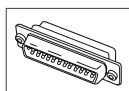


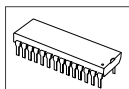
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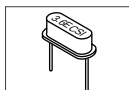
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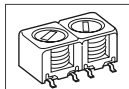
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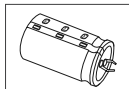
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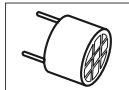
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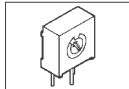


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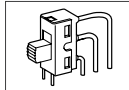
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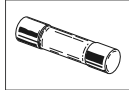
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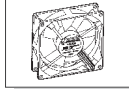
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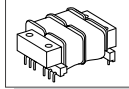


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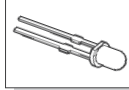
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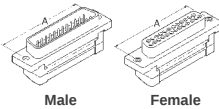
O

**1-800-344-4539**

218-681-6674 • FAX: 218-681-3380 • [www.digikey.com](http://www.digikey.com)

AMP

## D-Subminiature Connectors



Male

Female

**Material and Finish:** Plastic Shell: Housing, Cover & Cable Stabilizer — 94V-0 rated thermoplastic, black Metal Shell: Front Shell — Steel, tin plated Housing, Cover & Cable Stabilizer — 94V-0 rated thermoplastic, black Contacts — Phosphor bronze, duplex plated .00030 gold on mating end, tin-lead on termination end, with entire contact nickel underplated **Mounting Holes:** Standard — .120" (3.05mm) Dia. • Recognized under the Component Program of Underwriters Laboratories Inc., File No. E28476 • Certified by Canadian Standards Assoc., File No. LR A5658



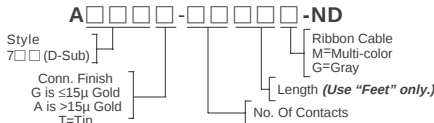
| No. of Contacts                                      | Contact Finish | Dim. A (in.)  | Dim. A (mm) | Digi-Key Part No. | Pricing 1 10 | AMP Part No. |
|------------------------------------------------------|----------------|---------------|-------------|-------------------|--------------|--------------|
| <b>Male D-Subminiature Connectors, Plastic Shell</b> |                |               |             |                   |              |              |
| 9                                                    | Gold           | .984 (24.99)  |             | AMS09G-ND         | 5.85 47.60   | 747321-4     |
| 15                                                   | Gold           | 1.312 (33.32) |             | AMS15G-ND         | 6.86 55.86   | 747321-3     |
| 25                                                   | Gold           | 1.852 (47.04) |             | AMS25G-ND         | 8.68 70.68   | 747321-2     |
| 37                                                   | Gold           | 2.500 (63.50) |             | AMS37G-ND         | 12.39 100.89 | 747321-1     |

|                                                        |      |               |  |           |              |          |
|--------------------------------------------------------|------|---------------|--|-----------|--------------|----------|
| <b>Female D-Subminiature Connectors, Plastic Shell</b> |      |               |  |           |              |          |
| 9                                                      | Gold | .984 (24.99)  |  | AFS09G-ND | 5.99 48.74   | 747318-4 |
| 15                                                     | Gold | 1.312 (33.32) |  | AFS15G-ND | 7.28 59.28   | 747318-3 |
| 25                                                     | Gold | 1.852 (47.04) |  | AFS25G-ND | 9.24 75.24   | 747318-2 |
| 37                                                     | Gold | 2.500 (63.50) |  | AFS37G-ND | 12.95 105.45 | 747318-1 |

|                                                    |      |               |  |           |              |          |
|----------------------------------------------------|------|---------------|--|-----------|--------------|----------|
| <b>Male D-Subminiature Connectors, Metal Shell</b> |      |               |  |           |              |          |
| 9                                                  | Gold | .984 (24.99)  |  | AMR09G-ND | 3.91 31.85   | 747306-4 |
| 15                                                 | Gold | 1.312 (33.32) |  | AMR15G-ND | 6.12 50.12   | 747306-3 |
| 25                                                 | Gold | 1.852 (47.04) |  | AMR25G-ND | 5.18 42.18   | 747306-2 |
| 37                                                 | Gold | 2.500 (63.50) |  | AMR37G-ND | 14.39 117.14 | 747306-1 |
| 50                                                 | Gold | 2.406 (61.11) |  | AMR50G-ND | 21.74 176.99 | 746790-1 |

|                                                      |      |               |  |           |              |          |
|------------------------------------------------------|------|---------------|--|-----------|--------------|----------|
| <b>Female D-Subminiature Connectors, Metal Shell</b> |      |               |  |           |              |          |
| 9                                                    | Gold | .984 (24.99)  |  | AFR09G-ND | 6.65 54.15   | 747303-4 |
| 15                                                   | Gold | 1.312 (33.32) |  | AFR15G-ND | 8.37 68.12   | 747303-3 |
| 25                                                   | Gold | 1.852 (47.04) |  | AFR25G-ND | 10.99 89.49  | 747303-2 |
| 37                                                   | Gold | 2.500 (63.50) |  | AFR37G-ND | 15.54 126.54 | 747303-1 |
| 50                                                   | Gold | 2.406 (61.11) |  | AFR50G-ND | 22.93 186.68 | 746789-1 |

|                                       |   |   |   |           |            |          |
|---------------------------------------|---|---|---|-----------|------------|----------|
| <b>Cable Strain Relief/Stabilizer</b> |   |   |   |           |            |          |
| 9                                     | — | — | — | ADS09N-ND | 1.08 8.54  | 747275-4 |
| 15                                    | — | — | — | ADS15N-ND | 1.15 9.08  | 747275-3 |
| 25                                    | — | — | — | ADS25N-ND | .85 6.72   | 747275-2 |
| 37                                    | — | — | — | ADS37N-ND | 1.34 10.59 | 747275-1 |
| 50                                    | — | — | — | ADS50N-ND | 3.34 26.38 | 746785-1 |



## D-Subminiature Cable Assemblies

## Single Ended — Male



\* MC = Multi-Color, GR = Gray

AMP

| No. of Contacts | Conn. Finish | Length (Feet) | Rib-bon* Cable | Digi-Key Part No. | Pricing 1 10 |
|-----------------|--------------|---------------|----------------|-------------------|--------------|
| <b>9</b>        |              |               |                |                   |              |
| Gold            | 6 (1.83)     | MC            | A7MXG-0906M-ND | 8.93              | 72.70        |
| Gold            | 6 (1.83)     | GR            | A7MXG-0906G-ND | 8.67              | 70.57        |
| Gold            | 10 (3.05)    | MC            | A7MXG-0910M-ND | 9.91              | 80.66        |
| Gold            | 10 (3.05)    | GR            | A7MXG-0910G-ND | 9.47              | 77.09        |
| <b>15</b>       |              |               |                |                   |              |
| Gold            | 6 (1.83)     | MC            | A7MXG-1506M-ND | 11.19             | 91.09        |
| Gold            | 6 (1.83)     | GR            | A7MXG-1506G-ND | 10.37             | 84.42        |
| Gold            | 10 (3.05)    | MC            | A7MXG-1510M-ND | 12.94             | 105.34       |
| Gold            | 10 (3.05)    | GR            | A7MXG-1510G-ND | 11.57             | 94.22        |
| <b>25</b>       |              |               |                |                   |              |
| Gold            | 6 (1.83)     | MC            | A7MXG-2506M-ND | 14.23             | 115.91       |
| Gold            | 6 (1.83)     | GR            | A7MXG-2506G-ND | 13.08             | 106.48       |
| Gold            | 10 (3.05)    | MC            | A7MXG-2510M-ND | 16.98             | 138.28       |
| Gold            | 10 (3.05)    | GR            | A7MXG-2510G-ND | 15.05             | 122.55       |
| <b>37</b>       |              |               |                |                   |              |
| Gold            | 6 (1.83)     | MC            | A7MXG-3706M-ND | 20.63             | 167.98       |
| Gold            | 6 (1.83)     | GR            | A7MXG-3706G-ND | 19.14             | 155.84       |
| Gold            | 10 (3.05)    | MC            | A7MXG-3710M-ND | 24.65             | 200.73       |
| Gold            | 10 (3.05)    | GR            | A7MXG-3710G-ND | 22.17             | 180.49       |

Also available in the following configuration:  
ATPX□-□□□□□-ND — With Metal Shell Connector.  
Call for complete part number and pricing!

## Single Ended — Female



\* MC = Multi-Color, GR = Gray

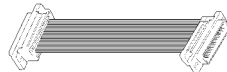
AMP

| No. of Contacts | Conn. Finish | Length (Feet) | Rib-bon* Cable | Digi-Key Part No. | Pricing 1 10 |
|-----------------|--------------|---------------|----------------|-------------------|--------------|
| <b>9</b>        |              |               |                |                   |              |
| Gold            | 6 (1.83)     | MC            | A7FXG-0906M-ND | 9.11              | 74.19        |
| Gold            | 6 (1.83)     | GR            | A7FXG-0906G-ND | 8.85              | 72.05        |
| Gold            | 10 (3.05)    | MC            | A7FXG-0910M-ND | 10.09             | 82.14        |
| Gold            | 10 (3.05)    | GR            | A7FXG-0910G-ND | 9.65              | 78.57        |
| <b>15</b>       |              |               |                |                   |              |
| Gold            | 6 (1.83)     | MC            | A7FXG-1506M-ND | 11.65             | 94.88        |
| Gold            | 6 (1.83)     | GR            | A7FXG-1506G-ND | 10.83             | 88.21        |
| Gold            | 10 (3.05)    | MC            | A7FXG-1510M-ND | 13.40             | 109.13       |
| Gold            | 10 (3.05)    | GR            | A7FXG-1510G-ND | 12.04             | 98.01        |

| No. of Contacts | Conn. Finish | Length (Feet) | Rib-bon* Cable | Digi-Key Part No. | Pricing 1 10 |
|-----------------|--------------|---------------|----------------|-------------------|--------------|
| <b>25</b>       |              |               |                |                   |              |
| Gold            | 6 (1.83)     | MC            | A7FXG-2506M-ND | 14.82             | 120.70       |
| Gold            | 6 (1.83)     | GR            | A7FXG-2506G-ND | 13.66             | 111.26       |
| Gold            | 15 (4.57)    | MC            | A7FXG-2510M-ND | 17.57             | 143.07       |
| Gold            | 15 (4.57)    | GR            | A7FXG-2510G-ND | 15.64             | 127.34       |
| <b>37</b>       |              |               |                |                   |              |
| Gold            | 6 (1.83)     | MC            | A7FXG-3706M-ND | 21.21             | 172.71       |
| Gold            | 6 (1.83)     | GR            | A7FXG-3706G-ND | 19.72             | 160.57       |
| Gold            | 15 (4.57)    | MC            | A7FXG-3710M-ND | 25.23             | 205.46       |
| Gold            | 15 (4.57)    | GR            | A7FXG-3710G-ND | 22.75             | 185.22       |

Also available in the following configuration:  
ATXS□-□□□□□-ND — With Metal Shell Connector.  
Call for complete part number and pricing!

## Male to Male



\* MC = Multi-Color, GR = Gray

AMP

| No. of Contacts | Conn. Finish | Length (Feet) | Rib-bon* Cable | Digi-Key Part No. | Pricing 1 10 |
|-----------------|--------------|---------------|----------------|-------------------|--------------|
| <b>9</b>        |              |               |                |                   |              |
| Gold            | 6 (1.83)     | MC            | A7MMG-0906M-ND | 16.39             | 133.47       |
| Gold            | 6 (1.83)     | GR            | A7MMG-0906G-ND | 16.13             | 131.33       |
| Gold            | 10 (3.05)    | MC            | A7MMG-0910M-ND | 16.38             | 133.41       |
| Gold            | 10 (3.05)    | GR            | A7MMG-0910G-ND | 16.12             | 131.27       |
| <b>15</b>       |              |               |                |                   |              |
| Gold            | 6 (1.83)     | MC            | A7MMG-1506M-ND | 18.93             | 154.13       |
| Gold            | 6 (1.83)     | GR            | A7MMG-1506G-ND | 16.92             | 137.80       |
| Gold            | 10 (3.05)    | MC            | A7MMG-1510M-ND | 21.50             | 175.05       |
| Gold            | 10 (3.05)    | GR            | A7MMG-1510G-ND | 19.75             | 160.80       |
| <b>25</b>       |              |               |                |                   |              |
| Gold            | 6 (1.83)     | MC            | A7MMG-2506M-ND | 24.35             | 198.27       |
| Gold            | 6 (1.83)     | GR            | A7MMG-2506G-ND | 23.19             | 188.84       |
| Gold            | 10 (3.05)    | MC            | A7MMG-2510M-ND | 27.10             | 220.65       |
| Gold            | 10 (3.05)    | GR            | A7MMG-2510G-ND | 25.17             | 204.92       |
| <b>37</b>       |              |               |                |                   |              |
| Gold            | 6 (1.83)     | MC            | A7MMG-3706M-ND | 35.80             | 291.52       |
| Gold            | 6 (1.83)     | GR            | A7MMG-3706G-ND | 33.73             | 274.68       |
| Gold            | 10 (3.05)    | MC            | A7MMG-3710M-ND | 39.25             | 319.57       |
| Gold            | 10 (3.05)    | GR            | A7MMG-3710G-ND | 36.76             | 299.34       |

Also available in the following configuration:  
ATPP□-□□□□□-ND — With Metal Shell Connector.  
Call for complete part number and pricing!

## Female to Female



\* MC = Multi-Color, GR = Gray

AMP

| No. of Contacts | Conn. Finish | Length (Feet) | Rib-bon* Cable | Digi-Key Part No. | Pricing 1 10 |
|-----------------|--------------|---------------|----------------|-------------------|--------------|
| <b>9</b>        |              |               |                |                   |              |
| Gold            | 6 (1.83)     | MC            | A7FFG-0906M-ND | 16.75             | 136.43       |
| Gold            | 6 (1.83)     | GR            | A7FFG-0906G-ND | 16.49             | 134.29       |
| Gold            | 10 (3.05)    | MC            | A7FFG-0910M-ND | 17.73             | 144.38       |
| Gold            | 10 (3.05)    | GR            | A7FFG-0910G-ND | 17.29             | 140.82       |
| <b>15</b>       |              |               |                |                   |              |
| Gold            | 6 (1.83)     | MC            | A7FFG-1506M-ND | 20.68             | 168.38       |
| Gold            | 6 (1.83)     | GR            | A7FFG-1506G-ND | 19.86             | 161.71       |
| Gold            | 10 (3.05)    | MC            | A7FFG-1510M-ND | 22.43             | 182.63       |
| Gold            | 10 (3.05)    | GR            | A7FFG-1510G-ND | 21.06             | 171.51       |
| <b>25</b>       |              |               |                |                   |              |
| Gold            | 6 (1.83)     | MC            | A7FFG-2506M-ND | 25.53             | 207.85       |
| Gold            | 6 (1.83)     | GR            | A7FFG-2506G-ND | 24.36             | 198.39       |
| Gold            | 10 (3.05)    | MC            | A7FFG-2510M-ND | 28.27             | 230.22       |
| Gold            | 10 (3.05)    | GR            | A7FFG-2510G-ND | 26.34             | 214.46       |
| <b>37</b>       |              |               |                |                   |              |
| Gold            | 6 (1.83)     | MC            | A7FFG-3706M-ND | 36.39             | 296.31       |
| Gold            | 6 (1.83)     | GR            | A7FFG-3706G-ND | 34.90             | 284.17       |
| Gold            | 10 (3.05)    | MC            | A7FFG-3710M-ND | 40.41             | 329.06       |
| Gold            | 10 (3.05)    | GR            | A7FFG-3710G-ND | 37.93             | 308.83       |

Also available in the following configuration:  
ATSS□-□□□□□-ND — With Metal Shell Connector.  
Call for complete part number and pricing!

## Male to Female



\* MC = Multi-Color, GR = Gray

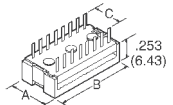
AMP

| No. of Contacts | Conn. Finish | Length (Feet) | Rib-bon* Cable | Digi-Key Part No. | Pricing 1 10 |
|-----------------|--------------|---------------|----------------|-------------------|--------------|
| <b>9</b>        |              |               |                |                   |              |
| Gold            | 6 (1.83)     | MC            | A7MFG-0906M-ND | 16.57             | 134.89       |
| Gold            | 6 (1.83)     | GR            | A7MFG-0906G-ND | 16.30             | 132.75       |
| Gold            | 10 (3.05)    | MC            | A7MFG-0910M-ND | 17.54             | 142.84       |
| Gold            | 10 (3.05)    | GR            | A7MFG-0910G-ND | 17.10             | 139.28       |
| <b>15</b>       |              |               |                |                   |              |
| Gold            | 6 (1.83)     | MC            | A7MFG-1506M-ND | 20.21             | 164.59       |
| Gold            | 6 (1.83)     | GR            | A7MFG-1506G-ND | 19.39             | 157.92       |
| Gold            | 10 (3.05)    | MC            | A7MFG-1510M-ND | 21.96             | 178.84       |
| Gold            | 10 (3.05)    | GR            | A7MFG-1510G-ND | 20.60             | 167.72       |
| <b>25</b>       |              |               |                |                   |              |
| Gold            | 6 (1.83)     | MC            | A7MFG-2506M-ND | 24.94             | 203.09       |
| Gold            | 6 (1.83)     | GR            | A7MFG-2506G-ND | 23.78             | 193.66       |
| Gold            | 10 (3.05)    | MC            | A7MFG-2510M-ND | 27.69             | 225.46       |
| Gold            | 10 (3.05)    | GR            | A7MFG-2510G-ND | 25.76             | 209.73       |
| <b>37</b>       |              |               |                |                   |              |
| Gold            | 6 (1.83)     | MC            | A7MFG-3706M-ND | 35.81             | 291.58       |
| Gold            | 6 (1.83)     | GR            | A7MFG-3706G-ND | 34.32             | 279.44       |
| Gold            | 10 (3.05)    | MC            | A7MFG-3710M-ND | 39.83             | 324.33       |
| Gold            | 10 (3.05)    | GR            | A7MFG-3710G-ND | 37.35             | 304.10       |

Also available in the following configuration:  
ATPS□-□□□□□-ND — With Metal Shell Connector.  
Call for complete part number and pricing!

## DIP Connectors

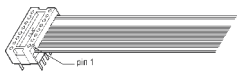
**Material & Finish:** Housing & Cover — Black thermoplastic, 94V-0 rated Contacts — Phosphor bronze, tin or duplex plated Gold — .00015 gold on pin end, .00010-.00020 bright tin-lead on cable termination end; entire contact underplated with .00050 nickel Tin — .00010-.00020 bright tin-lead over .00050 nickel on entire contact **Mounting Holes:** DIP Sockets (for 2.54 x 7.62mm & 2.54 x 15.24mm versions) • Connectors Recognized under Component Program of Underwriters Laboratories Inc., File No. E28476 • Connectors Certified by Canadian Standards Association, File No. LR 16455



| Number of Pins | Dimensions — in. (mm) |              |             |
|----------------|-----------------------|--------------|-------------|
|                | A                     | B            | C           |
| 14             | .43 (10.87)           | .79 (20.02)  | .30 (7.62)  |
| 16             | .43 (10.87)           | .89 (22.56)  | .30 (7.62)  |
| 24             | .72 (18.29)           | 1.29 (32.72) | .60 (15.24) |
| 40             | .72 (18.29)           | 2.09 (53.04) | .60 (15.24) |

| No. of<br>Contacts                 | Contact<br>Finish | Digi-Key<br>Part No. | Pricing<br>110 | AMP<br>Part No. |
|------------------------------------|-------------------|----------------------|----------------|-----------------|
| Dip Connectors (3.96mm Pin Length) |                   |                      |                |                 |
| 14                                 | Gold              | ADP14G-ND            | 1.75 14.25     | 746612-2        |
| 14                                 | Tin               | ADP14T-ND            | 1.16 9.41      | 746613-2        |
| 16                                 | Gold              | ADP16G-ND            | 1.40 11.40     | 746612-3        |
| 16                                 | Tin               | ADP16T-ND            | 1.30 10.55     | 746613-3        |
| 24                                 | Gold              | ADP24G-ND            | 3.99 32.49     | 746615-1        |
| 24                                 | Tin               | ADP24T-ND            | 2.59 21.09     | 746616-1        |
| 40                                 | Gold              | ADP40G-ND            | 5.92 48.17     | 746615-3        |
| 40                                 | Tin               | ADP40T-ND            | 2.56 20.81     | 746616-3        |

## Single Ended — Style 4

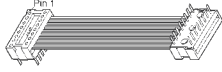


\* MC = Multi-Color, GR = Gray

AMP

| No. of Contacts | Conn. Finish | Length In. (cm) | Rib-bon* Cable | Digi-Key Part No. | Pricing 1 10 |
|-----------------|--------------|-----------------|----------------|-------------------|--------------|
| 14              | Gold         | 6 (15.24)       | MC             | A4PXG-1406M-ND    | 1.94 15.81   |
|                 | Tin          | 6 (15.24)       | MC             | A4PXT-1406M-ND    | 1.35 10.97   |
|                 | Gold         | 6 (15.24)       | GR             | A4PXG-1406G-ND    | 1.88 15.33   |
|                 | Tin          | 6 (15.24)       | GR             | A4PXT-1406G-ND    | 1.29 10.49   |
|                 | Gold         | 18 (45.72)      | MC             | A4PXG-1418M-ND    | 2.32 18.93   |
|                 | Tin          | 18 (45.72)      | MC             | A4PXT-1418M-ND    | 1.73 14.08   |
|                 | Gold         | 18 (45.72)      | GR             | A4PXG-1418G-ND    | 2.15 17.50   |
|                 | Tin          | 18 (45.72)      | GR             | A4PXT-1418G-ND    | 1.55 12.65   |
|                 | Gold         | 36 (91.44)      | MC             | A4PXG-1436M-ND    | 2.90 23.61   |
|                 | Tin          | 36 (91.44)      | MC             | A4PXT-1436M-ND    | 2.31 18.78   |
|                 | Gold         | 36 (91.44)      | GR             | A4PXG-1436G-ND    | 2.55 20.75   |
|                 | Tin          | 36 (91.44)      | GR             | A4PXT-1436G-ND    | 1.95 15.90   |
| 16              | Gold         | 6 (15.24)       | MC             | A4PXG-1606M-ND    | 3.02 24.58   |
|                 | Tin          | 6 (15.24)       | MC             | A4PXT-1606M-ND    | 1.52 12.34   |
|                 | Gold         | 6 (15.24)       | GR             | A4PXG-1606G-ND    | 2.95 22.03   |
|                 | Tin          | 6 (15.24)       | GR             | A4PXT-1606G-ND    | 1.45 11.77   |
|                 | Gold         | 18 (45.72)      | MC             | A4PXG-1618M-ND    | 3.46 28.14   |
|                 | Tin          | 18 (45.72)      | MC             | A4PXT-1618M-ND    | 1.95 15.90   |
|                 | Gold         | 18 (45.72)      | GR             | A4PXG-1618G-ND    | 3.25 26.48   |
|                 | Tin          | 18 (45.72)      | GR             | A4PXT-1618G-ND    | 1.75 14.22   |
|                 | Gold         | 36 (91.44)      | MC             | A4PXG-1636M-ND    | 4.11 33.49   |
|                 | Tin          | 36 (91.44)      | MC             | A4PXT-1636M-ND    | 2.61 21.23   |
|                 | Gold         | 36 (91.44)      | GR             | A4PXG-1636G-ND    | 3.70 30.15   |
|                 | Tin          | 36 (91.44)      | GR             | A4PXT-1636G-ND    | 2.20 17.90   |
| 24              | Gold         | 6 (15.24)       | MC             | A4PXG-2406M-ND    | 2.92 23.77   |
|                 | Tin          | 6 (15.24)       | MC             | A4PXT-2406M-ND    | 2.92 23.77   |
|                 | Gold         | 6 (15.24)       | GR             | A4PXG-2406G-ND    | 2.82 22.93   |
|                 | Tin          | 6 (15.24)       | GR             | A4PXT-2406G-ND    | 2.82 22.93   |
|                 | Gold         | 18 (45.72)      | MC             | A4PXG-2418M-ND    | 4.98 40.53   |
|                 | Tin          | 18 (45.72)      | MC             | A4PXT-2418M-ND    | 3.58 29.13   |
|                 | Gold         | 18 (45.72)      | GR             | A4PXG-2418G-ND    | 4.67 38.02   |
|                 | Tin          | 18 (45.72)      | GR             | A4PXT-2418G-ND    | 3.27 26.60   |
|                 | Gold         | 36 (91.44)      | MC             | A4PXG-2436M-ND    | 5.96 48.56   |
|                 | Tin          | 36 (91.44)      | MC             | A4PXT-2436M-ND    | 4.56 37.16   |
|                 | Gold         | 36 (91.44)      | GR             | A4PXG-2436G-ND    | 5.34 43.52   |
|                 | Tin          | 36 (91.44)      | GR             | A4PXT-2436G-ND    | 3.94 32.12   |
| 40              | Gold         | 6 (15.24)       | MC             | A4PXG-4006M-ND    | 6.46 52.64   |
|                 | Tin          | 6 (15.24)       | MC             | A4PXT-4006M-ND    | 4.64 37.76   |
|                 | Gold         | 6 (15.24)       | GR             | A4PXG-4006G-ND    | 6.29 51.24   |
|                 | Tin          | 6 (15.24)       | GR             | A4PXT-4006G-ND    | 4.47 36.27   |
|                 | Gold         | 18 (45.72)      | MC             | A4PXG-4018M-ND    | 7.56 61.56   |
|                 | Tin          | 18 (45.72)      | MC             | A4PXT-4018M-ND    | 5.73 46.68   |
|                 | Gold         | 18 (45.72)      | GR             | A4PXG-4018G-ND    | 7.05 57.40   |
|                 | Tin          | 18 (45.72)      | GR             | A4PXT-4018G-ND    | 5.22 42.52   |
|                 | Gold         | 36 (91.44)      | MC             | A4PXG-4036M-ND    | 9.20 74.93   |
|                 | Tin          | 36 (91.44)      | MC             | A4PXT-4036M-ND    | 7.37 60.05   |
|                 | Gold         | 36 (91.44)      | GR             | A4PXG-4036G-ND    | 8.19 66.66   |
|                 | Tin          | 36 (91.44)      | GR             | A4PXT-4036G-ND    | 6.36 51.78   |

## Double Ended — Style 8

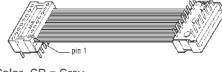


\* MC = Multi-Color, GR = Gray

AMP

| No. of Contacts | Conn. Finish | Length In. (cm) | Rib-bon* Cable | Digi-Key Part No. | Pricing 1 10 |
|-----------------|--------------|-----------------|----------------|-------------------|--------------|
| 14              | Gold         | 6 (15.24)       | MC             | A8PPG-1406M-ND    | 3.69 30.06   |
|                 | Tin          | 6 (15.24)       | MC             | A8PPT-1406M-ND    | 2.50 20.38   |
|                 | Gold         | 6 (15.24)       | GR             | A8PPG-1406G-ND    | 3.63 29.58   |
|                 | Tin          | 6 (15.24)       | GR             | A8PPT-1406G-ND    | 2.44 19.89   |
|                 | Gold         | 18 (45.72)      | MC             | A8PPG-1418M-ND    | 4.07 33.18   |
|                 | Tin          | 18 (45.72)      | MC             | A8PPT-1418M-ND    | 2.88 23.48   |
|                 | Gold         | 18 (45.72)      | GR             | A8PPG-1418G-ND    | 3.90 31.75   |
|                 | Tin          | 18 (45.72)      | GR             | A8PPT-1418G-ND    | 2.71 22.06   |
|                 | Gold         | 36 (91.44)      | MC             | A8PPG-1436M-ND    | 4.65 37.86   |
|                 | Tin          | 36 (91.44)      | MC             | A8PPT-1436M-ND    | 3.46 28.19   |
|                 | Gold         | 36 (91.44)      | GR             | A8PPG-1436G-ND    | 4.30 35.00   |
|                 | Tin          | 36 (91.44)      | GR             | A8PPT-1436G-ND    | 3.11 25.31   |
| 16              | Gold         | 6 (15.24)       | MC             | A8PPG-1606M-ND    | 5.82 47.38   |
|                 | Tin          | 6 (15.24)       | MC             | A8PPT-1606M-ND    | 2.81 22.89   |
|                 | Gold         | 6 (15.24)       | GR             | A8PPG-1606G-ND    | 5.75 46.83   |
|                 | Tin          | 6 (15.24)       | GR             | A8PPT-1606G-ND    | 2.74 22.32   |
|                 | Gold         | 18 (45.72)      | MC             | A8PPG-1618M-ND    | 6.26 50.94   |
|                 | Tin          | 18 (45.72)      | MC             | A8PPT-1618M-ND    | 3.25 26.45   |
|                 | Gold         | 18 (45.72)      | GR             | A8PPG-1618G-ND    | 6.05 49.28   |
|                 | Tin          | 18 (45.72)      | GR             | A8PPT-1618G-ND    | 3.04 24.77   |
|                 | Gold         | 36 (91.44)      | MC             | A8PPG-1636M-ND    | 6.91 56.29   |
|                 | Tin          | 36 (91.44)      | MC             | A8PPT-1636M-ND    | 3.90 31.78   |
|                 | Gold         | 36 (91.44)      | GR             | A8PPG-1636G-ND    | 6.50 52.95   |
|                 | Tin          | 36 (91.44)      | GR             | A8PPT-1636G-ND    | 3.49 28.44   |
| 24              | Gold         | 6 (15.24)       | MC             | A8PPG-2406M-ND    | 8.31 67.66   |
|                 | Tin          | 6 (15.24)       | MC             | A8PPT-2406M-ND    | 5.51 44.86   |
|                 | Gold         | 6 (15.24)       | GR             | A8PPG-2406G-ND    | 8.21 66.83   |
|                 | Tin          | 6 (15.24)       | GR             | A8PPT-2406G-ND    | 5.41 44.02   |
|                 | Gold         | 18 (45.72)      | MC             | A8PPG-2418M-ND    | 8.97 73.02   |
|                 | Tin          | 18 (45.72)      | MC             | A8PPT-2418M-ND    | 6.17 50.22   |
|                 | Gold         | 18 (45.72)      | GR             | A8PPG-2418G-ND    | 8.66 70.51   |
|                 | Tin          | 18 (45.72)      | GR             | A8PPT-2418G-ND    | 5.86 47.69   |
|                 | Gold         | 36 (91.44)      | MC             | A8PPG-2436M-ND    | 9.95 81.05   |
|                 | Tin          | 36 (91.44)      | MC             | A8PPT-2436M-ND    | 7.15 58.25   |
|                 | Gold         | 36 (91.44)      | GR             | A8PPG-2436G-ND    | 9.33 76.01   |
|                 | Tin          | 36 (91.44)      | GR             | A8PPT-2436G-ND    | 6.53 53.21   |
| 40              | Gold         | 6 (15.24)       | MC             | A8PPG-4006M-ND    | 12.38 100.80 |
|                 | Tin          | 6 (15.24)       | MC             | A8PPT-4006M-ND    | 8.73 71.05   |
|                 | Gold         | 6 (15.24)       | GR             | A8PPG-4006G-ND    | 12.21 99.41  |
|                 | Tin          | 6 (15.24)       | GR             | A8PPT-4006G-ND    | 8.55 69.65   |
|                 | Gold         | 18 (45.72)      | MC             | A8PPG-4018M-ND    | 13.48 109.73 |
|                 | Tin          | 18 (45.72)      | MC             | A8PPT-4018M-ND    | 9.82 79.97   |
|                 | Gold         | 18 (45.72)      | GR             | A8PPG-4018G-ND    | 12.96 105.56 |
|                 | Tin          | 18 (45.72)      | GR             | A8PPT-4018G-ND    | 9.31 75.81   |
|                 | Gold         | 36 (91.44)      | MC             | A8PPG-4036M-ND    | 15.12 123.09 |
|                 | Tin          | 36 (91.44)      | MC             | A8PPT-4036M-ND    | 11.46 93.34  |
|                 | Gold         | 36 (91.44)      | GR             | A8PPG-4036G-ND    | 14.10 114.83 |
|                 | Tin          | 36 (91.44)      | GR             | A8PPT-4036G-ND    | 10.45 85.07  |

## Double Ended — Style 0

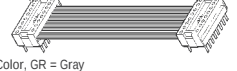


\* MC = Multi-Color, GR = Gray

AMP

| No. of Contacts | Conn. Finish | Length In. (cm) | Rib-bon* Cable | Digi-Key Part No. | Pricing 1 10 |
|-----------------|--------------|-----------------|----------------|-------------------|--------------|
| 14              | Gold         | 6 (15.24)       | MC             | A0PPG-1406M-ND    | 3.69 30.06   |
|                 | Tin          | 6 (15.24)       | MC             | A0PPT-1406M-ND    | 2.50 20.38   |
|                 | Gold         | 6 (15.24)       | GR             | A0PPG-1406G-ND    | 3.63 29.58   |
|                 | Tin          | 6 (15.24)       | GR             | A0PPT-1406G-ND    | 2.44 19.89   |
|                 | Gold         | 18 (45.72)      | MC             | A0PPG-1418M-ND    | 4.07 33.18   |
|                 | Tin          | 18 (45.72)      | MC             | A0PPT-1418M-ND    | 2.88 23.48   |
|                 | Gold         | 18 (45.72)      | GR             | A0PPG-1418G-ND    | 3.90 31.75   |
|                 | Tin          | 18 (45.72)      | GR             | A0PPT-1418G-ND    | 2.71 22.06   |
|                 | Gold         | 36 (91.44)      | MC             | A0PPG-1436M-ND    | 4.65 37.86   |
|                 | Tin          | 36 (91.44)      | MC             | A0PPT-1436M-ND    | 3.46 28.19   |
|                 | Gold         | 36 (91.44)      | GR             | A0PPG-1436G-ND    | 4.30 35.00   |
|                 | Tin          | 36 (91.44)      | GR             | A0PPT-1436G-ND    | 3.11 25.31   |
| 16              | Gold         | 6 (15.24)       | MC             | A0PPG-1606M-ND    | 5.82 47.38   |
|                 | Tin          | 6 (15.24)       | MC             | A0PPT-1606M-ND    | 2.81 22.89   |
|                 | Gold         | 6 (15.24)       | GR             | A0PPG-1606G-ND    | 5.75 46.83   |
|                 | Tin          | 6 (15.24)       | GR             | A0PPT-1606G-ND    | 2.74 22.32   |
|                 | Gold         | 18 (45.72)      | MC             | A0PPG-1618M-ND    | 6.26 50.94   |
|                 | Tin          | 18 (45.72)      | MC             | A0PPT-1618M-ND    | 3.25 26.45   |
|                 | Gold         | 18 (45.72)      | GR             | A0PPG-1618G-ND    | 6.05 49.28   |
|                 | Tin          | 18 (45.72)      | GR             | A0PPT-1618G-ND    | 3.04 24.77   |
|                 | Gold         | 36 (91.44)      | MC             | A0PPG-1636M-ND    | 6.91 56.29   |
|                 | Tin          | 36 (91.44)      | MC             | A0PPT-1636M-ND    | 3.90 31.78   |
|                 | Gold         | 36 (91.44)      | GR             | A0PPG-1636G-ND    | 6.50 52.95   |
|                 | Tin          | 36 (91.44)      | GR             | A0PPT-1636G-ND    | 3.49 28.44   |
| 24              | Gold         | 6 (15.24)       | MC             | A0PPG-2406M-ND    | 8.31 67.66   |
|                 | Tin          | 6 (15.24)       | MC             | A0PPT-2406M-ND    | 5.51 44.86   |
|                 | Gold         | 6 (15.24)       | GR             | A0PPG-2406G-ND    | 8.21 66.83   |
|                 | Tin          | 6 (15.24)       | GR             | A0PPT-2406G-ND    | 5.41 44.02   |
|                 | Gold         | 18 (45.72)      | MC             | A0PPG-2418M-ND    | 8.97 73.02   |
|                 | Tin          | 18 (45.72)      | MC             | A0PPT-2418M-ND    | 6.17 50.22   |
|                 | Gold         | 18 (45.72)      | GR             | A0PPG-2418G-ND    | 8.66 70.51   |
|                 | Tin          | 18 (45.72)      | GR             | A0PPT-2418G-ND    | 5.86 47.69   |
|                 | Gold         | 36 (91.44)      | MC             | A0PPG-2436M-ND    | 9.95 81.05   |
|                 | Tin          | 36 (91.44)      | MC             | A0PPT-2436M-ND    | 7.15 58.25   |
|                 | Gold         | 36 (91.44)      | GR             | A0PPG-2436G-ND    | 9.33 76.01   |
|                 | Tin          | 36 (91.44)      | GR             | A0PPT-2436G-ND    | 6.53 53.21   |
| 40              | Gold         | 6 (15.24)       | MC             | A0PPG-4006M-ND    | 12.38 100.80 |
|                 | Tin          | 6 (15.24)       | MC             | A0PPT-4006M-ND    | 8.73 71.05   |
|                 | Gold         | 6 (15.24)       | GR             | A0PPG-4006G-ND    | 12.21 99.41  |
|                 | Tin          | 6 (15.24)       | GR             | A0PPT-4006G-ND    | 8.55 69.65   |
|                 | Gold         | 18 (45.72)      | MC             | A0PPG-4018M-ND    | 13.48 109.73 |
|                 | Tin          | 18 (45.72)      | MC             | A0PPT-4018M-ND    | 9.82 79.97   |
|                 | Gold         | 18 (45.72)      | GR             | A0PPG-4018G-ND    | 12.96 105.56 |
|                 | Tin          | 18 (45.72)      | GR             | A0PPT-4018G-ND    | 9.31 75.81   |
|                 | Gold         | 36 (91.44)      | MC             | A0PPG-4036M-ND    | 15.12 123.09 |
|                 | Tin          | 36 (91.44)      | MC             | A0PPT-4036M-ND    | 11.46 93.34  |
|                 | Gold         | 36 (91.44)      | GR             | A0PPG-4036G-ND    | 14.10 114.83 |
|                 | Tin          | 36 (91.44)      | GR             | A0PPT-4036G-ND    | 10.45 85.07  |

## Double Ended — Style 6



\* MC = Multi-Color, GR = Gray

AMP

| No. of Contacts | Conn. Finish | Length In. (cm) | Rib-bon* Cable | Digi-Key Part No. | Pricing 1 10 |
|-----------------|--------------|-----------------|----------------|-------------------|--------------|
| 14              | Gold         | 6 (15.24)       | MC             | A6PPG-1406M-ND    | 3.69 30.06   |
|                 | Tin          | 6 (15.24)       | MC             | A6PPT-1406M-ND    | 2.50 20.38   |
|                 | Gold         | 6 (15.24)       | GR             | A6PPG-1406G-ND    | 3.63 29.58   |
|                 | Tin          | 6 (15.24)       | GR             | A6PPT-1406G-ND    | 2.44 19.89   |
|                 | Gold         | 18 (45.72)      | MC             | A6PPG-1418M-ND    | 4.07 33.18   |
|                 | Tin          | 18 (45.72)      | MC             | A6PPT-1418M-ND    | 2.88 23.48   |
|                 | Gold         | 18 (45.72)      | GR             | A6PPG-1418G-ND    | 3.90 31.75   |
|                 | Tin          | 18 (45.72)      | GR             | A6PPT-1418G-ND    | 2.71 22.06   |
|                 | Gold         | 36 (91.44)      | MC             | A6PPG-1436M-ND    | 4.65 37.86   |
|                 | Tin          | 36 (91.44)      | MC             | A6PPT-1436M-ND    | 3.46 28.19   |
|                 | Gold         | 36 (91.44)      | GR             | A6PPG-1436G-ND    | 4.30 35.00   |
|                 | Tin          | 36 (91.44)      | GR             | A6PPT-1436G-ND    | 3.11 25.31   |
| 16              | Gold         | 6 (15.24)       | MC             | A6PPG-1606M-ND    | 5.82 47.38   |
|                 | Tin          | 6 (15.24)       | MC             | A6PPT-1606M-ND    | 2.81 22.89   |
|                 | Gold         | 6 (15.24)       | GR             | A6PPG-1606G-ND    | 5.75 46.83   |
|                 | Tin          | 6 (15.24)       | GR             | A6PPT-1606G-ND    | 2.74 22.32   |
|                 | Gold         | 18 (45.72)      | MC             | A6PPG-1618M-ND    |              |

## Termination Jumpers

### Socket Connector — Single Ended



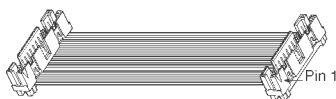
\* MC = Multi-Color, GR = Gray

| No. of Contacts | Conn. Finish | Length In. (cm) | Rib-bon* Cable | Digi-Key Part No. | Pricing 1 10 |
|-----------------|--------------|-----------------|----------------|-------------------|--------------|
| 10              | Gold         | 36 (91.44)      | MC             | A1AXG-1036M-ND    | 1.94 15.79   |
|                 | Gold         | 36 (91.44)      | GR             | A1AXG-1036G-ND    | 1.68 13.71   |
| 14              | Gold         | 36 (91.44)      | MC             | A1AXG-1436M-ND    | 2.80 22.77   |
|                 | Gold         | 36 (91.44)      | GR             | A1AXG-1436G-ND    | 2.44 19.89   |
| 16              | Gold         | 36 (91.44)      | MC             | A1AXG-1636M-ND    | 3.06 24.94   |
|                 | Gold         | 36 (91.44)      | GR             | A1AXG-1636G-ND    | 2.75 22.37   |
| 20              | Gold         | 36 (91.44)      | MC             | A1AXG-2036M-ND    | 2.65 21.60   |
|                 | Gold         | 36 (91.44)      | GR             | A1AXG-2036G-ND    | 2.34 19.04   |
| 26              | Gold         | 36 (91.44)      | MC             | A1AXG-2636M-ND    | 3.57 29.07   |
|                 | Gold         | 36 (91.44)      | GR             | A1AXG-2636G-ND    | 3.06 24.94   |
| 34              | Gold         | 36 (91.44)      | MC             | A1AXG-3436M-ND    | 4.31 35.06   |
|                 | Gold         | 36 (91.44)      | GR             | A1AXG-3436G-ND    | 3.65 29.73   |
| 40              | Gold         | 36 (91.44)      | MC             | A1AXG-4036M-ND    | 5.23 42.61   |
|                 | Gold         | 36 (91.44)      | GR             | A1AXG-4036G-ND    | 4.81 39.19   |
| 50              | Gold         | 36 (91.44)      | MC             | A1AXG-5036M-ND    | 4.38 35.68   |
|                 | Gold         | 36 (91.44)      | GR             | A1AXG-5036G-ND    | 3.96 32.26   |
| 60              | Gold         | 36 (91.44)      | MC             | A1AXG-6036M-ND    | 6.02 48.99   |
|                 | Gold         | 36 (91.44)      | GR             | A1AXG-6036G-ND    | 5.00 40.72   |
| 60              | Gold         | 36 (91.44)      | MC             | A1AXG-6036M-ND    | 8.19 66.66   |
|                 | Gold         | 36 (91.44)      | GR             | A1AXG-6036G-ND    | 6.91 56.26   |
| 60              | Gold         | 36 (91.44)      | MC             | A1AXG-6036M-ND    | 9.78 79.66   |
|                 | Gold         | 36 (91.44)      | GR             | A1AXG-6036G-ND    | 8.31 67.63   |
| 60              | Gold         | 36 (91.44)      | MC             | A1AXG-6036M-ND    | 8.27 67.32   |
|                 | Gold         | 36 (91.44)      | GR             | A1AXG-6036G-ND    | 6.79 55.29   |

Also available in the following versions:

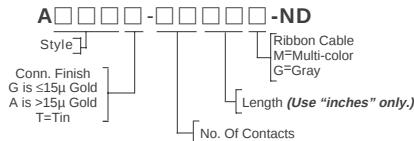
A1BXG-ND — Socket Connector with Strain Relief.  
A1CXG-ND — Socket Connector with Central Polarizing Key.  
A1DXG-ND — Socket Connector w/Strain Relief & Central Polarizing Key.  
Call for complete part number and pricing!

### Pin Connector to Pin Connector

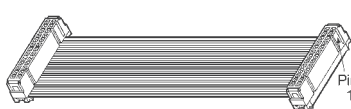


\* MC = Multi-Color, GR = Gray

| No. of Contacts | Conn. Finish | Length In. (cm) | Rib-bon* Cable | Digi-Key Part No. | Pricing 1 10 |
|-----------------|--------------|-----------------|----------------|-------------------|--------------|
| 10              | Gold         | 6 (15.24)       | MC             | A3KKG-1006M-ND    | 10.30 83.88  |
|                 | Gold         | 6 (15.24)       | GR             | A3KKG-1006G-ND    | 10.26 83.53  |
| 14              | Gold         | 18 (45.72)      | MC             | A3KKG-1018M-ND    | 10.57 86.10  |
|                 | Gold         | 18 (45.72)      | GR             | A3KKG-1018G-ND    | 10.44 85.05  |
| 16              | Gold         | 36 (91.44)      | MC             | A3KKG-1036M-ND    | 10.98 89.43  |
|                 | Gold         | 36 (91.44)      | GR             | A3KKG-1036G-ND    | 10.73 87.34  |
| 14              | Gold         | 6 (15.24)       | MC             | A3KKG-1406M-ND    | 15.45 125.82 |
|                 | Gold         | 6 (15.24)       | GR             | A3KKG-1406G-ND    | 15.39 125.34 |
| 16              | Gold         | 18 (45.72)      | MC             | A3KKG-1418M-ND    | 15.83 128.94 |
|                 | Gold         | 18 (45.72)      | GR             | A3KKG-1418G-ND    | 15.66 127.51 |
| 20              | Gold         | 36 (91.44)      | MC             | A3KKG-1436M-ND    | 16.41 133.62 |
|                 | Gold         | 36 (91.44)      | GR             | A3KKG-1436G-ND    | 16.06 130.76 |
| 16              | Gold         | 6 (15.24)       | MC             | A3KKG-1606M-ND    | 15.97 130.03 |
|                 | Gold         | 6 (15.24)       | GR             | A3KKG-1606G-ND    | 15.90 129.48 |
| 20              | Gold         | 18 (45.72)      | MC             | A3KKG-1618M-ND    | 16.41 133.59 |
|                 | Gold         | 18 (45.72)      | GR             | A3KKG-1618G-ND    | 16.20 131.93 |
| 26              | Gold         | 36 (91.44)      | MC             | A3KKG-1636M-ND    | 17.06 138.94 |
|                 | Gold         | 36 (91.44)      | GR             | A3KKG-1636G-ND    | 16.65 135.60 |
| 20              | Gold         | 6 (15.24)       | MC             | A3KKG-2006M-ND    | 16.79 136.75 |
|                 | Gold         | 6 (15.24)       | GR             | A3KKG-2006G-ND    | 16.71 136.06 |
| 26              | Gold         | 18 (45.72)      | MC             | A3KKG-2018M-ND    | 17.34 141.21 |
|                 | Gold         | 18 (45.72)      | GR             | A3KKG-2018G-ND    | 17.09 139.14 |
| 34              | Gold         | 36 (91.44)      | MC             | A3KKG-2036M-ND    | 18.16 147.90 |
|                 | Gold         | 36 (91.44)      | GR             | A3KKG-2036G-ND    | 17.65 143.75 |
| 26              | Gold         | 6 (15.24)       | MC             | A3KKG-2606M-ND    | 18.77 152.81 |
|                 | Gold         | 6 (15.24)       | GR             | A3KKG-2606G-ND    | 18.66 151.92 |
| 34              | Gold         | 18 (45.72)      | MC             | A3KKG-2618M-ND    | 19.48 158.60 |
|                 | Gold         | 18 (45.72)      | GR             | A3KKG-2618G-ND    | 19.15 155.94 |
| 40              | Gold         | 36 (91.44)      | MC             | A3KKG-2636M-ND    | 20.54 167.29 |
|                 | Gold         | 36 (91.44)      | GR             | A3KKG-2636G-ND    | 19.89 161.97 |
| 40              | Gold         | 6 (15.24)       | MC             | A3KKG-3406M-ND    | 19.62 159.73 |
|                 | Gold         | 6 (15.24)       | GR             | A3KKG-3406G-ND    | 19.47 158.57 |
| 50              | Gold         | 18 (45.72)      | MC             | A3KKG-3418M-ND    | 20.54 167.28 |
|                 | Gold         | 18 (45.72)      | GR             | A3KKG-3418G-ND    | 20.12 163.82 |
| 60              | Gold         | 36 (91.44)      | MC             | A3KKG-3436M-ND    | 21.93 178.61 |
|                 | Gold         | 36 (91.44)      | GR             | A3KKG-3436G-ND    | 21.08 171.68 |
| 40              | Gold         | 6 (15.24)       | MC             | A3KKG-4006M-ND    | 20.92 170.39 |
|                 | Gold         | 6 (15.24)       | GR             | A3KKG-4006G-ND    | 20.65 168.15 |
| 50              | Gold         | 18 (45.72)      | MC             | A3KKG-4018M-ND    | 21.92 178.45 |
|                 | Gold         | 18 (45.72)      | GR             | A3KKG-4018G-ND    | 21.41 174.32 |
| 60              | Gold         | 36 (91.44)      | MC             | A3KKG-4036M-ND    | 23.56 191.83 |
|                 | Gold         | 36 (91.44)      | GR             | A3KKG-4036G-ND    | 22.54 183.56 |
| 50              | Gold         | 6 (15.24)       | MC             | A3KKG-5006M-ND    | 23.53 191.63 |
|                 | Gold         | 6 (15.24)       | GR             | A3KKG-5006G-ND    | 23.32 189.90 |
| 60              | Gold         | 18 (45.72)      | MC             | A3KKG-5018M-ND    | 24.90 202.78 |
|                 | Gold         | 18 (45.72)      | GR             | A3KKG-5018G-ND    | 24.27 197.59 |
| 60              | Gold         | 36 (91.44)      | MC             | A3KKG-5036M-ND    | 26.96 219.52 |
|                 | Gold         | 36 (91.44)      | GR             | A3KKG-5036G-ND    | 25.68 209.13 |
| 60              | Gold         | 6 (15.24)       | MC             | A3KKG-6006M-ND    | 27.49 223.83 |
|                 | Gold         | 6 (15.24)       | GR             | A3KKG-6006G-ND    | 27.24 221.78 |
| 60              | Gold         | 18 (45.72)      | MC             | A3KKG-6018M-ND    | 29.12 237.16 |
|                 | Gold         | 18 (45.72)      | GR             | A3KKG-6018G-ND    | 28.37 230.99 |
| 60              | Gold         | 36 (91.44)      | MC             | A3KKG-6036M-ND    | 31.58 257.14 |
|                 | Gold         | 36 (91.44)      | GR             | A3KKG-6036G-ND    | 30.06 244.81 |



### Socket Connector to Socket Connector



\* MC = Multi-Color, GR = Gray

| No. of Contacts | Conn. Finish | Length In. (cm) | Rib-bon* Cable | Digi-Key Part No. | Pricing 1 10 |
|-----------------|--------------|-----------------|----------------|-------------------|--------------|
| 10              | Gold         | 6 (15.24)       | MC             | A3AAG-1006M-ND    | 2.38 19.35   |
|                 | Gold         | 6 (15.24)       | GR             | A3AAG-1006G-ND    | 2.33 19.01   |
| 14              | Gold         | 18 (45.72)      | MC             | A3AAG-1018M-ND    | 2.65 21.57   |
|                 | Gold         | 18 (45.72)      | GR             | A3AAG-1018G-ND    | 2.52 20.52   |
| 16              | Gold         | 36 (91.44)      | MC             | A3AAG-1036M-ND    | 3.06 24.91   |
|                 | Gold         | 36 (91.44)      | GR             | A3AAG-1036G-ND    | 2.80 22.83   |
| 14              | Gold         | 6 (15.24)       | MC             | A3AAG-1406M-ND    | 3.48 28.36   |
|                 | Gold         | 6 (15.24)       | GR             | A3AAG-1406G-ND    | 3.42 27.87   |
| 16              | Gold         | 18 (45.72)      | MC             | A3AAG-1418M-ND    | 3.86 31.46   |
|                 | Gold         | 18 (45.72)      | GR             | A3AAG-1418G-ND    | 3.69 30.04   |
| 20              | Gold         | 36 (91.44)      | MC             | A3AAG-1436M-ND    | 4.44 36.17   |
|                 | Gold         | 36 (91.44)      | GR             | A3AAG-1436G-ND    | 4.09 33.29   |
| 16              | Gold         | 6 (15.24)       | MC             | A3AAG-1606M-ND    | 3.72 30.30   |
|                 | Gold         | 6 (15.24)       | GR             | A3AAG-1606G-ND    | 3.09 25.17   |
| 20              | Gold         | 18 (45.72)      | MC             | A3AAG-1618M-ND    | 3.65 29.73   |
|                 | Gold         | 18 (45.72)      | GR             | A3AAG-1618G-ND    | 3.02 24.60   |
| 26              | Gold         | 36 (91.44)      | MC             | A3AAG-1636M-ND    | 4.16 33.86   |
|                 | Gold         | 36 (91.44)      | GR             | A3AAG-1636G-ND    | 3.53 28.73   |
| 34              | Gold         | 6 (15.24)       | MC             | A3AAG-2006M-ND    | 4.13 33.63   |
|                 | Gold         | 6 (15.24)       | GR             | A3AAG-2006G-ND    | 4.05 32.95   |
| 40              | Gold         | 18 (45.72)      | MC             | A3AAG-2018M-ND    | 4.68 38.08   |
|                 | Gold         | 18 (45.72)      | GR             | A3AAG-2018G-ND    | 4.42 36.02   |
| 50              | Gold         | 36 (91.44)      | MC             | A3AAG-2036M-ND    | 5.50 44.77   |
|                 | Gold         | 36 (91.44)      | GR             | A3AAG-2036G-ND    | 4.99 40.64   |
| 26              | Gold         | 6 (15.24)       | MC             | A3AAG-2606M-ND    | 4.70 38.25   |
|                 | Gold         | 6 (15.24)       | GR             | A3AAG-2606G-ND    | 4.59 37.36   |
| 34              | Gold         | 18 (45.72)      | MC             | A3AAG-2618M-ND    | 5.41 44.03   |
|                 | Gold         | 18 (45.72)      | GR             | A3AAG-2618G-ND    | 5.08 41.38   |
| 40              | Gold         | 36 (91.44)      | MC             | A3AAG-2636M-ND    | 6.48 52.73   |
|                 | Gold         | 36 (91.44)      | GR             | A3AAG-2636G-ND    | 5.82 47.40   |
| 34              | Gold         | 6 (15.24)       | MC             | A3AAG-3406M-ND    | 5.37 43.69   |
|                 | Gold         | 6 (15.24)       | GR             | A3AAG-3406G-ND    | 4.53 36.85   |
| 40              | Gold         | 18 (45.72)      | MC             | A3AAG-3418M-ND    | 5.22 42.52   |
|                 | Gold         | 18 (45.72)      | GR             | A3AAG-3418G-ND    | 4.38 35.68   |
| 50              | Gold         | 36 (91.44)      | MC             | A3AAG-3436M-ND    | 6.29 51.24   |
|                 | Gold         | 36 (91.44)      | GR             | A3AAG-3436G-ND    | 5.45 44.40   |
| 60              | Gold         | 6 (15.24)       | MC             | A3AAG-3406M-ND    | 5.87 47.77   |
|                 | Gold         | 6 (15.24)       | GR             | A3AAG-3406G-ND    | 5.03 40.93   |
| 60              | Gold         | 18 (45.72)      | MC             | A3AAG-3418M-ND    | 7.68 62.56   |
|                 | Gold         | 18 (45.72)      | GR             | A3AAG-3418G-ND    | 6.84 55.72   |
| 60              | Gold         | 36 (91.44)      | MC             | A3AAG-3436M-ND    | 6.83 55.63   |
|                 | Gold         | 36 (91.44)      | GR             | A3AAG-3436G-ND    | 5.99 48.79   |
| 40              | Gold         | 6 (15.24)       | MC             | A3AAG-4006M-ND    | 6.01 48.92   |
|                 | Gold         | 6 (15.24)       | GR             | A3AAG-4006G-ND    | 5.84 47.54   |
| 50              | Gold         | 18 (45.72)      | MC             | A3AAG-4018M-ND    | 7.10 57.84   |
|                 | Gold         | 18 (45.72)      | GR             | A3AAG-4018G-ND    | 6.60 53.70   |
| 60              | Gold         | 36 (91.44)      | MC             | A3AAG-4036M-ND    | 8.75 71.22   |
|                 | Gold         | 36 (91.44)      | GR             | A3AAG-4036G-ND    | 7.73 62.95   |
| 50              | Gold         | 6 (15.24)       | MC             | A3AAG-5006M-ND    | 8.83 71.93   |
|                 | Gold         | 6 (15.24)       | GR             | A3AAG-5006G-ND    | 8.62 70.20   |
| 60              | Gold         | 18 (45.72)      | MC             | A3AAG-5018M-ND    | 10.20 83.08  |
|                 | Gold         | 18 (45.72)      | GR             | A3AAG-5018G-ND    | 9.57 77.89   |
| 60              | Gold         | 36 (91.44)      | MC             | A3AAG-5036M-ND    | 12.26 99.84  |
|                 | Gold         | 36 (91.44)      | GR             | A3AAG-5036G-ND    | 10.98 89.43  |
| 60              | Gold         | 6 (15.24)       | MC             | A3AAG-6006M-ND    | 10.56 86.01  |
|                 | Gold         | 6 (15.24)       | GR             | A3AAG-6006G-ND    | 7.61 61.96   |
| 60              | Gold         | 18 (45.72)      | MC             | A3AAG-6018M-ND    | 10.31 83.96  |
|                 | Gold         | 18 (45.72)      | GR             | A3AAG-6018G-ND    | 7.36 59.91   |
| 60              | Gold         | 36 (91.44)      | MC             | A3AAG-6036M-ND    | 12.20 99.32  |
|                 | Gold         | 36 (91.44)      | GR             | A3AAG-6036G-ND    | 9.24 75.27   |
| 60              | Gold         | 6 (15.24)       | MC             | A3AAG-6006M-ND    | 11.44 93.93  |
|                 | Gold         | 6 (15.24)       | GR             | A3AAG-6006G-ND    | 8.49 69.11   |
| 60              | Gold         | 18 (45.72)      | MC             | A3AAG-6018M-ND    | 14.65 119.33 |
|                 | Gold         | 18 (45.72)      | GR             | A3AAG-6018G-ND    | 11.70 95.28  |
| 60              | Gold         | 36 (91.44)      | MC             | A3AAG-6036M-ND    | 13.14 106.99 |
|                 | Gold         | 36 (91.44)      | GR             | A3AAG-6036G-ND    | 10.19 82.94  |

Also available in the following versions:

A3BBG-ND — Socket Connector with Strain Relief.  
A3CCG-ND — Socket Connector with Central Polarizing Key.  
A3DDG-ND — Socket Connector w/Strain Relief & Central Polarizing Key.  
Call for complete part number and pricing!

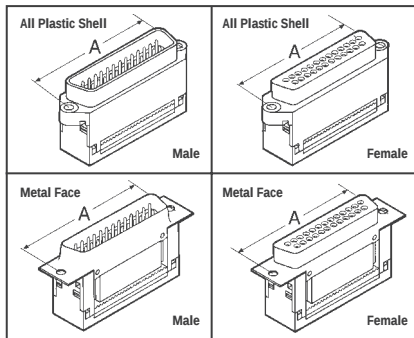
### Pin Connector — Single Ended



\* MC = Multi-Color, GR = Gray

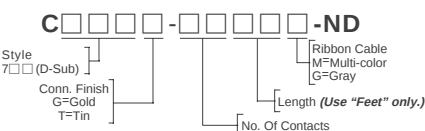
| No. of Contacts | Conn. Finish | Length In. (cm) | Rib-bon* Cable | Digi-Key Part No. | Pricing 1 10 |
|-----------------|--------------|-----------------|----------------|-------------------|--------------|
| 10              | Gold         | 36 (91.44)      | MC             | A1KXG-1036M-ND    | 5.90 48.05   |
|                 | Gold         | 36 (91.44)      | GR             | A1KXG-1036G-ND    | 5.64 45.     |

## D-Subminiature Connectors

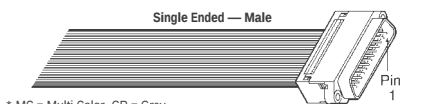


**Specifications:** • Contacts: phosphor bronze • Contact Plating: Gold -10µ in. gold (in mating area) over 50µ in. nickel, Tin -100µ in. tin-lead • Insulator material: UL 94V-0 flame-retardant thermoplastic • Cover pull-off force 226.79 grams/contact minimum (force applied along contacts' primary axis) • Withdrawal force 56.70g - 226.79g/contact, typical • Color: blue • Operating temp.: -55° to +125°C • Current 1A (max.) per contact • Dielectric Withstand Voltage: 500Vdc (sea level) • Insulation resistance: 5 x 10<sup>9</sup> ohms

| No. of Contacts                                        | Contact Finish | Dim. A In. (mm) | Digi-Key Part No. | Pricing 1 100      |
|--------------------------------------------------------|----------------|-----------------|-------------------|--------------------|
| <b>Male D-Subminiature Connectors, Plastic Shell</b>   |                |                 |                   |                    |
| 9                                                      | Gold           | .984 (24.99)    | CMP09G-ND         | 3.35 25.38 194.40  |
| 9                                                      | Tin            | .984 (24.99)    | CMP09T-ND         | 2.85 21.62 165.60  |
| 15                                                     | Gold           | 1.312 (33.32)   | CMP15G-ND         | 4.40 33.37 255.60  |
| 15                                                     | Tin            | 1.312 (33.32)   | CMP15T-ND         | 3.75 28.44 217.80  |
| 25                                                     | Gold           | 1.852 (47.04)   | CMP25G-ND         | 5.92 44.89 343.80  |
| 25                                                     | Tin            | 1.852 (47.04)   | CMP25T-ND         | 5.02 38.07 291.60  |
| 37                                                     | Gold           | 2.500 (63.50)   | CMP37G-ND         | 8.74 66.27 507.60  |
| 37                                                     | Tin            | 2.500 (63.50)   | CMP37T-ND         | 7.44 56.40 432.00  |
| <b>Female D-Subminiature Connectors, Plastic Shell</b> |                |                 |                   |                    |
| 9                                                      | Gold           | .984 (24.99)    | CFP09G-ND         | 3.84 29.14 223.20  |
| 9                                                      | Tin            | .984 (24.99)    | CFP09T-ND         | 3.26 24.68 189.00  |
| 15                                                     | Gold           | 1.312 (33.32)   | CFP15G-ND         | 5.02 38.07 291.60  |
| 15                                                     | Tin            | 1.312 (33.32)   | CFP15T-ND         | 4.28 32.43 248.40  |
| 25                                                     | Gold           | 1.852 (47.04)   | CFP25G-ND         | 6.82 51.70 386.00  |
| 25                                                     | Tin            | 1.852 (47.04)   | CFP25T-ND         | 5.80 43.95 336.60  |
| 37                                                     | Gold           | 2.500 (63.50)   | CFP37G-ND         | 10.08 76.38 585.00 |
| 37                                                     | Tin            | 2.500 (63.50)   | CFP37T-ND         | 8.56 64.86 496.80  |
| <b>Male D-Subminiature Connectors, Metal Face</b>      |                |                 |                   |                    |
| 9                                                      | Gold           | .984 (24.99)    | CMM09G-ND         | 3.66 27.73 212.40  |
| 9                                                      | Tin            | .984 (24.99)    | CMM09T-ND         | 3.11 23.57 180.54  |
| 15                                                     | Gold           | 1.312 (33.32)   | CMM15G-ND         | 4.82 36.43 279.00  |
| 15                                                     | Tin            | 1.312 (33.32)   | CMM15T-ND         | 4.08 30.96 237.15  |
| 25                                                     | Gold           | 1.852 (47.04)   | CMM25G-ND         | 6.51 49.35 378.00  |
| 25                                                     | Tin            | 1.852 (47.04)   | CMM25T-ND         | 5.53 41.95 321.30  |
| 37                                                     | Gold           | 2.500 (63.50)   | CMM37G-ND         | 9.64 73.09 559.80  |
| 37                                                     | Tin            | 2.500 (63.50)   | CMM37T-ND         | 8.19 62.12 475.83  |
| <b>Female D-Subminiature Connectors, Metal Face</b>    |                |                 |                   |                    |
| 9                                                      | Gold           | .984 (24.99)    | CFM09G-ND         | 4.25 32.20 246.60  |
| 9                                                      | Tin            | .984 (24.99)    | CFM09T-ND         | 3.82 27.37 209.61  |
| 15                                                     | Gold           | 1.312 (33.32)   | CFM15G-ND         | 5.52 41.83 320.40  |
| 15                                                     | Tin            | 1.312 (33.32)   | CFM15T-ND         | 4.69 35.56 272.34  |
| 25                                                     | Gold           | 1.852 (47.04)   | CFM25G-ND         | 7.47 56.64 433.80  |
| 25                                                     | Tin            | 1.852 (47.04)   | CFM25T-ND         | 6.35 48.14 368.73  |
| 37                                                     | Gold           | 2.500 (63.50)   | CFM37G-ND         | 11.10 84.13 644.40 |
| 37                                                     | Tin            | 2.500 (63.50)   | CFM37T-ND         | 9.43 71.51 547.74  |



## D-Subminiature Cable Assemblies

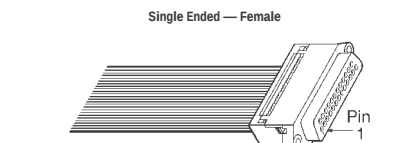


\* MC = Multi Color, GR = Gray

| No. of Contacts                       | Conn. Finish | Length Feet (Meters) | Rib-bon* Cable | Digi-Key Part No. | Pricing 1 10 |
|---------------------------------------|--------------|----------------------|----------------|-------------------|--------------|
| <b>Using Plastic Shell Connectors</b> |              |                      |                |                   |              |
| 9                                     | Gold         | 6 (1.83)             | MC             | C7MXG-0906M-ND    | 4.65 35.21   |
|                                       | Gold         | 6 (1.83)             | MC             | C7MXT-0906M-ND    | 4.14 31.41   |
|                                       | Gold         | 6 (1.83)             | GR             | C7MXG-0906G-ND    | 4.41 33.45   |
|                                       | Tin          | 10 (3.05)            | MC             | C7MXT-0910M-ND    | 5.51 41.77   |
|                                       | Gold         | 10 (3.05)            | MC             | C7MXG-0910G-ND    | 5.01 37.96   |
|                                       | Tin          | 10 (3.05)            | GR             | C7MXT-0910G-ND    | 5.12 38.83   |
| 15                                    | Gold         | 6 (1.83)             | MC             | C7MXG-1506M-ND    | 6.73 51.00   |
|                                       | Gold         | 6 (1.83)             | MC             | C7MXT-1506M-ND    | 6.07 45.45   |
|                                       | Gold         | 6 (1.83)             | GR             | C7MXG-1506G-ND    | 6.00 45.50   |
|                                       | Tin          | 10 (3.05)            | MC             | C7MXT-1510M-ND    | 8.28 62.75   |
|                                       | Gold         | 10 (3.05)            | MC             | C7MXG-1510G-ND    | 7.62 57.74   |
|                                       | Tin          | 10 (3.05)            | GR             | C7MXT-1510G-ND    | 7.07 53.58   |

|    |      |           |    |                |              |
|----|------|-----------|----|----------------|--------------|
| 25 | Gold | 6 (1.83)  | MC | C7MXG-2506M-ND | 9.57 72.56   |
|    | Tin  | 6 (1.83)  | MC | C7MXT-2506M-ND | 8.68 65.82   |
|    | Gold | 6 (1.83)  | GR | C7MXG-2506G-ND | 8.54 64.77   |
|    | Tin  | 10 (3.05) | MC | C7MXT-2510M-ND | 12.00 91.00  |
|    | Gold | 10 (3.05) | MC | C7MXG-2510G-ND | 11.12 84.27  |
|    | Tin  | 10 (3.05) | GR | C7MXT-2510G-ND | 10.29 78.02  |
| 37 | Gold | 6 (1.83)  | MC | C7MXG-3706M-ND | 14.08 106.77 |
|    | Tin  | 6 (1.83)  | MC | C7MXT-3706M-ND | 12.77 96.83  |
|    | Gold | 6 (1.83)  | GR | C7MXG-3706G-ND | 12.76 96.76  |
|    | Tin  | 10 (3.05) | MC | C7MXT-3710M-ND | 11.45 86.82  |
|    | Gold | 10 (3.05) | MC | C7MXG-3710G-ND | 17.65 133.77 |
|    | Tin  | 10 (3.05) | GR | C7MXT-3710G-ND | 16.34 123.83 |

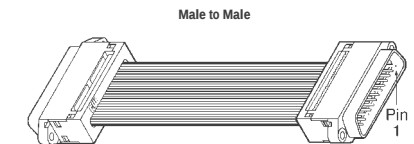
Also available in the following configuration:  
C7PXX-□-□-□-□-ND — With Metal Face Connector.  
Call for complete part number and pricing!



\* MC = Multi-Color, GR = Gray

| No. of Contacts                       | Conn. Finish | Length Feet (Meters) | Rib-bon* Cable | Digi-Key Part No. | Pricing 1 10 |
|---------------------------------------|--------------|----------------------|----------------|-------------------|--------------|
| <b>Using Plastic Shell Connectors</b> |              |                      |                |                   |              |
| 9                                     | Gold         | 6 (1.83)             | MC             | C7FXG-0906M-ND    | 5.14 38.97   |
|                                       | Tin          | 6 (1.83)             | MC             | C7FXT-0906M-ND    | 4.56 34.60   |
|                                       | Gold         | 6 (1.83)             | GR             | C7FXG-0906G-ND    | 4.91 37.21   |
|                                       | Tin          | 10 (3.05)            | MC             | C7FXT-0910M-ND    | 4.33 32.84   |
|                                       | Gold         | 10 (3.05)            | MC             | C7FXG-0910G-ND    | 6.01 45.53   |
|                                       | Tin          | 10 (3.05)            | GR             | C7FXT-0910G-ND    | 5.43 41.16   |
| 15                                    | Gold         | 6 (1.83)             | MC             | C7FXG-1506M-ND    | 5.14 38.97   |
|                                       | Tin          | 6 (1.83)             | MC             | C7FXT-1506M-ND    | 4.56 34.60   |
|                                       | Gold         | 6 (1.83)             | GR             | C7FXG-1506G-ND    | 6.62 50.20   |
|                                       | Tin          | 10 (3.05)            | MC             | C7FXT-1510M-ND    | 5.87 44.49   |
|                                       | Gold         | 10 (3.05)            | MC             | C7FXG-1510G-ND    | 8.90 67.45   |
|                                       | Tin          | 10 (3.05)            | GR             | C7FXT-1510G-ND    | 8.14 61.73   |
| 25                                    | Gold         | 6 (1.83)             | MC             | C7FXG-2506M-ND    | 10.47 79.37  |
|                                       | Tin          | 6 (1.83)             | MC             | C7FXT-2506M-ND    | 9.45 71.62   |
|                                       | Gold         | 6 (1.83)             | GR             | C7FXG-2506G-ND    | 9.44 71.58   |
|                                       | Tin          | 10 (3.05)            | MC             | C7FXT-2510M-ND    | 8.42 63.83   |
|                                       | Gold         | 10 (3.05)            | MC             | C7FXG-2510G-ND    | 12.90 97.82  |
|                                       | Tin          | 10 (3.05)            | GR             | C7FXT-2510G-ND    | 11.88 90.06  |
| 37                                    | Gold         | 6 (1.83)             | MC             | C7FXG-3706M-ND    | 15.42 116.88 |
|                                       | Tin          | 6 (1.83)             | MC             | C7FXT-3706M-ND    | 13.91 105.42 |
|                                       | Gold         | 6 (1.83)             | GR             | C7FXG-3706G-ND    | 14.10 106.87 |
|                                       | Tin          | 10 (3.05)            | MC             | C7FXT-3710M-ND    | 12.59 95.41  |
|                                       | Gold         | 10 (3.05)            | MC             | C7FXG-3710G-ND    | 18.98 143.88 |
|                                       | Tin          | 10 (3.05)            | GR             | C7FXT-3710G-ND    | 17.47 132.42 |

Also available in the following configuration:  
C7SXX-□-□-□-□-ND — With Metal Face Connector.  
Call for complete part number and pricing!



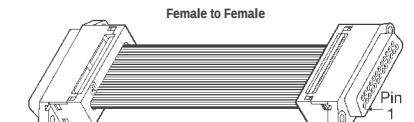
\* MC = Multi-Color, GR = Gray

| No. of Contacts                       | Conn. Finish | Length Feet (Meters) | Rib-bon* Cable | Digi-Key Part No. | Pricing 1 10 |
|---------------------------------------|--------------|----------------------|----------------|-------------------|--------------|
| <b>Using Plastic Shell Connectors</b> |              |                      |                |                   |              |
| 9                                     | Gold         | 6 (1.83)             | MC             | C7MMG-0906M-ND    | 7.99 60.59   |
|                                       | Tin          | 6 (1.83)             | MC             | C7MMT-0906M-ND    | 6.99 52.98   |
|                                       | Gold         | 6 (1.83)             | GR             | C7MMG-0906G-ND    | 7.76 58.83   |
|                                       | Tin          | 10 (3.05)            | MC             | C7MMT-0910M-ND    | 7.76 58.83   |
|                                       | Gold         | 10 (3.05)            | MC             | C7MMG-0910G-ND    | 8.66 67.15   |
|                                       | Tin          | 10 (3.05)            | GR             | C7MMT-0910G-ND    | 7.85 59.54   |
| 15                                    | Gold         | 6 (1.83)             | MC             | C7MMG-1506M-ND    | 11.13 84.37  |
|                                       | Tin          | 6 (1.83)             | MC             | C7MMT-1506M-ND    | 9.81 74.35   |
|                                       | Gold         | 6 (1.83)             | GR             | C7MMG-1506G-ND    | 10.40 78.87  |
|                                       | Tin          | 10 (3.05)            | MC             | C7MMT-1510M-ND    | 12.68 96.12  |
|                                       | Gold         | 10 (3.05)            | MC             | C7MMG-1510G-ND    | 11.36 86.10  |
|                                       | Tin          | 10 (3.05)            | GR             | C7MMT-1510G-ND    | 10.15 76.94  |
| 25                                    | Gold         | 6 (1.83)             | MC             | C7MMG-2506M-ND    | 15.49 117.44 |
|                                       | Tin          | 6 (1.83)             | MC             | C7MMT-2506M-ND    | 13.72 103.98 |
|                                       | Gold         | 6 (1.83)             | GR             | C7MMG-2506G-ND    | 14.46 109.65 |
|                                       | Tin          | 10 (3.05)            | MC             | C7MMT-2510M-ND    | 12.69 96.19  |
|                                       | Gold         | 10 (3.05)            | MC             | C7MMG-2510G-ND    | 17.93 135.89 |
|                                       | Tin          | 10 (3.05)            | GR             | C7MMT-2510G-ND    | 16.15 122.42 |

Also available in the following configuration:  
C7PSC-□-□-□-□-ND — With Metal Face Connector.  
Call for complete part number and pricing!

|    |      |           |    |                |              |
|----|------|-----------|----|----------------|--------------|
| 37 | Gold | 6 (1.83)  | MC | C7MMG-3706M-ND | 22.83 173.04 |
|    | Tin  | 6 (1.83)  | MC | C7MMT-3706M-ND | 20.20 153.16 |
|    | Gold | 6 (1.83)  | GR | C7MMG-3706G-ND | 21.51 163.03 |
|    | Tin  | 10 (3.05) | MC | C7MMT-3710M-ND | 18.88 143.15 |
|    | Gold | 10 (3.05) | MC | C7MMG-3710M-ND | 26.39 200.04 |
|    | Tin  | 10 (3.05) | GR | C7MMT-3710G-ND | 23.77 180.16 |

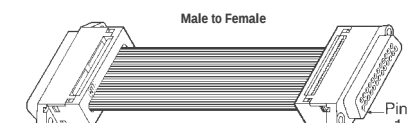
Also available in the following configuration:  
C7PPC-□-□-□-□-ND — With Metal Face Connector.  
Call for complete part number and pricing!



\* MC = Multi-Color, GR = Gray

| No. of Contacts                       | Conn. Finish | Length Feet (Meters) | Rib-bon* Cable | Digi-Key Part No. | Pricing 1 10 |
|---------------------------------------|--------------|----------------------|----------------|-------------------|--------------|
| <b>Using Plastic Shell Connectors</b> |              |                      |                |                   |              |
| 9                                     | Gold         | 6 (1.83)             | MC             | C7FFG-0906M-ND    | 8.99 68.11   |
|                                       | Tin          | 6 (1.83)             | MC             | C7FFT-0906M-ND    | 7.83 59.37   |
|                                       | Gold         | 6 (1.83)             | GR             | C7FFG-0906G-ND    | 8.75 66.35   |
|                                       | Tin          | 10 (3.05)            | MC             | C7FFT-0910M-ND    | 7.60 57.61   |
|                                       | Gold         | 10 (3.05)            | MC             | C7FFG-0910G-ND    | 9.85 74.67   |
|                                       | Tin          | 10 (3.05)            | GR             | C7FFT-0910G-ND    | 8.70 65.93   |
| 15                                    | Gold         | 6 (1.83)             | MC             | C7FFG-1506M-ND    | 12.37 93.77  |
|                                       | Tin          | 6 (1.83)             | MC             | C7FFT-1506M-ND    | 10.86 82.34  |
|                                       | Gold         | 6 (1.83)             | GR             | C7FFG-1506G-ND    | 11.64 88.27  |
|                                       | Tin          | 10 (3.05)            | MC             | C7FFT-1510M-ND    | 10.14 76.85  |
|                                       | Gold         | 10 (3.05)            | MC             | C7FFG-1510G-ND    | 13.92 105.52 |
|                                       | Tin          | 10 (3.05)            | GR             | C7FFT-1510G-ND    | 12.41 94.09  |
| 25                                    | Gold         | 6 (1.83)             | MC             | C7FFG-2506M-ND    | 17.29 131.07 |
|                                       | Tin          | 6 (1.83)             | MC             | C7FFT-2506M-ND    | 15.24 115.56 |
|                                       | Gold         | 6 (1.83)             | GR             | C7FFG-2506G-ND    | 16.26 123.28 |
|                                       | Tin          | 10 (3.05)            | MC             | C7FFT-2510M-ND    | 14.22 107.77 |
|                                       | Gold         | 10 (3.05)            | MC             | C7FFG-2510G-ND    | 19.72 149.52 |
|                                       | Tin          | 10 (3.05)            | GR             | C7FFT-2510G-ND    | 17.68 134.01 |
| 37                                    | Gold         | 6 (1.83)             | MC             | C7FFG-3706M-ND    | 25.49 193.25 |
|                                       | Tin          | 6 (1.83)             | MC             | C7FFT-3706M-ND    | 22.47 170.34 |
|                                       | Gold         | 6 (1.83)             | GR             | C7FFG-3706G-ND    | 24.17 183.24 |
|                                       | Tin          | 10 (3.05)            | MC             | C7FFT-3710M-ND    | 21.15 160.33 |
|                                       | Gold         | 10 (3.05)            | MC             | C7FFG-3710G-ND    | 29.05 220.25 |
|                                       | Tin          | 10 (3.05)            | GR             | C7FFT-3710G-ND    | 26.03 197.34 |

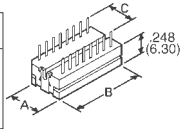
Also available in the following configuration:  
C7SSC-□-□-□-□-ND — With Metal Face Connector.  
Call for complete part number and pricing!



\* MC = Multi-Color, GR = Gray

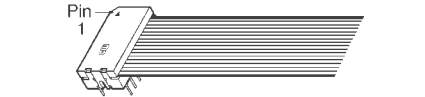
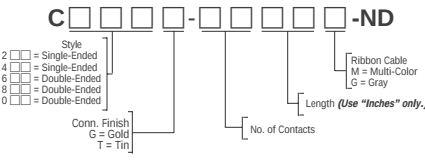
| No. of Contacts                       | Conn. Finish | Length Feet (Meters) | Rib-bon* Cable | Digi-Key Part No. | Pricing 1 10 |
|---------------------------------------|--------------|----------------------|----------------|-------------------|--------------|
| <b>Using Plastic Shell Connectors</b> |              |                      |                |                   |              |
| 9                                     | Gold         | 6 (1.83)             | MC             | C7MFG-0906M-ND    | 8.49 64.35   |
|                                       | Tin          | 6 (1.83)             | MC             | C7MFT-0906M-ND    | 7.41 56.18   |
|                                       | Gold         | 6 (1.83)             | GR             | C7MFG-0906G-ND    | 8.26 62.59   |
|                                       | Tin          | 10 (3.05)            | MC             | C7MFT-0910M-ND    | 7.18 54.41   |
|                                       | Gold         | 10 (3.05)            | MC             | C7MFG-0910G-ND    | 9.35 70.91   |
|                                       | Tin          | 10 (3.05)            | GR             | C7MFT-0910G-ND    | 8.28 62.73   |
| 15                                    | Gold         | 6 (1.83)             | MC             | C7MFG-1506M-ND    | 11.75 89.07  |
|                                       | Tin          | 6 (1.83)             | MC             | C7MFT-1506M-ND    | 10.34 78.35  |
|                                       | Gold         | 6 (1.83)             | GR             | C7MFG-1506G-ND    | 11.02 83.57  |
|                                       | Tin          | 10 (3.05)            | MC             | C7MFT-1510M-ND    | 9.61 72.85   |
|                                       | Gold         | 10 (3.05)            | MC             | C7MFG-1510G-ND    | 13.30 100.82 |

| No. of Pins | Dimensions - In. (mm) |               |              |
|-------------|-----------------------|---------------|--------------|
|             | A                     | B             | C            |
| 14          | .42 (10.67)           | .754 (19.15)  | .300 (7.62)  |
| 16          | .42 (10.67)           | .854 (21.69)  | .300 (7.62)  |
| 24          | .72 (18.29)           | 1.264 (32.11) | .600 (15.24) |
| 40          | .72 (18.29)           | 2.067 (52.50) | .600 (15.24) |



**SPECIFICATIONS:** • **Contacts:** phosphor bronze • **Contact Plating:** Gold - 10µ in. gold over 50µ in. nickel Tin - 100µ in. tin-lead • **Insulator Material:** UL 94V 0 retardant glass-filled thermoplastic • **Strain Relief Strap Material:** Tin-plated steel • **Color:** Blue • **Operating Temperature:** -55°C to -125°C • **Current Rating:** 1A (maximum) per contact • **Dielectric Withstand Voltage:** Greater than 500Vdc at sea level • **Insulation Resistance:** Greater than 5 x 10<sup>9</sup> ohms • **Mates with:** .050" (1.27mm) centered round conductor flat cable and standard Dip socket with .100" x .300" or .100" x .600" (2.54mm x 7.62mm or 2.54mm x 15.24mm) contact spacing • **Cover pull-off force:** with strain relief 7.46kg. minimum (force along contacts) primary axis)

| No. of Contacts                                | Contact Finish | Digi-Key Part No. | Pricing |       |        |         |
|------------------------------------------------|----------------|-------------------|---------|-------|--------|---------|
|                                                |                |                   | 1       | 10    | 100    | 1,000   |
| <b>DIP Connectors (4.44mm Pin Length)</b>      |                |                   |         |       |        |         |
| 14                                             | Gold           | CDP14G-ND         | 1.61    | 12.22 | 93.60  | 676.00  |
| 14                                             | Tin            | CDP14T-ND         | 1.37    | 10.39 | 79.56  | 574.60  |
| 16                                             | Gold           | CDP16G-ND         | 1.71    | 12.93 | 99.00  | 715.00  |
| 16                                             | Tin            | CDP16T-ND         | 1.45    | 10.99 | 84.15  | 607.75  |
| 24                                             | Gold           | CDP24G-ND         | 2.82    | 21.39 | 163.80 | 1183.00 |
| 24                                             | Tin            | CDP24T-ND         | 2.40    | 18.18 | 139.23 | 1005.55 |
| 40                                             | Gold           | CDP40G-ND         | 4.06    | 30.79 | 235.80 | 1703.00 |
| 40                                             | Tin            | CDP40T-ND         | 3.45    | 26.17 | 200.43 | 1447.55 |
| <b>Strain Relief Straps For DIP Connectors</b> |                |                   |         |       |        |         |
| 14                                             | —              | CDSR14-ND         | 1.18    | 9.00  | 65.00  | —       |
| 16                                             | —              | CDSR16-ND         | 1.41    | 10.80 | 78.00  | —       |
| 24                                             | —              | CDSR24-ND         | 2.25    | 16.55 | 126.00 | 91.00   |
| 40                                             | —              | CDSR40-ND         | 2.25    | 18.88 | 144.00 | 104.00  |

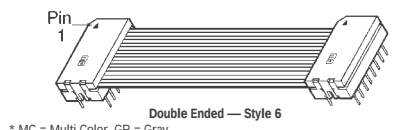


| No. of Contacts               | Contact Finish | Length In. (mm) | Rib-bon Cable | Digi-Key Part No. | Pricing |       |     |       |
|-------------------------------|----------------|-----------------|---------------|-------------------|---------|-------|-----|-------|
|                               |                |                 |               |                   | 1       | 10    | 100 | 1,000 |
| <b>Single Ended — Style 2</b> |                |                 |               |                   |         |       |     |       |
| 14                            | Gold           | 6 (15.24)       | MC            | C2PXG-1406G-ND    | 1.78    | 13.51 | —   | —     |
|                               | Tin            | 6 (15.24)       | MC            | C2PXT-1406G-ND    | 1.54    | 11.67 | —   | —     |
|                               | Gold           | 6 (15.24)       | GR            | C2PXG-1406G-ND    | 1.73    | 13.11 | —   | —     |
|                               | Tin            | 6 (15.24)       | GR            | C2PXT-1406G-ND    | 1.49    | 11.28 | —   | —     |
|                               | Gold           | 18 (45.72)      | MC            | C2PXG-1418G-ND    | 2.12    | 16.08 | —   | —     |
|                               | Tin            | 18 (45.72)      | MC            | C2PXT-1418G-ND    | 1.88    | 14.25 | —   | —     |
|                               | Gold           | 18 (45.72)      | GR            | C2PXG-1418G-ND    | 1.97    | 14.90 | —   | —     |
|                               | Tin            | 18 (45.72)      | GR            | C2PXT-1418G-ND    | 1.72    | 13.07 | —   | —     |
|                               | Gold           | 36 (91.44)      | MC            | C2PXG-1436G-ND    | 2.63    | 19.94 | —   | —     |
|                               | Tin            | 36 (91.44)      | MC            | C2PXT-1436G-ND    | 2.39    | 18.11 | —   | —     |
|                               | Gold           | 36 (91.44)      | GR            | C2PXG-1436G-ND    | 2.32    | 17.58 | —   | —     |
|                               | Tin            | 36 (91.44)      | GR            | C2PXT-1436G-ND    | 2.08    | 15.75 | —   | —     |
| 16                            | Gold           | 6 (15.24)       | MC            | C2PXG-1606G-ND    | 1.90    | 14.39 | —   | —     |
|                               | Tin            | 6 (15.24)       | MC            | C2PXT-1606G-ND    | 1.64    | 12.46 | —   | —     |
|                               | Gold           | 6 (15.24)       | GR            | C2PXG-1606G-ND    | 1.84    | 13.94 | —   | —     |
|                               | Tin            | 6 (15.24)       | GR            | C2PXT-1606G-ND    | 1.58    | 12.00 | —   | —     |
|                               | Gold           | 18 (45.72)      | MC            | C2PXG-1618G-ND    | 2.29    | 17.33 | —   | —     |
|                               | Tin            | 18 (45.72)      | MC            | C2PXT-1618G-ND    | 2.03    | 15.39 | —   | —     |
|                               | Gold           | 18 (45.72)      | GR            | C2PXG-1618G-ND    | 2.15    | 15.96 | —   | —     |
|                               | Tin            | 18 (45.72)      | GR            | C2PXT-1618G-ND    | 1.85    | 14.02 | —   | —     |
|                               | Gold           | 36 (91.44)      | MC            | C2PXG-1636G-ND    | 2.87    | 21.74 | —   | —     |
|                               | Tin            | 36 (91.44)      | MC            | C2PXT-1636G-ND    | 2.61    | 19.80 | —   | —     |
|                               | Gold           | 36 (91.44)      | GR            | C2PXG-1636G-ND    | 2.50    | 18.99 | —   | —     |
|                               | Tin            | 36 (91.44)      | GR            | C2PXT-1636G-ND    | 2.25    | 17.05 | —   | —     |
| 24                            | Gold           | 6 (15.24)       | MC            | C2PXG-2406G-ND    | 3.11    | 23.59 | —   | —     |
|                               | Tin            | 6 (15.24)       | MC            | C2PXT-2406G-ND    | 2.69    | 20.39 | —   | —     |
|                               | Gold           | 6 (15.24)       | GR            | C2PXG-2406G-ND    | 3.02    | 22.90 | —   | —     |
|                               | Tin            | 6 (15.24)       | GR            | C2PXT-2406G-ND    | 2.60    | 19.69 | —   | —     |
|                               | Gold           | 18 (45.72)      | MC            | C2PXG-2418G-ND    | 3.70    | 28.01 | —   | —     |
|                               | Tin            | 18 (45.72)      | MC            | C2PXT-2418G-ND    | 3.27    | 24.80 | —   | —     |
|                               | Gold           | 18 (45.72)      | GR            | C2PXG-2418G-ND    | 3.42    | 25.93 | —   | —     |
|                               | Tin            | 18 (45.72)      | GR            | C2PXT-2418G-ND    | 3.00    | 22.72 | —   | —     |
|                               | Gold           | 36 (91.44)      | MC            | C2PXG-2436G-ND    | 4.57    | 34.64 | —   | —     |
|                               | Tin            | 36 (91.44)      | MC            | C2PXT-2436G-ND    | 4.15    | 31.43 | —   | —     |
|                               | Gold           | 36 (91.44)      | GR            | C2PXG-2436G-ND    | 4.02    | 30.48 | —   | —     |
|                               | Tin            | 36 (91.44)      | GR            | C2PXT-2436G-ND    | 3.60    | 27.27 | —   | —     |
| 40                            | Gold           | 6 (15.24)       | MC            | C2PXG-4006G-ND    | 4.55    | 34.46 | —   | —     |
|                               | Tin            | 6 (15.24)       | MC            | C2PXT-4006G-ND    | 3.94    | 29.85 | —   | —     |
|                               | Gold           | 6 (15.24)       | GR            | C2PXG-4006G-ND    | 4.40    | 33.33 | —   | —     |
|                               | Tin            | 6 (15.24)       | GR            | C2PXT-4006G-ND    | 3.79    | 28.71 | —   | —     |
|                               | Gold           | 18 (45.72)      | MC            | C2PXG-4018G-ND    | 5.52    | 41.82 | —   | —     |
|                               | Tin            | 18 (45.72)      | MC            | C2PXT-4018G-ND    | 4.91    | 37.20 | —   | —     |
|                               | Gold           | 18 (45.72)      | GR            | C2PXG-4018G-ND    | 5.07    | 38.41 | —   | —     |
|                               | Tin            | 18 (45.72)      | GR            | C2PXT-4018G-ND    | 4.46    | 33.79 | —   | —     |
|                               | Gold           | 36 (91.44)      | MC            | C2PXG-4036G-ND    | 6.97    | 52.85 | —   | —     |
|                               | Tin            | 36 (91.44)      | MC            | C2PXT-4036G-ND    | 6.36    | 48.23 | —   | —     |
|                               | Gold           | 36 (91.44)      | GR            | C2PXG-4036G-ND    | 6.07    | 46.03 | —   | —     |
|                               | Tin            | 36 (91.44)      | GR            | C2PXT-4036G-ND    | 5.46    | 41.41 | —   | —     |

Also available in the following version:  
C2RX□□□□□□□□-ND — Dip Connector with Strain Relief Strap.  
Call for complete part number and pricing!

| No. of Contacts               | Contact Finish | Length In. (mm) | Rib-bon Cable | Digi-Key Part No. | Pricing |       |     |       |
|-------------------------------|----------------|-----------------|---------------|-------------------|---------|-------|-----|-------|
|                               |                |                 |               |                   | 1       | 10    | 100 | 1,000 |
| <b>Single Ended — Style 4</b> |                |                 |               |                   |         |       |     |       |
| 14                            | Gold           | 6 (15.24)       | MC            | C4PXG-1406G-ND    | 1.78    | 13.51 | —   | —     |
|                               | Tin            | 6 (15.24)       | MC            | C4PXT-1406G-ND    | 1.54    | 11.67 | —   | —     |
|                               | Gold           | 6 (15.24)       | GR            | C4PXG-1406G-ND    | 1.73    | 13.11 | —   | —     |
|                               | Tin            | 6 (15.24)       | GR            | C4PXT-1406G-ND    | 1.49    | 11.28 | —   | —     |
|                               | Gold           | 18 (45.72)      | MC            | C4PXG-1418G-ND    | 2.12    | 16.08 | —   | —     |
|                               | Tin            | 18 (45.72)      | MC            | C4PXT-1418G-ND    | 1.88    | 14.25 | —   | —     |
|                               | Gold           | 18 (45.72)      | GR            | C4PXG-1418G-ND    | 1.97    | 14.90 | —   | —     |
|                               | Tin            | 18 (45.72)      | GR            | C4PXT-1418G-ND    | 1.72    | 13.07 | —   | —     |
|                               | Gold           | 36 (91.44)      | MC            | C4PXG-1436G-ND    | 2.39    | 18.11 | —   | —     |
|                               | Tin            | 36 (91.44)      | MC            | C4PXT-1436G-ND    | 2.32    | 17.58 | —   | —     |
|                               | Gold           | 36 (91.44)      | GR            | C4PXG-1436G-ND    | 2.08    | 15.75 | —   | —     |
| 16                            | Gold           | 6 (15.24)       | MC            | C4PXG-1606G-ND    | 1.90    | 14.39 | —   | —     |
|                               | Tin            | 6 (15.24)       | MC            | C4PXT-1606G-ND    | 1.64    | 12.46 | —   | —     |
|                               | Gold           | 6 (15.24)       | GR            | C4PXG-1606G-ND    | 1.84    | 13.94 | —   | —     |
|                               | Tin            | 6 (15.24)       | GR            | C4PXT-1606G-ND    | 1.58    | 12.00 | —   | —     |
|                               | Gold           | 18 (45.72)      | MC            | C4PXG-1618G-ND    | 2.29    | 17.33 | —   | —     |
|                               | Tin            | 18 (45.72)      | MC            | C4PXT-1618G-ND    | 2.03    | 15.39 | —   | —     |
|                               | Gold           | 18 (45.72)      | GR            | C4PXG-1618G-ND    | 2.15    | 15.96 | —   | —     |
|                               | Tin            | 18 (45.72)      | GR            | C4PXT-1618G-ND    | 1.85    | 14.02 | —   | —     |
|                               | Gold           | 36 (91.44)      | MC            | C4PXG-1636G-ND    | 2.87    | 21.74 | —   | —     |
|                               | Tin            | 36 (91.44)      | MC            | C4PXT-1636G-ND    | 2.61    | 19.80 | —   | —     |
|                               | Gold           | 36 (91.44)      | GR            | C4PXG-1636G-ND    | 2.50    | 18.99 | —   | —     |
|                               | Tin            | 36 (91.44)      | GR            | C4PXT-1636G-ND    | 2.25    | 17.05 | —   | —     |
| 24                            | Gold           | 6 (15.24)       | MC            | C4PXG-2406G-ND    | 3.11    | 23.59 | —   | —     |
|                               | Tin            | 6 (15.24)       | MC            | C4PXT-2406G-ND    | 2.69    | 20.39 | —   | —     |
|                               | Gold           | 6 (15.24)       | GR            | C4PXG-2406G-ND    | 3.02    | 22.90 | —   | —     |
|                               | Tin            | 6 (15.24)       | GR            | C4PXT-2406G-ND    | 2.60    | 19.69 | —   | —     |
|                               | Gold           | 18 (45.72)      | MC            | C4PXG-2418G-ND    | 3.70    | 28.01 | —   | —     |
|                               | Tin            | 18 (45.72)      | MC            | C4PXT-2418G-ND    | 3.27    | 24.80 | —   | —     |
|                               | Gold           | 18 (45.72)      | GR            | C4PXG-2418G-ND    | 3.42    | 25.93 | —   | —     |
|                               | Tin            | 18 (45.72)      | GR            | C4PXT-2418G-ND    | 3.00    | 22.72 | —   | —     |
|                               | Gold           | 36 (91.44)      | MC            | C4PXG-2436G-ND    | 4.57    | 34.64 | —   | —     |
|                               | Tin            | 36 (91.44)      | MC            | C4PXT-2436G-ND    | 4.15    | 31.43 | —   | —     |
|                               | Gold           | 36 (91.44)      | GR            | C4PXG-2436G-ND    | 4.02    | 30.48 | —   | —     |
|                               | Tin            | 36 (91.44)      | GR            | C4PXT-2436G-ND    | 3.60    | 27.27 | —   | —     |
| 40                            | Gold           | 6 (15.24)       | MC            | C4PXG-4006G-ND    | 4.55    | 34.46 | —   | —     |
|                               | Tin            | 6 (15.24)       | MC            | C4PXT-4006G-ND    | 3.94    | 29.85 | —   | —     |
|                               | Gold           | 6 (15.24)       | GR            | C4PXG-4006G-ND    | 4.40    | 33.33 | —   | —     |
|                               | Tin            | 6 (15.24)       | GR            | C4PXT-4006G-ND    | 3.79    | 28.71 | —   | —     |
|                               | Gold           | 18 (45.72)      | MC            | C4PXG-4018G-ND    | 5.52    | 41.82 | —   | —     |
|                               | Tin            | 18 (45.72)      | MC            | C4PXT-4018G-ND    | 4.91    | 37.20 | —   | —     |
|                               | Gold           | 18 (45.72)      | GR            | C4PXG-4018G-ND    | 5.07    | 38.41 | —   | —     |
|                               | Tin            | 18 (45.72)      | GR            | C4PXT-4018G-ND    | 4.46    | 33.79 | —   | —     |
|                               | Gold           | 36 (91.44)      | MC            | C4PXG-4036G-ND    | 6.97    | 52.85 | —   | —     |
|                               | Tin            | 36 (91.44)      | MC            | C4PXT-4036G-ND    | 6.36    | 48.23 | —   | —     |
|                               | Gold           | 36 (91.44)      | GR            | C4PXG-4036G-ND    | 6.07    | 46.03 | —   | —     |
|                               | Tin            | 36 (91.44)      | GR            | C4PXT-4036G-ND    | 5.46    | 41.41 | —   | —     |

Also available in the following version:  
C4RX□□□□□□□□-ND — Dip Connector with Strain Relief Strap.  
Call for complete part number and pricing!

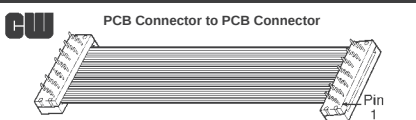


| No. of<br>Contacts | Conn.<br>Finish | Length<br>In. (cm) | Rib-<br>bon*<br>Cable | Digi-Key<br>Part No. | Pricing |       |
|--------------------|-----------------|--------------------|-----------------------|----------------------|---------|-------|
|                    |                 |                    |                       |                      | 1       | 10    |
| 14                 | Gold            | 6 (15.24)          | MC                    | C6PPG-1406M-ND       | 3.39    | 25.73 |
|                    | Tin             | 6 (15.24)          | MC                    | C6PPT-1406M-ND       | 2.91    | 22.06 |
|                    | Gold            | 6 (15.24)          | GR                    | C6PPG-1406G-ND       | 3.34    | 25.33 |
|                    | Tin             | 6 (15.24)          | GR                    | C6PPT-1406G-ND       | 2.86    | 21.27 |
|                    | Gold            | 18 (45.72)         | MC                    | C6PPG-1418M-ND       | 3.73    | 28.30 |
|                    | Tin             | 18 (45.72)         | MC                    | C6PPT-1418M-ND       | 3.25    | 24.64 |
|                    | Gold            | 18 (45.72)         | GR                    | C6PPG-1418G-ND       | 3.58    | 27.12 |
|                    | Tin             | 18 (45.72)         | GR                    | C6PPT-1418G-ND       | 3.09    | 23.45 |
|                    | Gold            | 36 (91.44)         | MC                    | C6PPG-1436M-ND       | 3.76    | 28.49 |
|                    | Tin             | 36 (91.44)         | MC                    | C6PPT-1436M-ND       | 3.24    | 26.12 |
| 16                 | Gold            | 6 (15.24)          | MC                    | C6PPG-1606M-ND       | 3.60    | 27.32 |
|                    | Tin             | 6 (15.24)          | MC                    | C6PPT-1606M-ND       | 3.09    | 23.44 |
|                    | Gold            | 6 (15.24)          | GR                    | C6PPG-1606G-ND       | 3.54    | 26.86 |
|                    | Tin             | 6 (15.24)          | GR                    | C6PPT-1606G-ND       | 3.03    | 22.98 |
|                    | Gold            | 18 (45.72)         | MC                    | C6PPG-1618M-ND       | 3.93    | 30.26 |
|                    | Tin             | 18 (45.72)         | MC                    | C6PPT-1618M-ND       | 3.48    | 26.38 |
|                    | Gold            | 18 (45.72)         | GR                    | C6PPG-1618G-ND       | 3.81    | 28.88 |
|                    | Tin             | 18 (45.72)         | GR                    | C6PPT-1618G-ND       | 3.30    | 25.45 |
|                    | Gold            | 36 (91.44)         | MC                    | C6PPG-1636M-ND       | 4.57    | 36.46 |
|                    | Tin             | 36 (91.44)         | MC                    | C6PPT-1636M-ND       | 4.06    | 30.79 |
| 24                 | Gold            | 6 (15.24)          | MC                    | C6PPG-2406M-ND       | 4.21    | 31.91 |
|                    | Tin             | 6 (15.24)          | MC                    | C6PPT-2406M-ND       | 3.70    | 28.04 |
|                    | Gold            | 6 (15.24)          | GR                    | C6PPG-2406G-ND       | 5.53    | 44.98 |
|                    | Tin             | 6 (15.24)          | GR                    | C6PPT-2406G-ND       | 5.09    | 38.29 |
|                    | Gold            | 18 (45.72)         | MC                    | C6PPG-2418M-ND       | 5.84    | 42.29 |
|                    | Tin             | 18 (45.72)         | MC                    | C6PPT-2418M-ND       | 5.62    | 42.98 |
|                    | Gold            | 18 (45.72)         | GR                    | C6PPG-2418G-ND       | 6.27    | 47.47 |
|                    | Tin             | 18 (45.72)         | GR                    | C6PPT-2418G-ND       | 5.40    | 40.90 |
|                    | Gold            | 36 (91.44)         | MC                    | C6PPG-2436M-ND       | 7.39    | 56.02 |
|                    | Tin             | 36 (91.44)         | MC                    | C6PPT-2436M-ND       | 6.54    | 49.91 |
| 40                 | Gold            | 6 (15.24)          | MC                    | C6PPG-4006M-ND       | 6.84    | 51.86 |
|                    | Tin             | 6 (15.24)          | MC                    | C6PPT-4006M-ND       | 6.00    | 46.00 |
|                    | Gold            | 6 (15.24)          | GR                    | C6PPG-4006G-ND       | 8.61    | 65.25 |
|                    | Tin             | 6 (15.24)          | GR                    | C6PPT-4006G-ND       | 7.39    | 56.11 |
|                    | Gold            | 18 (45.72)         | MC                    | C6PPG-4018M-ND       | 8.46    | 64.11 |
|                    | Tin             | 18 (45.72)         | MC                    | C6PPT-4018M-ND       | 7.24    | 54.87 |
|                    | Gold            | 18 (45.72)         | GR                    | C6PPG-4018G-ND       | 9.58    | 72.19 |
|                    | Tin             | 18 (45.72)         | GR                    | C6PPT-4018G-ND       | 8.35    | 63.83 |
|                    | Gold            | 36 (91.44)         | MC                    | C6PPG-4036M-ND       | 9.13    | 69.60 |
|                    | Tin             | 36 (91.44)         | MC                    | C6PPT-4036M-ND       | 7.91    | 59.96 |
| 50                 | Gold            | 36 (91.44)         | GR                    | C6PPG-4036G-ND       | 11.03   | 83.64 |
|                    | Tin             | 36 (91.44)         | GR                    | C6PPT-4036G-ND       | 9.81    | 74.40 |
|                    | Gold            | 36 (91.44)         | GR                    | C6PPG-4036M-ND       | 10.13   | 76.58 |
|                    | Tin             | 36 (91.44)         | GR                    | C6PPT-4036M-ND       | 8.91    | 67.58 |



|    |      |            |    |                |      |       |
|----|------|------------|----|----------------|------|-------|
| 20 | Gold | 6 (15.24)  | MC | C3AAG-2006G-ND | 4.09 | 30.98 |
|    | Tin  | 6 (15.24)  | MC | C3AAT-2006G-ND | 3.51 | 26.61 |
|    | Gold | 6 (15.24)  | GR | C3AAG-2006G-ND | 4.01 | 30.41 |
|    | Tin  | 6 (15.24)  | GR | C3AAT-2006G-ND | 3.43 | 26.04 |
|    | Gold | 18 (45.72) | MC | C3AAT-2018G-ND | 4.57 | 34.66 |
|    | Tin  | 18 (45.72) | MC | C3AAT-2018G-ND | 4.00 | 30.23 |
| 26 | Gold | 18 (45.72) | GR | C3AAG-2018G-ND | 4.35 | 32.95 |
|    | Tin  | 18 (45.72) | GR | C3AAT-2018G-ND | 3.77 | 28.58 |
|    | Gold | 36 (91.44) | MC | C3AAG-2036G-ND | 5.30 | 40.17 |
|    | Tin  | 36 (91.44) | MC | C3AAT-2036G-ND | 4.72 | 35.80 |
|    | Gold | 36 (91.44) | GR | C3AAG-2036G-ND | 5.25 | 39.39 |
|    | Tin  | 36 (91.44) | GR | C3AAT-2036G-ND | 4.27 | 32.38 |
| 34 | Gold | 6 (15.24)  | MC | C3AAG-2606G-ND | 4.90 | 37.17 |
|    | Tin  | 6 (15.24)  | MC | C3AAT-2606G-ND | 4.21 | 31.95 |
|    | Gold | 6 (15.24)  | GR | C3AAG-2606G-ND | 4.81 | 36.44 |
|    | Tin  | 6 (15.24)  | GR | C3AAT-2606G-ND | 4.12 | 31.22 |
|    | Gold | 18 (45.72) | MC | C3AAG-2618G-ND | 5.53 | 41.95 |
|    | Tin  | 18 (45.72) | MC | C3AAT-2618G-ND | 4.84 | 36.84 |
| 40 | Gold | 18 (45.72) | GR | C3AAG-2618G-ND | 5.24 | 39.75 |
|    | Tin  | 18 (45.72) | GR | C3AAT-2618G-ND | 4.56 | 34.53 |
|    | Gold | 36 (91.44) | MC | C3AAG-2636G-ND | 6.48 | 49.11 |
|    | Tin  | 36 (91.44) | MC | C3AAT-2636G-ND | 5.79 | 43.89 |
|    | Gold | 36 (91.44) | GR | C3AAG-2636G-ND | 5.90 | 44.72 |
|    | Tin  | 36 (91.44) | GR | C3AAT-2636G-ND | 5.21 | 39.50 |
| 50 | Gold | 6 (15.24)  | MC | C3AAG-3406G-ND | 6.05 | 45.88 |
|    | Tin  | 6 (15.24)  | MC | C3AAT-3406G-ND | 5.21 | 39.47 |
|    | Gold | 6 (15.24)  | GR | C3AAG-3406G-ND | 5.93 | 44.93 |
|    | Tin  | 6 (15.24)  | GR | C3AAT-3406G-ND | 5.08 | 38.52 |
|    | Gold | 18 (45.72) | MC | C3AAG-3418G-ND | 6.87 | 52.11 |
|    | Tin  | 18 (45.72) | MC | C3AAT-3418G-ND | 6.03 | 45.70 |
| 60 | Gold | 18 (45.72) | GR | C3AAG-3418G-ND | 6.50 | 49.26 |
|    | Tin  | 18 (45.72) | GR | C3AAT-3418G-ND | 5.65 | 42.84 |
|    | Gold | 36 (91.44) | MC | C3AAG-3436G-ND | 8.11 | 61.45 |
|    | Tin  | 36 (91.44) | MC | C3AAT-3436G-ND | 7.26 | 55.07 |
|    | Gold | 36 (91.44) | GR | C3AAG-3436G-ND | 7.25 | 55.74 |
|    | Tin  | 36 (91.44) | GR | C3AAT-3436G-ND | 6.51 | 49.33 |

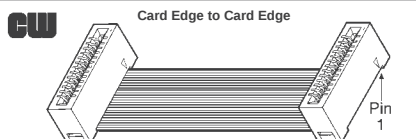
Also available in the following versions:  
 C3BBP-ND — Socket Connector with Strain Relief.  
 C3CCP-ND — Socket Connector with Central Polarizing Key.  
 C3DDP-ND — Socket Connector w. Strain Relief & Central Polarizing Key.  
 Call for complete part number and pricing!



\* MC = Multi-Color, GR = Gray

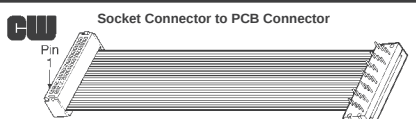
| No. of<br>Con-<br>tacts | Conn.<br>Finish | Length<br>In. (cm) | Rib-<br>bon*<br>Cable | Digi-Key<br>Part No. | Pricing<br>1 10 |
|-------------------------|-----------------|--------------------|-----------------------|----------------------|-----------------|
| 10                      | Tin             | 6 (15.24)          | MC                    | C3PPT-1006G-ND       | 2.60 19.72      |
|                         | Tin             | 6 (15.24)          | GR                    | C3PPT-1006G-ND       | 2.56 19.43      |
|                         | Tin             | 18 (45.72)         | MC                    | C3PPT-1018G-ND       | 2.84 21.55      |
|                         | Tin             | 18 (45.72)         | GR                    | C3PPT-1018G-ND       | 2.73 20.69      |
|                         | Tin             | 36 (91.44)         | MC                    | C3PPT-1036G-ND       | 3.21 24.30      |
|                         | Tin             | 36 (91.44)         | GR                    | C3PPT-1036G-ND       | 2.98 22.57      |
| 20                      | Tin             | 6 (15.24)          | MC                    | C3PPT-2006G-ND       | 3.16 23.93      |
|                         | Tin             | 6 (15.24)          | GR                    | C3PPT-2006G-ND       | 3.08 23.66      |
|                         | Tin             | 18 (45.72)         | MC                    | C3PPT-2018G-ND       | 3.64 27.31      |
|                         | Tin             | 18 (45.72)         | GR                    | C3PPT-2018G-ND       | 3.42 25.90      |
|                         | Tin             | 36 (91.44)         | MC                    | C3PPT-2036G-ND       | 4.37 33.12      |
|                         | Tin             | 36 (91.44)         | GR                    | C3PPT-2036G-ND       | 3.92 29.70      |
| 26                      | Tin             | 6 (15.24)          | MC                    | C3PPT-2606G-ND       | 4.03 30.59      |
|                         | Tin             | 6 (15.24)          | GR                    | C3PPT-2606G-ND       | 3.94 29.86      |
|                         | Tin             | 18 (45.72)         | MC                    | C3PPT-2618G-ND       | 4.67 36.37      |
|                         | Tin             | 18 (45.72)         | GR                    | C3PPT-2618G-ND       | 4.38 33.17      |
|                         | Tin             | 36 (91.44)         | MC                    | C3PPT-2636G-ND       | 5.61 42.53      |
|                         | Tin             | 36 (91.44)         | GR                    | C3PPT-2636G-ND       | 5.03 38.14      |
| 34                      | Tin             | 6 (15.24)          | MC                    | C3PPT-3406G-ND       | 4.94 37.42      |
|                         | Tin             | 6 (15.24)          | GR                    | C3PPT-3406G-ND       | 4.81 36.47      |
|                         | Tin             | 18 (45.72)         | MC                    | C3PPT-3418G-ND       | 5.76 43.65      |
|                         | Tin             | 18 (45.72)         | GR                    | C3PPT-3418G-ND       | 5.38 40.80      |
|                         | Tin             | 36 (91.44)         | MC                    | C3PPT-3436G-ND       | 6.99 52.99      |
|                         | Tin             | 36 (91.44)         | GR                    | C3PPT-3436G-ND       | 6.24 47.28      |
| 40                      | Tin             | 6 (15.24)          | MC                    | C3PPT-4006G-ND       | 5.69 43.16      |
|                         | Tin             | 6 (15.24)          | GR                    | C3PPT-4006G-ND       | 5.54 42.02      |
|                         | Tin             | 18 (45.72)         | MC                    | C3PPT-4018G-ND       | 6.66 50.51      |
|                         | Tin             | 18 (45.72)         | GR                    | C3PPT-4018G-ND       | 6.21 47.10      |
|                         | Tin             | 36 (91.44)         | MC                    | C3PPT-4036G-ND       | 8.12 61.55      |
|                         | Tin             | 36 (91.44)         | GR                    | C3PPT-4036G-ND       | 7.22 54.31      |
| 50                      | Tin             | 6 (15.24)          | MC                    | C3PPT-5006G-ND       | 7.05 53.48      |
|                         | Tin             | 6 (15.24)          | GR                    | C3PPT-5006G-ND       | 6.87 52.05      |
|                         | Tin             | 18 (45.72)         | MC                    | C3PPT-5018G-ND       | 8.27 62.68      |
|                         | Tin             | 18 (45.72)         | GR                    | C3PPT-5018G-ND       | 7.70 58.40      |
|                         | Tin             | 36 (91.44)         | MC                    | C3PPT-5036G-ND       | 10.09 76.48     |
|                         | Tin             | 36 (91.44)         | GR                    | C3PPT-5036G-ND       | 8.96 67.92      |

|    |     |            |    |                |             |
|----|-----|------------|----|----------------|-------------|
| 60 | Tin | 6 (15.24)  | MC | C3PPT-6006G-ND | 8.16 61.89  |
|    | Tin | 6 (15.24)  | GR | C3PPT-6006G-ND | 7.94 60.20  |
|    | Tin | 18 (45.72) | MC | C3PPT-6018G-ND | 9.61 72.88  |
|    | Tin | 18 (45.72) | GR | C3PPT-6018G-ND | 8.94 67.80  |
|    | Tin | 36 (91.44) | MC | C3PPT-6036G-ND | 11.79 89.36 |
|    | Tin | 36 (91.44) | GR | C3PPT-6036G-ND | 10.45 79.19 |



\* MC = Multi-Color, GR = Gray

| No. of<br>Con-<br>tacts | Conn.<br>Finish | Length<br>In. (cm) | Rib-<br>bon*<br>Cable | Digi-Key<br>Part No. | Pricing<br>1 10 |
|-------------------------|-----------------|--------------------|-----------------------|----------------------|-----------------|
| 10                      | Gold            | 6 (15.24)          | MC                    | C3EE-1006G-ND        | 4.96 37.58      |
|                         | Tin             | 6 (15.24)          | MC                    | C3EE-1006G-ND        | 4.23 32.08      |
|                         | Gold            | 6 (15.24)          | GR                    | C3EE-1006G-ND        | 4.92 37.29      |
|                         | Tin             | 6 (15.24)          | GR                    | C3EE-1006G-ND        | 4.19 31.79      |
|                         | Gold            | 18 (45.72)         | MC                    | C3EE-1018G-ND        | 5.20 39.41      |
|                         | Tin             | 18 (45.72)         | MC                    | C3EE-1018G-ND        | 4.47 33.91      |
| 20                      | Gold            | 18 (45.72)         | GR                    | C3EE-1018G-ND        | 5.08 38.55      |
|                         | Tin             | 18 (45.72)         | GR                    | C3EE-1018G-ND        | 4.36 33.05      |
|                         | Gold            | 36 (91.44)         | MC                    | C3EE-1036G-ND        | 5.56 42.16      |
|                         | Tin             | 36 (91.44)         | MC                    | C3EE-1036G-ND        | 4.84 36.69      |
|                         | Gold            | 36 (91.44)         | GR                    | C3EE-1036G-ND        | 5.33 40.43      |
|                         | Tin             | 36 (91.44)         | GR                    | C3EE-1036G-ND        | 4.61 34.93      |
| 26                      | Gold            | 6 (15.24)          | MC                    | C3EE-2006G-ND        | 6.69 50.72      |
|                         | Tin             | 6 (15.24)          | MC                    | C3EE-2006G-ND        | 5.72 43.39      |
|                         | Gold            | 6 (15.24)          | GR                    | C3EE-2006G-ND        | 6.62 49.15      |
|                         | Tin             | 6 (15.24)          | GR                    | C3EE-2006G-ND        | 5.65 42.82      |
|                         | Gold            | 18 (45.72)         | MC                    | C3EE-2018G-ND        | 7.18 54.40      |
|                         | Tin             | 18 (45.72)         | MC                    | C3EE-2018G-ND        | 6.21 47.07      |
| 34                      | Gold            | 18 (45.72)         | GR                    | C3EE-2018G-ND        | 6.95 52.69      |
|                         | Tin             | 18 (45.72)         | GR                    | C3EE-2018G-ND        | 5.98 45.36      |
|                         | Gold            | 36 (91.44)         | MC                    | C3EE-2036G-ND        | 7.90 59.91      |
|                         | Tin             | 36 (91.44)         | MC                    | C3EE-2036G-ND        | 6.94 52.58      |
|                         | Gold            | 36 (91.44)         | GR                    | C3EE-2036G-ND        | 7.45 56.49      |
|                         | Tin             | 36 (91.44)         | GR                    | C3EE-2036G-ND        | 6.49 49.16      |
| 40                      | Gold            | 6 (15.24)          | MC                    | C3EE-3406G-ND        | 8.06 61.14      |
|                         | Tin             | 6 (15.24)          | MC                    | C3EE-3406G-ND        | 6.80 53.33      |
|                         | Gold            | 6 (15.24)          | GR                    | C3EE-3406G-ND        | 7.87 60.41      |
|                         | Tin             | 6 (15.24)          | GR                    | C3EE-3406G-ND        | 6.81 51.59      |
|                         | Gold            | 18 (45.72)         | MC                    | C3EE-3418G-ND        | 8.70 65.92      |
|                         | Tin             | 18 (45.72)         | MC                    | C3EE-3418G-ND        | 7.53 57.10      |
| 50                      | Gold            | 18 (45.72)         | GR                    | C3EE-3418G-ND        | 8.41 63.72      |
|                         | Tin             | 18 (45.72)         | GR                    | C3EE-3418G-ND        | 7.24 54.91      |
|                         | Gold            | 36 (91.44)         | MC                    | C3EE-3436G-ND        | 9.64 73.08      |
|                         | Tin             | 36 (91.44)         | MC                    | C3EE-3436G-ND        | 8.48 64.27      |
|                         | Gold            | 36 (91.44)         | GR                    | C3EE-3436G-ND        | 9.06 68.69      |
|                         | Tin             | 36 (91.44)         | GR                    | C3EE-3436G-ND        | 7.90 59.88      |
| 60                      | Gold            | 6 (15.24)          | MC                    | C3EE-4006G-ND        | 10.02 75.96     |
|                         | Tin             | 6 (15.24)          | MC                    | C3EE-4006G-ND        | 8.58 65.04      |
|                         | Gold            | 6 (15.24)          | GR                    | C3EE-4006G-ND        | 9.90 75.01      |
|                         | Tin             | 6 (15.24)          | GR                    | C3EE-4006G-ND        | 8.45 64.08      |
|                         | Gold            | 18 (45.72)         | MC                    | C3EE-4018G-ND        | 10.84 82.19     |
|                         | Tin             | 18 (45.72)         | MC                    | C3EE-4018G-ND        | 9.40 71.26      |
| 70                      | Gold            | 18 (45.72)         | GR                    | C3EE-4018G-ND        | 10.47 79.34     |
|                         | Tin             | 18 (45.72)         | GR                    | C3EE-4018G-ND        | 9.02 68.41      |
|                         | Gold            | 36 (91.44)         | MC                    | C3EE-4036G-ND        | 12.07 91.53     |
|                         | Tin             | 36 (91.44)         | MC                    | C3EE-4036G-ND        | 10.63 80.61     |
|                         | Gold            | 36 (91.44)         | GR                    | C3EE-4036G-ND        | 11.32 85.82     |
|                         | Tin             | 36 (91.44)         | GR                    | C3EE-4036G-ND        | 9.88 74.89      |
| 80                      | Gold            | 6 (15.24)          | MC                    | C3EE-5006G-ND        | 11.71 88.75     |
|                         | Tin             | 6 (15.24)          | MC                    | C3EE-5006G-ND        | 10.02 75.99     |
|                         | Gold            | 6 (15.24)          | GR                    | C3EE-5006G-ND        | 11.56 87.61     |
|                         | Tin             | 6 (15.24)          | GR                    | C3EE-5006G-ND        | 9.87 74.85      |
|                         | Gold            | 18 (45.72)         | MC                    | C3EE-5018G-ND        | 12.68 96.10     |
|                         | Tin             | 18 (45.72)         | MC                    | C3EE-5018G-ND        | 10.99 83.34     |
| 90                      | Gold            | 18 (45.72)         | GR                    | C3EE-5018G-ND        | 12.23 92.69     |
|                         | Tin             | 18 (45.72)         | GR                    | C3EE-5018G-ND        | 10.54 79.93     |
|                         | Gold            | 36 (91.44)         | MC                    | C3EE-5036G-ND        | 14.13 107.14    |
|                         | Tin             | 36 (91.44)         | MC                    | C3EE-5036G-ND        | 12.45 94.36     |
|                         | Gold            | 36 (91.44)         | GR                    | C3EE-5036G-ND        | 12.23 100.32    |
|                         | Tin             | 36 (91.44)         | GR                    | C3EE-5036G-ND        | 11.55 87.56     |
| 100                     | Gold            | 6 (15.24)          | MC                    | C3EE-6006G-ND        | 13.25 100.48    |
|                         | Tin             | 6 (15.24)          | MC                    | C3EE-6006G-ND        | 11.36 86.10     |
|                         | Gold            | 6 (15.24)          | GR                    | C3EE-6006G-ND        | 13.07 99.05     |
|                         | Tin             | 6 (15.24)          | GR                    | C3EE-6006G-ND        | 11.17 84.61     |
|                         | Gold            | 18 (45.72)         | MC                    | C3EE-6018G-ND        | 14.47 109.68    |
|                         | Tin             | 18 (45.72)         | MC                    | C3EE-6018G-ND        | 12.57 95.30     |
| 110                     | Gold            | 18 (45.72)         | GR                    | C3EE-6018G-ND        | 13.90 105.40    |
|                         | Tin             | 18 (45.72)         | GR                    | C3EE-6018G-ND        | 12.01 91.02     |
|                         | Gold            | 36 (91.44)         | MC                    | C3EE-6036G-ND        | 16.29 123.48    |
|                         | Tin             | 36 (91.44)         | MC                    | C3EE-6036G-ND        | 14.39 109.10    |
|                         | Gold            | 36 (91.44)         | GR                    | C3EE-6036G-ND        | 15.16 114.92    |
|                         | Tin             | 36 (91.44)         | GR                    | C3EE-6036G-ND        | 13.26 100.53    |



\* MC = Multi-Color, GR = Gray

| No. of<br>Con-<br>tacts | Conn.<br>Finish | Length<br>In. (cm) | Rib-<br>bon*<br>Cable | Digi-Key<br>Part No. | Pricing<br>1 10 |
|-------------------------|-----------------|--------------------|-----------------------|----------------------|-----------------|
| 10                      | Tin             | 6 (15.24)          | MC                    | C3APT-1006M-ND       | 2.02 15.30      |
|                         | Tin             | 6 (15.24)          | GR                    | C3APT-1006G-ND       | 1.98 15.01      |
|                         | Tin             | 18 (45.72)         | MC                    | C3APT-1018M-ND       | 2.26 17.13      |
|                         | Tin             | 18 (45.72)         | GR                    | C3APT-1018G-ND       | 2.15 16.27      |
|                         | Tin             | 36 (91.44)         | MC                    | C3APT-1036M-ND       | 2.62 19.88      |
|                         | Tin             | 36 (91.44)         | GR                    | C3APT-1036G-ND       | 2.39 18.15      |
| 20                      | Tin             | 6 (15.24)          | MC                    | C3APT-2006M-ND       | 3.33 25.27      |
|                         | Tin             | 6 (15.24)          | GR                    | C3APT-2006G-ND       | 3.26 24.70      |
|                         | Tin             | 18 (45.72)         | MC                    | C3APT-2018M-ND       | 3.82 28.95      |
|                         | Tin             | 18 (45.72)         | GR                    | C3APT-2018G-ND       | 3.59 27.94      |
|                         | Tin             | 36 (91.44)         | MC                    | C3APT-2036M-ND       | 4.55 34.27      |
|                         | Tin             | 36 (91.44)         | GR                    | C3APT-2036G-ND       | 4.10 31.04      |
| 26                      | Tin             | 6 (15.24)          | MC                    | C3APT-2606M-ND       | 4.12 31.27      |
|                         | Tin             | 6 (15.24)          | GR                    | C3APT-2606G-ND       | 4.03 30.54      |
|                         | Tin             | 18 (45.72)         | MC                    | C3APT-2618M-ND       | 4.76 36.05      |
|                         | Tin             | 18 (45.72)         | GR                    | C3APT-2618G-ND       | 4.47 33.85      |
|                         | Tin             | 36 (91.44)         | MC                    | C3APT-2636M-ND       | 5.70 43.21      |
|                         | Tin             | 36 (91.44)         | GR                    | C3APT-2636G-ND       | 5.38 41.27      |



PCB Connector to Card Edge Connector



\* MC = Multi-Color, GR = Gray

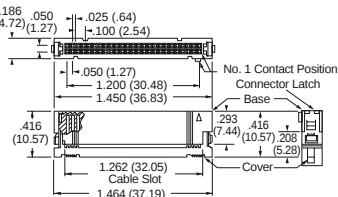
| No. of<br>Con-<br>tacts | Conn.<br>Finish | Length<br>In. (cm) | Rib-<br>bon*<br>Cable | Digi-Key<br>Part No. | Pricing<br>1 10 |
|-------------------------|-----------------|--------------------|-----------------------|----------------------|-----------------|
| 10                      | Tin             | 6 (15.24)          | MC                    | C3PET-1006G-ND       | 3.42 25.90      |
|                         | Tin             | 6 (15.24)          | GR                    | C3PET-1006G-ND       | 3.38 25.61      |
|                         | Tin             | 18 (45.72)         | MC                    | C3PET-1018G-ND       | 3.66 27.73      |
|                         | Tin             | 18 (45.72)         | GR                    | C3PET-1018G-ND       | 3.54 26.87      |
|                         | Tin             | 36 (91.44)         | MC                    | C3PET-1036G-ND       | 4.02 30.48      |
| 20                      | Tin             | 6 (15.24)          | MC                    | C3PET-2006G-ND       | 4.44 33.66      |
|                         | Tin             | 6 (15.24)          | GR                    | C3PET-2006G-ND       | 4.36 33.09      |
|                         | Tin             | 18 (45.72)         | MC                    | C3PET-2018G-ND       | 4.93 37.34      |
|                         | Tin             | 18 (45.72)         | GR                    | C3PET-2018G-ND       | 4.70 35.63      |
|                         | Tin             | 36 (91.44)         | MC                    | C3PET-2036G-ND       | 5.65 42.85      |
| 26                      | Tin             | 6 (15.24)          | MC                    | C3PET-2606G-ND       | 5.47 41.46      |
|                         | Tin             | 6 (15.24)          | GR                    | C3PET-2606G-ND       | 5.37 40.73      |
|                         | Tin             | 18 (45.72)         | MC                    | C3PET-2618G-ND       | 6.10 46.23      |
|                         | Tin             | 18 (45.72)         | GR                    | C3PET-2618G-ND       | 5.81 44.04      |
|                         | Tin             | 36 (91.44)         | MC                    | C3PET-2636G-ND       | 7.04 53.40      |
| 34                      | Tin             | 6 (15.24)          | MC                    | C3PET-3406G-ND       | 6.76 51.23      |
|                         | Tin             | 6 (15.24)          | GR                    | C3PET-3406G-ND       | 6.63 50.28      |
|                         | Tin             | 18 (45.72)         | MC                    | C3PET-3418G-ND       | 7.58 57.46      |
|                         | Tin             | 18 (45.72)         | GR                    | C3PET-3418G-ND       | 7.20 54.60      |
|                         | Tin             | 36 (91.44)         | MC                    | C3PET-3436G-ND       | 8.81 66.80      |
| 40                      | Tin             | 6 (15.24)          | MC                    | C3PET-4006G-ND       | 7.86 59.57      |
|                         | Tin             | 6 (15.24)          | GR                    | C3PET-4006G-ND       | 7.71 58.44      |
|                         | Tin             | 18 (45.72)         | MC                    | C3PET-4018G-ND       | 8.83 66.93      |
|                         | Tin             | 18 (45.72)         | GR                    | C3PET-4018G-ND       | 8.38 63.52      |
|                         | Tin             | 36 (91.44)         | MC                    | C3PET-4036G-ND       | 10.28 77.96     |
| 50                      | Tin             | 6 (15.24)          | MC                    | C3PET-5006G-ND       | 9.21 69.79      |
|                         | Tin             | 6 (15.24)          | GR                    | C3PET-5006G-ND       | 9.02 68.36      |
|                         | Tin             | 18 (45.72)         | MC                    | C3PET-5018G-ND       | 10.42 78.99     |
|                         | Tin             | 18 (45.72)         | GR                    | C3PET-5018G-ND       | 9.85 74.71      |
|                         | Tin             | 36 (91.44)         | MC                    | C3PET-5036G-ND       | 12.24 92.79     |
|                         | Tin             | 36 (91.44)         | GR                    | C3PET-5036G-ND       | 11.11 84.22     |

## CW INDUSTRIES

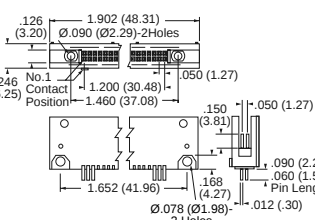
### NANO IDC Connector System

• **Contacts:** Copper Alloy • **Contact Plating:** 30µ in. Gold (in mating area) over 50µ in. Nickel • **Operating Temp.:** -55°C to +125°C • **Current Rating:** 5 Amp per contact

#### Socket Connector



#### Header



**RIBBON CABLE:** 0.635mm (25mil) pitch flat cable with 30AWG (7/0.1mm) conductors is designed to allow terminations to a High Density IDC connector.

**Features:** • **Capacitance:** Approx. 105pF/m • **Inductance:** Approx. 0.48µH/m • **Impedance:** • Approx. 71Ω • **Propagation Delay Time:** Approx. 5.4ns/m

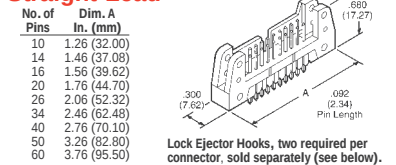
| Description                                              | Digi-Key<br>Part No. | Pricing<br>1 10 100  |
|----------------------------------------------------------|----------------------|----------------------|
| 50-Contact NANO Right Angle Header w/Lock Eject Hooks    | R9244-ND             | 7.28 59.28 436.80    |
| 50-Contact NANO Wire-Wrap Header w/Lock Eject Hooks      | R9246-ND             | 18.27 148.77 1096.20 |
| 50-Contact NANO Right Angle WW Header w/Lock Eject Hooks | R9264-ND             | 18.69 152.19 1121.40 |
| 50-Contact NANO Socket Connector                         | R9307-ND             | 10.05 81.80 602.70   |
| <b>50-Conductor (0.635mm Pitch) Ribbon Cable - Gray</b>  |                      |                      |
| 5 Foot (1.52 Meter) Length                               | R9029-5-ND           | 13.00 — —            |
| 10 Foot (3.05 Meter) Length                              | R9029-10-ND          | 23.20 — —            |
| 50 Foot (15.24 Meter) Length                             | R9029-50-ND          | 104.00 — —           |
| 100 Foot (30.48 Meter) Length                            | R9029-100-ND         | 192.00 — —           |
| 200 Foot (60.96 Meter) Length                            | R9029-200-ND         | 352.00 — —           |

## CW INDUSTRIES

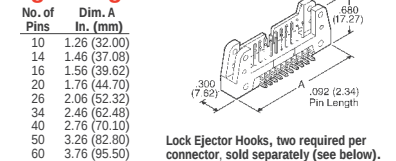
### Protected Headers



#### Straight-Lead

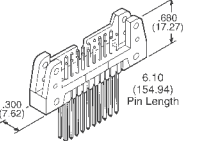


#### Right-Angle



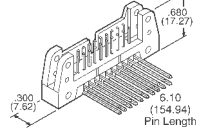
#### Straight-Lead Wire Wrap

Lock Ejector Hooks, two required per connector, sold separately (see below)



#### Right-Angle Wire Wrap

Lock Ejector Hooks, two required per connector, sold separately (see below)



**SPECIFICATIONS:** • **Contacts:** phosphor bronze, standard. • **Contact Plating:** 10µ in. gold (in mating area) over 50µ in. nickel. • **Insulator Material:** UL 94V-0 flame-retardant thermoplastic. • **Color:** blue. • **Operating Temperature:** -55°C to +125°C. • **Current Rating:** 1A (maximum) per contact. • **Dielectric Withstand Voltage:** greater than 500 Vdc at sea level. • **Insulation Resistance:** greater than 5 x 10<sup>9</sup> ohms. • U.S. Defense Department MIL-C-8350/20, 21, approved.

| No. of<br>Contacts              | Description                     | Digi-Key<br>Part No. | 1    | 10    | Pricing<br>100 | 1,000   |
|---------------------------------|---------------------------------|----------------------|------|-------|----------------|---------|
| Protected Headers - Gold Finish |                                 |                      |      |       |                |         |
| 10                              | Straight-Lead                   | CHS10G-ND            | .99  | 7.52  | 57.60          | 416.00  |
|                                 | Right-Angle                     | CHR10G-ND            | .99  | 7.52  | 57.60          | 416.00  |
|                                 | Straight-Lead WW                | CHW10G-ND            | 2.08 | 15.75 | 120.60         | 871.00  |
|                                 | Right-Angle WW                  | CH10G-ND             | 2.08 | 15.75 | 120.60         | 871.00  |
| 14                              | Straight-Lead                   | CHS14G-ND            | 1.30 | 9.87  | 75.60          | 546.00  |
|                                 | Right-Angle                     | CHR14G-ND            | 1.30 | 9.87  | 75.60          | 546.00  |
|                                 | Straight-Lead WW                | CHW14G-ND            | 2.64 | 19.98 | 153.00         | 1105.00 |
|                                 | Right-Angle WW                  | CH14G-ND             | 2.64 | 19.98 | 153.00         | 1105.00 |
| 16                              | Straight-Lead                   | CHS16G-ND            | 1.46 | 11.05 | 84.60          | 611.00  |
|                                 | Right-Angle                     | CHR16G-ND            | 1.46 | 11.05 | 84.60          | 611.00  |
|                                 | Straight-Lead WW                | CHW16G-ND            | 2.98 | 22.56 | 172.80         | 1248.00 |
|                                 | Right-Angle WW                  | CH16G-ND             | 2.98 | 22.56 | 172.80         | 1248.00 |
| 20                              | Straight-Lead                   | CHS20G-ND            | 1.52 | 11.52 | 88.20          | 637.00  |
|                                 | Right-Angle                     | CHR20G-ND            | 1.52 | 11.52 | 88.20          | 637.00  |
|                                 | Straight-Lead WW                | CHW20G-ND            | 3.10 | 23.50 | 180.00         | 1300.00 |
|                                 | Right-Angle WW                  | CH20G-ND             | 3.10 | 23.50 | 180.00         | 1300.00 |
| 26                              | Straight-Lead                   | CHS26G-ND            | 1.86 | 14.10 | 108.00         | 780.00  |
|                                 | Right-Angle                     | CHR26G-ND            | 1.86 | 14.10 | 108.00         | 780.00  |
|                                 | Straight-Lead WW                | CHW26G-ND            | 3.72 | 28.20 | 216.00         | 1560.00 |
|                                 | Right-Angle WW                  | CH26G-ND             | 3.72 | 28.20 | 216.00         | 1560.00 |
| 34                              | Straight-Lead                   | CHS34G-ND            | 2.23 | 16.92 | 129.60         | 936.00  |
|                                 | Right-Angle                     | CHR34G-ND            | 2.23 | 16.92 | 129.60         | 936.00  |
|                                 | Straight-Lead WW                | CHW34G-ND            | 4.46 | 33.84 | 259.20         | 1872.00 |
|                                 | Right-Angle WW                  | CH34G-ND             | 4.46 | 33.84 | 259.20         | 1872.00 |
| 40                              | Straight-Lead                   | CHS40G-ND            | 2.73 | 20.68 | 158.40         | 1144.00 |
|                                 | Right-Angle                     | CHR40G-ND            | 2.73 | 20.68 | 158.40         | 1144.00 |
|                                 | Straight-Lead WW                | CHW40G-ND            | 5.43 | 41.13 | 315.00         | 2275.00 |
|                                 | Right-Angle WW                  | CH40G-ND             | 5.43 | 41.13 | 315.00         | 2275.00 |
| 50                              | Straight-Lead                   | CHS50G-ND            | 3.04 | 23.03 | 176.40         | 1274.00 |
|                                 | Right-Angle                     | CHR50G-ND            | 3.04 | 23.03 | 176.40         | 1274.00 |
|                                 | Straight-Lead WW                | CHW50G-ND            | 6.11 | 46.30 | 354.60         | 2561.00 |
|                                 | Right-Angle WW                  | CH50G-ND             | 6.11 | 46.30 | 354.60         | 2561.00 |
| 60                              | Straight-Lead ST*<br>(Shrouded) | CHB60G-ND            | 5.08 | 38.54 | 295.20         | 2132.00 |
|                                 | Straight-Lead WW*<br>(Shrouded) | CHC60G-ND            | 5.08 | 38.54 | 295.20         | 2132.00 |
| 60                              | Right-Angle ST*<br>(Shrouded)   | CHD60G-ND            | 3.72 | 28.20 | 216.00         | 1560.00 |
|                                 | Right-Angle WW*<br>(Shrouded)   | CHE60G-ND            | 5.08 | 38.54 | 295.20         | 2132.00 |

CLKS01-ND Lock Ejector Hooks-Short (2 required per connector) . . \$22/2  
CLKS02-ND Lock Ejector Hooks-Long - with strain relief, (2 required per connector) . . \$22/2

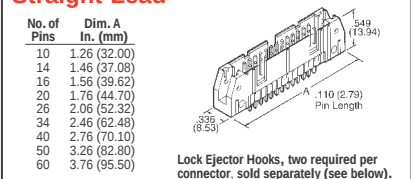
\* Lock ejector hooks included.

## AMP

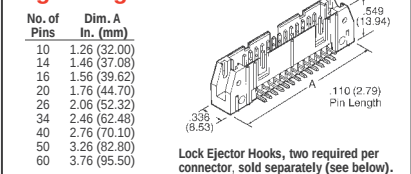
### Protected Headers



#### Straight-Lead

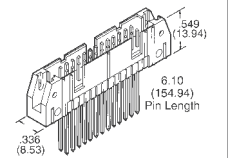


#### Right-Angle



#### Straight-Lead Wire Wrap

Lock Ejector Hooks, two required per connector, sold separately (see below)



#### Specifications:

- Connectors recognized under component program of Underwriters Laboratories Inc. File No. E28476.
- Connectors certified by Canadian Standards Association File No. LR16455.
- .025" (.64mm) Sq. Posts, .240" (6.10mm) Mating Post Length.
- Material and Finish: Housing and Latches — Black thermoplastic, 94V-0 rated.
- Contact Finish: .000015 gold on post/pin mating end, .000100-.000200 bright tin-lead on termination end, with entire contact underplated .000050 nickel.

| No. of<br>Contacts                                   | Description        | Digi-Key<br>Part No. | Pricing<br>1 10 100 | AMP<br>Part No. |
|------------------------------------------------------|--------------------|----------------------|---------------------|-----------------|
| <b>Protected Headers - Gold Finish</b>               |                    |                      |                     |                 |
| 10                                                   | Straight-Lead      | AHS10G-ND            | 1.00 8.15 60.03     | 102153-1        |
|                                                      | Right-Angle        | AHR10G-ND            | 1.09 8.89 65.49     | 102159-1        |
|                                                      | Straight-Lead WW   | AHW10G-ND            | 5.11 41.61 306.60   | 102158-1        |
| 14                                                   | Straight-Lead      | AHS14G-ND            | 1.32 10.74 79.13    | 102153-2        |
|                                                      | Right-Angle        | AHR14G-ND            | 1.41 11.48 84.59    | 102159-2        |
|                                                      | Straight-Lead WW   | AHW14G-ND            | 5.11 41.61 306.60   | 102158-2        |
| 16                                                   | Straight-Lead      | AHS16G-ND            | 1.50 12.22 90.05    | 102153-3        |
|                                                      | Right-Angle        | AHR16G-ND            | 1.73 14.07 103.69   | 102159-3        |
|                                                      | Straight-Lead WW   | AHW16G-ND            | 5.11 41.61 306.60   | 102158-3        |
| 20                                                   | Straight-Lead      | AHS20G-ND            | 1.86 15.18 111.88   | 102153-4        |
|                                                      | Right-Angle        | AHR20G-ND            | 2.05 16.66 122.79   | 102159-4        |
|                                                      | Straight-Lead WW   | AHW20G-ND            | 5.78 47.03 346.50   | 102158-4        |
| 26                                                   | Straight-Lead      | AHS26G-ND            | 2.36 19.26 141.89   | 102153-6        |
|                                                      | Right-Angle        | AHR26G-ND            | 2.50 20.37 150.08   | 102159-6        |
|                                                      | Straight-Lead WW   | AHW26G-ND            | 7.00 57.00 420.00   | 102158-6        |
| 34                                                   | Straight-Lead      | AHS34G-ND            | 3.00 24.44 180.10   | 102153-8        |
|                                                      | Right-Angle        | AHR34G-ND            | 3.09 25.18 185.55   | 102159-8        |
|                                                      | Straight-Lead WW   | AHW34G-ND            | 8.40 68.40 504.00   | 102158-8        |
| 40                                                   | Straight-Lead      | AHS40G-ND            | 3.46 28.14 207.38   | 102153-9        |
|                                                      | Right-Angle        | AHR40G-ND            | 3.55 28.89 212.84   | 102159-9        |
|                                                      | Straight-Lead WW   | AHW40G-ND            | 9.70 78.95 581.70   | 102158-9        |
| 50                                                   | Straight-Lead      | AHS50G-ND            | 4.09 33.33 245.59   | 1-102153-0      |
|                                                      | Right-Angle        | AHR50G-ND            | 4.18 34.07 251.04   | 1-102159-0      |
|                                                      | Straight-Lead WW   | AHW50G-ND            | 11.83 96.33 709.80  | 1-102158-0      |
| 60                                                   | Straight-Lead      | AHS60G-ND            | 4.76 38.76 285.60   | 1-102153-1      |
|                                                      | Right-Angle        | AHR60G-ND            | 4.87 39.62 291.90   | 1-102159-1      |
|                                                      | Straight-Lead WW   | AHW60G-ND            | 12.74 103.74 764.40 | 1-102158-1      |
| <b>Lock Ejector Hooks (2 Required per Connector)</b> |                    |                      |                     |                 |
| —                                                    | Short              | ALSN01-ND            | \$46/2              | 102312-1        |
| —                                                    | Long w/o Push Tabs | ALLN01-ND            | \$46/2              | 102320-1        |

# 1-800-344-4539

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## 3M D-Subminiature Connectors



Wire Accommodation: 26 & 28 AWG solid and stranded.  
Order strain reliefs separately.

**Physical:** • Contact Material: Beryllium Copper Plating • Underplate: 50µ" Nickel — QQ-N-290, Class 2 • Wiping Area: 30µ" Gold — MIL-G-45204, Type II, Grade C • Shell Material: Steel, Plating: Tin • Strain Relief Material: Stainless Steel .016" (.41mm) Thick • Marking: 3M logo and Contact Position Numbers. **Electrical:** • Current Rating: 1 amp. • Insulation Resistance: >1x10<sup>9</sup> Ω @ 500 VDC. • Withstanding Voltage: 1000VRMS @ sea level. **Environmental:** • Temperature Rating: -55°C to +105°C. UL File No.: E68080, CSA File No.: LR-40971.

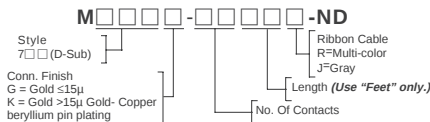
| No of Cont.                                      | Dim. - In. (mm) |               | Digi-Key Part No. | Pricing 1     | 3M Part No. |
|--------------------------------------------------|-----------------|---------------|-------------------|---------------|-------------|
| Plugs with flange, thru-hole style, Male         |                 |               |                   |               |             |
| 9                                                | .98 (24.89)     | 67 (17.02)    | MMR09K-ND         | 5.01 380.78   | DE610007119 |
| 15                                               | 1.31 (33.27)    | 1.00 (25.40)  | MMR15K-ND         | 5.70 432.92   | DE610007325 |
| 25                                               | 1.85 (46.99)    | 1.54 (39.12)  | MMR25K-ND         | 6.47 491.38   | DE610006657 |
| 37                                               | 2.50 (63.50)    | 2.18 (55.37)  | MMR37K-ND         | 8.36 635.16   | DE610007531 |
| Plugs with 4-40 threaded insert, Male            |                 |               |                   |               |             |
| 9                                                | .98 (24.89)     | 67 (17.02)    | MMML09K-ND        | 6.14 466.10   | DE610008364 |
| 15                                               | 1.31 (33.27)    | 1.00 (25.40)  | MMML15K-ND        | 6.82 518.24   | DE610008372 |
| 25                                               | 1.85 (46.99)    | 1.54 (39.12)  | MMML25K-ND        | 7.36 559.32   | DE610008380 |
| 37                                               | 2.50 (63.50)    | 2.18 (55.37)  | MMML37K-ND        | 9.13 693.62   | DE610008398 |
| 50                                               | 2.40 (60.96)    | 2.074 (52.68) | MMML50K-ND        | 18.20 1382.50 | DE610006699 |
| Receptacles with flange, thru-hole style, Female |                 |               |                   |               |             |
| 9                                                | .98 (24.89)     | 67 (17.02)    | MFR09K-ND         | 5.14 390.26   | DE610007218 |
| 15                                               | 1.31 (33.27)    | .97 (24.64)   | MFR15K-ND         | 5.91 444.28   | DE610007424 |
| 25                                               | 1.85 (46.99)    | 1.51 (38.35)  | MFR25K-ND         | 6.67 499.28   | DE610005402 |
| 37                                               | 2.50 (63.50)    | 2.16 (54.86)  | MFR37K-ND         | 8.49 644.64   | DE610007630 |
| Receptacles with 4-40 threaded insert, Female    |                 |               |                   |               |             |
| 9                                                | .98 (24.89)     | 67 (17.02)    | MFL09K-ND         | 6.26 475.58   | DE610008323 |
| 15                                               | 1.31 (33.27)    | .97 (24.64)   | MFL15K-ND         | 7.03 534.04   | DE610008356 |
| 25                                               | 1.85 (46.99)    | 1.51 (38.35)  | MFL25K-ND         | 7.47 567.22   | DE610008331 |
| 37                                               | 2.50 (63.50)    | 2.16 (54.86)  | MFL37K-ND         | 9.13 693.62   | DE610008349 |
| 50                                               | 2.40 (60.96)    | 2.068(52.53)  | MFL50K-ND         | 18.20 1382.50 | DE610006715 |
| Backshells                                       |                 |               |                   |               |             |
| 9                                                | —               | —             | MDR09-ND          | 3.12 237.00   | 80610182158 |
| 15                                               | —               | —             | MDR15-ND          | 3.12 237.00   | 80610182166 |
| 25                                               | —               | —             | MDR25-ND          | 3.12 237.00   | 80610182174 |
| 37                                               | —               | —             | MDR37-ND          | 3.12 237.00   | 80610182182 |
| Strain Relief                                    |                 |               |                   |               |             |
| 9                                                | —               | —             | MSDR09-ND         | .25 18.96     | DE610058062 |
| 15                                               | —               | —             | MSDR15-ND         | .25 18.96     | DE610058070 |
| 25                                               | —               | —             | MSDR25-ND         | .25 18.96     | DE610058088 |
| 37                                               | —               | —             | MSDR37-ND         | .25 18.96     | DE610058096 |
| 50                                               | —               | —             | MSDR50-ND         | .25 18.96     | DE610057569 |

## Series 89 D-Subminiature Connectors

We've designed these standard-performance D-Sub connectors to reduce costs and save assembly time.

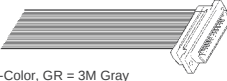
**Physical Specifications:** • Insulation Material: Glass reinforced polyester (PBT) • Flammability rating: UL94V-0 • Color: Gray • Marking: Molded figures 3M Logo, part identification number and contact position number • Shell Material: Steel • Plating: Tin • Design: Pin Connector with dimples • Fastening: Through Hole and 4-40 Insert • Contact Material: Copper Alloy • Contact Plating: Wipe area 15µ" average gold over nickel • Wire Accommodation: 26 & 28 AWG Solid or Stranded. **Electrical Specifications:** • Current Rating: 1A • Insulation Resistance: >1 x 10<sup>9</sup> Ω @ 500 VDC • Withstanding Voltage: 1000VRMS @ Sea Level. **Environmental Specifications:** • Operating Temperature: -55°C to +105°C

| No. of Cont.                     | Dim. - In. (mm) | Digi-Key Part No. | Pricing 1 100 | 3M Part No. |             |
|----------------------------------|-----------------|-------------------|---------------|-------------|-------------|
| D-Sub Connectors, Male           |                 |                   |               |             |             |
| 9                                | .98 (24.89)     | 67 (17.02)        | MMR09-ND      | 4.59 37.34  | DE610010352 |
| 15                               | 1.31 (33.27)    | 1.00 (25.40)      | MMR15-ND      | 5.92 48.17  | DE610011202 |
| 25                               | 1.85 (46.99)    | 1.54 (39.12)      | MMR25-ND      | 6.41 52.16  | DE610009784 |
| 37                               | 2.50 (63.50)    | 2.18 (55.37)      | MMR37-ND      | 8.68 70.68  | DE610010733 |
| D-Sub Connectors, Male, Insert   |                 |                   |               |             |             |
| 9                                | .98 (24.89)     | 67 (17.02)        | MMML09-ND     | 5.08 41.33  | DE610010360 |
| 15                               | 1.31 (33.27)    | 1.00 (25.40)      | MMML15-ND     | 6.34 51.59  | DE610011210 |
| 25                               | 1.85 (46.99)    | 1.54 (39.12)      | MMML25-ND     | 6.79 55.29  | DE610040037 |
| 37                               | 2.50 (63.50)    | 2.18 (55.37)      | MMML37-ND     | 8.96 72.96  | DE610010840 |
| D-Sub Connectors, Female         |                 |                   |               |             |             |
| 9                                | .98 (24.89)     | 67 (17.02)        | MFR09-ND      | 4.24 34.49  | DE610010402 |
| 15                               | 1.31 (33.27)    | 1.00 (25.40)      | MFR15-ND      | 5.25 42.75  | DE610011269 |
| 25                               | 1.85 (46.99)    | 1.54 (39.12)      | MFR25-ND      | 5.74 46.74  | DE610009826 |
| 37                               | 2.50 (63.50)    | 2.18 (55.37)      | MFR37-ND      | 7.77 63.27  | DE610010782 |
| D-Sub Connectors, Female, Insert |                 |                   |               |             |             |
| 9                                | .98 (24.89)     | 67 (17.02)        | MFL09-ND      | 4.38 35.63  | DE610010410 |
| 15                               | 1.31 (33.27)    | 1.00 (25.40)      | MFL15-ND      | 5.71 46.46  | DE610011277 |
| 25                               | 1.85 (46.99)    | 1.54 (39.12)      | MFL25-ND      | 6.16 50.16  | DE610009834 |
| 37                               | 2.50 (63.50)    | 2.18 (55.37)      | MFL37-ND      | 7.39 60.14  | DE610010824 |
| Strain Relief                    |                 |                   |               |             |             |
| 9                                | —               | —                 | MSDR09-ND     | .25 —       | DE610058062 |
| 15                               | —               | —                 | MSDR15-ND     | .25 —       | DE610058070 |
| 25                               | —               | —                 | MSDR25-ND     | .25 —       | DE610058088 |
| 37                               | —               | —                 | MSDR37-ND     | .25 —       | DE610058096 |



## D-Sub Cable Assemblies

### Single Ended — Male



\*MC = 3M Multi-Color, GR = 3M Gray

| No. of Cont. | Conn. Finish | Length Feet (Meters) | Rib-bon Cable  | Digi-Key Part No. | Pricing 1 10 |
|--------------|--------------|----------------------|----------------|-------------------|--------------|
| <b>9</b>     |              |                      |                |                   |              |
| Au 30µ"      | 6 (1.83)     | MC                   | M7PKX-0906R-ND | 11.40             | 100.01       |
| Au 15µ"      | 6 (1.83)     | MC                   | M7PKX-0906R-ND | 7.63              | 66.95        |
| Au 30µ"      | 6 (1.83)     | GR                   | M7PKX-0906J-ND | 10.42             | 91.41        |
| Au 15µ"      | 6 (1.83)     | GR                   | M7PKX-0906J-ND | 6.65              | 58.35        |
| Au 30µ"      | 10 (3.05)    | MC                   | M7PKX-0910R-ND | 13.53             | 118.61       |
| Au 15µ"      | 10 (3.05)    | MC                   | M7PKX-0910R-ND | 9.76              | 85.55        |
| Au 30µ"      | 10 (3.05)    | GR                   | M7PKX-0910J-ND | 11.89             | 104.27       |
| Au 15µ"      | 10 (3.05)    | GR                   | M7PKX-0910J-ND | 8.12              | 71.21        |
| <b>15</b>    |              |                      |                |                   |              |
| Au 30µ"      | 6 (1.83)     | MC                   | M7PKX-1506R-ND | 14.52             | 127.32       |
| Au 15µ"      | 6 (1.83)     | MC                   | M7PKX-1506R-ND | 10.85             | 95.12        |
| Au 30µ"      | 6 (1.83)     | GR                   | M7PKX-1506J-ND | 12.95             | 113.53       |
| Au 15µ"      | 6 (1.83)     | GR                   | M7PKX-1506J-ND | 9.27              | 81.33        |
| Au 30µ"      | 10 (3.05)    | MC                   | M7PKX-1510R-ND | 17.92             | 157.10       |
| Au 15µ"      | 10 (3.05)    | MC                   | M7PKX-1510R-ND | 14.24             | 124.90       |
| Au 30µ"      | 10 (3.05)    | GR                   | M7PKX-1510J-ND | 15.29             | 134.12       |
| Au 15µ"      | 10 (3.05)    | GR                   | M7PKX-1510J-ND | 11.62             | 101.92       |
| <b>25</b>    |              |                      |                |                   |              |
| Au 30µ"      | 6 (1.83)     | MC                   | M7PKX-2506R-ND | 18.77             | 164.62       |
| Au 15µ"      | 6 (1.83)     | MC                   | M7PKX-2506R-ND | 14.32             | 125.57       |
| Au 30µ"      | 6 (1.83)     | GR                   | M7PKX-2506J-ND | 16.22             | 142.25       |
| Au 15µ"      | 6 (1.83)     | GR                   | M7PKX-2506J-ND | 11.77             | 103.20       |
| Au 30µ"      | 10 (3.05)    | MC                   | M7PKX-2510R-ND | 24.29             | 212.99       |
| Au 15µ"      | 10 (3.05)    | MC                   | M7PKX-2510R-ND | 19.84             | 173.94       |
| Au 30µ"      | 10 (3.05)    | GR                   | M7PKX-2510J-ND | 20.04             | 175.71       |
| Au 15µ"      | 10 (3.05)    | GR                   | M7PKX-2510J-ND | 15.58             | 136.67       |
| <b>37</b>    |              |                      |                |                   |              |
| Au 30µ"      | 6 (1.83)     | MC                   | M7PKX-3706R-ND | 25.46             | 223.24       |
| Au 15µ"      | 6 (1.83)     | MC                   | M7PKX-3706R-ND | 20.06             | 175.93       |
| Au 30µ"      | 6 (1.83)     | GR                   | M7PKX-3706J-ND | 21.83             | 191.41       |
| Au 15µ"      | 6 (1.83)     | GR                   | M7PKX-3706J-ND | 16.43             | 144.10       |
| Au 30µ"      | 10 (3.05)    | MC                   | M7PKX-3710R-ND | 33.31             | 292.08       |
| Au 15µ"      | 10 (3.05)    | MC                   | M7PKX-3710R-ND | 27.91             | 244.77       |
| Au 30µ"      | 10 (3.05)    | GR                   | M7PKX-3710J-ND | 27.26             | 239.03       |
| Au 15µ"      | 10 (3.05)    | GR                   | M7PKX-3710J-ND | 21.86             | 191.72       |

Also available in the following configurations:

M7NN□□□□□□-ND - Metal Shell Connector with Threaded Insert.  
M7VX□□□□□□-ND - Metal Shell Connector with Threaded Insert & Strain Relief.

Call for complete part number and pricing!

### Single Ended — Female



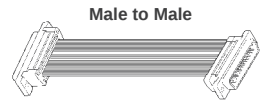
\*MC = 3M Multi-Color, GR = 3M Gray

| No. of Cont. | Conn. Finish | Length Feet (Meters) | Rib-bon Cable  | Digi-Key Part No. | Pricing 1 10 |
|--------------|--------------|----------------------|----------------|-------------------|--------------|
| <b>9</b>     |              |                      |                |                   |              |
| Au 30µ"      | 6 (1.83)     | MC                   | M7SKX-0906R-ND | 11.60             | 101.72       |
| Au 15µ"      | 6 (1.83)     | MC                   | M7SKX-0906R-ND | 7.31              | 64.10        |
| Au 30µ"      | 6 (1.83)     | GR                   | M7SKX-0906J-ND | 10.62             | 93.12        |
| Au 15µ"      | 6 (1.83)     | GR                   | M7SKX-0906J-ND | 6.33              | 55.50        |
| Au 30µ"      | 10 (3.05)    | MC                   | M7SKX-0910R-ND | 13.72             | 120.32       |
| Au 15µ"      | 10 (3.05)    | MC                   | M7SKX-0910R-ND | 9.43              | 82.70        |
| Au 30µ"      | 10 (3.05)    | GR                   | M7SKX-0910J-ND | 12.09             | 105.98       |
| Au 15µ"      | 10 (3.05)    | GR                   | M7SKX-0910J-ND | 7.80              | 68.36        |
| <b>15</b>    |              |                      |                |                   |              |
| Au 30µ"      | 6 (1.83)     | MC                   | M7SKX-1506R-ND | 14.84             | 130.17       |
| Au 15µ"      | 6 (1.83)     | MC                   | M7SKX-1506R-ND | 10.26             | 89.99        |
| Au 30µ"      | 6 (1.83)     | GR                   | M7SKX-1506J-ND | 12.27             | 116.38       |
| Au 15µ"      | 6 (1.83)     | GR                   | M7SKX-1506J-ND | 8.69              | 76.20        |
| Au 30µ"      | 10 (3.05)    | MC                   | M7SKX-1510R-ND | 18.24             | 159.95       |
| Au 15µ"      | 10 (3.05)    | MC                   | M7SKX-1510R-ND | 13.66             | 119.77       |
| Au 30µ"      | 10 (3.05)    | GR                   | M7SKX-1510J-ND | 15.62             | 136.97       |
| Au 15µ"      | 10 (3.05)    | GR                   | M7SKX-1510J-ND | 11.04             | 96.79        |
| <b>25</b>    |              |                      |                |                   |              |
| Au 30µ"      | 6 (1.83)     | MC                   | M7SKX-2506R-ND | 18.93             | 166.04       |
| Au 15µ"      | 6 (1.83)     | MC                   | M7SKX-2506R-ND | 13.73             | 120.44       |
| Au 30µ"      | 6 (1.83)     | GR                   | M7SKX-2506J-ND | 16.38             | 143.67       |
| Au 15µ"      | 6 (1.83)     | GR                   | M7SKX-2506J-ND | 11.18             | 98.07        |
| Au 30µ"      | 10 (3.05)    | MC                   | M7SKX-2510R-ND | 24.45             | 214.41       |
| Au 15µ"      | 10 (3.05)    | MC                   | M7SKX-2510R-ND | 19.25             | 168.81       |
| Au 30µ"      | 10 (3.05)    | GR                   | M7SKX-2510J-ND | 20.20             | 177.14       |
| Au 15µ"      | 10 (3.05)    | GR                   | M7SKX-2510J-ND | 15.00             | 131.54       |
| <b>37</b>    |              |                      |                |                   |              |
| Au 30µ"      | 6 (1.83)     | MC                   | M7SKX-3706R-ND | 25.65             | 224.95       |
| Au 15µ"      | 6 (1.83)     | MC                   | M7SKX-3706R-ND | 19.49             | 170.90       |
| Au 30µ"      | 6 (1.83)     | GR                   | M7SKX-3706J-ND | 22.02             | 193.12       |
| Au 15µ"      | 6 (1.83)     | GR                   | M7SKX-3706J-ND | 15.86             | 139.07       |
| Au 30µ"      | 10 (3.05)    | MC                   | M7SKX-3710R-ND | 33.50             | 293.79       |
| Au 15µ"      | 10 (3.05)    | MC                   | M7SKX-3710R-ND | 27.34             | 239.74       |
| Au 30µ"      | 10 (3.05)    | GR                   | M7SKX-3710J-ND | 27.45             | 240.74       |
| Au 15µ"      | 10 (3.05)    | GR                   | M7SKX-3710J-ND | 21.29             | 186.69       |

Also available in the following configurations:

M7OX□□□□□□-ND - Metal Shell Connector w/ Threaded Insert.  
M7WV□□□□□□-ND - Metal Shell Connector w/ Threaded Insert & Strain Relief.

Call for complete part number and pricing!



\*MC = 3M Multi-Color, GR = 3M Gray

| No. of Cont. | Conn. Finish | Length Feet (Meters) | Rib-bon Cable  | Digi-Key Part No. | Pricing 1 10 |
|--------------|--------------|----------------------|----------------|-------------------|--------------|
| <b>9</b>     |              |                      |                |                   |              |
| Au 30µ"      | 6 (1.83)     | MC                   | M7PPK-0906R-ND | 19.63             | 172.11       |
| Au 15µ"      | 6 (1.83)     | MC                   | M7PPK-0906R-ND | 12.09             | 105.99       |
| Au 30µ"      | 6 (1.83)     | GR                   | M7PPK-0906J-ND | 18.65             | 163.51       |
| Au 15µ"      | 6 (1.83)     | GR                   | M7PPK-0906J-ND | 11.11             | 97.39        |
| Au 30µ"      | 10 (3.05)    | MC                   | M7PPK-0910R-ND | 21.75             | 190.71       |
| Au 15µ"      | 10 (3.05)    | MC                   | M7PPK-0910R-ND | 14.21             | 124.59       |
| Au 30µ"      | 10 (3.05)    | GR                   | M7PPK-0910J-ND | 20.11             | 176.38       |
| Au 15µ"      | 10 (3.05)    | GR                   | M7PPK-0910J-ND | 12.57             |              |

## Male to Female



\*MC = 3M Multi-Color, GR = 3M Gray

| No. of<br>Contacts | Conn.<br>Finish   | Length<br>Feet (meters) | Rib-<br>bon*<br>Cable | Digi-Key<br>Part No. | Pricing<br>1 10 |
|--------------------|-------------------|-------------------------|-----------------------|----------------------|-----------------|
| 9                  | Au 30u" 6 (1.83)  | MC                      | M7PSK-0906R-ND        | 19.82                | 173.82          |
|                    | Au 15u" 6 (1.83)  | MC                      | M7PSG-0906R-ND        | 11.76                | 103.14          |
|                    | Au 30u" 6 (1.83)  | GR                      | M7PSK-0906J-ND        | 18.84                | 165.22          |
|                    | Au 15u" 6 (1.83)  | GR                      | M7PSG-0906J-ND        | 10.78                | 94.54           |
|                    | Au 30u" 10 (3.05) | MC                      | M7PSK-0910R-ND        | 21.94                | 192.42          |
|                    | Au 15u" 10 (3.05) | MC                      | M7PSG-0910R-ND        | 13.88                | 121.74          |
|                    | Au 30u" 10 (3.05) | GR                      | M7PSK-0910J-ND        | 20.31                | 178.09          |
|                    | Au 15u" 10 (3.05) | GR                      | M7PSG-0910J-ND        | 12.25                | 107.41          |
|                    | Au 30u" 6 (1.83)  | MC                      | M7PSK-1506R-ND        | 24.27                | 212.82          |
| 15                 | Au 15u" 6 (1.83)  | MC                      | M7PSG-1506R-ND        | 16.01                | 140.43          |
|                    | Au 30u" 6 (1.83)  | GR                      | M7PSK-1506J-ND        | 22.70                | 199.03          |
|                    | Au 15u" 6 (1.83)  | GR                      | M7PSG-1506J-ND        | 14.44                | 126.64          |
|                    | Au 30u" 10 (3.05) | MC                      | M7PSK-1510R-ND        | 27.67                | 242.60          |
|                    | Au 15u" 10 (3.05) | MC                      | M7PSG-1510R-ND        | 19.41                | 170.21          |
|                    | Au 30u" 10 (3.05) | GR                      | M7PSK-1510J-ND        | 25.04                | 219.62          |
|                    | Au 15u" 10 (3.05) | GR                      | M7PSG-1510J-ND        | 16.79                | 147.23          |
|                    | Au 30u" 6 (1.83)  | MC                      | M7PSK-2506R-ND        | 29.43                | 258.10          |
|                    | Au 15u" 6 (1.83)  | MC                      | M7PSG-2506R-ND        | 19.78                | 173.45          |
| 25                 | Au 30u" 6 (1.83)  | GR                      | M7PSK-2506J-ND        | 26.88                | 235.73          |
|                    | Au 15u" 6 (1.83)  | GR                      | M7PSG-2506J-ND        | 17.23                | 151.08          |
|                    | Au 30u" 10 (3.05) | MC                      | M7PSK-2510R-ND        | 34.95                | 306.47          |
|                    | Au 15u" 10 (3.05) | MC                      | M7PSG-2510R-ND        | 25.30                | 221.82          |
|                    | Au 30u" 10 (3.05) | GR                      | M7PSK-2510J-ND        | 30.70                | 269.19          |
|                    | Au 15u" 10 (3.05) | GR                      | M7PSG-2510J-ND        | 21.04                | 184.55          |
|                    | Au 30u" 6 (1.83)  | MC                      | M7PSK-3706R-ND        | 39.33                | 344.94          |
|                    | Au 15u" 6 (1.83)  | MC                      | M7PSG-3706R-ND        | 27.78                | 243.58          |
|                    | Au 30u" 6 (1.83)  | GR                      | M7PSK-3706J-ND        | 35.71                | 313.11          |
| 37                 | Au 15u" 6 (1.83)  | GR                      | M7PSG-3706J-ND        | 24.15                | 211.75          |
|                    | Au 30u" 10 (3.05) | MC                      | M7PSK-3710R-ND        | 47.18                | 413.77          |
|                    | Au 15u" 10 (3.05) | MC                      | M7PSG-3710R-ND        | 35.63                | 312.42          |
|                    | Au 30u" 10 (3.05) | GR                      | M7PSK-3710J-ND        | 41.14                | 360.72          |
|                    | Au 15u" 10 (3.05) | GR                      | M7PSG-3710J-ND        | 29.58                | 259.37          |

Also available in the following configurations:

M7N0□-□□□□□-ND - Metal Shell Connector w/ Threaded Insert.

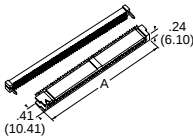
M7VW□-□□□□□-ND - Metal Shell Connector w/ Threaded Insert & Strain Relief.

Call for complete part number and pricing!

## 3M .100" x .100" (2.54mm x 2.54mm) Socket Connectors

Wire Accommodation:  
26, 28, 30 AWG solid or stranded.

**Physical:** • Insulation Material: Glass reinforced polyester. Flammability rating: UL 94V-0. • Color: Gray. • Contact Material: Beryllium Copper, • Plating: 30µ" Gold. • Wire Accommodation: 26 & 28 AWG Solid or Stranded, 30 AWG Solid • Marking: 3M logo, Part Identification Number and Orientation Triangle. **Electrical:** • Current Rating: 1 amp. • Insulation Resistance: >1x10<sup>10</sup> Ω @ 500 VDC. • Withstanding Voltage: 1000VRMS @ sea level. **Environmental:** • Temperature Rating: -55°C to +105°C. UL File No.: E68080, CSA File No.: LR-40971.



| No. of<br>Contacts                           | Dim. A<br>In. (mm) | Digi-Key<br>Part No. | Pricing<br>1 100 | 3M<br>Part No. |
|----------------------------------------------|--------------------|----------------------|------------------|----------------|
| <b>Polarizing Slots (Open End)</b>           |                    |                      |                  |                |
| 10                                           | .68 (17.27)        | MSC10K-ND            | 1.93             | 146.94         |
| 14                                           | .88 (22.35)        | MSC14K-ND            | 2.35             | 178.54         |
| 16                                           | .98 (24.89)        | MSC16K-ND            | 2.56             | 194.34         |
| 20                                           | 1.18 (29.97)       | MSC20K-ND            | 2.83             | 214.88         |
| 24                                           | 1.38 (35.05)       | MSC24K-ND            | 3.39             | 257.54         |
| 26                                           | 1.48 (37.59)       | MSC26K-ND            | 3.66             | 278.08         |
| 30                                           | 1.68 (42.67)       | MSC30K-ND            | 4.20             | 319.16         |
| 34                                           | 1.88 (47.75)       | MSC34K-ND            | 4.76             | 361.82         |
| 40                                           | 2.18 (55.37)       | MSC40K-ND            | 5.60             | 425.02         |
| 50                                           | 2.68 (68.07)       | MSC50K-ND            | 6.99             | 530.88         |
| 60                                           | 3.18 (80.77)       | MSC60K-ND            | 8.65             | 657.28         |
| <b>Center-Bumped Polarizing (Open End)</b>   |                    |                      |                  |                |
| 10                                           | .68 (17.27)        | MKC10K-ND            | 2.29             | 173.80         |
| 14                                           | .88 (22.35)        | MKC14K-ND            | 2.35             | 178.54         |
| 16                                           | .98 (24.89)        | MKC16K-ND            | 2.56             | 194.34         |
| 20                                           | 1.18 (29.97)       | MKC20K-ND            | 2.83             | 214.88         |
| 24                                           | 1.38 (35.05)       | MKC24K-ND            | 3.39             | 257.54         |
| 26                                           | 1.48 (37.59)       | MKC26K-ND            | 3.66             | 278.08         |
| 30                                           | 1.68 (42.67)       | MKC30K-ND            | 4.20             | 319.16         |
| 34                                           | 1.88 (47.75)       | MKC34K-ND            | 4.76             | 361.82         |
| 40                                           | 2.18 (55.37)       | MKC40K-ND            | 5.60             | 425.02         |
| 50                                           | 2.68 (68.07)       | MKC50K-ND            | 6.99             | 530.88         |
| 60                                           | 3.18 (80.77)       | MKC60K-ND            | 8.65             | 657.28         |
| <b>Center-Bumped Polarizing (Closed End)</b> |                    |                      |                  |                |
| 10                                           | .68 (17.27)        | MSD10K-ND            | 2.06             | 156.42         |
| 14                                           | .88 (22.35)        | MSD14K-ND            | 2.58             | 195.92         |
| 16                                           | .98 (24.89)        | MSD16K-ND            | 2.70             | 205.40         |
| 20                                           | 1.18 (29.97)       | MSD20K-ND            | 2.97             | 225.94         |
| 24                                           | 1.38 (35.05)       | MSD24K-ND            | 3.56             | 270.18         |
| 26                                           | 1.48 (37.59)       | MSD26K-ND            | 3.85             | 292.30         |
| 30                                           | 1.68 (42.67)       | MSD30K-ND            | 4.41             | 334.96         |
| 34                                           | 1.88 (47.75)       | MSD34K-ND            | 4.97             | 377.62         |
| 40                                           | 2.18 (55.37)       | MSD40K-ND            | 5.82             | 442.40         |
| 50                                           | 2.68 (68.07)       | MSD50K-ND            | 7.26             | 551.42         |
| 60                                           | 3.18 (80.77)       | MSD60K-ND            | 8.72             | 662.02         |

| No. of<br>Contacts                    | Dim. A<br>In. (mm) | Digi-Key<br>Part No. | Pricing<br>1 100 | 3M<br>Part No. |
|---------------------------------------|--------------------|----------------------|------------------|----------------|
| <b>Cable Strain Relief/Stabilizer</b> |                    |                      |                  |                |
| 10                                    | —                  | MSR10-ND             | .25              | 18.96          |
| 14                                    | —                  | MSR14-ND             | .25              | 18.96          |
| 16                                    | —                  | MSR16-ND             | .25              | 18.96          |
| 20                                    | —                  | MSR20-ND             | .25              | 18.96          |
| 24                                    | —                  | MSR24-ND             | .25              | 18.96          |
| 26                                    | —                  | MSR26-ND             | .25              | 18.96          |
| 30                                    | —                  | MSR30-ND             | .25              | 18.96          |
| 34                                    | —                  | MSR34-ND             | .25              | 18.96          |
| 40                                    | —                  | MSR40-ND             | .25              | 18.96          |
| 50                                    | —                  | MSR50-ND             | .25              | 18.96          |
| 60                                    | —                  | MSR60-ND             | .25              | 18.96          |

## 3M Series 89, .100" x .100" (2.54mm x 2.54mm) Socket Connectors

These high-quality, standard-performance IDC sockets minimize applied assembly costs without sacrificing reliability. The Series 89 IDC socket is part of a new line of standard-performance interconnects specifically designed to help electronic equipment manufacturers hold down applied assembly costs. These interconnects also offer the quality and reliability you'd expect from 3M. They have been engineered with a "systems" approach that has a positive impact on your process and product costs. **Physical Specifications:** • Insulation Material: Glass filled polyester (PBT), flammability rating: UL94V-0 • Color: Gray • Marking: Molded figures: 3M Logo and Orientation Triangle • Pins are Phosphor Bronze • Contact Plating: Wire Area: 30µ" Gold • MIL-G-45204, Type 11, Grade C. Under Plate: 100µ" Nickel-QQ-N-290, Class 2 • Wire Accommodation: 28 AWG Stranded. **Electrical Specifications:** • Current Rating: 1A • Insulation Resistance: >1x10<sup>10</sup> Ω @ 500 VDC • Withstanding Voltage: 1000VRMS @ Sea Level. **Environmental Specifications:** • Operating Temperature: -55°C to +105°C. UL File No.: E68080 CSA File No.: LR40971

| No. of<br>Contacts                 | Dim. A<br>In. (mm) | Digi-Key<br>Part No. | Pricing<br>1 100 | 3M<br>Part No. |
|------------------------------------|--------------------|----------------------|------------------|----------------|
| <b>IDC Socket Gold</b>             |                    |                      |                  |                |
| 10                                 | .68 (17.27)        | MSC10A-ND            | .53              | 4.28           |
| 14                                 | .88 (22.35)        | MSC14A-ND            | .74              | 5.99           |
| 16                                 | .98 (24.89)        | MSC16A-ND            | .84              | 6.84           |
| 20                                 | 1.18 (29.97)       | MSC20A-ND            | 1.05             | 8.55           |
| 24                                 | 1.38 (35.05)       | MSC24A-ND            | 1.26             | 10.26          |
| 26                                 | 1.48 (37.59)       | MSC26A-ND            | 1.37             | 11.12          |
| 30                                 | 1.68 (42.67)       | MSC30A-ND            | 1.58             | 12.83          |
| 34                                 | 1.88 (47.75)       | MSC34A-ND            | 1.79             | 14.54          |
| 40                                 | 2.18 (55.37)       | MSC40A-ND            | 2.10             | 17.10          |
| 50                                 | 2.68 (68.07)       | MSC50A-ND            | 2.63             | 21.38          |
| 60                                 | 3.18 (80.77)       | MSC60A-ND            | 3.15             | 25.65          |
| <b>IDC Socket Gold, Polarizing</b> |                    |                      |                  |                |
| 10                                 | .68 (17.27)        | MCK10A-ND            | .53              | 4.28           |
| 14                                 | .88 (22.35)        | MCK14A-ND            | .74              | 5.99           |
| 16                                 | .98 (24.89)        | MCK16A-ND            | .84              | 6.84           |
| 20                                 | 1.18 (29.97)       | MCK20A-ND            | 1.05             | 8.55           |
| 24                                 | 1.38 (35.05)       | MCK24A-ND            | 1.26             | 10.26          |
| 26                                 | 1.48 (37.59)       | MCK26A-ND            | 1.37             | 11.12          |
| 30                                 | 1.68 (42.67)       | MCK30A-ND            | 1.58             | 12.83          |
| 34                                 | 1.88 (47.75)       | MCK34A-ND            | 1.79             | 14.54          |
| 40                                 | 2.18 (55.37)       | MCK40A-ND            | 2.10             | 17.10          |
| 50                                 | 2.68 (68.07)       | MCK50A-ND            | 2.63             | 21.38          |
| 60                                 | 3.18 (80.77)       | MCK60A-ND            | 3.15             | 25.65          |
| <b>Strain Relief</b>               |                    |                      |                  |                |
| 10                                 | —                  | MKSRI0-ND            | .21              | 1.71           |
| 14                                 | —                  | MKSRI4-ND            | .21              | 1.71           |
| 16                                 | —                  | MKSRI6-ND            | .21              | 1.71           |
| 20                                 | —                  | MKSRI20-ND           | .21              | 1.71           |
| 24                                 | —                  | MKSRI24-ND           | .21              | 1.71           |
| 26                                 | —                  | MKSRI26-ND           | .21              | 1.71           |
| 30                                 | —                  | MKSRI30-ND           | .21              | 1.71           |
| 34                                 | —                  | MKSRI34-ND           | .21              | 1.71           |
| 40                                 | —                  | MKSRI40-ND           | .21              | 1.71           |
| 50                                 | —                  | MKSRI50-ND           | .21              | 1.71           |
| 60                                 | —                  | MKSRI60-ND           | .21              | 1.71           |

## 3M .100" x .100" (2.54mm x 2.54mm) Plug Connectors

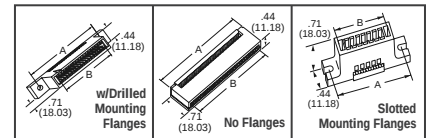
Wire Accommodation: 26 & 28 AWG solid or stranded, 30 AWG solid.

**Physical:** • Insulation Material: Glass reinforced polyester. Flammability rating: UL 94V-0. • Color: Gray. • Contact Material: Flat Cable Connectors are Beryllium Copper • Plating: 30µ" Gold. Latch Eject Headers are Copper Alloy. **Electrical:** • Current Rating: 1 amp. • Insulation Resistance: >1x10<sup>10</sup> Ω @ 500 VDC. • Withstanding Voltage: 1000VRMS @ sea level. **Environmental:** • Temperature Rating: -55°C to +105°C. UL File No.: E68080, CSA File No.: LR-40971.

| No. of<br>Cont.                      | Dim. A<br>In. (mm) | Digi-Key<br>Part No. | Pricing<br>1 100 | 3M<br>Part No. |
|--------------------------------------|--------------------|----------------------|------------------|----------------|
| <b>With Slotted Mounting Flanges</b> |                    |                      |                  |                |
| 10                                   | 1.20 (30.48)       | MPL10K-ND            | 2.81             | 213.30         |
| 14                                   | 1.40 (35.56)       | MPL14K-ND            | 3.89             | 295.46         |
| 16                                   | 1.50 (38.10)       | MPL16K-ND            | 4.41             | 334.96         |
| 20                                   | 1.70 (43.18)       | MPL20K-ND            | 5.14             | 390.26         |
| 24                                   | 1.90 (48.26)       | MPL24K-ND            | 5.66             | 429.76         |
| 26                                   | 2.00 (50.80)       | MPL26K-ND            | 5.84             | 443.76         |
| 30                                   | 2.20 (55.88)       | MPL30K-ND            | 6.43             | 488.22         |
| 34                                   | 2.40 (60.96)       | MPL34K-ND            | 7.26             | 551.42         |
| 40                                   | 2.60 (66.04)       | MPL36K-ND            | 7.68             | 583.02         |
| 50                                   | 2.70 (68.58)       | MPL40K-ND            | 8.05             | 611.46         |

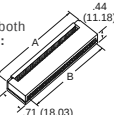
| No. of<br>Cont.                      | Dim. A<br>In. (mm) | Dim. B<br>In. (mm) | Digi-Key<br>Part No. | Pricing<br>1 100 | 3M<br>Part No. |
|--------------------------------------|--------------------|--------------------|----------------------|------------------|----------------|
| <b>Without Mounting Flanges</b>      |                    |                    |                      |                  |                |
| 50                                   | 3.20 (81.28)       | 2.90 (73.66)       | MPL50K-ND            | 8.72             | 662.02         |
| 60                                   | 3.70 (93.98)       | 3.40 (86.36)       | MPL60K-ND            | 10.28            | 780.52         |
| 64                                   | 3.90 (99.06)       | 3.60 (91.44)       | MPL64K-ND            | 10.96            | 832.66         |
| <b>With Slotted Mounting Flanges</b> |                    |                    |                      |                  |                |
| 10                                   | 1.20 (30.48)       | .90 (22.86)        | MPK10K-ND            | 2.81             | 213.30         |
| 14                                   | 1.40 (35.56)       | 1.10 (27.94)       | MPK14K-ND            | 3.89             | 295.46         |
| 16                                   | 1.50 (38.10)       | 1.20 (30.48)       | MPK16K-ND            | 4.41             | 334.96         |
| 20                                   | 1.70 (43.18)       | 1.40 (35.56)       | MPK20K-ND            | 5.14             | 390.26         |
| 24                                   | 1.90 (48.26)       | 1.60 (40.64)       | MPK24K-ND            | 5.66             | 429.76         |
| 26                                   | 2.00 (50.80)       | 1.70 (43.18)       | MPK26K-ND            | 5.84             | 443.76         |
| 30                                   | 2.20 (55.88)       | 1.90 (48.26)       | MPK30K-ND            | 6.43             | 488.22         |
| 34                                   | 2.40 (60.96)       | 2.10 (53.34)       | MPK34K-ND            | 7.26             | 551.42         |
| 36                                   | 2.50 (63.50)       | 2.20 (55.88)       | MPK36K-ND            | 7.68             | 583.02         |
| 40                                   | 2.70 (68.58)       | 2.40 (60.96)       | MPK40K-ND            | 8.05             | 611.46         |
| 50                                   | 3.20 (81.28)       | 2.90 (73.66)       | MPK50K-ND            | 8.72             | 662.02         |
| 60                                   | 3.70 (93.98)       | 3.40 (86.36)       | MPK60K-ND            | 10.28            | 780.52         |
| 64                                   | 3.90 (99.06)       | 3.60 (91.44)       | MPK64K-ND            | 10.96            | 832.66         |
| <b>Strain Reliefs</b>                |                    |                    |                      |                  |                |
| 10                                   | —                  | —                  | MPSRI0-ND            | .46              | 34.76          |
| 14                                   | —                  | —                  | MPSRI4-ND            | .46              | 34.76          |
| 16                                   | —                  | —                  | MPSRI6-ND            | .46              | 34.76          |
| 20                                   | —                  | —                  | MPSRI20-ND           | .46              | 34.76          |
| 24                                   | —                  | —                  | MPSRI24-ND           | .46              | 34.76          |
| 26                                   | —                  | —                  | MPSRI26-ND           | .46              | 34.76          |
| 30                                   | —                  | —                  | MPSRI30-ND           | .46              | 34.76          |
| 34                                   | —                  | —                  | MPSRI34-ND           | .46              | 34.76          |
| 36                                   | —                  | —                  | MPSRI36-ND           | .46              | 34.76          |
| 40                                   | —                  | —                  | MPSRI40-ND           | .46              | 34.76          |
| 50                                   | —                  | —                  | MPSRI50-ND           | .46              | 34.76          |
| 60                                   | —                  | —                  | MPSRI60-ND           | .46              | 34.76          |
| 64                                   | —                  | —                  | MPSRI64-ND           | .46              | 34.76          |
| <b>Lock Eject. Hooks (Short)</b>     |                    |                    |                      |                  |                |
| <b>Lock Eject. Hooks (Long)</b>      |                    |                    |                      |                  |                |
| 10                                   | —                  | —                  | MDLKS1-ND            | .29/2            | 11.06          |
| 14                                   | —                  | —                  | MDLKS2-ND            | .33/2            | 12.64          |

## 3M .100" (2.54mm) Card Edge Connectors

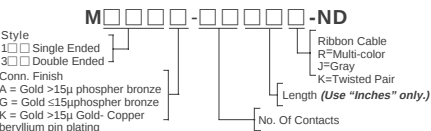


## 3M Series 89, .100 (2.54mm) Card Edge Connectors

A high-volume connector designed to reduce both material and labor costs at the same time. **Physical:**  
 • Insulation Material: Glass reinforced thermoplastic • Flammability rating: UL94V-0 • Plating: Gold flash • Color: Gray • Marking: 3M Logo  
 • Contact Material: Phosphor Bronze • Wire Accommodation: 28 AWG solid or stranded.  
**Electrical:** • Current Rating: 1A • Insulation Resistance: 1000 M ohm @ 500 VDC • Withstanding Voltage: 500V. **Environmental:**  
 • Operating Temperature: -55°C to +105°C. **UL File No.:** E68080, Guide RTRT2. **CSA File No.:** LR-76260, Guide 365-E-1, Class 6233



| No. of Cont.            | Dim. - In. (mm) | Digi-Key Part No. | Pricing 1 10 | 3M Part No.           |
|-------------------------|-----------------|-------------------|--------------|-----------------------|
| Card Edge Connectors    |                 |                   |              |                       |
| 20                      | 1.38 (35.05)    | 1.02 (25.91)      | MCE20G-ND    | 1.26 10.26 89520-0041 |
| 26                      | 1.68 (42.67)    | 1.32 (33.53)      | MCE26G-ND    | 1.44 11.69 89526-0041 |
| 34                      | 2.08 (52.83)    | 1.72 (43.69)      | MCE34G-ND    | 2.14 17.39 89534-0041 |
| 40                      | 2.38 (60.45)    | 2.02 (51.31)      | MCE40G-ND    | 2.52 20.52 89540-0041 |
| 50                      | 2.88 (73.15)    | 2.52 (64.01)      | MCE50G-ND    | 3.15 25.65 89550-0041 |
| Card Edge Strain Relief |                 |                   |              |                       |
| 20                      | —               | —                 | MCSF20-ND    | .18 1.43 3448-89520   |
| 26                      | —               | —                 | MCSF26-ND    | .18 1.43 3448-89526   |
| 34                      | —               | —                 | MCSF34-ND    | .18 1.43 3448-89534   |
| 40                      | —               | —                 | MCSF40-ND    | .18 1.43 3448-89540   |
| 50                      | —               | —                 | MCSF50-ND    | .18 1.43 3448-89550   |



## 3M Termination Jumpers Single Ended Socket Connector



\*MC = 3M Multi-Color, GR = 3M Gray

| No. of Conts. | Conn. Finish | Length In. (cm) | Rib-bon* Cable | Digi-Key Part No. | Pricing 1 10 |
|---------------|--------------|-----------------|----------------|-------------------|--------------|
| 10            | Au 30µi      | 36 (91.44)      | MC             | M1AXK-1036R-ND    | 4.61 40.46   |
|               | Au 30µi      | 36 (91.44)      | MC             | M1AXA-1036R-ND    | 2.08 18.23   |
|               | Au 30µi      | 36 (91.44)      | GR             | M1AXK-1036J-ND    | 4.12 36.16   |
|               | Au 15µi      | 36 (91.44)      | GR             | M1AXA-1036J-ND    | 1.59 13.93   |
| 14            | Au 30µi      | 36 (91.44)      | MC             | M1AXK-1436R-ND    | 5.90 51.74   |
|               | Au 30µi      | 36 (91.44)      | MC             | M1AXA-1436R-ND    | 2.91 25.52   |
|               | Au 30µi      | 36 (91.44)      | GR             | M1AXK-1436J-ND    | 5.21 45.72   |
|               | Au 15µi      | 36 (91.44)      | GR             | M1AXA-1436J-ND    | 2.22 19.50   |
| 16            | Au 30µi      | 36 (91.44)      | MC             | M1AXK-1636R-ND    | 6.54 57.39   |
|               | Au 30µi      | 36 (91.44)      | MC             | M1AXA-1636R-ND    | 3.33 29.18   |
|               | Au 30µi      | 36 (91.44)      | GR             | M1AXK-1636J-ND    | 5.76 50.50   |
|               | Au 15µi      | 36 (91.44)      | GR             | M1AXA-1636J-ND    | 2.54 22.28   |
| 20            | Au 30µi      | 36 (91.44)      | MC             | M1AXK-2036R-ND    | 7.60 66.66   |
|               | Au 30µi      | 36 (91.44)      | MC             | M1AXA-2036R-ND    | 4.16 36.45   |
|               | Au 30µi      | 36 (91.44)      | GR             | M1AXK-2036J-ND    | 6.62 58.07   |
|               | Au 15µi      | 36 (91.44)      | GR             | M1AXA-2036J-ND    | 3.18 27.86   |
| 24            | Au 30µi      | 36 (91.44)      | MC             | M1AXK-2436R-ND    | 9.12 79.94   |
|               | Au 30µi      | 36 (91.44)      | MC             | M1AXA-2436R-ND    | 4.99 43.75   |
|               | Au 30µi      | 36 (91.44)      | GR             | M1AXK-2436J-ND    | 7.94 69.62   |
|               | Au 15µi      | 36 (91.44)      | GR             | M1AXA-2436J-ND    | 3.81 33.42   |
| 26            | Au 30µi      | 36 (91.44)      | MC             | M1AXK-2636R-ND    | 9.86 86.44   |
|               | Au 30µi      | 36 (91.44)      | MC             | M1AXA-2636R-ND    | 5.40 47.40   |
|               | Au 30µi      | 36 (91.44)      | GR             | M1AXK-2636J-ND    | 8.58 75.26   |
|               | Au 15µi      | 36 (91.44)      | GR             | M1AXA-2636J-ND    | 4.13 36.21   |
| 30            | Au 30µi      | 36 (91.44)      | MC             | M1AXK-3036R-ND    | 11.97 105.00 |
|               | Au 30µi      | 36 (91.44)      | MC             | M1AXA-3036R-ND    | 6.87 60.25   |
|               | Au 30µi      | 36 (91.44)      | GR             | M1AXK-3036J-ND    | 10.31 90.39  |
|               | Au 15µi      | 36 (91.44)      | GR             | M1AXA-3036J-ND    | 5.20 45.64   |
| 34            | Au 30µi      | 36 (91.44)      | MC             | M1AXK-3436R-ND    | 12.85 112.69 |
|               | Au 30µi      | 36 (91.44)      | MC             | M1AXA-3436R-ND    | 7.07 61.96   |
|               | Au 30µi      | 36 (91.44)      | GR             | M1AXK-3436J-ND    | 11.18 98.08  |
|               | Au 15µi      | 36 (91.44)      | GR             | M1AXA-3436J-ND    | 5.40 47.35   |
| 40            | Au 30µi      | 36 (91.44)      | MC             | M1AXK-4036R-ND    | 15.11 132.47 |
|               | Au 30µi      | 36 (91.44)      | MC             | M1AXA-4036R-ND    | 8.31 72.91   |
|               | Au 30µi      | 36 (91.44)      | GR             | M1AXK-4036J-ND    | 13.15 115.27 |
|               | Au 15µi      | 36 (91.44)      | GR             | M1AXA-4036J-ND    | 6.35 55.71   |
| 50            | Au 30µi      | 36 (91.44)      | MC             | M1AXK-5036R-ND    | 18.87 165.52 |
|               | Au 30µi      | 36 (91.44)      | MC             | M1AXA-5036R-ND    | 10.39 91.13  |
|               | Au 30µi      | 36 (91.44)      | GR             | M1AXK-5036J-ND    | 16.42 144.02 |
|               | Au 15µi      | 36 (91.44)      | GR             | M1AXA-5036J-ND    | 7.94 69.63   |
| 60            | Au 30µi      | 36 (91.44)      | MC             | M1AXK-6036R-ND    | 23.07 202.27 |
|               | Au 30µi      | 36 (91.44)      | MC             | M1AXA-6036R-ND    | 12.47 109.36 |
|               | Au 30µi      | 36 (91.44)      | GR             | M1AXK-6036J-ND    | 20.12 176.47 |
|               | Au 15µi      | 36 (91.44)      | GR             | M1AXA-6036J-ND    | 9.53 83.56   |

Also available in the following configurations:

M1BXK-□□□□□□-ND - Standard Open End w/ Strain Relief.  
 M1CXK-□□□□□□-ND - Standard Open End w/ Polarizing Key.  
 M1DXK-□□□□□□-ND - Standard Open End w/ Polarizing Key & Strain Relief.  
 M1TXK-□□□□□□-ND - Standard Closed End w/ Polarizing Key.  
 M1UXK-□□□□□□-ND - Standard Closed End w/ Polarizing Key & Strain Relief.  
 Call for complete part number and pricing!

## Single Ended Socket Connector

\*Twisted Pair Cable Finished Length is Approximate

| No. of Conts. | Conn. Finish | Length In. (cm) | Rib-bon* Cable | Digi-Key Part No. | Pricing 1 10 |
|---------------|--------------|-----------------|----------------|-------------------|--------------|
| 10            | Au 30µi      | 40 (101.60)     | TW             | M1AXK-1040K-ND    | 4.99 43.80   |
|               | Au 15µi      | 40 (101.60)     | TW             | M1AXA-1040K-ND    | 2.46 21.57   |
| 14            | Au 30µi      | 40 (101.60)     | TW             | M1AXK-1440K-ND    | 6.43 56.41   |
|               | Au 15µi      | 40 (101.60)     | TW             | M1AXA-1440K-ND    | 3.44 30.19   |
| 16            | Au 30µi      | 40 (101.60)     | TW             | M1AXK-1640K-ND    | 7.15 62.72   |
|               | Au 15µi      | 40 (101.60)     | TW             | M1AXA-1640K-ND    | 3.93 34.50   |
| 20            | Au 30µi      | 40 (101.60)     | TW             | M1AXK-2040K-ND    | 8.36 73.34   |
|               | Au 15µi      | 40 (101.60)     | TW             | M1AXA-2040K-ND    | 4.92 43.13   |
| 26            | Au 30µi      | 40 (101.60)     | TW             | M1AXK-2640K-ND    | 10.85 95.11  |
|               | Au 15µi      | 40 (101.60)     | TW             | M1AXA-2640K-ND    | 6.39 56.07   |
| 34            | Au 30µi      | 40 (101.60)     | TW             | M1AXK-3440K-ND    | 14.15 124.05 |
|               | Au 15µi      | 40 (101.60)     | TW             | M1AXA-3440K-ND    | 8.36 73.32   |
| 40            | Au 30µi      | 40 (101.60)     | TW             | M1AXK-4040K-ND    | 16.63 145.83 |
|               | Au 15µi      | 40 (101.60)     | TW             | M1AXA-4040K-ND    | 9.84 86.26   |
| 50            | Au 30µi      | 40 (101.60)     | TW             | M1AXK-5040K-ND    | 20.78 182.21 |
|               | Au 15µi      | 40 (101.60)     | TW             | M1AXA-5040K-ND    | 12.30 107.82 |
| 60            | Au 30µi      | 40 (101.60)     | TW             | M1AXK-6040K-ND    | 25.35 222.30 |
|               | Au 15µi      | 40 (101.60)     | TW             | M1AXA-6040K-ND    | 14.76 129.39 |

Also available in the following configurations:

M1BXK-□□□□□□-ND - Standard Open End w/ Strain Relief.  
 M1CXK-□□□□□□-ND - Standard Open End w/ Polarizing Key.  
 M1DXK-□□□□□□-ND - Standard Open End w/ Polarizing Key & Strain Relief.  
 M1TXK-□□□□□□-ND - Standard Closed End w/ Polarizing Key.  
 M1UXK-□□□□□□-ND - Standard Closed End w/ Polarizing Key & Strain Relief.  
 Call for complete part number and pricing!

## Plug Connector — Single Ended



\*MC = 3M Multi-Color, GR = 3M Gray

| No. of Conts. | Conn. Finish | Length In. (cm) | Rib-bon* Cable | Digi-Key Part No. | Pricing 1 10 |
|---------------|--------------|-----------------|----------------|-------------------|--------------|
| 10            | Au 30µi      | 36 (91.44)      | MC             | M1KXK-1036R-ND    | 5.98 52.43   |
|               | Au 30µi      | 36 (91.44)      | GR             | M1KXK-1036J-ND    | 5.49 48.13   |
| 14            | Au 30µi      | 36 (91.44)      | MC             | M1KXK-1436R-ND    | 8.31 72.83   |
|               | Au 30µi      | 36 (91.44)      | GR             | M1KXK-1436J-ND    | 7.62 66.81   |
| 16            | Au 30µi      | 36 (91.44)      | MC             | M1KXK-1636R-ND    | 9.44 82.76   |
|               | Au 30µi      | 36 (91.44)      | GR             | M1KXK-1636J-ND    | 8.65 75.86   |
| 20            | Au 30µi      | 36 (91.44)      | MC             | M1KXK-2036R-ND    | 11.21 98.30  |
|               | Au 30µi      | 36 (91.44)      | GR             | M1KXK-2036J-ND    | 10.23 89.70  |
| 24            | Au 30µi      | 36 (91.44)      | MC             | M1KXK-2436R-ND    | 12.66 111.01 |
|               | Au 30µi      | 36 (91.44)      | GR             | M1KXK-2436J-ND    | 11.48 100.68 |
| 26            | Au 30µi      | 36 (91.44)      | MC             | M1KXK-2636R-ND    | 13.27 116.37 |
|               | Au 30µi      | 36 (91.44)      | GR             | M1KXK-2636J-ND    | 11.99 105.18 |
| 30            | Au 30µi      | 36 (91.44)      | MC             | M1KXK-3036R-ND    | 15.45 135.49 |
|               | Au 30µi      | 36 (91.44)      | GR             | M1KXK-3036J-ND    | 13.78 120.88 |
| 34            | Au 30µi      | 36 (91.44)      | MC             | M1KXK-3436R-ND    | 16.75 146.89 |
|               | Au 30µi      | 36 (91.44)      | GR             | M1KXK-3436J-ND    | 15.08 132.28 |
| 36            | Au 30µi      | 36 (91.44)      | MC             | M1KXK-3636R-ND    | 17.88 156.79 |
|               | Au 30µi      | 36 (91.44)      | GR             | M1KXK-3636J-ND    | 16.07 140.88 |
| 40            | Au 30µi      | 36 (91.44)      | MC             | M1KXK-4036R-ND    | 18.94 166.10 |
|               | Au 30µi      | 36 (91.44)      | GR             | M1KXK-4036J-ND    | 16.98 148.90 |
| 50            | Au 30µi      | 36 (91.44)      | MC             | M1KXK-5036R-ND    | 21.57 189.17 |
|               | Au 30µi      | 36 (91.44)      | GR             | M1KXK-5036J-ND    | 19.12 167.67 |
| 60            | Au 30µi      | 36 (91.44)      | MC             | M1KXK-6036R-ND    | 25.60 224.50 |
|               | Au 30µi      | 36 (91.44)      | GR             | M1KXK-6036J-ND    | 22.66 198.70 |
| 64            | Au 30µi      | 36 (91.44)      | MC             | M1KXK-6436R-ND    | 27.31 239.48 |
|               | Au 30µi      | 36 (91.44)      | GR             | M1KXK-6436J-ND    | 24.17 211.97 |

Also available in the following configurations:

M1RXK-□□□□□□-ND - Pin Connector w/o Flange w/ PK & Strain Relief.  
 M1WXX-□□□□□□-ND - Pin Connector with Flange w/ Polarizing Key.  
 M1YXX-□□□□□□-ND - Pin Connector w/ Polarizing Key & Strain Relief.  
 Call for complete part number and pricing!

## Plug Connector — Single Ended

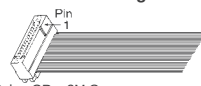
\*Twisted Pair Cable Finished Length is Approximate

| No. of Conts. | Conn. Finish | Length In. (cm) | Rib-bon* Cable | Digi-Key Part No. | Pricing 1 10 |
|---------------|--------------|-----------------|----------------|-------------------|--------------|
| 10            | Au 30µi      | 40 (101.60)     | TW             | M1KXK-1040K-ND    | 6.36 55.77   |
|               | Au 15µi      | 40 (101.60)     | TW             | M1KXK-1440K-ND    | 8.84 77.50   |
| 14            | Au 30µi      | 40 (101.60)     | TW             | M1KXK-1640K-ND    | 10.04 88.08  |
|               | Au 30µi      | 40 (101.60)     | TW             | M1KXK-2040K-ND    | 11.97 104.97 |
| 26            | Au 30µi      | 40 (101.60)     | TW             | M1KXK-2640K-ND    | 14.26 125.04 |
| 34            | Au 30µi      | 40 (101.60)     | TW             | M1KXK-3440K-ND    | 18.05 158.25 |
|               | Au 30µi      | 40 (101.60)     | TW             | M1KXK-4040K-ND    | 20.46 179.46 |
| 50            | Au 30µi      | 40 (101.60)     | TW             | M1KXK-5040K-ND    | 23.48 205.86 |
|               | Au 30µi      | 40 (101.60)     | TW             | M1KXK-6040K-ND    | 27.89 244.53 |
| 64            | Au 30µi      | 40 (101.60)     | TW             | M1KXK-6440K-ND    | 29.75 260.85 |

Also available in the following configurations:

M1RXK-□□□□□□-ND - Standard Open End without Flange, with Polarizing Key & Strain Relief.  
 M1WXX-□□□□□□-ND - Standard Open End with Flange, with Polarizing Key.  
 M1YXX-□□□□□□-ND - Standard Open End with Flange, with Polarizing Key & Strain Relief.  
 Call for complete part number and pricing!

## Single Ended Card Edge Connector



\*MC = 3M Multi-Color, GR = 3M Gray

| No. of<br>Con-<br>tacts | Conn.<br>Finish | Length<br>In. (cm) | Ribbon<br>Cable | Digi-Key<br>Part No. | Pricing |        |
|-------------------------|-----------------|--------------------|-----------------|----------------------|---------|--------|
|                         |                 |                    |                 |                      | 1       | 10     |
| 10                      | Au 30µ"         | 36 (91.44)         | MC              | M1EXK-1036R-ND       | 5.82    | 51.00  |
|                         | Au 30µ"         | 36 (91.44)         | GR              | M1EXK-1036J-ND       | 5.33    | 46.70  |
| 16                      | Au 30µ"         | 36 (91.44)         | MC              | M1EXK-1636R-ND       | 8.36    | 73.35  |
|                         | Au 30µ"         | 36 (91.44)         | GR              | M1EXK-1636J-ND       | 7.58    | 66.46  |
| 20                      | Au 30µ"         | 36 (91.44)         | MC              | M1EXK-2036R-ND       | 10.40   | 91.17  |
|                         | Au 15µ"         | 36 (91.44)         | MC              | M1EXG-2036R-ND       | 4.35    | 38.16  |
|                         | Au 30µ"         | 36 (91.44)         | GR              | M1EXK-2036J-ND       | 9.42    | 82.58  |
|                         | Au 15µ"         | 36 (91.44)         | GR              | M1EXG-2036J-ND       | 3.37    | 29.57  |
| 26                      | Au 30µ"         | 36 (91.44)         | MC              | M1EXK-2636R-ND       | 12.68   | 111.24 |
|                         | Au 15µ"         | 36 (91.44)         | MC              | M1EXG-2636R-ND       | 5.47    | 47.97  |
|                         | Au 30µ"         | 36 (91.44)         | GR              | M1EXK-2636J-ND       | 11.41   | 100.05 |
|                         | Au 15µ"         | 36 (91.44)         | GR              | M1EXG-2636J-ND       | 5.41    | 36.78  |
| 34                      | Au 30µ"         | 36 (91.44)         | MC              | M1EXK-3436R-ND       | 15.35   | 134.64 |
|                         | Au 15µ"         | 36 (91.44)         | MC              | M1EXG-3436R-ND       | 7.39    | 64.81  |
|                         | Au 30µ"         | 36 (91.44)         | GR              | M1EXK-3436J-ND       | 13.69   | 120.03 |
|                         | Au 15µ"         | 36 (91.44)         | GR              | M1EXG-3436J-ND       | 5.72    | 50.20  |
| 40                      | Au 30µ"         | 36 (91.44)         | MC              | M1EXK-4036R-ND       | 18.55   | 162.68 |
|                         | Au 15µ"         | 36 (91.44)         | MC              | M1EXG-4036R-ND       | 8.70    | 76.33  |
|                         | Au 30µ"         | 36 (91.44)         | GR              | M1EXK-4036J-ND       | 16.56   | 145.48 |
|                         | Au 15µ"         | 36 (91.44)         | GR              | M1EXG-4036J-ND       | 6.74    | 59.13  |
| 50                      | Au 30µ"         | 36 (91.44)         | MC              | M1EXK-5036R-ND       | 20.50   | 179.77 |
|                         | Au 15µ"         | 36 (91.44)         | MC              | M1EXG-5036R-ND       | 10.88   | 95.41  |
|                         | Au 30µ"         | 36 (91.44)         | GR              | M1EXK-5036J-ND       | 18.05   | 158.27 |
|                         | Au 15µ"         | 36 (91.44)         | GR              | M1EXG-5036J-ND       | 8.43    | 73.91  |
| 60                      | Au 30µ"         | 36 (91.44)         | MC              | M1EXK-6036R-ND       | 25.34   | 222.22 |
|                         | Au 30µ"         | 36 (91.44)         | GR              | M1EXK-6036J-ND       | 22.40   | 196.42 |
| 64                      | Au 30µ"         | 36 (91.44)         | MC              | M1EXK-6436R-ND       | 26.24   | 230.07 |
|                         | Au 30µ"         | 36 (91.44)         | GR              | M1EXK-6436J-ND       | 23.10   | 202.56 |

| No. of<br>Con-<br>tacts | Conn.<br>Finish | Length<br>In. (cm) | Rib-<br>bon*<br>Cable | Digi-Key<br>Part No. | Pricing |        |
|-------------------------|-----------------|--------------------|-----------------------|----------------------|---------|--------|
|                         |                 |                    |                       |                      | 1       | 10     |
| 14                      | Au 30µ"         | 18 (45.72)         | MC                    | M3AAK-1418R-ND       | 8.46    | 74.18  |
|                         | Au 15µ"         | 18 (45.72)         | MC                    | M3AAA-1418R-ND       | 2.48    | 21.74  |
|                         | Au 30µ"         | 18 (45.72)         | GR                    | M3AAK-1418J-ND       | 8.12    | 71.17  |
|                         | Au 15µ"         | 18 (45.72)         | GR                    | M3AAA-1418J-ND       | 2.14    | 18.73  |
| 14                      | Au 30µ"         | 36 (91.44)         | MC                    | M3AAK-1436R-ND       | 9.57    | 83.95  |
|                         | Au 15µ"         | 36 (91.44)         | MC                    | M3AAA-1436R-ND       | 3.59    | 31.51  |
|                         | Au 30µ"         | 36 (91.44)         | GR                    | M3AAK-1436J-ND       | 8.89    | 77.92  |
|                         | Au 15µ"         | 36 (91.44)         | GR                    | M3AAA-1436J-ND       | 2.91    | 25.48  |
| 16                      | Au 30µ"         | 6 (15.24)          | MC                    | M3AAK-1606R-ND       | 8.42    | 73.83  |
|                         | Au 15µ"         | 6 (15.24)          | MC                    | M3AAA-1606R-ND       | 1.98    | 17.40  |
|                         | Au 30µ"         | 6 (15.24)          | GR                    | M3AAK-1606J-ND       | 8.29    | 72.68  |
|                         | Au 15µ"         | 6 (15.24)          | GR                    | M3AAA-1606J-ND       | 1.85    | 16.25  |
| 16                      | Au 30µ"         | 18 (45.72)         | MC                    | M3AAK-1618R-ND       | 9.27    | 81.28  |
|                         | Au 15µ"         | 18 (45.72)         | MC                    | M3AAA-1618R-ND       | 2.83    | 24.85  |
|                         | Au 30µ"         | 18 (45.72)         | GR                    | M3AAK-1618J-ND       | 8.88    | 77.83  |
|                         | Au 15µ"         | 18 (45.72)         | GR                    | M3AAA-1618J-ND       | 2.44    | 21.40  |
| 16                      | Au 30µ"         | 36 (91.44)         | MC                    | M3AAK-1636R-ND       | 10.54   | 92.45  |
|                         | Au 15µ"         | 36 (91.44)         | MC                    | M3AAA-1636R-ND       | 4.11    | 36.02  |
|                         | Au 30µ"         | 36 (91.44)         | GR                    | M3AAK-1636J-ND       | 9.76    | 85.55  |
|                         | Au 15µ"         | 36 (91.44)         | GR                    | M3AAA-1636J-ND       | 3.32    | 29.12  |
| 20                      | Au 30µ"         | 6 (15.24)          | MC                    | M3AAK-2006R-ND       | 9.37    | 82.17  |
|                         | Au 15µ"         | 6 (15.24)          | MC                    | M3AAA-2006R-ND       | 2.48    | 21.75  |
|                         | Au 30µ"         | 6 (15.24)          | GR                    | M3AAK-2006J-ND       | 9.21    | 80.74  |
|                         | Au 15µ"         | 6 (15.24)          | GR                    | M3AAA-2006J-ND       | 2.32    | 20.32  |
| 20                      | Au 30µ"         | 18 (45.72)         | MC                    | M3AAK-2018R-ND       | 10.43   | 91.47  |
|                         | Au 15µ"         | 18 (45.72)         | MC                    | M3AAA-2018R-ND       | 3.54    | 31.05  |
|                         | Au 30µ"         | 18 (45.72)         | GR                    | M3AAK-2018J-ND       | 9.94    | 87.17  |
|                         | Au 15µ"         | 18 (45.72)         | GR                    | M3AAA-2018J-ND       | 3.05    | 26.75  |
| 20                      | Au 30µ"         | 36 (91.44)         | MC                    | M3AAK-2036R-ND       | 12.02   | 105.42 |
|                         | Au 15µ"         | 36 (91.44)         | MC                    | M3AAA-2036R-ND       | 5.13    | 45.00  |
|                         | Au 30µ"         | 36 (91.44)         | GR                    | M3AAK-2036J-ND       | 11.04   | 96.83  |
|                         | Au 15µ"         | 36 (91.44)         | GR                    | M3AAA-2036J-ND       | 4.15    | 36.41  |
| 24                      | Au 30µ"         | 6 (15.24)          | MC                    | M3AAK-2406R-ND       | 11.23   | 98.49  |
|                         | Au 15µ"         | 6 (15.24)          | MC                    | M3AAA-2406R-ND       | 2.98    | 26.10  |
|                         | Au 30µ"         | 6 (15.24)          | GR                    | M3AAK-2406J-ND       | 11.04   | 96.77  |
|                         | Au 15µ"         | 6 (15.24)          | GR                    | M3AAA-2406J-ND       | 2.78    | 24.38  |
| 24                      | Au 30µ"         | 18 (45.72)         | MC                    | M3AAK-2418R-ND       | 12.50   | 109.65 |
|                         | Au 15µ"         | 18 (45.72)         | MC                    | M3AAA-2418R-ND       | 4.25    | 37.26  |
|                         | Au 30µ"         | 18 (45.72)         | GR                    | M3AAK-2418J-ND       | 11.92   | 104.49 |
|                         | Au 15µ"         | 18 (45.72)         | GR                    | M3AAA-2418J-ND       | 3.66    | 32.10  |
| 24                      | Au 30µ"         | 36 (91.44)         | MC                    | M3AAK-2436R-ND       | 14.41   | 126.40 |
|                         | Au 15µ"         | 36 (91.44)         | MC                    | M3AAA-2436R-ND       | 6.16    | 54.01  |
|                         | Au 30µ"         | 36 (91.44)         | GR                    | M3AAK-2436J-ND       | 13.24   | 116.07 |
|                         | Au 15µ"         | 36 (91.44)         | GR                    | M3AAA-2436J-ND       | 4.98    | 43.68  |
| 26                      | Au 30µ"         | 6 (15.24)          | MC                    | M3AAK-2606R-ND       | 12.13   | 106.37 |
|                         | Au 15µ"         | 6 (15.24)          | MC                    | M3AAA-2606R-ND       | 3.22    | 28.28  |
|                         | Au 30µ"         | 6 (15.24)          | GR                    | M3AAK-2606J-ND       | 11.92   | 104.50 |
|                         | Au 15µ"         | 6 (15.24)          | GR                    | M3AAA-2606J-ND       | 3.01    | 26.41  |
| 26                      | Au 30µ"         | 18 (45.72)         | MC                    | M3AAK-2618R-ND       | 13.51   | 118.46 |
|                         | Au 15µ"         | 18 (45.72)         | MC                    | M3AAA-2618R-ND       | 4.60    | 40.37  |
|                         | Au 30µ"         | 18 (45.72)         | GR                    | M3AAK-2618J-ND       | 12.87   | 112.87 |
|                         | Au 15µ"         | 18 (45.72)         | GR                    | M3AAA-2618J-ND       | 3.97    | 34.78  |
| 26                      | Au 30µ"         | 36 (91.44)         | MC                    | M3AAK-2636R-ND       | 15.58   | 136.60 |
|                         | Au 15µ"         | 36 (91.44)         | MC                    | M3AAA-2636R-ND       | 6.67    | 58.51  |
|                         | Au 30µ"         | 36 (91.44)         | GR                    | M3AAK-2636J-ND       | 14.30   | 125.42 |
|                         | Au 15µ"         | 36 (91.44)         | GR                    | M3AAA-2636J-ND       | 5.40    | 47.33  |
| 30                      | Au 30µ"         | 6 (15.24)          | MC                    | M3AAK-3006R-ND       | 14.03   | 123.05 |
|                         | Au 15µ"         | 6 (15.24)          | MC                    | M3AAA-3006R-ND       | 3.83    | 33.56  |
|                         | Au 30µ"         | 6 (15.24)          | GR                    | M3AAK-3006J-ND       | 13.75   | 120.61 |
|                         | Au 15µ"         | 6 (15.24)          | GR                    | M3AAA-3006J-ND       | 3.55    | 31.12  |
| 30                      | Au 30µ"         | 18 (45.72)         | MC                    | M3AAK-3018R-ND       | 15.83   | 138.85 |
|                         | Au 15µ"         | 18 (45.72)         | MC                    | M3AAA-3018R-ND       | 5.63    | 49.36  |
|                         | Au 30µ"         | 18 (45.72)         | GR                    | M3AAK-3018J-ND       | 15.00   | 131.55 |
|                         | Au 15µ"         | 18 (45.72)         | GR                    | M3AAA-3018J-ND       | 4.80    | 42.06  |
| 30                      | Au 30µ"         | 36 (91.44)         | MC                    | M3AAK-3036R-ND       | 18.54   | 162.57 |
|                         | Au 15µ"         | 36 (91.44)         | MC                    | M3AAA-3036R-ND       | 8.33    | 73.08  |
|                         | Au 30µ"         | 36 (91.44)         | GR                    | M3AAK-3036J-ND       | 16.87   | 147.96 |
|                         | Au 15µ"         | 36 (91.44)         | GR                    | M3AAA-3036J-ND       | 6.67    | 58.47  |
| 34                      | Au 30µ"         | 6 (15.24)          | MC                    | M3AAK-3406R-ND       | 15.79   | 138.44 |
|                         | Au 15µ"         | 6 (15.24)          | MC                    | M3AAA-3406R-ND       | 4.22    | 36.98  |
|                         | Au 30µ"         | 6 (15.24)          | GR                    | M3AAK-3406J-ND       | 15.51   | 136.00 |
|                         | Au 15µ"         | 6 (15.24)          | GR                    | M3AAA-3406J-ND       | 3.94    | 34.54  |
| 34                      | Au 30µ"         | 18 (45.72)         | MC                    | M3AAK-3418R-ND       | 17.59   | 154.24 |
|                         | Au 15µ"         | 18 (45.72)         | MC                    | M3AAA-3418R-ND       | 6.02    | 52.78  |
|                         | Au 30µ"         | 18 (45.72)         | GR                    | M3AAK-3418J-ND       | 16.76   | 146.94 |
|                         | Au 15µ"         | 18 (45.72)         | GR                    | M3AAA-3418J-ND       | 5.19    | 45.48  |
| 34                      | Au 30µ"         | 36 (91.44)         | MC                    | M3AAK-3436R-ND       | 20.29   | 177.96 |
|                         | Au 15µ"         | 36 (91.44)         | MC                    | M3AAA-3436R-ND       | 8.72    | 76.50  |
|                         | Au 30µ"         | 36 (91.44)         | GR                    | M3AAK-3436J-ND       | 18.63   | 163.35 |
|                         | Au 15µ"         | 36 (91.44)         | GR                    | M3AAA-3436J-ND       | 7.06    | 61.89  |
| 40                      | Au 30µ"         | 6 (15.24)          | MC                    | M3AAK-4006R-ND       | 18.55   | 162.63 |
|                         | Au 15µ"         | 6 (15.24)          | MC                    | M3AAA-4006R-ND       | 4.96    | 43.50  |
|                         | Au 30µ"         | 6 (15.24)          | GR                    | M3AAK-4006J-ND       | 18.22   | 159.76 |
|                         | Au 15µ"         | 6 (15.24)          | GR                    | M3AAA-4006J-ND       | 4.63    | 40.63  |
| 40                      | Au 30µ"         | 18 (45.72)         | MC                    | M3AAK-4018R-ND       | 20.67   | 181.23 |
|                         | Au 15µ"         | 18 (45.72)         | MC                    | M3AAA-4018R-ND       | 7.08    | 62.10  |
|                         | Au 30µ"         | 18 (45.72)         | GR                    | M3AAK-4018J-ND       | 19.69   | 172.63 |
|                         | Au 15µ"         | 18 (45.72)         | GR                    | M3AAA-4018J-ND       | 6.10    | 53.50  |
| 40                      | Au 30µ"         | 36 (91.44)         | MC                    | M3AAK-4036R-ND       | 23.85   | 209.14 |
|                         | Au 15µ"         | 36 (91.44)         | MC                    | M3AAA-4036R-ND       | 10.26   | 90.01  |
|                         | Au 30µ"         | 36 (91.44)         | GR                    | M3AAK-4036J-ND       | 21.89   | 191.94 |
|                         | Au 15µ"         | 36 (91.44)         | GR                    | M3AAA-4036J-ND       | 8.30    | 72.81  |
| 50                      | Au 30µ"         | 6 (15.24)          | MC                    | M3AAK-5006R-ND       | 23.17   | 203.15 |
|                         | Au 15µ"         | 6 (15.24)          | MC                    | M3AAA-5006R-ND       | 6.20    | 54.38  |

| No. of<br>Con-<br>tacts | Conn.<br>Finish | Length<br>In. (cm) | Rib-<br>bon*<br>Cable | Digi-Key<br>Part No. | Pricing |        |
|-------------------------|-----------------|--------------------|-----------------------|----------------------|---------|--------|
|                         |                 |                    |                       |                      | 1       | 10     |
| 50                      | Au 30µ"         | 6 (15.24)          | GR                    | M3AAK-5006J-ND       | 22.76   | 199.56 |
|                         | Au 15µ"         | 6 (15.24)          | GR                    | M3AAA-5006J-ND       | 5.79    | 50.79  |
| 50                      | Au 30µ"         | 18 (45.72)         | MC                    | M3AAK-5018R-ND       | 25.82   | 226.40 |
|                         | Au 15µ"         | 18 (45.72)         | MC                    | M3AAA-5018R-ND       | 8.85    | 77.63  |
|                         | Au 30µ"         | 18 (45.72)         | GR                    | M3AAK-5018J-ND       | 24.59   | 215.65 |
|                         | Au 15µ"         | 18 (45.72)         | GR                    | M3AAA-5018J-ND       | 7.63    | 66.88  |
| 50                      | Au 30µ"         | 36 (91.44)         | MC                    | M3AAK-5036R-ND       | 29.79   | 261.28 |
|                         | Au 15µ"         | 36 (91.44)         | MC                    | M3AAA-5036R-ND       | 12.83   | 112.51 |
|                         | Au 30µ"         | 36 (91.44)         | GR                    | M3AAK-5036J-ND       | 27.34   | 239.78 |
|                         | Au 15µ"         | 36 (91.44)         | GR                    | M3AAA-5036J-ND       | 10.38   | 91.01  |
| 60                      | Au 30µ"         | 6 (15.24)          | MC                    | M3AAK-6006R-ND       | 28.63   | 251.07 |
|                         | Au 15µ"         | 6 (15.24)          | MC                    | M3AAA-6006R-ND       | 7.44    | 65.25  |
|                         | Au 30µ"         | 6 (15.24)          | GR                    | M3AAK-6006J-ND       | 28.14   | 246.77 |
|                         | Au 15µ"         | 6 (15.24)          | GR                    | M3AAA-6006J-ND       | 6.95    | 60.95  |
| 60                      | Au 30µ"         | 18 (45.72)         | MC                    | M3AAK-6018R-ND       | 31.81   | 278.98 |
|                         | Au 15µ"         | 18 (45.72)         | MC                    | M3AAA-6018R-ND       | 10.62   | 93.16  |
|                         | Au 30µ"         | 18 (45.72)         | GR                    | M3AAK-6018J-ND       | 30.34   | 266.08 |
|                         | Au 15µ"         | 18 (45.72)         | GR                    | M3AAA-6018J-ND       | 9.15    | 80.26  |
| 60                      | Au 30µ"         | 36 (91.44)         | MC                    | M3AAK-6036R-ND       | 36.59   | 320.83 |
|                         | Au 15µ"         | 36 (91.44)         | MC                    | M3AAA-6036R-ND       | 15.40   | 135.01 |
|                         | Au 30µ"         | 36 (91.44)         | GR                    | M3AAK-6036J-ND       | 33.64   | 295.03 |
|                         | Au 15µ"         | 36 (91.44)         | GR                    | M3AAA-6036J-ND       | 12.45   | 109.21 |

Also available in the following configurations:  
M3BBK-ND - Standard Open End w/ Strain Relief.  
M3CC-ND - Standard Open End w/ Polarizing Key.  
M3DD-ND - Standard Open End w/ Polarizing Key & Strain Relief.  
M3TTK-ND - Standard Closed End w/ Polarizing Key.  
M3UUK-ND - Standard Closed End w/ Polarizing Key & Strain Relief.  
Call for complete part number and pricing!

### Socket to Socket Connector

\*Twisted Pair Cable Finished Length is Approximate

| No. of<br>Con-<br>tacts | Conn.<br>Finish | Length<br>In. (cm) | Ribbon*<br>Cable | Digi-Key<br>Part No. | Pricing |        |
|-------------------------|-----------------|--------------------|------------------|----------------------|---------|--------|
|                         |                 |                    |                  |                      | 1       | 10     |
| 10                      | Au 30µ"         | 20 (50.80)         | TW               | M3AAK-1020K-ND       | 7.03    | 61.65  |
|                         | Au 15µ"         | 20 (50.80)         | TW               | M3AAA-1020K-ND       | 1.96    | 17.19  |
|                         | Au 30µ"         | 40 (101.60)        | TW               | M3AAK-1040K-ND       | 8.02    | 70.30  |
|                         | Au 15µ"         | 40 (101.60)        | TW               | M3AAA-1040K-ND       | 2.95    | 25.84  |
|                         | Au 30µ"         | 60 (152.40)        | TW               | M3AAK-1060K-ND       | 9.00    | 78.95  |
|                         | Au 15µ"         | 60 (152.40)        | TW               | M3AAA-1060K-ND       | 3.93    | 34.49  |
| 14                      | Au 30µ"         | 20 (50.80)         | TW               | M3AAK-1420K-ND       | 8.73    | 76.51  |
|                         | Au 15µ"         | 20 (50.80)         | TW               | M3AAA-1420K-ND       | 2.75    | 24.07  |
|                         | Au 30µ"         | 40 (101.60)        | TW               | M3AAK-1440K-ND       | 10.11   | 88.62  |
|                         | Au 15µ"         | 40 (101.60)        | TW               | M3AAA-1440K-ND       | 4.13    | 36.18  |
|                         | Au 30µ"         | 60 (152.40)        | TW               | M3AAK-1460K-ND       | 11.49   | 100.72 |
|                         | Au 15µ"         | 60 (152.40)        | TW               | M3AAA-1460K-ND       | 5.51    | 48.28  |
| 16                      | Au 30µ"         | 20 (50.80)         | TW               | M3AAK-1620K-ND       | 9.57    | 83.94  |
|                         | Au 15µ"         | 20 (50.80)         | TW               | M3AAA-1620K-ND       | 3.14    | 27.51  |
|                         | Au 30µ"         | 40 (101.60)        | TW               | M3AAK-1640K-ND       | 11.15   | 97.77  |
|                         | Au 15µ"         | 40 (101.60)        | TW               | M3AAA-1640K-ND       | 4.71    | 41.34  |
|                         | Au 30µ"         | 60 (152.40)        | TW               | M3AAK-1660K-ND       | 12.73   | 111.61 |
|                         | Au 15µ"         | 60 (152.40)        | TW               | M3AAA-1660K-ND       | 6.29    | 55.18  |
| 20                      | Au 30µ"         | 20 (50.80)         | TW               | M3AAK-2020K-ND       | 10.81   | 94.81  |
|                         | Au 15µ"         | 20 (50.80)         | TW               | M3AAA-2020K-ND       | 3.92    | 34.39  |
|                         | Au 30µ"         | 40 (101.60)        | TW               | M3AAK-2040K-ND       | 12.78   | 112.10 |
|                         | Au 15µ"         | 40 (101.60)        | TW               | M3AAA-2040K-ND       | 5.89    | 51.68  |
|                         | Au 30µ"         | 60 (152.40)        | TW               | M3AAK-2060K-ND       | 14.76   | 129.39 |
|                         | Au 15µ"         | 60 (152.40)        | TW               | M3AAA-2060K-ND       | 7.87    | 68.97  |
| 26                      | Au 30µ"         | 20 (50.80)         | TW               | M3AAK-2620K-ND       | 14.00   | 122.80 |
|                         | Au 15µ"         | 20 (50.80)         | TW               | M3AAA-2620K-ND       | 5.10    | 44.71  |
|                         | Au 30µ"         | 40 (101.60)        | TW               | M3AAK-2640K-ND       | 16.57   | 145.27 |
|                         | Au 15µ"         | 40 (101.60)        | TW               | M3AAA-2640K-ND       | 7.66    | 67.18  |
|                         | Au 30µ"         | 60 (152.40)        | TW               | M3AAK-2660K-ND       | 19.13   | 167.75 |
|                         | Au 15µ"         | 60 (152.40)        | TW               | M3AAA-2660K-ND       | 10.22   | 89.66  |
| 34                      | Au 30µ"         | 20 (50.80)         | TW               | M3AAK-3420K-ND       | 18.24   | 159.92 |
|                         | Au 15µ"         | 20 (50.80)         | TW               | M3AAA-3420K-ND       | 6.67    | 58.46  |
|                         | Au 30µ"         | 40 (101.60)        | TW               | M3AAK-3440K-ND       | 21.59   | 189.32 |
|                         | Au 15µ"         | 40 (101.60)        | TW               | M3AAA-3440K-ND       | 10.02   | 87.86  |
|                         | Au 30µ"         | 60 (152.40)        | TW               | M3AAK-3460K-ND       | 24.94   | 218.71 |
|                         | Au 15µ"         | 60 (152.40)        | TW               | M3AAA-3460K-ND       | 13.37   | 117.25 |
| 40                      | Au 30µ"         | 20 (50.80)         | TW               | M3AAK-4020K-ND       | 21.43   | 187.91 |
|                         | Au 15µ"         | 20 (50.80)         | TW               | M3AAA-4020K-ND       | 7.84    | 68.78  |
|                         | Au 30µ"         | 40 (101.60)        | TW               | M3AAK-4040K-ND       | 25.37   | 222.49 |
|                         | Au 15µ"         | 40 (101.60)        | TW               | M3AAA-4040K-ND       | 11.59   | 103.36 |
|                         | Au 30µ"         | 60 (152.40)        | TW               | M3AAK-4060K-ND       | 29.32   | 257.07 |
|                         | Au 15µ"         | 60 (152.40)        | TW               | M3AAA-4060K-ND       | 15.73   | 137.94 |
| 50                      | Au 30µ"         | 20 (50.80)         | TW               | M3AAK-5020K-ND       | 26.77   | 234.75 |
|                         | Au 15µ"         | 20 (50.80)         | TW               | M3AAA-5020K-ND       | 9.80    | 85.98  |
|                         | Au 30µ"         | 40 (101.60)        | TW               | M3AAK-5040K-ND       | 31.70   | 277.97 |
|                         | Au 15µ"         | 40 (101.60)        | TW               | M3AAA-5040K-ND       | 14.73   | 129.20 |
|                         | Au 30µ"         | 60 (152.40)        | TW               | M3AAK-5060K-ND       | 36.63   | 321.20 |
|                         | Au 15µ"         | 60 (152.40)        | TW               | M3AAA-5060K-ND       | 19.66   | 172.43 |
| 60                      | Au 30µ"         | 20 (50.80)         | TW               | M3AAK-6020K-ND       | 32.96   | 288.99 |
|                         | Au 15µ"         | 20 (50.80)         | TW               | M3AAA-6020K-ND       | 11.77   | 103.17 |
|                         | Au 30µ"         | 40 (101.60)        | TW               | M3AAK-6040K-ND       | 38.87   | 340.86 |
|                         | Au 15µ"         | 40 (101.60)        | TW               | M3AAA-6040K-ND       | 17.68   | 155.04 |
|                         | Au 30µ"         | 60 (152.40)        | TW               | M3AAK-6060K-ND       | 44.79   | 392.73 |
|                         | Au 15µ"         | 60 (152.40)        | TW               | M3AAA-6060K-ND       | 23.60   | 206.18 |

### Plug Connector to Plug Connector

\*Twisted Pair Cable Finished Length is Approximate

| No. of<br>Con-<br>tacts | Conn.<br>Finish | Length<br>In. (cm) | Rib-<br>bon*<br>Cable | Digi-Key<br>Part No. | Pricing<br>1 10 |
|-------------------------|-----------------|--------------------|-----------------------|----------------------|-----------------|
| 10                      | Au 30µi         | 20 (50.80)         | TW                    | M3KKK-1020K-ND       | 9.76 85.59      |
|                         | Au 30µi         | 40 (101.60)        | TW                    | M3KKK-1040K-ND       | 10.75 94.24     |
| 14                      | Au 30µi         | 20 (50.80)         | TW                    | M3KKK-1420K-ND       | 13.54 118.69    |
|                         | Au 30µi         | 40 (101.60)        | TW                    | M3KKK-1440K-ND       | 14.92 130.80    |
| 16                      | Au 30µi         | 20 (50.80)         | TW                    | M3KKK-1620K-ND       | 15.36 134.67    |
|                         | Au 30µi         | 40 (101.60)        | TW                    | M3KKK-1640K-ND       | 16.93 148.50    |
| 20                      | Au 30µi         | 20 (50.80)         | TW                    | M3KKK-2020K-ND       | 18.03 158.08    |
|                         | Au 30µi         | 40 (101.60)        | TW                    | M3KKK-2040K-ND       | 20.00 175.37    |
| 20                      | Au 30µi         | 20 (50.80)         | TW                    | M3KKK-2620K-ND       | 20.83 182.65    |
|                         | Au 30µi         | 40 (101.60)        | TW                    | M3KKK-2640K-ND       | 23.39 205.12    |
| 34                      | Au 30µi         | 20 (50.80)         | TW                    | M3KKK-3420K-ND       | 26.04 228.32    |
|                         | Au 30µi         | 40 (101.60)        | TW                    | M3KKK-3440K-ND       | 29.39 257.72    |
| 40                      | Au 30µi         | 20 (50.80)         | TW                    | M3KKK-4020K-ND       | 29.10 255.17    |
|                         | Au 30µi         | 40 (101.60)        | TW                    | M3KKK-4040K-ND       | 33.04 289.75    |
| 50                      | Au 30µi         | 20 (50.80)         | TW                    | M3KKK-5020K-ND       | 32.16 282.06    |
|                         | Au 30µi         | 40 (101.60)        | TW                    | M3KKK-5040K-ND       | 37.09 325.28    |
| 60                      | Au 30µi         | 20 (50.80)         | TW                    | M3KKK-6020K-ND       | 38.03 333.45    |
|                         | Au 30µi         | 40 (101.60)        | TW                    | M3KKK-6040K-ND       | 43.94 385.32    |
| 64                      | Au 30µi         | 20 (50.80)         | TW                    | M3KKK-6420K-ND       | 40.56 355.72    |
|                         | Au 30µi         | 40 (101.60)        | TW                    | M3KKK-6440K-ND       | 46.87 411.05    |

Also available in the following configurations:

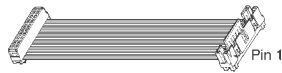
M3RRK-□□□□K-ND - Pin Connector without Flange, with Polarizing Key and Strain Relief.

M3WWK-□□□□K-ND - Pin Connector with Flange, with Polarizing Key.

M3YYK-□□□□K-ND - Pin Connector with Flange, with Polarizing Key and Strain Relief.

Call for complete part number and pricing!

### Socket Connector to Plug Connector



\*MC = 3M Multi-Color, GR = 3M Gray

| No. of<br>Con-<br>tacts | Conn.<br>Finish | Length<br>In. (cm) | Rib-<br>bon*<br>Cable | Digi-Key<br>Part No. | Pricing<br>1 10 |
|-------------------------|-----------------|--------------------|-----------------------|----------------------|-----------------|
| 10                      | Au 30µi         | 6 (15.24)          | MC                    | M3AKK-1006R-ND       | 7.68 67.31      |
|                         | Au 30µi         | 6 (15.24)          | GR                    | M3AKK-1006J-ND       | 7.59 66.59      |
|                         | Au 30µi         | 18 (45.72)         | MC                    | M3AKK-1018R-ND       | 8.21 71.96      |
|                         | Au 30µi         | 18 (45.72)         | GR                    | M3AKK-1018J-ND       | 7.96 69.81      |
|                         | Au 30µi         | 36 (91.44)         | MC                    | M3AKK-1036R-ND       | 9.00 78.93      |
|                         | Au 30µi         | 36 (91.44)         | GR                    | M3AKK-1036J-ND       | 8.51 74.63      |
| 16                      | Au 30µi         | 6 (15.24)          | MC                    | M3AKK-1606R-ND       | 11.31 99.20     |
|                         | Au 30µi         | 6 (15.24)          | GR                    | M3AKK-1606J-ND       | 11.18 98.05     |
|                         | Au 30µi         | 18 (45.72)         | MC                    | M3AKK-1618R-ND       | 12.16 106.64    |
|                         | Au 30µi         | 18 (45.72)         | GR                    | M3AKK-1618J-ND       | 11.77 103.20    |
|                         | Au 30µi         | 36 (91.44)         | MC                    | M3AKK-1636R-ND       | 13.43 117.81    |
|                         | Au 30µi         | 36 (91.44)         | GR                    | M3AKK-1636J-ND       | 12.65 110.92    |
| 20                      | Au 30µi         | 6 (15.24)          | MC                    | M3AKK-2006R-ND       | 12.98 113.81    |
|                         | Au 30µi         | 6 (15.24)          | GR                    | M3AKK-2006J-ND       | 12.81 112.37    |
|                         | Au 30µi         | 18 (45.72)         | MC                    | M3AKK-2018R-ND       | 14.04 123.11    |
|                         | Au 30µi         | 18 (45.72)         | GR                    | M3AKK-2018J-ND       | 13.55 118.81    |
|                         | Au 30µi         | 36 (91.44)         | MC                    | M3AKK-2036R-ND       | 15.63 137.06    |
|                         | Au 30µi         | 36 (91.44)         | GR                    | M3AKK-2036J-ND       | 14.65 128.46    |
| 24                      | Au 30µi         | 6 (15.24)          | MC                    | M3AKK-2406R-ND       | 14.77 129.56    |
|                         | Au 30µi         | 6 (15.24)          | GR                    | M3AKK-2406J-ND       | 14.58 127.84    |
|                         | Au 30µi         | 18 (45.72)         | MC                    | M3AKK-2418R-ND       | 16.05 140.72    |
|                         | Au 30µi         | 18 (45.72)         | GR                    | M3AKK-2418J-ND       | 15.46 135.56    |
|                         | Au 30µi         | 36 (91.44)         | MC                    | M3AKK-2436R-ND       | 17.96 157.46    |
|                         | Au 30µi         | 36 (91.44)         | GR                    | M3AKK-2436J-ND       | 16.78 147.14    |
| 26                      | Au 30µi         | 6 (15.24)          | MC                    | M3AKK-2606R-ND       | 15.54 136.29    |
|                         | Au 30µi         | 6 (15.24)          | GR                    | M3AKK-2606J-ND       | 15.33 134.43    |
|                         | Au 30µi         | 18 (45.72)         | MC                    | M3AKK-2618R-ND       | 16.92 148.39    |
|                         | Au 30µi         | 18 (45.72)         | GR                    | M3AKK-2618J-ND       | 16.28 142.79    |
|                         | Au 30µi         | 36 (91.44)         | MC                    | M3AKK-2636R-ND       | 18.99 166.53    |
|                         | Au 30µi         | 36 (91.44)         | GR                    | M3AKK-2636J-ND       | 17.71 155.34    |
| 30                      | Au 30µi         | 6 (15.24)          | MC                    | M3AKK-3006R-ND       | 17.51 153.54    |
|                         | Au 30µi         | 6 (15.24)          | GR                    | M3AKK-3006J-ND       | 17.23 151.10    |
|                         | Au 30µi         | 18 (45.72)         | MC                    | M3AKK-3018R-ND       | 19.31 169.35    |
|                         | Au 30µi         | 18 (45.72)         | GR                    | M3AKK-3018J-ND       | 18.48 162.04    |
|                         | Au 30µi         | 36 (91.44)         | MC                    | M3AKK-3036R-ND       | 22.02 193.06    |
|                         | Au 30µi         | 36 (91.44)         | GR                    | M3AKK-3036J-ND       | 20.35 178.45    |
| 34                      | Au 30µi         | 6 (15.24)          | MC                    | M3AKK-3406R-ND       | 19.69 172.64    |
|                         | Au 30µi         | 6 (15.24)          | GR                    | M3AKK-3406J-ND       | 19.41 170.20    |
|                         | Au 30µi         | 18 (45.72)         | MC                    | M3AKK-3418R-ND       | 21.49 188.44    |
|                         | Au 30µi         | 18 (45.72)         | GR                    | M3AKK-3418J-ND       | 20.66 181.14    |
|                         | Au 30µi         | 36 (91.44)         | MC                    | M3AKK-3436R-ND       | 24.19 212.16    |
|                         | Au 30µi         | 36 (91.44)         | GR                    | M3AKK-3436J-ND       | 22.53 197.55    |
| 40                      | Au 30µi         | 6 (15.24)          | MC                    | M3AKK-4006R-ND       | 22.38 196.26    |
|                         | Au 30µi         | 6 (15.24)          | GR                    | M3AKK-4006J-ND       | 22.05 193.39    |
|                         | Au 30µi         | 18 (45.72)         | MC                    | M3AKK-4018R-ND       | 24.50 214.86    |
|                         | Au 30µi         | 18 (45.72)         | GR                    | M3AKK-4018J-ND       | 23.52 206.26    |
|                         | Au 30µi         | 36 (91.44)         | MC                    | M3AKK-4036R-ND       | 27.68 242.77    |
|                         | Au 30µi         | 36 (91.44)         | GR                    | M3AKK-4036J-ND       | 25.72 225.57    |
| 50                      | Au 30µi         | 6 (15.24)          | MC                    | M3AKK-5006R-ND       | 25.86 226.80    |
|                         | Au 30µi         | 6 (15.24)          | GR                    | M3AKK-5006J-ND       | 25.45 223.22    |
|                         | Au 30µi         | 18 (45.72)         | MC                    | M3AKK-5018R-ND       | 28.51 250.05    |

| No. of<br>Con-<br>tacts | Conn.<br>Finish | Length<br>In. (cm) | Rib-<br>bon*<br>Cable | Digi-Key<br>Part No. | Pricing<br>1 10 |
|-------------------------|-----------------|--------------------|-----------------------|----------------------|-----------------|
| 50                      | Au 30µi         | 18 (45.72)         | GR                    | M3AKK-5018J-ND       | 27.29 239.30    |
|                         | Au 30µi         | 36 (91.44)         | MC                    | M3AKK-5036R-ND       | 32.49 284.93    |
|                         | Au 30µi         | 36 (91.44)         | GR                    | M3AKK-5036J-ND       | 30.04 263.43    |
| 60                      | Au 30µi         | 6 (15.24)          | MC                    | M3AKK-6006R-ND       | 31.17 273.30    |
|                         | Au 30µi         | 6 (15.24)          | GR                    | M3AKK-6006J-ND       | 30.68 269.00    |
|                         | Au 30µi         | 18 (45.72)         | MC                    | M3AKK-6018R-ND       | 34.35 301.21    |
|                         | Au 30µi         | 18 (45.72)         | GR                    | M3AKK-6018J-ND       | 32.88 288.31    |
|                         | Au 30µi         | 36 (91.44)         | MC                    | M3AKK-6036R-ND       | 39.12 343.06    |
|                         | Au 30µi         | 36 (91.44)         | GR                    | M3AKK-6036J-ND       | 36.18 317.26    |

Also available in the following configurations:

M3AW□□□□□K-ND - Socket Connector with Polarizing Key and Strain Relief.

M3BR□□□□□K-ND - Socket Connector with SR, Pin Connector without Flange with PK and SR.

M3BY□□□□□K-ND - Socket Connector with SR, Pin Connector with Flange with PK and SR.

M3CK□□□□□K-ND - Socket Connector Open with Polarizing Key.

M3CW□□□□□K-ND - Socket Connector with PK, Pin Connector with Flange w/ PK.

M3DR□□□□□K-ND - Socket Connector with PK and SR, Pin Connector without Flange with PK and SR.

M3DY□□□□□K-ND - Socket Connector with PK and SR, Pin Connector with Flange with PK and SR.

M3TK□□□□□K-ND - Socket Connector Closed with Polarizing Key.

M3UR□□□□□K-ND - Socket Connector Closed End with PK and SR.

M3UY□□□□□K-ND - Socket Connector Closed End with PK and SR, Pin Connector with Flange with PK & SR.

Call for complete part number and pricing!

### Socket Connector to Plug Connector

\*Twisted Pair Cable Finished Length is Approximate

| No. of<br>Con-<br>tacts | Conn.<br>Finish | Length<br>In. (cm) | Rib-<br>bon*<br>Cable | Digi-Key<br>Part No. | Pricing<br>1 10 |
|-------------------------|-----------------|--------------------|-----------------------|----------------------|-----------------|
| 10                      | Au 30µi         | 20 (50.80)         | TW                    | M3AKK-1020K-ND       | 8.40 73.62      |
|                         | Au 30µi         | 40 (101.60)        | TW                    | M3AKK-1040K-ND       | 9.38 82.27      |
|                         | Au 30µi         | 60 (152.40)        | TW                    | M3AKK-1060K-ND       | 10.37 90.92     |
| 16                      | Au 30µi         | 20 (50.80)         | TW                    | M3AKK-1620K-ND       | 12.46 109.31    |
|                         | Au 30µi         | 40 (101.60)        | TW                    | M3AKK-1640K-ND       | 14.04 123.14    |
|                         | Au 30µi         | 60 (152.40)        | TW                    | M3AKK-1660K-ND       | 15.62 136.97    |
| 20                      | Au 30µi         | 20 (50.80)         | TW                    | M3AKK-2020K-ND       | 14.42 126.45    |
|                         | Au 30µi         | 40 (101.60)        | TW                    | M3AKK-2040K-ND       | 16.39 143.73    |
|                         | Au 30µi         | 60 (152.40)        | TW                    | M3AKK-2060K-ND       | 18.36 161.03    |
| 26                      | Au 30µi         | 20 (50.80)         | TW                    | M3AKK-2620K-ND       | 17.42 152.72    |
|                         | Au 30µi         | 40 (101.60)        | TW                    | M3AKK-2640K-ND       | 19.98 175.20    |
|                         | Au 30µi         | 60 (152.40)        | TW                    | M3AKK-2660K-ND       | 22.54 197.68    |
| 34                      | Au 30µi         | 20 (50.80)         | TW                    | M3AKK-3420K-ND       | 22.14 194.12    |
|                         | Au 30µi         | 40 (101.60)        | TW                    | M3AKK-3440K-ND       | 25.49 223.52    |
|                         | Au 30µi         | 60 (152.40)        | TW                    | M3AKK-3460K-ND       | 28.84 252.91    |
| 40                      | Au 30µi         | 20 (50.80)         | TW                    | M3AKK-4020K-ND       | 25.26 221.54    |
|                         | Au 30µi         | 40 (101.60)        | TW                    | M3AKK-4040K-ND       | 29.21 256.12    |
|                         | Au 30µi         | 60 (152.40)        | TW                    | M3AKK-4060K-ND       | 33.15 290.70    |
| 50                      | Au 30µi         | 20 (50.80)         | TW                    | M3AKK-5020K-ND       | 29.47 258.40    |
|                         | Au 30µi         | 40 (101.60)        | TW                    | M3AKK-5040K-ND       | 34.40 301.62    |
|                         | Au 30µi         | 60 (152.40)        | TW                    | M3AKK-5060K-ND       | 39.33 344.85    |
| 60                      | Au 30µi         | 20 (50.80)         | TW                    | M3AKK-6020K-ND       | 35.49 311.22    |
|                         | Au 30µi         | 40 (101.60)        | TW                    | M3AKK-6040K-ND       | 41.41 363.09    |
|                         | Au 30µi         | 60 (152.40)        | TW                    | M3AKK-6060K-ND       | 47.32 414.96    |

Also available in the following configurations:

M3AW□□□□□K-ND - Socket Connector/Pin Connector w/ Flange w/ PK.

M3BR□□□□□K-ND - Socket Connector with SR, Pin Connector without Flange with PK and SR.

M3BY□□□□□K-ND - Socket Connector with SR, Pin Connector with Flange with PK and SR.

M3CK□□□□□K-ND - Socket Connector with PK, Pin Connector without Flange with PK.

M3CW□□□□□K-ND - Socket Connector with PK, Pin Connector with Flange with PK.

M3DR□□□□□K-ND - Socket Connector with PK and SR, Pin Connector without Flange with PK and SR.

M3DY□□□□□K-ND - Socket Connector with PK and SR, Pin Connector with Flange with PK and SR.

M3TK□□□□□K-ND - Closed End Socket Connector with PK, Pin Connector without Flange with PK.

M3UR□□□□□K-ND - Closed End Socket Connector with PK and SR, Pin Connector without Flange with PK and SR.

M3UY□□□□□K-ND - Closed End Socket Connector with PK and SR, Pin Connector with Flange with PK and SR.

Call for complete part number and pricing!

### M□□□□□□□□□□-ND

Style  
 1 □ Single Ended  
 3 □ Double Ended  
 Conn. Finish  
 G = Gold ±15µ  
 K = Gold >15µ Gold-Copper  
 beryllium pin plating  
 Ribbon Cable  
 R=Multi-color  
 J=Gray  
 L=Twisted Pair  
 Length (Use "Inches" only.)  
 No. Of Contacts

### Card Edge to Card Edge



\*MC = 3M Multi-Color, GR = 3M Gray

3M

| No. of<br>Con-<br>tacts | Conn.<br>Finish | Length<br>In. (cm) | Rib-<br>bon*<br>Cable | Digi-Key<br>Part No. | Pricing<br>110 |
|-------------------------|-----------------|--------------------|-----------------------|----------------------|----------------|
| 10                      | Au 30µi         | 6 (15.24)          | MC                    | M3EEK-1006R-ND       | 8.72 76.43     |
|                         | Au 30µi         | 6 (15.24)          | GR                    | M3EEK-1006J-ND       | 8.63 75.71     |
|                         | Au 30µi         | 18 (45.72)         | MC                    | M3EEK-1018R-ND       | 9.25 81.08     |
|                         | Au 30µi         | 18 (45.72)         | GR                    | M3EEK-1018J-ND       | 9.00 78.93     |
|                         | Au 30µi         | 36 (91.44)         | MC                    | M3EEK-1036R-ND       | 10.04 88.05    |
|                         | Au 30µi         | 36 (91.44)         | GR                    | M3EEK-1036J-ND       | 9.55 83.75     |
| 16                      | Au 30µi         | 6 (15.24)          | MC                    | M3EEK-1606R-ND       | 12.06 105.75   |
|                         | Au 30µi         | 6 (15.24)          | GR                    | M3EEK-1606J-ND       | 11.93 104.60   |
|                         | Au 30µi         | 18 (45.72)         | MC                    | M3EEK-1618R-ND       | 12.91 113.20   |
|                         | Au 30µi         | 18 (45.72)         | GR                    | M3EEK-1618J-ND       | 12.52 109.75   |
|                         | Au 30µi         | 36 (91.44)         | MC                    | M3EEK-1636R-ND       | 14.18 124.37   |
|                         | Au 30µi         | 36 (91.44)         | GR                    | M3EEK-1636J-ND       | 13.40 117.47   |
| 20                      | Au 30µi         | 6 (15.24)          | MC                    | M3EEK-2006R-ND       | 14.96 131.19   |
|                         | Au 15µi         | 6 (15.24)          | MC                    | M3EEK-2006R-ND       | 2.87 25.17     |
|                         | Au 15µi         | 6 (15.24)          | GR                    | M3EEK-2006J-ND       | 14.80 129.76   |
|                         | Au 30µi         | 6 (15.24)          | GR                    | M3EEK-2006J-ND       | 2.71 23.74     |
|                         | Au 30µi         | 18 (45.72)         | MC                    | M3EEK-2018R-ND       | 16.02 140.49   |
|                         | Au 15µi         | 18 (45.72)         | MC                    | M3EEK-2018R-ND       | 3.93 34.47     |
| 26                      | Au 30µi         | 18 (45.72)         | GR                    | M3EEK-2018J-ND       | 15.53 136.19   |
|                         | Au 15µi         | 18 (45.72)         | GR                    | M3EEK-2018J-ND       | 3.44 30.17     |
|                         | Au 30µi         | 36 (91.44)         | MC                    | M3EEK-2036R-ND       | 17.61 154.44   |
|                         | Au 15µi         | 36 (91.44)         | MC                    | M3EEK-2036R-ND       | 5.52 48.42     |
|                         | Au 30µi         | 36 (91.44)         | MC                    | M3EEK-2036J-ND       | 16.63 145.85   |
|                         | Au 15µi         | 36 (91.44)         | MC                    | M3EEK-2036J-ND       | 4.54 39.83     |
| 34                      | Au 30µi         | 6 (15.24)          | MC                    | M3EEK-3406R-ND       | 17.58 155.96   |
|                         | Au 15µi         | 6 (15.24)          | MC                    | M3EEK-3406R-ND       | 3.35 29.42     |
|                         | Au 30µi         | 6 (15.24)          | GR                    | M3EEK-3406J-ND       | 17.57 154.09   |
|                         | Au 15µi         | 6 (15.24)          | GR                    | M3EEK-3406J-ND       | 3.14 27.55     |
|                         | Au 30µi         | 18 (45.72)         | MC                    | M3EEK-3418R-ND       | 19.16 168.05   |
|                         | Au 15µi         | 18 (45.72)         | MC                    | M3EEK-3418R-ND       | 4.73 41.51     |
| 40                      | Au 30µi         | 18 (45.72)         | GR                    | M3EEK-3418J-ND       | 18.53 162.46   |
|                         | Au 15µi         | 18 (45.72)         | GR                    | M3EEK-3418J-ND       | 4.10 35.92     |
|                         | Au 30µi         | 36 (91.44)         | MC                    | M3EEK-3636R-ND       | 21.23 186.19   |
|                         | Au 15µi         | 36 (91.44)         | MC                    | M3EEK-3636R-ND       | 6.80 59.65     |
|                         | Au 30µi         | 36 (91.44)         | GR                    | M3EEK-3636J-ND       | 19.96 175.01   |
|                         | Au 15µi         | 36 (91.44)         | GR                    | M3EEK-3636J-ND       | 5.53 48.47     |
| 50                      | Au 30µi         | 6 (15.24)          | MC                    | M3EEK-3406R-ND       | 20.79 182.33   |
|                         | Au 15µi         | 6 (15.24)          | MC                    | M3EEK-3406R-ND       | 4.87 42.68     |
|                         | Au 30µi         | 6 (15.24)          | GR                    | M3EEK-3406J-ND       | 20.51 179.89   |
|                         | Au 15µi         | 6 (15.24)          | GR                    | M3EEK-3406J-ND       | 4.59 40.24     |
|                         | Au 30µi         | 18 (45.72)         | MC                    | M3EEK-3418R-ND       | 22.59 198.13   |
|                         | Au 15µi         | 18 (45.72)         | MC                    | M3EEK-3418R-ND       | 6.67 58.48     |
| 60                      | Au 30µi         | 18 (45.72)         | GR                    | M3EEK-3418J-ND       | 21.76 190.83   |
|                         | Au 15µi         | 18 (45.72)         | GR                    | M3EEK-3418J-ND       | 5.84 51.18     |
|                         | Au 30µi         | 36 (91.44)         | MC                    | M3EEK-3436R-ND       | 25.30 221.85   |
|                         | Au 15µi         | 36 (91.44)         | MC                    | M3EEK-3436R-ND       | 9.37 82.20     |
|                         | Au 30µi         | 36 (91.44)         | GR                    | M3EEK-3436J-ND       | 23.63 207.24   |
|                         | Au 15µi         | 36 (91.44)         | GR                    | M3EEK-3436J-ND       | 7.71 67.59     |
| 80                      | Au 30µi         | 6 (15.24)          | MC                    | M3EEK-4006R-ND       | 25.44 223.05   |
|                         | Au 15µi         | 6 (15.24)          | MC                    | M3EEK-4006R-ND       | 5.74 50.34     |
|                         | Au 30µi         | 6 (15.24)          | GR                    | M3EEK-4006J-ND       | 25.11 220.18   |
|                         | Au 15µi         | 6 (15.24)          | GR                    | M3EEK-4006J-ND       | 5.41 47.47     |
|                         | Au 30µi         | 18 (45.72)         | MC                    | M3EEK-4018R-ND       | 27.56 241.65   |
|                         | Au 15µi         | 18 (45.72)         | MC                    | M3EEK-4018R-ND       | 6.86 68.94     |
| 100                     | Au 30µi         | 18 (45.72)         | GR                    | M3EEK-4018J-ND       | 26.58 233.05   |
|                         | Au 15µi         | 18 (45.72)         | GR                    | M3EEK-4018J-ND       | 6.88 60.34     |
|                         | Au 30µi         | 36 (91.44)         | MC                    | M3EEK-4036R-ND       | 31.18 273.46   |
|                         | Au 15µi         | 36 (91.44)         | MC                    | M3EEK-4036R-ND       | 11.04 96.85    |
|                         | Au 30µi         | 36 (91.44)         | GR                    | M3EEK-4036J-ND       | 28.78 252.36   |
|                         | Au 15µi         | 36 (91.44)         | GR                    | M3EEK-4036J-ND       | 9.08 79.65     |
| 120                     | Au 30µi         | 6 (15.24)          | MC                    | M3EEK-5006R-ND       | 26.42 231.65   |
|                         | Au 15µi         | 6 (15.24)          | MC                    | M3EEK-5006R-ND       | 7.18 62.93     |
|                         | Au 30µi         | 6 (15.24)          | GR                    | M3EEK-5006J-ND       | 26.01 228.06   |
|                         | Au 15µi         | 6 (15.24)          | GR                    | M3EEK-5006J-ND       | 6.77 59.34     |
|                         | Au 30µi         | 18 (45.72)         | MC                    | M3EEK-5018R-ND       | 29.07 254.90   |
|                         | Au 15µi         | 18 (45.72)         | MC                    | M3EEK-5018R-ND       | 9.83 86.18     |
| 160                     | Au 30µi         | 18 (45.72)         | GR                    | M3EEK-5018J-ND       | 27.84 244.15   |
|                         | Au 15µi         | 18 (45.72)         | GR                    | M3EEK-5018J-ND       | 8.60 75.43     |
|                         | Au 30µi         | 36 (91.44)         | MC                    | M3EEK-5036R-ND       | 33.04 289.78   |
|                         | Au 15µi         | 36 (91.44)         | MC                    | M3EEK-5036R-ND       | 13.80 121.06   |
|                         | Au 30µi         | 36 (91.44)         | GR                    | M3EEK-5036J-ND       | 30.59 268.28   |
|                         | Au 15µi         | 36 (91.44)         | GR                    | M3EEK-5036J-ND       | 11.35 99.56    |
| 200                     | Au 30µi         | 6 (15.24)          | MC                    | M3EEK-6006R-ND       | 33.18 290.97   |
|                         | Au 30µi         | 6 (15.24)          | GR                    | M3EEK-6006J-ND       | 32.69 286.67   |
|                         | Au 30µi         | 18 (45.72)         | MC                    | M3EEK-6018R-ND       | 36.36 318.88   |
|                         | Au 30µi         | 18 (45.72)         | GR                    | M3EEK-6018J-ND       | 34.89 305.98   |
|                         | Au 30µi         | 36 (91.44)         | MC                    | M3EEK-6036R-ND       | 41.14 360.73   |
|                         | Au 30µi         | 36 (91.44)         | GR                    | M3EEK-6036J-ND       | 38.19 334.93   |
| 250                     | Au 30µi         | 6 (15.24)          | MC                    | M3EEK-6406R-ND       | 33.81 296.46   |
|                         | Au 30µi         | 6 (15.24)          | GR                    | M3EEK-6406J-ND       | 33.28 291.88   |
|                         | Au 30µi         | 18 (45.72)         | MC                    | M3EEK-6418R-ND       | 37.20 326.22   |
|                         | Au 30µi         | 18 (45.72)         | GR                    | M3EEK-6418J-ND       | 35.63 312.47   |
|                         | Au 30µi         | 36 (91.44)         | MC                    | M3EEK-6436R-ND       | 42.29 370.86   |
|                         | Au 30µi         | 36 (91.44)         | GR                    | M3EEK-6436J-ND       | 39.15 343.35   |

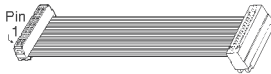
## Card Edge to Card Edge

\*Twisted Pair Cable Finished Length is Approximate

| No. of<br>Con-<br>tacts | Conn.<br>Finish | Length<br>In. (cm) | Rib-<br>bon*<br>Cable | Digi-Key<br>Part No. | Pricing<br>1 10 |
|-------------------------|-----------------|--------------------|-----------------------|----------------------|-----------------|
| 10                      | Au 30µ"         | 20 (50.80)         | TW                    | M3EEK-1020K-ND       | 9.44 82.74      |
|                         | Au 30µ"         | 40 (101.60)        | TW                    | M3EEK-1040K-ND       | 10.42 91.39     |
|                         | Au 30µ"         | 60 (152.40)        | TW                    | M3EEK-1060K-ND       | 11.41 100.04    |
| 16                      | Au 30µ"         | 20 (50.80)         | TW                    | M3EEK-1620K-ND       | 13.21 115.86    |
|                         | Au 30µ"         | 40 (101.60)        | TW                    | M3EEK-1640K-ND       | 14.79 129.69    |
|                         | Au 30µ"         | 60 (152.40)        | TW                    | M3EEK-1660K-ND       | 16.37 143.53    |
| 20                      | Au 30µ"         | 20 (50.80)         | TW                    | M3EEK-2020K-ND       | 16.40 143.83    |
|                         | Au 15µ"         | 20 (50.80)         | TW                    | M3EEK-2020K-ND       | 4.31 37.81      |
|                         | Au 30µ"         | 40 (101.60)        | TW                    | M3EEK-2040K-ND       | 18.37 161.12    |
| 26                      | Au 30µ"         | 20 (50.80)         | TW                    | M3EEK-2620K-ND       | 6.28 55.10      |
|                         | Au 30µ"         | 40 (101.60)        | TW                    | M3EEK-2640K-ND       | 20.35 178.41    |
|                         | Au 15µ"         | 60 (152.40)        | TW                    | M3EEK-2660K-ND       | 8.26 72.39      |
| 34                      | Au 30µ"         | 20 (50.80)         | TW                    | M3EEK-3420K-ND       | 19.66 172.39    |
|                         | Au 15µ"         | 20 (50.80)         | TW                    | M3EEK-3420K-ND       | 5.23 45.85      |
|                         | Au 30µ"         | 40 (101.60)        | TW                    | M3EEK-3440K-ND       | 22.22 194.86    |
| 40                      | Au 30µ"         | 20 (50.80)         | TW                    | M3EEK-4040K-ND       | 7.79 68.32      |
|                         | Au 30µ"         | 40 (101.60)        | TW                    | M3EEK-4060K-ND       | 24.78 217.34    |
|                         | Au 15µ"         | 60 (152.40)        | TW                    | M3EEK-4080K-ND       | 10.35 90.80     |
| 50                      | Au 30µ"         | 20 (50.80)         | TW                    | M3EEK-5020K-ND       | 23.24 203.81    |
|                         | Au 15µ"         | 20 (50.80)         | TW                    | M3EEK-5020K-ND       | 7.32 64.16      |
|                         | Au 30µ"         | 40 (101.60)        | TW                    | M3EEK-5040K-ND       | 26.59 232.21    |
| 60                      | Au 30µ"         | 20 (50.80)         | TW                    | M3EEK-6020K-ND       | 10.67 93.56     |
|                         | Au 15µ"         | 20 (50.80)         | TW                    | M3EEK-6020K-ND       | 29.95 262.60    |
|                         | Au 30µ"         | 40 (101.60)        | TW                    | M3EEK-6040K-ND       | 14.02 122.95    |
| 64                      | Au 30µ"         | 20 (50.80)         | TW                    | M3EEK-6420K-ND       | 28.32 248.33    |
|                         | Au 15µ"         | 20 (50.80)         | TW                    | M3EEK-6420K-ND       | 8.62 75.62      |
|                         | Au 30µ"         | 40 (101.60)        | TW                    | M3EEK-6440K-ND       | 32.26 282.91    |
| 68                      | Au 30µ"         | 20 (50.80)         | TW                    | M3EEK-6820K-ND       | 12.57 110.20    |
|                         | Au 15µ"         | 20 (50.80)         | TW                    | M3EEK-6820K-ND       | 36.21 317.49    |
|                         | Au 30µ"         | 40 (101.60)        | TW                    | M3EEK-6840K-ND       | 16.51 144.78    |
| 72                      | Au 30µ"         | 20 (50.80)         | TW                    | M3EEK-7220K-ND       | 30.02 263.25    |
|                         | Au 15µ"         | 20 (50.80)         | TW                    | M3EEK-7220K-ND       | 10.78 94.53     |
|                         | Au 30µ"         | 40 (101.60)        | TW                    | M3EEK-7240K-ND       | 34.95 306.47    |
| 76                      | Au 30µ"         | 20 (50.80)         | TW                    | M3EEK-7620K-ND       | 15.71 137.75    |
|                         | Au 15µ"         | 20 (50.80)         | TW                    | M3EEK-7620K-ND       | 39.88 349.70    |
|                         | Au 30µ"         | 40 (101.60)        | TW                    | M3EEK-7640K-ND       | 20.64 180.98    |
| 80                      | Au 30µ"         | 20 (50.80)         | TW                    | M3EEK-8020K-ND       | 37.51 328.89    |
|                         | Au 15µ"         | 20 (50.80)         | TW                    | M3EEK-8020K-ND       | 43.42 380.76    |
|                         | Au 30µ"         | 40 (101.60)        | TW                    | M3EEK-8040K-ND       | 49.34 432.63    |
| 84                      | Au 30µ"         | 20 (50.80)         | TW                    | M3EEK-8420K-ND       | 38.42 336.91    |
|                         | Au 15µ"         | 20 (50.80)         | TW                    | M3EEK-8420K-ND       | 44.73 392.24    |
|                         | Au 30µ"         | 40 (101.60)        | TW                    | M3EEK-8440K-ND       | 51.04 447.56    |

Also available in the following configurations:  
M3FFK-□□□□K-ND - with Flange.  
M3GGK-□□□□K-ND - with Slotted Flange.  
Call for complete part number and pricing!

## Socket Connector to Card Edge Connector



\*MC = 3M Multi-Color, GR = 3M Gray

| No. of<br>Con-<br>tacts | Conn.<br>Finish | Length<br>In. (cm) | Rib-<br>bon*<br>Cable | Digi-Key<br>Part No. | Pricing<br>1 10 |
|-------------------------|-----------------|--------------------|-----------------------|----------------------|-----------------|
| 10                      | Au 30µ"         | 6 (15.24)          | MC                    | M3AEK-1006R-ND       | 7.51 65.88      |
|                         | Au 30µ"         | 6 (15.24)          | GR                    | M3AEK-1006G-ND       | 7.43 65.16      |
|                         | Au 30µ"         | 18 (45.72)         | MC                    | M3AEK-1018R-ND       | 8.04 70.53      |
| 16                      | Au 30µ"         | 18 (45.72)         | GR                    | M3AEK-1018G-ND       | 7.80 68.38      |
|                         | Au 30µ"         | 36 (91.44)         | MC                    | M3AEK-1036R-ND       | 8.84 77.51      |
|                         | Au 30µ"         | 36 (91.44)         | GR                    | M3AEK-1036G-ND       | 8.35 73.21      |
| 20                      | Au 30µ"         | 6 (15.24)          | MC                    | M3AEK-1606R-ND       | 10.24 89.79     |
|                         | Au 30µ"         | 6 (15.24)          | GR                    | M3AEK-1606G-ND       | 10.11 88.64     |
|                         | Au 30µ"         | 18 (45.72)         | MC                    | M3AEK-1618R-ND       | 11.09 97.24     |
| 26                      | Au 30µ"         | 18 (45.72)         | GR                    | M3AEK-1618G-ND       | 10.70 93.79     |
|                         | Au 30µ"         | 36 (91.44)         | MC                    | M3AEK-1636R-ND       | 12.36 108.41    |
|                         | Au 30µ"         | 36 (91.44)         | GR                    | M3AEK-1636G-ND       | 11.58 101.51    |
| 34                      | Au 30µ"         | 6 (15.24)          | MC                    | M3AEK-2006R-ND       | 12.17 106.68    |
|                         | Au 30µ"         | 6 (15.24)          | GR                    | M3AEK-2006G-ND       | 2.68 23.46      |
|                         | Au 30µ"         | 18 (45.72)         | MC                    | M3AEK-2018R-ND       | 12.00 105.25    |
| 40                      | Au 30µ"         | 18 (45.72)         | GR                    | M3AEK-2018G-ND       | 2.51 22.03      |
|                         | Au 30µ"         | 36 (91.44)         | MC                    | M3AEK-2036R-ND       | 13.23 115.98    |
|                         | Au 30µ"         | 36 (91.44)         | GR                    | M3AEK-2036G-ND       | 3.74 32.76      |
| 46                      | Au 30µ"         | 18 (45.72)         | MC                    | M3AEK-2183R-ND       | 12.74 111.68    |
|                         | Au 30µ"         | 18 (45.72)         | GR                    | M3AEK-2183G-ND       | 3.25 28.46      |
|                         | Au 30µ"         | 36 (91.44)         | MC                    | M3AEK-2183R-ND       | 14.82 129.93    |
| 52                      | Au 30µ"         | 36 (91.44)         | GR                    | M3AEK-2183G-ND       | 5.33 46.71      |
|                         | Au 30µ"         | 36 (91.44)         | MC                    | M3AEK-2363R-ND       | 13.84 121.34    |
|                         | Au 30µ"         | 36 (91.44)         | GR                    | M3AEK-2363G-ND       | 4.35 38.12      |
| 58                      | Au 30µ"         | 6 (15.24)          | MC                    | M3AEK-2606R-ND       | 14.96 131.16    |
|                         | Au 30µ"         | 6 (15.24)          | GR                    | M3AEK-2606G-ND       | 3.29 28.85      |
|                         | Au 30µ"         | 18 (45.72)         | MC                    | M3AEK-2618R-ND       | 14.74 129.30    |
| 64                      | Au 30µ"         | 18 (45.72)         | GR                    | M3AEK-2618G-ND       | 3.08 26.98      |
|                         | Au 30µ"         | 36 (91.44)         | MC                    | M3AEK-2636R-ND       | 16.34 143.26    |
|                         | Au 30µ"         | 36 (91.44)         | GR                    | M3AEK-2636G-ND       | 4.67 40.94      |
| 70                      | Au 30µ"         | 18 (45.72)         | MC                    | M3AEK-2618R-ND       | 15.70 137.66    |
|                         | Au 30µ"         | 18 (45.72)         | GR                    | M3AEK-2618G-ND       | 4.03 35.35      |
|                         | Au 30µ"         | 36 (91.44)         | MC                    | M3AEK-2636R-ND       | 18.40 161.40    |
| 76                      | Au 30µ"         | 36 (91.44)         | GR                    | M3AEK-2636G-ND       | 6.74 59.08      |
|                         | Au 30µ"         | 36 (91.44)         | MC                    | M3AEK-2836R-ND       | 17.13 150.21    |
|                         | Au 30µ"         | 36 (91.44)         | GR                    | M3AEK-2836G-ND       | 5.46 47.90      |

| No. of<br>Con-<br>tacts | Conn.<br>Finish | Length<br>In. (cm) | Rib-<br>bon*<br>Cable | Digi-Key<br>Part No. | Pricing<br>1 10 |
|-------------------------|-----------------|--------------------|-----------------------|----------------------|-----------------|
| 34                      | Au 30µ"         | 6 (15.24)          | MC                    | M3AEK-3406R-ND       | 18.29 160.38    |
|                         | Au 30µ"         | 6 (15.24)          | GR                    | M3AEK-3406G-ND       | 4.54 39.83      |
|                         | Au 30µ"         | 18 (45.72)         | MC                    | M3AEK-3418R-ND       | 18.01 157.94    |
| 40                      | Au 30µ"         | 6 (15.24)          | GR                    | M3AEK-4006R-ND       | 4.26 37.39      |
|                         | Au 30µ"         | 18 (45.72)         | MC                    | M3AEK-4018R-ND       | 20.09 176.19    |
|                         | Au 30µ"         | 18 (45.72)         | GR                    | M3AEK-4018G-ND       | 6.34 55.63      |
| 50                      | Au 30µ"         | 18 (45.72)         | MC                    | M3AEK-5006R-ND       | 19.26 168.88    |
|                         | Au 30µ"         | 18 (45.72)         | GR                    | M3AEK-5018R-ND       | 5.51 48.33      |
|                         | Au 30µ"         | 36 (91.44)         | MC                    | M3AEK-5036R-ND       | 22.80 199.90    |
| 60                      | Au 30µ"         | 36 (91.44)         | GR                    | M3AEK-5036G-ND       | 9.05 79.35      |
|                         | Au 30µ"         | 36 (91.44)         | MC                    | M3AEK-6006R-ND       | 21.13 185.29    |
|                         | Au 30µ"         | 36 (91.44)         | GR                    | M3AEK-6006G-ND       | 7.38 64.74      |
| 64                      | Au 30µ"         | 6 (15.24)          | MC                    | M3AEK-6006R-ND       | 21.99 192.84    |
|                         | Au 30µ"         | 6 (15.24)          | GR                    | M3AEK-6006G-ND       | 5.35 46.92      |
|                         | Au 30µ"         | 18 (45.72)         | MC                    | M3AEK-6018R-ND       | 21.11 185.29    |
| 70                      | Au 30µ"         | 18 (45.72)         | GR                    | M3AEK-6018G-ND       | 5.02 44.05      |
|                         | Au 30µ"         | 36 (91.44)         | MC                    | M3AEK-6036R-ND       | 24.11 211.44    |
|                         | Au 30µ"         | 36 (91.44)         | GR                    | M3AEK-6036G-ND       | 7.47 65.52      |
| 76                      | Au 30µ"         | 18 (45.72)         | MC                    | M3AEK-7606R-ND       | 23.13 202.84    |
|                         | Au 30µ"         | 18 (45.72)         | GR                    | M3AEK-7606G-ND       | 6.49 56.92      |
|                         | Au 30µ"         | 36 (91.44)         | MC                    | M3AEK-7618R-ND       | 27.29 239.35    |
| 80                      | Au 30µ"         | 36 (91.44)         | GR                    | M3AEK-7618G-ND       | 10.65 93.43     |
|                         | Au 30µ"         | 36 (91.44)         | MC                    | M3AEK-8006R-ND       | 25.33 222.15    |
|                         | Au 30µ"         | 36 (91.44)         | GR                    | M3AEK-8006G-ND       | 8.69 76.23      |
| 84                      | Au 30µ"         | 6 (15.24)          | MC                    | M3AEK-8006R-ND       | 24.79 217.40    |
|                         | Au 30µ"         | 6 (15.24)          | GR                    | M3AEK-8006G-ND       | 6.69 58.65      |
|                         | Au 30µ"         | 18 (45.72)         | MC                    | M3AEK-8018R-ND       | 24.38 213.81    |
| 90                      | Au 30µ"         | 18 (45.72)         | GR                    | M3AEK-8018G-ND       | 6.28 55.07      |
|                         | Au 30µ"         | 36 (91.44)         | MC                    | M3AEK-8036R-ND       | 27.44 240.65    |
|                         | Au 30µ"         | 36 (91.44)         | GR                    | M3AEK-8036G-ND       | 9.34 81.90      |
| 96                      | Au 30µ"         | 18 (45.72)         | MC                    | M3AEK-9606R-ND       | 26.22 229.90    |
|                         | Au 30µ"         | 18 (45.72)         | GR                    | M3AEK-9606G-ND       | 8.11 71.15      |
|                         | Au 30µ"         | 36 (91.44)         | MC                    | M3AEK-9618R-ND       | 31.42 275.53    |
| 100                     | Au 30µ"         | 36 (91.44)         | GR                    | M3AEK-9618G-ND       | 13.32 116.78    |
|                         | Au 30µ"         | 36 (91.44)         | MC                    | M3AEK-9636R-ND       | 29.87 254.03    |
|                         | Au 30µ"         | 36 (91.44)         | GR                    | M3AEK-9636G-ND       | 10.87 95.28     |
| 104                     | Au 30µ"         | 6 (15.24)          | MC                    | M3AEK-1006R-ND       | 30.91 271.02    |
|                         | Au 30µ"         | 6 (15.24)          | GR                    | M3AEK-1006G-ND       | 30.42 266.72    |
|                         | Au 30µ"         | 18 (45.72)         | MC                    | M3AEK-1018R-ND       | 34.09 299.93    |
| 108                     | Au 30µ"         | 18 (45.72)         | GR                    | M3AEK-1018G-ND       | 32.62 286.03    |
|                         | Au 30µ"         | 36 (91.44)         | MC                    | M3AEK-1036R-ND       | 38.86 340.78    |
|                         | Au 30µ"         | 36 (91.44)         | GR                    | M3AEK-1036G-ND       | 35.92 314.98    |

Also available in the following configurations:  
M3AFK-□□□□K-ND - Socket Connector/Card Edge Connector w/ Flange.  
M3AGK-□□□□K-ND - Socket Conn./Card Edge Conn. w/ Slotted Flange.  
M3AMK-□□□□K-ND - Socket Conn./Card Edge Conn. w/ Strain Relief.  
M3APK-□□□□K-ND - Socket Connector/Card Edge Connector with Slotted Flange & Strain Relief.  
M3ASK-□□□□K-ND - Socket Connector/Card Edge Connector with Flange & Strain Relief.  
M3BEK-□□□□K-ND - Socket Connector/Card Edge Connector.  
M3BFK-□□□□K-ND - Socket Connector/Card Edge Connector w/ Flange.  
M3BGK-□□□□K-ND - Socket Conn./Card Edge Conn. w/ Slotted Flange.  
M3BMK-□□□□K-ND - Socket Connector with Strain Relief/Card Edge Connector with Strain Relief.  
M3BPk-□□□□K-ND - Socket Connector with Strain Relief/Card Edge Connector with Slotted Flange & Strain Relief.  
M3BSK-□□□□K-ND - Socket Connector with Strain Relief/Card Edge Connector with Flange & Strain Relief.  
M3CEK-□□□□K-ND - Socket Connector/Card Edge Connector.  
M3CFK-□□□□K-ND - Socket Connector/Card Edge Conn. w/ Flange.  
M3CGK-□□□□K-ND - Socket Conn./Card Edge Conn. w/ Slotted Flange.  
M3CMK-□□□□K-ND - Socket Connector Open End with Strain Relief/Card Edge Connector with Strain Relief.  
M3CPK-□□□□K-ND - Socket Conn. Open End w/ Strain Relief/Card Edge Conn. w/ Slotted Flange & Strain Relief.  
M3CSK-□□□□K-ND - Socket Connector Open End with PK/Card Edge Connector with Flange & Strain Relief.  
M3DEK-□□□□K-ND - Socket Connector/Card Edge Connector.  
M3DFK-□□□□K-ND - Socket Connector/Card Edge Connector w/ Flange.  
M3DGK-□□□□K-ND - Socket Conn./Card Edge Conn. w/ Slotted Flange.  
M3DMK-□□□□K-ND - Socket Connector Open End with PK & Strain Relief/Card Edge Connector with Strain Relief.  
M3DPK-□□□□K-ND - Socket Connector Open End w/ PK & Strain Relief/Card Edge Conn. w/ Slotted Flange & Strain Relief.  
M3DSK-□□□□K-ND - Socket Conn. Open End w/ PK & Strain Relief/Card Edge Conn. w/ Flange & Strain Relief.  
M3TEK-□□□□K-ND - Socket Connector Closed End with PK/Card Edge Connector Standard.  
M3TFK-□□□□K-ND - Socket Connector Closed End with PK/Card Edge Connector with Flange.  
M3TgK-□□□□K-ND - Socket Connector Closed End with PK/Card Edge Connector with Slotted Flange.  
M3TMK-□□□□K-ND - Socket Connector Closed End with PK/Card Edge Connector with Strain Relief.  
M3TPK-□□□□K-ND - Socket Connector Closed End with PK/Card Edge Connector with Slotted Flange & Strain Relief.  
M3TSK-□□□□K-ND - Socket Connector Closed End with PK/Card Edge Connector with Flange & Strain Relief.  
M3UEK-□□□□K-ND - Socket Connector Closed End with PK & SR/Card Edge Connector Standard.  
M3UFK-□□□□K-ND - Socket Connector Closed End with PK & SR/Card Edge Connector with Flange.  
M3UGK-□□□□K-ND - Socket Connector Closed End with PK & SR/Card Edge Connector with Slotted Flange.  
M3UMK-□□□□K-ND - Socket Connector Closed End with PK & Strain Relief/Card Edge Connector w/ Strain Relief.  
M3UPK-□□□□K-ND - Socket Conn. Closed End w/ PK & Strain Relief/Card Edge Conn. w/ Slotted Flange & Strain Relief.  
M3USK-□□□□K-ND - Socket Conn. Closed End w/ PK & Strain Relief/Card Edge Conn. w/ Flange & Strain Relief.

Call for complete part number and pricing!

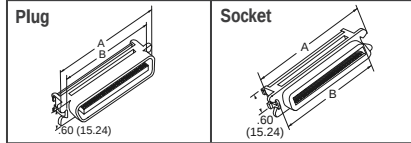
## Socket Connector to Card Edge

\*Twisted Pair Cable Finished Length is Approximate

| No. of<br>Con-<br>tacts | Conn.<br>Finish | Length<br>In. (cm) | Rib-<br>bon*<br>Cable | Digi-Key<br>Part No. | Pricing<br>110 |
|-------------------------|-----------------|--------------------|-----------------------|----------------------|----------------|
| 10                      | Au 30µ"         | 20 (50.80)         | TW                    | M3AEK-1020K-ND       | 8.23 72.20     |
|                         | Au 30µ"         | 40 (101.60)        | TW                    | M3AEK-1040K-ND       | 9.22 80.85     |
|                         | Au 30µ"         | 60 (152.40)        | TW                    | M3AEK-1060K-ND       | 10.21 89.49    |
| 16                      | Au 30µ"         | 20 (50.80)         | TW                    | M3AEK-1620K-ND       | 11.39 99.90    |
|                         | Au 30µ"         | 40 (101.60)        | TW                    | M3AEK-1640K-ND       | 12.97 113.73   |
|                         | Au 30µ"         | 60 (152.40)        | TW                    | M3AEK-1660K-ND       | 14.55 127.57   |
| 20                      | Au 30µ"         | 20 (50.80)         | TW                    | M3AEK-2020K-ND       | 13.61 119.32   |
|                         | Au 30µ"         | 20 (50.80)         | TW                    | M3AEG-2020K-ND       | 4.12 36.10     |
|                         | Au 30µ"         | 40 (101.60)        | TW                    | M3AEK-2040K-ND       | 15.58 136.61   |
| 26                      | Au 30µ"         | 20 (50.80)         | TW                    | M3AEG-2040K-ND       | 6.09 53.39     |
|                         | Au 30µ"         | 60 (152.40)        | TW                    | M3AEK-2060K-ND       | 17.55 153.90   |
|                         | Au 30µ"         | 60 (152.40)        | TW                    | M3AEG-2060K-ND       | 8.06 70.68     |
| 26                      | Au 30µ"         | 20 (50.80)         | TW                    | M3AEK-2620K-ND       | 16.83 147.59   |
|                         | Au 30µ"         | 20 (50.80)         | TW                    | M3AEG-2620K-ND       | 5.16 45.28     |
|                         | Au 30µ"         | 40 (101.60)        | TW                    | M3AEK-2640K-ND       | 19.39 170.07   |
| 34                      | Au 30µ"         | 40 (101.60)        | TW                    | M3AEG-2640K-ND       | 7.73 67.05     |
|                         | Au 30µ"         | 60 (152.40)        | TW                    | M3AEK-2660K-ND       | 21.96 192.55   |
|                         | Au 30µ"         | 60 (152.40)        | TW                    | M3AEG-2660K-ND       | 10.29 90.23    |
| 34                      | Au 30µ"         | 20 (50.80)         | TW                    | M3AEK-3420K-ND       | 20.74 181.87   |
|                         | Au 30µ"         | 20 (50.80)         | TW                    | M3AEG-3420K-ND       | 6.99 61.31     |
|                         | Au 30µ"         | 40 (101.60)        | TW                    | M3AEK-3440K-ND       | 24.09 211.26   |
| 40                      | Au 30µ"         | 40 (101.60)        | TW                    | M3AEG-3440K-ND       | 10.34 90.71    |
|                         | Au 30µ"         | 60 (152.40)        | TW                    | M3AEK-3460K-ND       | 27.44 240.65   |
|                         | Au 30µ"         | 60 (152.40)        | TW                    | M3AEG-3460K-ND       | 13.70 120.10   |
| 40                      | Au 30µ"         | 20 (50.80)         | TW                    | M3AEK-4020K-ND       | 24.87 218.12   |
|                         | Au 30µ"         | 20 (50.80)         | TW                    | M3AEG-4020K-ND       | 8.23 72.20     |
|                         | Au 30µ"         | 40 (101.60)        | TW                    | M3AEK-4040K-ND       | 28.82 252.70   |
| 50                      | Au 30µ"         | 40 (101.60)        | TW                    | M3AEG-4040K-ND       | 12.18 106.78   |
|                         | Au 30µ"         | 60 (152.40)        | TW                    | M3AEK-4060K-ND       | 32.76 287.28   |
|                         | Au 30µ"         | 60 (152.40)        | TW                    | M3AEG-4060K-ND       | 16.12 141.36   |
| 50                      | Au 30µ"         | 20 (50.80)         | TW                    | M3AEK-5020K-ND       | 28.39 249.00   |
|                         | Au 30µ"         | 20 (50.80)         | TW                    | M3AEG-5020K-ND       | 10.29 90.25    |
|                         | Au 30µ"         | 40 (101.60)        | TW                    | M3AEK-5040K-ND       | 33.92 292.22   |
| 60                      | Au 30µ"         | 40 (101.60)        | TW                    | M3AEG-5040K-ND       | 15.22 133.47   |
|                         | Au 30µ"         | 60 (152.40)        | TW                    | M3AEK-5060K-ND       | 38.25 335.45   |
|                         | Au 30µ"         | 60 (152.40)        | TW                    | M3AEG-5060K-ND       | 20.15 176.70   |
| 60                      | Au 30µ"         | 20 (50.80)         | TW                    | M3AEK-6020K-ND       | 35.23 308.94   |
|                         | Au 30µ"         | 40 (101.60)        | TW                    | M3AEK-6040K-ND       | 41.15 360.81   |
|                         | Au 30µ"         | 60 (152.40)        | TW                    | M3AEK-6060K-ND       | 47.06 412.68   |

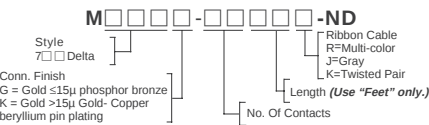
## 3M Delta Flat Ribbon Cable Connectors

**Physical:** • Insulation Material: Glass reinforced polyester. Flammability rating: UL 94V-0 • Color: Gray • Contact Material: Flat Cable Connectors are Beryllium Copper, Latch Eject Headers are Copper Alloy • Plating: 30µ" Gold • Electrical: • Current Rating: 1 amp • Insulation Resistance: >1x10<sup>10</sup> Ω @ 500 VDC • Withstanding Voltage: 1000VRMS @ sea level. **Environmental:** • Temperature Rating: -55°C to +105°C. UL File No.: E68080, CSA File No.: LR-40971



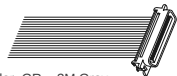
3 mounting designs available. Those with **Prefix MDA** on Digi-Key part number: combination mount, which is a universal mount type that accepts both ball and screw mount hardware. **Prefix MDC:** ball mount, which can be used as a standard I/O connector for various electronic applications. Positive latching and easy disconnect. **Prefix MDS:** screw mount, which have #4-40 threaded insert that simplifies mounting when a more permanent connection is desired • Wire Accommodation: 26-30 AWG stranded

| No. of Conts.              | Dim. A       | Dim. B       | Digi-Key Part No. | Pricing 1 100 | 3M Part No. |
|----------------------------|--------------|--------------|-------------------|---------------|-------------|
| <b>Plugs</b>               |              |              |                   |               |             |
| 14                         | 1.75 (44.45) | 1.42 (36.07) | MDD14K-ND         | 4.41 334.96   | 80610089560 |
|                            | 1.58 (40.13) | 1.20 (30.48) | MDD14K-ND         | 4.60 349.18   | 80610084941 |
|                            | 1.75 (44.45) | 1.42 (36.07) | MDB14K-ND         | 4.70 357.08   | 80610084958 |
| 24                         | 2.17 (55.12) | 1.84 (46.74) | MDD24K-ND         | 5.22 396.58   | 80610090237 |
|                            | 2.00 (50.80) | 1.63 (41.40) | MDD24K-ND         | 5.45 413.96   | 80610084917 |
|                            | 2.17 (55.12) | 1.84 (46.74) | MDB24K-ND         | 5.55 421.86   | 80610084925 |
| 36                         | 2.68 (68.07) | 2.35 (59.69) | MDD36K-ND         | 6.43 488.22   | 80610098578 |
|                            | 2.52 (64.01) | 2.14 (54.36) | MDD36K-ND         | 6.74 511.92   | 80610084974 |
|                            | 2.68 (68.07) | 2.35 (59.69) | MDB36K-ND         | 6.88 522.98   | 80610084982 |
| 50                         | 3.27 (83.06) | 2.95 (74.93) | MDD50K-ND         | 7.65 581.44   | 80610080006 |
|                            | 3.11 (78.99) | 2.73 (69.34) | MDD50K-ND         | 8.26 627.26   | 80610082218 |
|                            | 3.27 (83.06) | 2.95 (74.93) | MDB50K-ND         | 8.47 643.06   | 80610082226 |
| <b>Sockets</b>             |              |              |                   |               |             |
| 14                         | 1.75 (44.45) | 1.42 (36.07) | MDD14K-ND         | 4.41 334.96   | 80610084966 |
|                            | 1.58 (40.13) | 1.20 (30.48) | MDD14K-ND         | 4.60 349.18   | 80610084954 |
|                            | 1.75 (44.45) | 1.42 (36.07) | MDB14K-ND         | 4.70 357.08   | 80610085552 |
| 24                         | 2.17 (55.12) | 1.84 (46.74) | MDD24K-ND         | 5.22 396.58   | 80610084933 |
|                            | 2.00 (50.80) | 1.63 (41.40) | MDD24K-ND         | 5.45 413.96   | 80610085003 |
|                            | 2.17 (55.12) | 1.84 (46.74) | MDB24K-ND         | 5.55 421.86   | 80610085111 |
| 36                         | 2.68 (68.07) | 2.35 (59.69) | MDD36K-ND         | 6.43 488.22   | 80610084990 |
|                            | 2.52 (64.01) | 2.14 (54.36) | MDD36K-ND         | 6.74 511.92   | 80610085856 |
|                            | 2.68 (68.07) | 2.35 (59.69) | MDB36K-ND         | 6.88 522.98   | 80610085854 |
| 50                         | 3.27 (83.06) | 2.95 (74.93) | MDD50K-ND         | 7.65 581.44   | 80610082200 |
|                            | 3.11 (78.99) | 2.73 (69.34) | MDD50K-ND         | 8.26 627.26   | 80610085829 |
|                            | 3.27 (83.06) | 2.95 (74.93) | MDB50K-ND         | 8.47 643.06   | 80610085837 |
| <b>Backshells</b>          |              |              |                   |               |             |
| 50                         | —            | —            | MDBF50-ND         | 3.12 237.00   | 80610080139 |
| <b>Metal Strip Reliefs</b> |              |              |                   |               |             |
| 14                         | —            | —            | MDSF14-ND         | .42 31.60     | 80610133474 |
| 24                         | —            | —            | MDSF24-ND         | .44 33.18     | 80610133482 |
| 36                         | —            | —            | MDSF36-ND         | .44 33.18     | 80610133490 |
| 50                         | —            | —            | MDSF50-ND         | .48 36.34     | 80610133508 |



## Delta Cable Assemblies

### Single Ended Male



\*MC = 3M Multi-Color, GR = 3M Gray

| No. of Conts. | Conn. Finish | Length Feet (Meters) | Rib-bon* Cable | Digi-Key Part No. | Pricing 1 10 |
|---------------|--------------|----------------------|----------------|-------------------|--------------|
| 14            | Au 30µ"      | 6 (1.83)             | MC             | M7KXX-1406R-ND    | 12.00 105.19 |
|               | Au 30µ"      | 6 (1.83)             | GR             | M7KXX-1406J-ND    | 10.62 93.14  |
|               | Au 30µ"      | 10 (3.05)            | MC             | M7KXX-1410R-ND    | 14.97 131.24 |
|               | Au 30µ"      | 10 (3.05)            | GR             | M7KXX-1410J-ND    | 12.68 111.16 |
| 24            | Au 30µ"      | 6 (1.83)             | MC             | M7KXX-2406R-ND    | 16.48 144.50 |
|               | Au 30µ"      | 6 (1.83)             | GR             | M7KXX-2406J-ND    | 14.12 123.85 |
|               | Au 30µ"      | 10 (3.05)            | MC             | M7KXX-2410R-ND    | 21.57 189.15 |
|               | Au 30µ"      | 10 (3.05)            | GR             | M7KXX-2410J-ND    | 17.65 154.74 |
| 36            | Au 30µ"      | 6 (1.83)             | MC             | M7KXX-3606R-ND    | 22.53 197.59 |
|               | Au 30µ"      | 6 (1.83)             | GR             | M7KXX-3606J-ND    | 18.90 165.76 |
|               | Au 30µ"      | 10 (3.05)            | MC             | M7KXX-3610R-ND    | 30.38 266.43 |
|               | Au 30µ"      | 10 (3.05)            | GR             | M7KXX-3610J-ND    | 24.33 213.38 |
| 50            | Au 30µ"      | 6 (1.83)             | MC             | M7KXX-5006R-ND    | 28.62 250.95 |
|               | Au 30µ"      | 6 (1.83)             | GR             | M7KXX-5006J-ND    | 23.71 207.95 |
|               | Au 30µ"      | 10 (3.05)            | MC             | M7KXX-5010R-ND    | 39.22 343.96 |
|               | Au 30µ"      | 10 (3.05)            | GR             | M7KXX-5010J-ND    | 31.05 272.30 |

Also available in the following configuration:  
M7LX□□□□□□-ND - Male Delta w/ Insert.  
M7QX□□□□□□-ND - Male Delta w/ Ball Lock.  
Call for complete part number and pricing!

### Single Ended — Male

\*Twisted Pair Cable Finished Length is Approximate

| No. of Conts. | Conn. Finish | Length Feet (Meters) | Rib-bon* Cable | Digi-Key Part No. | Pricing 1 10 |
|---------------|--------------|----------------------|----------------|-------------------|--------------|
| 14            | Au 30µ"      | 5 (1.52)             | TW             | M7KXX-1405K-ND    | 11.68 102.43 |
|               | Au 30µ"      | 10 (3.05)            | TW             | M7KXX-1410K-ND    | 15.82 138.74 |
| 24            | Au 30µ"      | 5 (1.52)             | TW             | M7KXX-2405K-ND    | 14.76 129.39 |
|               | Au 30µ"      | 10 (3.05)            | TW             | M7KXX-2410K-ND    | 20.67 181.26 |
| 36            | Au 30µ"      | 5 (1.52)             | TW             | M7KXX-3605K-ND    | 21.40 187.70 |
|               | Au 30µ"      | 10 (3.05)            | TW             | M7KXX-3610K-ND    | 32.05 281.07 |
| 50            | Au 30µ"      | 5 (1.52)             | TW             | M7KXX-5005K-ND    | 27.50 241.11 |
|               | Au 30µ"      | 10 (3.05)            | TW             | M7KXX-5010K-ND    | 42.28 370.79 |

Also available in the following configurations:  
M7LX□□□□□□K-ND - Male Delta with Insert.  
M7QX□□□□□□K-ND - Male Delta with Ball Lock.  
Call for complete part number and pricing!

### Single Ended Female

\*MC = 3M Multi-Color, GR = 3M Gray

| No. of Conts. | Conn. Finish | Length Feet (Meters) | Rib-bon* Cable | Digi-Key Part No. | Pricing 1 10 |
|---------------|--------------|----------------------|----------------|-------------------|--------------|
| 14            | Au 30µ"      | 6 (1.83)             | MC             | M7RXX-1406R-ND    | 12.00 105.19 |
|               | Au 30µ"      | 6 (1.83)             | GR             | M7RXX-1406J-ND    | 10.62 93.14  |
|               | Au 30µ"      | 10 (3.05)            | MC             | M7RXX-1410R-ND    | 14.97 131.24 |
|               | Au 30µ"      | 10 (3.05)            | GR             | M7RXX-1410J-ND    | 12.68 111.16 |
| 24            | Au 30µ"      | 6 (1.83)             | MC             | M7RXX-2406R-ND    | 16.48 144.50 |
|               | Au 30µ"      | 6 (1.83)             | GR             | M7RXX-2406J-ND    | 14.12 123.85 |
|               | Au 30µ"      | 10 (3.05)            | MC             | M7RXX-2410R-ND    | 21.57 189.15 |
|               | Au 30µ"      | 10 (3.05)            | GR             | M7RXX-2410J-ND    | 17.65 154.74 |
| 36            | Au 30µ"      | 6 (1.83)             | MC             | M7RXX-3606R-ND    | 22.53 197.59 |
|               | Au 30µ"      | 6 (1.83)             | GR             | M7RXX-3606J-ND    | 18.90 165.76 |
|               | Au 30µ"      | 10 (3.05)            | MC             | M7RXX-3610R-ND    | 30.38 266.43 |
|               | Au 30µ"      | 10 (3.05)            | GR             | M7RXX-3610J-ND    | 24.33 213.38 |
| 50            | Au 30µ"      | 6 (1.83)             | MC             | M7RXX-5006R-ND    | 28.62 250.95 |
|               | Au 30µ"      | 6 (1.83)             | GR             | M7RXX-5006J-ND    | 23.71 207.95 |
|               | Au 30µ"      | 10 (3.05)            | MC             | M7RXX-5010R-ND    | 39.22 343.96 |
|               | Au 30µ"      | 10 (3.05)            | GR             | M7RXX-5010J-ND    | 31.05 272.30 |

Also available in the following configurations:  
M7TX□□□□□□-ND - Female Delta with Insert.  
M7UX□□□□□□-ND - Female Delta with Ball Lock.  
Call for complete part number and pricing!

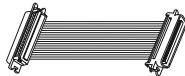
### Single Ended — Female

\*Twisted Pair Cable Finished Length is Approximate

| No. of Conts. | Conn. Finish | Length Feet (Meters) | Rib-bon* Cable | Digi-Key Part No. | Pricing 1 10 |
|---------------|--------------|----------------------|----------------|-------------------|--------------|
| 14            | Au 30µ"      | 5 (1.52)             | TW             | M7RXX-1405K-ND    | 11.68 102.43 |
|               | Au 30µ"      | 10 (3.05)            | TW             | M7RXX-1410K-ND    | 15.82 138.74 |
| 24            | Au 30µ"      | 5 (1.52)             | TW             | M7RXX-2405K-ND    | 14.76 129.39 |
|               | Au 30µ"      | 10 (3.05)            | TW             | M7RXX-2410K-ND    | 20.67 181.26 |
| 36            | Au 30µ"      | 5 (1.52)             | TW             | M7RXX-3605K-ND    | 21.40 187.70 |
|               | Au 30µ"      | 10 (3.05)            | TW             | M7RXX-3610K-ND    | 32.05 281.07 |
| 50            | Au 30µ"      | 5 (1.52)             | TW             | M7RXX-5005K-ND    | 27.50 241.11 |
|               | Au 30µ"      | 10 (3.05)            | TW             | M7RXX-5010K-ND    | 42.28 370.79 |

Also available in the following configuration:  
M7TX□□□□□□K-ND - Female Delta w/ Insert.  
M7UX□□□□□□K-ND - Female Delta w/ Ball Lock.  
Call for complete part number and pricing!

### Male to Male



\*MC = 3M Multi-Color, GR = 3M Gray

| No. of Conts. | Conn. Finish | Length Feet (Meters) | Rib-bon* Cable | Digi-Key Part No. | Pricing 1 10 |
|---------------|--------------|----------------------|----------------|-------------------|--------------|
| 14            | Au 30µ"      | 6 (1.83)             | MC             | M7KKK-1406R-ND    | 19.54 171.31 |
|               | Au 30µ"      | 6 (1.83)             | GR             | M7KKK-1406J-ND    | 18.16 159.26 |
|               | Au 30µ"      | 10 (3.05)            | MC             | M7KKK-1410R-ND    | 22.51 197.36 |
|               | Au 30µ"      | 10 (3.05)            | GR             | M7KKK-1410J-ND    | 20.22 177.28 |
| 24            | Au 30µ"      | 6 (1.83)             | MC             | M7KKK-2406R-ND    | 25.32 222.02 |
|               | Au 30µ"      | 6 (1.83)             | GR             | M7KKK-2406J-ND    | 22.96 201.37 |
|               | Au 30µ"      | 10 (3.05)            | MC             | M7KKK-2410R-ND    | 30.41 266.67 |
|               | Au 30µ"      | 10 (3.05)            | GR             | M7KKK-2410J-ND    | 26.49 232.26 |
| 36            | Au 30µ"      | 6 (1.83)             | MC             | M7KKK-3606R-ND    | 33.29 291.93 |
|               | Au 30µ"      | 6 (1.83)             | GR             | M7KKK-3606J-ND    | 29.66 260.10 |
|               | Au 30µ"      | 10 (3.05)            | MC             | M7KKK-3610R-ND    | 41.14 360.76 |
|               | Au 30µ"      | 10 (3.05)            | GR             | M7KKK-3610J-ND    | 35.09 307.71 |
| 50            | Au 30µ"      | 6 (1.83)             | MC             | M7KKK-5006R-ND    | 41.32 362.38 |
|               | Au 30µ"      | 6 (1.83)             | GR             | M7KKK-5006J-ND    | 36.42 319.39 |
|               | Au 30µ"      | 10 (3.05)            | MC             | M7KKK-5010R-ND    | 51.93 455.39 |
|               | Au 30µ"      | 10 (3.05)            | GR             | M7KKK-5010J-ND    | 43.76 383.73 |

Also available in the following configuration:  
M7LX□□□□□□K-ND - Double Ended Male Delta w/ Insert.  
M7QX□□□□□□K-ND - Double Ended Male Delta w/ Ball Lock.  
Call for complete part number and pricing!

### Male to Male

\*Twisted Pair Cable Finished Length is Approximate

| No. of Conts. | Conn. Finish | Length Feet (Meters) | Rib-bon* Cable | Digi-Key Part No. | Pricing 1 10 |
|---------------|--------------|----------------------|----------------|-------------------|--------------|
| 14            | Au 30µ"      | 5 (1.52)             | TW             | M7KKK-1405K-ND    | 19.22 168.55 |
|               | Au 30µ"      | 10 (3.05)            | TW             | M7KKK-1410K-ND    | 23.36 204.86 |
| 36            | Au 30µ"      | 5 (1.52)             | TW             | M7KKK-3605K-ND    | 32.16 282.04 |
|               | Au 30µ"      | 10 (3.05)            | TW             | M7KKK-3610K-ND    | 42.81 375.40 |
| 50            | Au 30µ"      | 5 (1.52)             | TW             | M7KKK-5005K-ND    | 40.20 352.55 |
|               | Au 30µ"      | 10 (3.05)            | TW             | M7KKK-5010K-ND    | 54.99 482.22 |

Also available in the following configuration:  
M7LL□□□□□□K-ND - Double Ended Male Delta w/ Insert.  
M7QQ□□□□□□K-ND - Double Ended Male Delta w/ Ball Lock.  
Call for complete part number and pricing!

### Female to Female

\*MC = 3M Multi-Color, GR = 3M Gray

| No. of Conts. | Conn. Finish | Length Feet (Meters) | Rib-bon* Cable | Digi-Key Part No. | Pricing 1 10 |
|---------------|--------------|----------------------|----------------|-------------------|--------------|
| 14            | Au 30µ"      | 6 (1.83)             | MC             | M7RRK-1406R-ND    | 19.54 171.31 |
|               | Au 30µ"      | 6 (1.83)             | GR             | M7RRK-1406J-ND    | 18.16 159.26 |
|               | Au 30µ"      | 10 (3.05)            | MC             | M7RRK-1410R-ND    | 22.51 197.36 |
|               | Au 30µ"      | 10 (3.05)            | GR             | M7RRK-1410J-ND    | 20.22 177.28 |
| 24            | Au 30µ"      | 6 (1.83)             | MC             | M7RRK-2406R-ND    | 25.32 222.02 |
|               | Au 30µ"      | 6 (1.83)             | GR             | M7RRK-2406J-ND    | 22.96 201.37 |
|               | Au 30µ"      | 10 (3.05)            | MC             | M7RRK-2410R-ND    | 30.41 266.67 |
|               | Au 30µ"      | 10 (3.05)            | GR             | M7RRK-2410J-ND    | 26.49 232.26 |
| 36            | Au 30µ"      | 6 (1.83)             | MC             | M7RRK-3606R-ND    | 33.29 291.93 |
|               | Au 30µ"      | 6 (1.83)             | GR             | M7RRK-3606J-ND    | 29.66 260.10 |
|               | Au 30µ"      | 10 (3.05)            | MC             | M7RRK-3610R-ND    | 41.14 360.76 |
|               | Au 30µ"      | 10 (3.05)            | GR             | M7RRK-3610J-ND    | 35.09 307.71 |
| 50            | Au 30µ"      | 6 (1.83)             | MC             | M7RRK-5006R-ND    | 41.32 362.38 |
|               | Au 30µ"      | 6 (1.83)             | GR             | M7RRK-5006J-ND    | 36.42 319.39 |
|               | Au 30µ"      | 10 (3.05)            | MC             | M7RRK-5010R-ND    | 51.93 455.39 |
|               | Au 30µ"      | 10 (3.05)            | GR             | M7RRK-5010J-ND    | 43.76 383.73 |

Also available in the following configuration:  
M7TT□□□□□□K-ND - Double Ended Female Delta w/ Insert.  
M7UU□□□□□□K-ND - Double Ended Female Delta w/ Ball Lock.  
Call for complete part number and pricing!

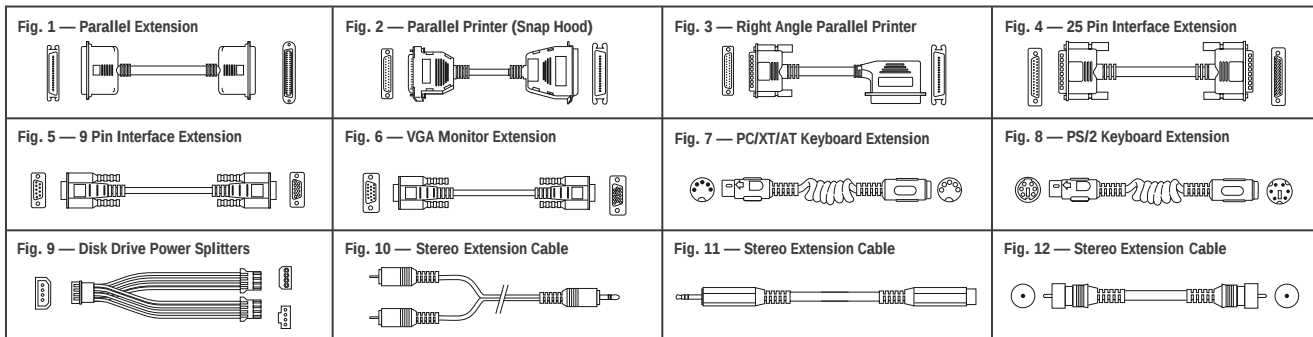
### Female to Female

\*Twisted Pair Cable Finished Length is Approximate

| No. of Conts. | Conn. Finish | Length Feet (Meters) | Rib-bon* Cable | Digi-Key Part No. | Pricing 1 10 |
|---------------|--------------|----------------------|----------------|-------------------|--------------|
| 14            | Au 30µ"      | 5 (1.52)             | TW             | M7RRK-1405K-ND    | 19.22 16     |

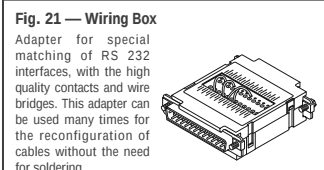
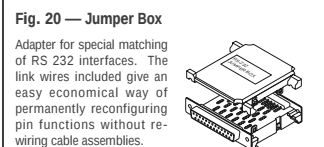
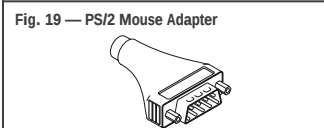
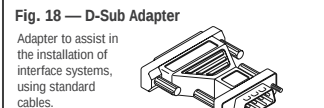
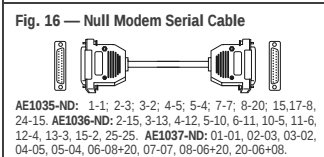
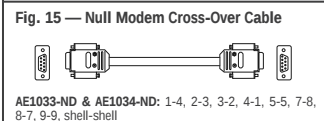
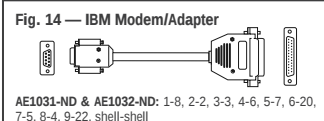
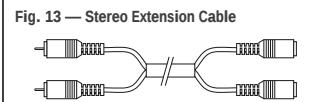
# ASSMANN Computer Cable Assemblies

A



| Fig. No.                                                 | Length | Lines | Description                                           | Digi-Key Part No. | 1     | 10     | Pricing 25 | 50     | 100     | Assmann Part No. |
|----------------------------------------------------------|--------|-------|-------------------------------------------------------|-------------------|-------|--------|------------|--------|---------|------------------|
| <b>Molded Extension for 36 Pin Centronics Interfaces</b> |        |       |                                                       |                   |       |        |            |        |         |                  |
| 1                                                        | 2m     | 36    | 2x Centronics 36 pin F-F                              | AE1000-ND         | 12.38 | 108.75 | 243.75     | 440.63 | 750.00  | AK155-2          |
|                                                          | 3m     | 36    | 2x Centronics 36 pin F-F                              | AE1001-ND         | 16.50 | 145.00 | 325.00     | 587.50 | 1000.00 | AK434-3          |
| 1                                                        | 2m     | 36    | 2x Centronics 36 pin M-M                              | AE1002-ND         | 10.73 | 94.25  | 211.25     | 381.88 | 650.00  | AK138-2          |
|                                                          | 3m     | 36    | 2x Centronics 36 pin M-M                              | AE1003-ND         | 15.02 | 131.95 | 295.75     | 534.63 | 910.00  | AK426-3          |
| 1                                                        | 2m     | 36    | 2x Centronics 36 pin M-F                              | AE1004-ND         | 11.55 | 101.50 | 227.50     | 411.25 | 700.00  | AK140-2          |
|                                                          | 3m     | 36    | 2x Centronics 36 pin M-F                              | AE1005-ND         | 15.68 | 137.75 | 308.75     | 558.13 | 950.00  | AK430-3          |
| <b>Parallel Printer Cable, IBM PC &amp; Compatibles</b>  |        |       |                                                       |                   |       |        |            |        |         |                  |
| 2                                                        | 1.8m   | 25    | DB25M - Centronics 36 Pin Male                        | AE1006-ND         | 4.79  | 42.05  | 94.25      | 170.38 | 290.00  | AK101-1.8        |
|                                                          | 3m     | 25    | DB25M - Centronics 36 Pin Male                        | AE1007-ND         | 7.99  | 70.18  | 157.30     | 284.35 | 484.00  | AK102-3          |
| 3                                                        | 2m     | 25    | DB25M - Rt Angle Centronics 36 pin Male               | AE1008-ND         | 8.25  | 72.50  | 162.50     | 293.75 | 500.00  | AK525-2          |
|                                                          | 3m     | 25    | DB25M - Lft Angle Centronics 36 pin Male              | AE1009-ND         | 8.25  | 72.50  | 162.50     | 293.75 | 500.00  | AK525-L2         |
| <b>Molded Extension for 25 Pin Interfaces</b>            |        |       |                                                       |                   |       |        |            |        |         |                  |
| 4                                                        | 2m     | 25    | 2x D-Sub 25 Pin Male - Male                           | AE1010-ND         | 6.93  | 60.90  | 136.50     | 246.75 | 420.00  | AK137-2          |
|                                                          | 3m     | 25    | 2x D-Sub 25 Pin Male - Male                           | AE1011-ND         | 8.58  | 75.40  | 169.00     | 305.50 | 520.00  | AK162-3          |
| 4                                                        | 2m     | 25    | 2x D-Sub 25 Pin M-F                                   | AE1012-ND         | 7.06  | 62.06  | 139.10     | 251.45 | 428.00  | AK135-2          |
|                                                          | 3m     | 25    | 2x D-Sub 25 Pin M-F                                   | AE1013-ND         | 8.58  | 75.40  | 169.00     | 305.50 | 520.00  | AK166-3          |
| 4                                                        | 2m     | 25    | 2x D-Sub 25 Pin F-F                                   | AE1014-ND         | 7.23  | 63.51  | 142.35     | 257.33 | 438.00  | AK133-2          |
|                                                          | 3m     | 25    | 2x D-Sub 25 Pin F-F                                   | AE1015-ND         | 10.03 | 88.16  | 197.60     | 357.20 | 608.00  | AK170-3          |
| <b>Molded Extension for 9 Pin Interfaces</b>             |        |       |                                                       |                   |       |        |            |        |         |                  |
| 5                                                        | 2m     | 9     | 2x D-Sub 9 Pin M-M                                    | AE1018-ND         | 5.35  | 46.98  | 105.30     | 190.35 | 324.00  | AK129-2          |
|                                                          | 3m     | 9     | 2x D-Sub 9 Pin M-M                                    | AE1019-ND         | 6.01  | 52.78  | 118.30     | 213.85 | 364.00  | AK174-3          |
| 5                                                        | 2m     | 9     | 2x D-Sub 9 Pin M-F                                    | AE1020-ND         | 5.35  | 46.98  | 105.30     | 190.35 | 324.00  | AK131-2          |
|                                                          | 3m     | 9     | 2x D-Sub 9 Pin M-F                                    | AE1021-ND         | 6.01  | 52.78  | 118.30     | 213.85 | 364.00  | AK178-3          |
| 5                                                        | 2m     | 9     | 2x D-Sub 9 Pin F-F                                    | AE1016-ND         | 5.35  | 46.98  | 105.30     | 190.35 | 324.00  | AK152-2          |
|                                                          | 3m     | 9     | 2x D-Sub 9 Pin F-F                                    | AE1017-ND         | 6.11  | 53.65  | 120.25     | 217.38 | 370.00  | AK182-3          |
| <b>VGA Monitor Extension Cable - IBM PS/2</b>            |        |       |                                                       |                   |       |        |            |        |         |                  |
| 6                                                        | 2m     | 15    | 2x H/D D-Sub 15 Pin M-F                               | AE1022-ND         | 6.01  | 52.78  | 118.30     | 213.85 | 364.00  | AK322-2          |
| <b>IBM PC-XT/AT Keyboard Extension</b>                   |        |       |                                                       |                   |       |        |            |        |         |                  |
| 7                                                        | 2m     | 5     | 5 Pin Standard Din M-F                                | AE1023-ND         | 4.29  | 37.70  | 84.50      | 152.75 | 260.00  | AK306-2          |
|                                                          | 5m     | 5     | 5 Pin Standard Din M-F                                | AE1024-ND         | 8.75  | 76.85  | 172.25     | 311.38 | 530.00  | AK307-5          |
| <b>PS/2 Keyboard Extension</b>                           |        |       |                                                       |                   |       |        |            |        |         |                  |
| 8                                                        | 2m     | 6     | 6 Pin Mini Din M-F                                    | AE1025-ND         | 5.84  | 51.33  | 115.05     | 207.98 | 354.00  | AK323-2          |
|                                                          | 5m     | 6     | 6 Pin Mini Din M-F                                    | AE1026-ND         | 10.73 | 94.25  | 211.25     | 381.88 | 650.00  | AK528-5          |
| <b>Power Splitter Cables</b>                             |        |       |                                                       |                   |       |        |            |        |         |                  |
| 9                                                        | .2m    | 4     | Power Cable for 2 - 5 1/4" Drives                     | AE1027-ND         | 1.98  | 17.40  | 39.00      | 70.50  | 120.00  | AK319-2          |
|                                                          | .2m    | 4     | Power Cable for 2 - 3 1/2" Drives                     | AE1028-ND         | 1.98  | 17.40  | 39.00      | 70.50  | 120.00  | AK520-2          |
|                                                          | .2m    | 4     | Power Cable for 3 1/2" and 5 1/4" Drives              | AE1029-ND         | 1.98  | 17.40  | 39.00      | 70.50  | 120.00  | AK521-2          |
| <b>Multi Media Cables</b>                                |        |       |                                                       |                   |       |        |            |        |         |                  |
| 10                                                       | 2m     | —     | 3.5mm Stereo Cable, 2 Phono Plugs                     | AE1042-ND         | 6.77  | 59.45  | 133.25     | 240.88 | 410.00  | AK243-2          |
| 11                                                       | 2.5m   | —     | 3.5mm Stereo Cable, Plug/Jack                         | AE1043-ND         | 3.60  | 31.61  | 70.85      | 128.08 | 218.00  | AK203-2.5        |
| 12                                                       | 2m     | —     | RCA Cable, Phono Plug/Plug                            | AE1044-ND         | 1.81  | 15.86  | 35.56      | 64.27  | 109.40  | AK302-2          |
| 13                                                       | 2m     | —     | RCA Cable, Double Phono Plug/Jack                     | AE1045-ND         | 2.44  | 21.40  | 47.97      | 86.72  | 147.60  | AK3030-2         |
| <b>IBM PC/AT Printer Adapter/Modem Cable</b>             |        |       |                                                       |                   |       |        |            |        |         |                  |
| 14                                                       | 2m     | 9     | D-Sub 9 Pin - D-Sub 25 Pin Female-Male                | AE1030-ND         | 4.72  | 41.47  | 92.95      | 168.03 | 286.00  | AK125-2          |
| <b>Null Modem Computer XT/AT, Cross-Over</b>             |        |       |                                                       |                   |       |        |            |        |         |                  |
| 14                                                       | 3m     | 9     | D-Sub 9 Pin - D-Sub 25 Pin Female-Male                | AE1031-ND         | 5.05  | 44.37  | 99.45      | 179.78 | 306.00  | AK149-3          |
|                                                          | 3m     | 9     | D-Sub 9 Pin - D-Sub 25 Pin Female-Female              | AE1032-ND         | 5.28  | 46.40  | 104.00     | 188.00 | 320.00  | AK124-3          |
| <b>Null Modem Computer AT/AT, Cross-Over</b>             |        |       |                                                       |                   |       |        |            |        |         |                  |
| 15                                                       | 3m     | 9     | D-Sub 9 Pin - D-Sub 9 Pin Female-Female               | AE1033-ND         | 5.68  | 49.88  | 111.80     | 202.10 | 344.00  | AK143-3          |
|                                                          | 3m     | 9     | D-Sub 9 Pin - D-Sub 9 Pin Male-Female                 | AE1034-ND         | 5.68  | 49.88  | 111.80     | 202.10 | 344.00  | AK142-3          |
| <b>Null Modem-Connection-Cable XT/XT + PS/2, Serial</b>  |        |       |                                                       |                   |       |        |            |        |         |                  |
| 16                                                       | 3m     | 25    | D-Sub 25 Pin - D-Sub 25 Pin Female-Female             | AE1035-ND         | 4.39  | 38.57  | 86.45      | 156.28 | 266.00  | AK144-3          |
|                                                          | 3m     | 25    | 2 x D-Sub-Plug, 25 Pin Male-Male                      | AE1036-ND         | 7.49  | 65.83  | 147.55     | 266.73 | 454.00  | AK250-3          |
|                                                          | 3m     | 25    | 2 x D-Sub-Socket, 25 Pin Female-Female                | AE1037-ND         | 4.39  | 38.57  | 86.45      | 156.28 | 266.00  | AK251-3          |
| <b>PS/2 Keyboard Adapters</b>                            |        |       |                                                       |                   |       |        |            |        |         |                  |
| 17                                                       | —      | —     | 1 x MINI DIN, 6 Pin Female to 1 x DIN 5 Pin Male      | AE1046-ND         | 3.93  | 34.51  | 77.35      | 139.83 | 238.00  | AB961            |
|                                                          | —      | —     | 1 x MINI DIN, 6 Pin Male to DIN 5 Pin Female          | AE1047-ND         | 3.04  | 26.68  | 59.80      | 108.10 | 184.00  | AB440            |
| <b>D-Sub Adapters</b>                                    |        |       |                                                       |                   |       |        |            |        |         |                  |
| 18                                                       | —      | —     | 2 x Male, 9 to 25 Pin                                 | AE1048-ND         | 3.04  | 26.68  | 59.80      | 108.10 | 184.00  | AB913            |
|                                                          | —      | —     | 1 x Female, 1 x Male, 9 on 25 Pin                     | AE1049-ND         | 3.04  | 26.68  | 59.80      | 108.10 | 184.00  | AB914            |
|                                                          | —      | —     | 1 x Male, 1 x Female, 9 on 25 Pin                     | AE1050-ND         | 3.04  | 26.68  | 59.80      | 108.10 | 184.00  | AB914F           |
|                                                          | —      | —     | 2 x Female, 9 to 25 Pin                               | AE1051-ND         | 3.04  | 26.68  | 59.80      | 108.10 | 184.00  | AB915            |
| <b>PS/2 Mouse Adapters</b>                               |        |       |                                                       |                   |       |        |            |        |         |                  |
| 19                                                       | —      | —     | 1 x MINI DIN, 6 Pin Female to 1 x D-Sub 9 Pin Male    | AE1052-ND         | 3.00  | 26.39  | 59.15      | 106.93 | 182.00  | AB401            |
|                                                          | —      | —     | 1 x MINI DIN, 6 Pin Male to 1 x D-Sub 9 Pin Female    | AE1053-ND         | 6.01  | 52.78  | 118.30     | 213.85 | 364.00  | AB450            |
|                                                          | —      | —     | 1 x MINI DIN, 6 Pin Female to 1 x D-Sub 25 Pin Male   | AE1054-ND         | 6.30  | 55.39  | 124.15     | 224.43 | 382.00  | AB402            |
|                                                          | —      | —     | 1 x MINI DIN, 6 Pin Male to 1 x D-Sub 9 Pin Male      | AE1055-ND         | 2.77  | 24.36  | 54.60      | 98.70  | 168.00  | AB405            |
|                                                          | —      | —     | 1 x MINI DIN, 6 Pin Female to 1 x D-Sub 25 Pin Female | AE1056-ND         | 7.26  | 63.80  | 143.00     | 258.50 | 440.00  | AB441            |
| <b>Jumper Box</b>                                        |        |       |                                                       |                   |       |        |            |        |         |                  |
| 20                                                       | —      | —     | 1 x Male, 1 x Female, 25 Pin, Plastic                 | AE1038-ND         | 7.39  | 64.96  | 145.60     | 263.20 | 448.00  | AK972            |
|                                                          | —      | —     | 1 x Male, 1 x Female, 25 Pin, Metalized               | AE1039-ND         | 7.82  | 68.73  | 154.05     | 278.48 | 474.00  | AK973            |
| <b>Wiring Box</b>                                        |        |       |                                                       |                   |       |        |            |        |         |                  |
| 21                                                       | —      | —     | 1 x Male, 1 x Female, 25 Pin, Plastic                 | AE1040-ND         | 14.12 | 124.12 | 278.20     | 502.90 | 856.00  | AK946            |
|                                                          | —      | —     | 1 x Male, 1 x Female, 25 Pin, Metalized               | AE1041-ND         | 14.62 | 128.47 | 287.95     | 520.53 | 886.00  | AK947            |

Note: All cable assemblies are overall foil shielded. Cable length in meters.

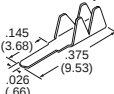


**1-800-344-4539**  
218-681-6674 • FAX: 218-681-3380 • [www.digikey.com](http://www.digikey.com)

# AMP .100" (2.54mm) Flat Flex Cable Assemblies

**.100 (2.54mm) Flat Flex Cable Material:** • Conductors: Un-plated copper per QQ-C-502 • Insulation: Flame retardant polyester film **Performance Characteristics:** • Current Rating: 2 amperes (28AWG equivalent) • Voltage Rating: 300 volts • Temperature Rating: -20°C to +105°C • Insulation Resistance: 5000 megohms (min.) • Insulation Flammability: Polyester, self-extinguishing per UL Flame Test VW-1

Solder Tab pin



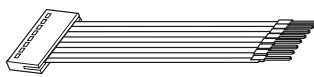
Solder Tab to Solder Tab



| No. of Contacts | Length in.(mm) | Digi-Key Part No. | 1    | Pricing 10 100 |
|-----------------|----------------|-------------------|------|----------------|
| 2               | 2 (50.80)      | A9AAT-0202F-ND    | .59  | 4.82 35.49     |
|                 | 3 (76.20)      | A9AAT-0203F-ND    | .71  | 5.76 42.42     |
|                 | 4 (101.60)     | A9AAT-0204F-ND    | .82  | 6.70 49.35     |
|                 | 5 (127.00)     | A9AAT-0205F-ND    | .94  | 7.64 56.28     |
|                 | 6 (152.40)     | A9AAT-0206F-ND    | 1.05 | 8.58 63.21     |
| 3               | 2 (50.80)      | A9AAT-0208F-ND    | 1.28 | 10.43 76.86    |
|                 | 3 (76.20)      | A9AAT-0302F-ND    | .76  | 6.18 45.57     |
|                 | 4 (101.60)     | A9AAT-0303F-ND    | .88  | 7.15 52.71     |
|                 | 5 (127.00)     | A9AAT-0304F-ND    | 1.00 | 8.15 60.05     |
|                 | 6 (152.40)     | A9AAT-0305F-ND    | 1.12 | 9.15 67.41     |
| 4               | 2 (50.80)      | A9AAT-0306F-ND    | 1.24 | 10.12 74.55    |
|                 | 3 (76.20)      | A9AAT-0308F-ND    | 1.49 | 12.11 89.25    |
|                 | 4 (101.60)     | A9AAT-0402F-ND    | .91  | 7.38 54.39     |
|                 | 5 (127.00)     | A9AAT-0403F-ND    | 1.03 | 8.41 61.95     |
|                 | 6 (152.40)     | A9AAT-0404F-ND    | 1.16 | 9.43 69.51     |
| 5               | 2 (50.80)      | A9AAT-0405F-ND    | 1.28 | 10.46 77.07    |
|                 | 3 (76.20)      | A9AAT-0406F-ND    | 1.41 | 11.49 84.63    |
|                 | 4 (101.60)     | A9AAT-0408F-ND    | 1.66 | 13.54 99.75    |
|                 | 5 (127.00)     | A9AAT-0502F-ND    | 1.04 | 8.46 62.37     |
|                 | 6 (152.40)     | A9AAT-0503F-ND    | 1.17 | 9.52 70.19     |
| 6               | 2 (50.80)      | A9AAT-0504F-ND    | 1.30 | 10.57 77.91    |
|                 | 3 (76.20)      | A9AAT-0505F-ND    | 1.43 | 11.66 85.89    |
|                 | 4 (101.60)     | A9AAT-0506F-ND    | 1.56 | 12.71 93.66    |
|                 | 5 (127.00)     | A9AAT-0508F-ND    | 1.82 | 14.85 109.41   |
|                 | 6 (152.40)     | A9AAT-0602F-ND    | 1.18 | 9.60 70.77     |
| 7               | 2 (50.80)      | A9AAT-0603F-ND    | 1.32 | 10.77 79.38    |
|                 | 3 (76.20)      | A9AAT-0604F-ND    | 1.47 | 11.97 88.20    |
|                 | 4 (101.60)     | A9AAT-0605F-ND    | 1.62 | 13.17 97.02    |
|                 | 5 (127.00)     | A9AAT-0606F-ND    | 1.76 | 14.36 105.84   |
|                 | 6 (152.40)     | A9AAT-0608F-ND    | 2.06 | 16.76 123.48   |
| 8               | 2 (50.80)      | A9AAT-0802F-ND    | 1.48 | 12.06 89.83    |
|                 | 3 (76.20)      | A9AAT-0803F-ND    | 1.66 | 13.51 99.54    |
|                 | 4 (101.60)     | A9AAT-0804F-ND    | 1.84 | 14.99 110.46   |
|                 | 5 (127.00)     | A9AAT-0805F-ND    | 2.02 | 16.44 121.17   |
|                 | 6 (152.40)     | A9AAT-0806F-ND    | 2.20 | 17.90 131.88   |
| 9               | 2 (50.80)      | A9AAT-0808F-ND    | 2.56 | 20.83 153.51   |
|                 | 3 (76.20)      | A9AAT-0902F-ND    | 1.65 | 13.40 98.70    |
|                 | 4 (101.60)     | A9AAT-0903F-ND    | 1.87 | 15.22 112.14   |
|                 | 5 (127.00)     | A9AAT-0904F-ND    | 2.09 | 17.04 125.58   |
|                 | 6 (152.40)     | A9AAT-0905F-ND    | 2.32 | 18.87 139.02   |
| 10              | 2 (50.80)      | A9AAT-0906F-ND    | 2.54 | 20.69 152.46   |
|                 | 3 (76.20)      | A9AAT-0908F-ND    | 2.99 | 24.34 179.34   |
|                 | 4 (101.60)     | A9AAT-1002F-ND    | 1.72 | 14.02 103.32   |
|                 | 5 (127.00)     | A9AAT-1003F-ND    | 1.95 | 15.87 116.97   |
|                 | 6 (152.40)     | A9AAT-1004F-ND    | 2.18 | 17.73 130.62   |
| 11              | 2 (50.80)      | A9AAT-1005F-ND    | 2.41 | 19.61 144.48   |
|                 | 3 (76.20)      | A9AAT-1006F-ND    | 2.64 | 21.46 158.13   |
|                 | 4 (101.60)     | A9AAT-1008F-ND    | 3.09 | 25.17 185.43   |
|                 | 5 (127.00)     | A9AAT-1102F-ND    | 1.80 | 14.62 107.73   |
|                 | 6 (152.40)     | A9AAT-1103F-ND    | 2.03 | 16.50 121.59   |
| 12              | 2 (50.80)      | A9AAT-1104F-ND    | 2.26 | 18.41 135.66   |
|                 | 3 (76.20)      | A9AAT-1105F-ND    | 2.50 | 20.32 149.73   |
|                 | 4 (101.60)     | A9AAT-1106F-ND    | 2.73 | 22.20 163.59   |
|                 | 5 (127.00)     | A9AAT-1108F-ND    | 3.19 | 25.99 191.52   |
|                 | 6 (152.40)     | A9AAT-1202F-ND    | 2.08 | 16.90 124.53   |
| 13              | 2 (50.80)      | A9AAT-1203F-ND    | 2.39 | 19.47 143.43   |
|                 | 3 (76.20)      | A9AAT-1204F-ND    | 2.70 | 22.00 162.12   |
|                 | 4 (101.60)     | A9AAT-1205F-ND    | 3.02 | 24.57 181.02   |
|                 | 5 (127.00)     | A9AAT-1206F-ND    | 3.33 | 27.10 199.71   |
|                 | 6 (152.40)     | A9AAT-1208F-ND    | 3.96 | 32.21 237.30   |
| 14              | 2 (50.80)      | A9AAT-1302F-ND    | 2.21 | 17.96 132.30   |
|                 | 3 (76.20)      | A9AAT-1303F-ND    | 2.52 | 20.55 151.41   |
|                 | 4 (101.60)     | A9AAT-1304F-ND    | 2.84 | 23.14 170.52   |
|                 | 5 (127.00)     | A9AAT-1305F-ND    | 3.16 | 25.74 189.63   |
|                 | 6 (152.40)     | A9AAT-1306F-ND    | 3.48 | 28.33 208.74   |
| 15              | 2 (50.80)      | A9AAT-1308F-ND    | 4.12 | 33.52 246.96   |
|                 | 3 (76.20)      | A9AAT-1402F-ND    | 2.34 | 19.04 140.28   |
|                 | 4 (101.60)     | A9AAT-1403F-ND    | 2.66 | 21.66 159.60   |
|                 | 5 (127.00)     | A9AAT-1404F-ND    | 2.98 | 24.28 178.92   |
|                 | 6 (152.40)     | A9AAT-1405F-ND    | 3.30 | 26.90 198.24   |
| 16              | 2 (50.80)      | A9AAT-1406F-ND    | 3.63 | 29.55 217.77   |
|                 | 3 (76.20)      | A9AAT-1408F-ND    | 4.27 | 34.80 256.41   |
|                 | 4 (101.60)     | A9AAT-1502F-ND    | 2.47 | 20.12 148.26   |
|                 | 5 (127.00)     | A9AAT-1503F-ND    | 2.80 | 22.80 168.00   |
|                 | 6 (152.40)     | A9AAT-1504F-ND    | 3.13 | 25.48 187.74   |
| 17              | 2 (50.80)      | A9AAT-1505F-ND    | 3.46 | 28.16 207.48   |
|                 | 3 (76.20)      | A9AAT-1506F-ND    | 3.79 | 30.84 227.22   |
|                 | 4 (101.60)     | A9AAT-1508F-ND    | 4.45 | 36.20 266.70   |
|                 | 5 (127.00)     | A9AAT-1602F-ND    | 2.60 | 21.18 156.03   |
|                 | 6 (152.40)     | A9AAT-1603F-ND    | 2.93 | 23.88 175.98   |
| 18              | 2 (50.80)      | A9AAT-1604F-ND    | 3.27 | 26.62 196.14   |
|                 | 3 (76.20)      | A9AAT-1605F-ND    | 3.60 | 29.33 216.09   |
|                 | 4 (101.60)     | A9AAT-1606F-ND    | 3.93 | 32.03 236.04   |
|                 | 5 (127.00)     | A9AAT-1608F-ND    | 4.60 | 37.48 276.15   |
|                 | 6 (152.40)     | A9AAT-1802F-ND    | 3.31 | 26.93 198.45   |
| 19              | 2 (50.80)      | A9AAT-1803F-ND    | 3.87 | 31.55 232.47   |
|                 | 3 (76.20)      | A9AAT-1804F-ND    | 4.44 | 36.17 266.49   |
|                 | 4 (101.60)     | A9AAT-1805F-ND    | 5.01 | 40.78 300.51   |
|                 | 5 (127.00)     | A9AAT-1806F-ND    | 5.58 | 45.40 334.53   |
|                 | 6 (152.40)     | A9AAT-1808F-ND    | 6.71 | 54.61 402.36   |
| 20              | 2 (50.80)      | A9AAT-2002F-ND    | 3.57 | 29.07 214.20   |
|                 | 3 (76.20)      | A9AAT-2003F-ND    | 4.15 | 33.80 249.06   |
|                 | 4 (101.60)     | A9AAT-2004F-ND    | 4.73 | 38.50 283.71   |
|                 | 5 (127.00)     | A9AAT-2005F-ND    | 5.31 | 43.21 318.36   |
|                 | 6 (152.40)     | A9AAT-2006F-ND    | 5.88 | 47.91 353.01   |
| 21              | 2 (50.80)      | A9AAT-2008F-ND    | 7.04 | 57.34 422.52   |

## Single-Row Receptacle Housing to Solder Tab

Mates with single row .025 (.64mm) square pin, .100 (2.54mm) headers.



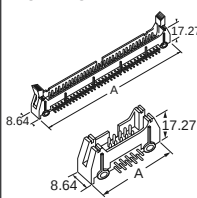
**Housing Contacts — Material and Finish:** Phosphor bronze; plated gold duplex or bright tin-lead overall. Duplex plated 15µ gold or 30µ gold on mating area. A9BAG-□□□□F-ND = 15µ gold, A9BAA-□□□□F-ND = 30µ gold.

| No. of Contacts | Length in.(mm) | Digi-Key Part No. | 1            | Pricing 10 100 |
|-----------------|----------------|-------------------|--------------|----------------|
| 2               | 2 (50.80)      | A9BAG-0202F-ND    | 1.73         | 14.11 103.95   |
|                 | 3 (76.20)      | A9BAG-0203F-ND    | 1.85         | 15.05 110.88   |
|                 | 4 (101.60)     | A9BAG-0204F-ND    | 1.96         | 15.96 117.60   |
|                 | 5 (127.00)     | A9BAG-0205F-ND    | 2.08         | 16.90 124.53   |
|                 | 6 (152.40)     | A9BAG-0206F-ND    | 2.19         | 17.84 131.46   |
| 3               | 8 (203.20)     | A9BAG-0208F-ND    | 2.42         | 19.72 145.32   |
|                 | 2 (50.80)      | A9BAG-0302F-ND    | 1.99         | 16.22 119.49   |
|                 | 3 (76.20)      | A9BAG-0303F-ND    | 2.11         | 17.21 126.84   |
|                 | 4 (101.60)     | A9BAG-0304F-ND    | 2.23         | 18.18 133.98   |
|                 | 5 (127.00)     | A9BAG-0305F-ND    | 2.36         | 19.18 141.33   |
| 4               | 6 (152.40)     | A9BAG-0306F-ND    | 2.48         | 20.18 148.68   |
|                 | 8 (203.20)     | A9BAG-0308F-ND    | 2.72         | 22.14 163.17   |
|                 | 2 (50.80)      | A9BAG-0402F-ND    | 2.24         | 18.27 134.61   |
|                 | 3 (76.20)      | A9BAG-0403F-ND    | 2.37         | 19.27 142.17   |
|                 | 4 (101.60)     | A9BAG-0404F-ND    | 2.50         | 20.32 149.73   |
| 5               | 5 (127.00)     | A9BAG-0405F-ND    | 2.62         | 21.35 157.29   |
|                 | 6 (152.40)     | A9BAG-0406F-ND    | 2.75         | 22.37 164.85   |
|                 | 8 (203.20)     | A9BAG-0408F-ND    | 3.00         | 24.42 179.97   |
|                 | 2 (50.80)      | A9BAG-0502F-ND    | 2.49         | 20.24 149.10   |
|                 | 3 (76.20)      | A9BAG-0503F-ND    | 2.61         | 21.29 156.87   |
| 6               | 4 (101.60)     | A9BAG-0504F-ND    | 2.75         | 22.37 164.85   |
|                 | 5 (127.00)     | A9BAG-0505F-ND    | 2.88         | 23.43 172.62   |
|                 | 6 (152.40)     | A9BAG-0506F-ND    | 3.01         | 24.48 180.39   |
|                 | 8 (203.20)     | A9BAG-0508F-ND    | 3.27         | 26.62 196.14   |
|                 | 2 (50.80)      | A9BAG-0602F-ND    | 2.74         | 22.32 164.43   |
| 7               | 3 (76.20)      | A9BAG-0603F-ND    | 2.89         | 23.51 173.25   |
|                 | 4 (101.60)     | A9BAG-0604F-ND    | 3.03         | 24.71 182.07   |
|                 | 5 (127.00)     | A9BAG-0605F-ND    | 3.18         | 25.88 190.68   |
|                 | 6 (152.40)     | A9BAG-0606F-ND    | 3.33         | 27.08 199.50   |
|                 | 8 (203.20)     | A9BAG-0608F-ND    | 3.62         | 29.47 217.11   |
| 8               | 2 (50.80)      | A9BAG-0802F-ND    | 3.27         | 26.59 195.93   |
|                 | 3 (76.20)      | A9BAG-0803F-ND    | 3.45         | 28.07 206.85   |
|                 | 4 (101.60)     | A9BAG-0804F-ND    | 3.63         | 29.53 217.56   |
|                 | 5 (127.00)     | A9BAG-0805F-ND    | 3.80         | 30.98 228.27   |
|                 | 6 (152.40)     | A9BAG-0806F-ND    | 3.99         | 32.46 239.19   |
| 9               | 8 (203.20)     | A9BAG-0808F-ND    | 4.34         | 35.37 260.61   |
|                 | 2 (50.80)      | A9BAG-0902F-ND    | 3.58         | 29.13 214.62   |
|                 | 3 (76.20)      | A9BAG-0903F-ND    | 3.80         | 30.95 228.06   |
|                 | 4 (101.60)     | A9BAG-0904F-ND    | 4.03         | 32.78 241.50   |
|                 | 5 (127.00)     | A9BAG-0905F-ND    | 4.25         | 34.57 254.73   |
| 10              | 6 (152.40)     | A9BAG-0906F-ND    | 4.47         | 36.39 268.17   |
|                 | 8 (203.20)     | A9BAG-0908F-ND    | 4.92         | 40.04 295.05   |
|                 | 2 (50.80)      | A9BAG-1002F-ND    | 3.79         | 30.87 227.43   |
|                 | 3 (76.20)      | A9BAG-1003F-ND    | 4.02         | 32.72 241.08   |
|                 | 4 (101.60)     | A9BAG-1004F-ND    | 4.25         | 34.57 254.73   |
| 11              | 5 (127.00)     | A9BAG-1005F-ND    | 4.47         | 36.42 268.38   |
|                 | 6 (152.40)     | A9BAG-1006F-ND    | 4.70         | 38.30 282.24   |
|                 | 8 (203.20)     | A9BAG-1008F-ND    | 5.16         | 42.01 309.54   |
|                 | 2 (50.80)      | A9BAG-1102F-ND    | 4.00         | 32.60 240.24   |
|                 | 3 (76.20)      | A9BAG-1103F-ND    | 4.24         | 34.49 254.10   |
| 12              | 4 (101.60)     | A9BAG-1104F-ND    | 4.47         | 36.39 268.17   |
|                 | 5 (127.00)     | A9BAG-1105F-ND    | 4.70         | 38.28 282.03   |
|                 | 6 (152.40)     | A9BAG-1106F-ND    | 4.94         | 40.19 296.10   |
|                 | 8 (203.20)     | A9BAG-1108F-ND    | 5.40         | 43.98 324.03   |
|                 | 2 (50.80)      | A9BAG-1202F-ND    | 4.41         | 35.94 264.81   |
| 13              | 3 (76.20)      | A9BAG-1203F-ND    | 4.73         | 38.50 283.71   |
|                 | 4 (101.60)     | A9BAG-1204F-ND    | 5.04         | 41.04 302.46   |
|                 | 5 (127.00)     | A9BAG-1205F-ND    | 5.36         | 43.61 321.30   |
|                 | 6 (152.40)     | A9BAG-1206F-ND    | 5.67         | 46.14 339.99   |
|                 | 8 (203.20)     | A9BAG-1208F-ND    | 6.29         | 51.24 377.58   |
| 14              | 2 (50.80)      | A9BAG-1302F-ND    | 4.66         | 37.93 279.51   |
|                 | 3 (76.20)      | A9BAG-1303F-ND    | 4.98         | 40.53 298.62   |
|                 | 4 (101.60)     | A9BAG-1304F-ND    | 5.30         | 43.12 317.73   |
|                 | 5 (127.00)     | A9BAG-1305F-ND    | 5.61         | 45.69 336.63   |
|                 | 6 (152.40)     | A9BAG-1306F-ND    | 5.93         | 48.28 355.73   |
| 15              | 8 (203.20)     | A9BAG-1308F-ND    | 6.57         | 53.47 393.96   |
|                 | 2 (50.80)      | A9BAG-1402F-ND    | 4.90         | 39.90 294.00   |
|                 | 3 (76.20)      | A9BAG-1403F-ND    | 5.22         | 42.52 313.32   |
|                 | 4 (101.60)     | A9BAG-1404F-ND    | 5.54         | 45.14 332.64   |
|                 | 5 (127.00)     | A9BAG-1405F-ND    | 5.87         | 47.77 351.96   |
| 16              | 6 (152.40)     | A9BAG-1406F-ND    | 6.19         | 50.42 371.49   |
|                 | 8 (203.20)     | A9BAG-1408F-ND    | 6.84         | 55.66 410.13   |
|                 | 2 (50.80)      | A9BAG-1502F-ND    | 5.36         | 43.41 319.83   |
|                 | 3 (76.20)      | A9BAG-1503F-ND    | 5.66         | 46.08 339.57   |
|                 | 4 (101.60)     | A9BAG-1504F-ND    | 5.98         | 48.76 359.21   |
| 17              | 5 (127.00)     | A9BAG-1505F-ND    | 6.32         | 51.44 379.05   |
|                 | 6 (152.40)     | A9BAG-1506F-ND    | 6.65         | 54.12 398.79   |
|                 | 8 (203.20)     | A9BAG-1508F-ND    | 7.30         | 59.48 428.27   |
|                 | 2 (50.80)      | A9BAG-1602F-ND    | 5.64         | 45.91 338.31   |
|                 | 3 (76.20)      | A9BAG-1603F-ND    | 5.97         | 48.62 358.26   |
| 18              | 4 (101.60)     | A9BAG-1604F-ND    | 6.31         | 51.36 378.42   |
|                 | 5 (127.00)     | A9BAG-1605F-ND    | 6.64         | 54.06 398.37   |
|                 | 6 (152.40)     | A9BAG-1606F-ND    | 6.98         | 56.80 418.53   |
|                 | 8 (203.20)     | A9BAG-1608F-ND    | 7.64         | 62.22 458.43   |
|                 | 2 (50.80)      | A9BAG-1802F-ND    | 6.70         | 55.48 402.15   |
| 19              | 3 (76.20)      | A9BAG-1803F-ND    | 7.27         | 59.19 436.17   |
|                 | 4 (101.60)     | A9BAG-1804F-ND    | 7.84         | 63.91 470.19   |
|                 | 5 (127.00)     | A9BAG-1805F-ND    | 8.40         | 68.43 504.21   |
|                 | 6 (152.40)     | A9BAG-1806F-ND    | 8.97         | 73.05 538.26   |
|                 | 8 (203.20)     | A9BAG-1808F-ND    | 10.10        | 82.60 608.27   |
| 20              | 2 (50.80)      | A9BAG-2002F-ND    | 7.33         | 59.65 439.53   |
|                 | 3 (76.20)      | A9BAG-2003F-ND    | 7.90         | 64.35 474.18   |
|                 | 4 (101.60)     | A9BAG-2004F-ND    | 8.48         | 69.06 508.83   |
|                 | 5 (127.00)     | A9BAG-2005F-ND    | 9.06         | 73.76 543.48   |
|                 | 6 (152.40)     | A9BAG-2006F-ND    | 9.64         | 78.46 578.13   |
| 8 (203.20)      | A9BAG-2008F-ND | 10.79             | 87.89 647.63 |                |

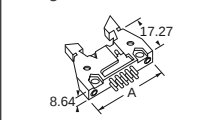
## 3M Latch/Eject Headers 2.54mm x 2.54mm

Four-wall shrouded housing to protect against physical and chemical pin damage. Order optional ejector latches separately below.

### Right Angle Headers



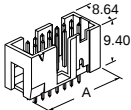
### Straight Header



| No. of Cont.                            | Dim. A (mm) | Digi-Key Part No. | 1    | Pricing 100 | 500     | 3M Part No. |
|-----------------------------------------|-------------|-------------------|------|-------------|---------|-------------|
| Right Angle                             |             |                   |      |             |         |             |
| 10                                      | 32.00       | MHR10K-ND         | 1.54 | 116.92      | 529.10  | 80610797476 |
| 14                                      | 37.08       | MHR14K-ND         | 1.71 | 129.56      | 586.30  | 80610097281 |
| 16                                      | 39.62       | MHR16K-ND         | 1.77 | 134.30      | 607.75  | 80610097125 |
| 20                                      | 44.70       | MHR20K-ND         | 1.98 | 150.10      | 679.25  | 80610096960 |
| 24                                      | 49.78       | MHR24K-ND         | 2.18 | 165.90      | 750.75  | 80610144174 |
| 26                                      | 52.32       | MHR26K-ND         | 2.33 | 176.96      | 800.80  | 80610097604 |
| 30                                      | 57.40       | MHR30K-ND         | 2.68 | 203.82      | 922.35  | 80610147573 |
| 34                                      | 62.48       | MHR34K-ND         | 3.02 | 229.10      | 1036.75 | 80610097448 |
| 40                                      | 70.10       | MHR40K-ND         | 3.45 | 262.28      | 1186.90 | 80610097927 |
| 50                                      | 82.80       | MHR50K-ND         | 4.16 | 316.00      | 1430.00 | 80610099287 |
| 60                                      | 95.50       | MHR60K-ND         | 5.12 | 388.68      | 1758.90 | 80610098081 |
| Straight                                |             |                   |      |             |         |             |
| 10                                      | 32.00       | MHS10K-ND         | 1.54 | 116.92      | 529.10  | 80610797518 |
| 14                                      | 37.08       | MHS14K-ND         | 1.71 | 129.56      | 586.30  | 80610097364 |
| 16                                      | 39.62       | MHS16K-ND         | 1.77 | 134.30      | 607.75  | 80610097208 |
| 20                                      | 44.70       | MHS20K-ND         | 1.89 | 143.78      | 650.65  | 80610097083 |
| 24                                      | 49.78       | MHS24K-ND         | 2.18 | 165.90      | 750.75  | 80610144372 |
| 26                                      | 52.32       | MHS26K-ND         | 2.33 | 176.96      | 800.80  | 80610097687 |
| 30                                      | 57.40       | MHS30K-ND         | 2.68 | 203.82      | 922.35  | 80610147771 |
| 34                                      | 62.48       | MHS34K-ND         | 3.02 | 229.10      | 1036.75 | 80610097521 |
| 40                                      | 70.10       | MHS40K-ND         | 3.45 | 262.28      | 1186.90 | 80610098008 |
| 50                                      | 82.80       | MHS50K-ND         | 4.16 | 316.00      | 1430.00 | 80610099360 |
| 60                                      | 95.50       | MHS60K-ND         | 5.12 | 388.68      | 1758.90 | 80610098164 |
| Optional Ejector Latches for Connectors |             |                   |      |             |         |             |
| Short                                   |             | MLKS01-ND*        | 21/2 | 7.90        | 35.75   | 80610098783 |
|                                         |             | MLKS02-ND†        | 21/2 | 7.90        | 35.75   | 80610138051 |

\* Use without strain relief; † Use with strain relief

## 3M Low Profile Headers (Protected Headers)



### Physical Specifications: Insulation:

- Material: Glass filled Polyester (PBT)
- Flammability: UL94V-0 • Color: Gray
- Marking: 3M logo and Orientation Triangle
- Contact: Material: Phosphor Bronze (C510) Plating: • Underplate: 100µ Nickel--Q-Q-N-290, Class 2
- Wiping Area: Gold--MIL-G-45204, Type II, Grade C • Solder tails: 200µ 60/40 Tin Lead--MIL-P-81728 • Wrap Tails: Gold Flash

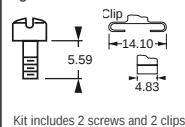
**Electrical Specifications:** • Current Rating: 2A • Insulation Resistance: >1x10<sup>9</sup>Ω @ 500Vdc • Withstanding voltage: 1000Vrms at Sea Level

**Environmental Specification:** • Temperature Rating: -55°C to +105°C  
UL File No.: E58908  
CSA File No.: LR 40971

| No. of<br>Contacts      | Dim. A<br>(mm) | Digi-Key<br>Part No. | 1    | Pricing<br>100 | 500     | 3M<br>Part No. |
|-------------------------|----------------|----------------------|------|----------------|---------|----------------|
| Straight Solder Tail    |                |                      |      |                |         |                |
| 10                      | 20.07          | MHB10K-ND            | 1.33 | 101.12         | 457.60  | 80610565030    |
| 14                      | 22.15          | MHB14K-ND            | 1.37 | 104.28         | 471.90  | 80610565071    |
| 16                      | 27.69          | MHB16K-ND            | 1.54 | 116.92         | 529.10  | 80610565113    |
| 20                      | 32.77          | MHB20K-ND            | 1.60 | 121.66         | 550.55  | 80610565154    |
| 24                      | 37.85          | MHB24K-ND            | 1.68 | 127.98         | 579.15  | 80610565196    |
| 26                      | 40.39          | MHB26K-ND            | 1.71 | 129.56         | 586.30  | 80610565238    |
| 30                      | 45.47          | MHB30K-ND            | 1.98 | 150.10         | 679.25  | 80610565279    |
| 34                      | 50.55          | MHB34K-ND            | 2.06 | 156.42         | 707.85  | 80610565311    |
| 40                      | 58.17          | MHB40K-ND            | 2.20 | 167.48         | 757.90  | 80610565352    |
| 50                      | 70.87          | MHB50K-ND            | 2.72 | 206.98         | 936.65  | 80610565394    |
| 60                      | 83.57          | MHB60K-ND            | 3.27 | 248.06         | 1122.55 | 80610565436    |
| Right Angle Solder Tail |                |                      |      |                |         |                |
| 10                      | 20.07          | MHD10K-ND            | 1.48 | 112.18         | 507.65  | 80610565014    |
| 14                      | 22.15          | MHD14K-ND            | 1.52 | 115.34         | 521.95  | 80610565055    |
| 16                      | 27.69          | MHD16K-ND            | 1.68 | 127.98         | 579.15  | 80610565097    |
| 20                      | 32.77          | MHD20K-ND            | 1.77 | 134.30         | 607.75  | 80610565139    |
| 24                      | 37.85          | MHD24K-ND            | 1.85 | 140.62         | 636.35  | 80610565170    |
| 26                      | 40.39          | MHD26K-ND            | 1.87 | 142.20         | 643.50  | 80610565212    |
| 30                      | 45.47          | MHD30K-ND            | 2.54 | 192.76         | 872.30  | 80610565253    |
| 34                      | 50.55          | MHD34K-ND            | 2.25 | 170.64         | 772.20  | 80610565295    |
| 40                      | 58.17          | MHD40K-ND            | 2.41 | 183.28         | 829.40  | 80610565337    |
| 50                      | 70.87          | MHD50K-ND            | 3.00 | 227.52         | 1029.60 | 80610565378    |
| 60                      | 83.57          | MHD60K-ND            | 3.60 | 273.34         | 1236.95 | 80610565410    |

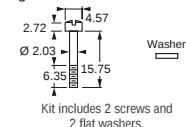
## 3M D-Sub Mounting Hardware

Fig. 1 - Jack Screw Kit



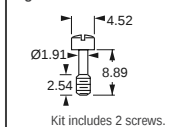
Kit includes 2 screws and 2 clips.

Fig. 2 - Jack Screw Kit



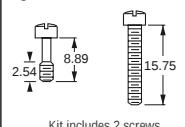
Kit includes 2 screws and 2 flat washers.

Fig. 3 - Jack Screw Kit



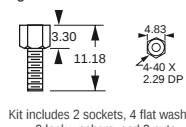
Kit includes 2 screws.

Fig. 4 - Screw Mount Kit



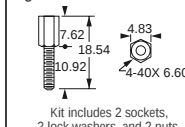
Kit includes 2 screws.

Fig. 5 - Jack Socket Kit



Kit includes 2 sockets, 4 flat washers, 2 lock washers, and 2 nuts.

Fig. 6 - Jack Socket Kit



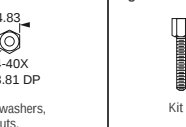
Kit includes 2 sockets, 2 lock washers, and 2 nuts.

Fig. 7 - Jack Socket Kit



Kit includes 2 sockets, 4 flat washers, 2 lock washers, and 2 nuts.

Fig. 8 - Jack Socket Kit

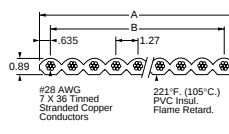


Kit includes 2 sockets, 4 flat washers, 2 lock washers, and 2 nuts.

| Fig. | Description     | Digi-Key Part No. | 1    | Pricing 100 | 500    | 3M Part No. |
|------|-----------------|-------------------|------|-------------|--------|-------------|
| 1    | Jack Screw Kit  | MDVS22-ND         | 1.00 | 75.84       | 343.20 | 80610210298 |
| 2    | Jack Screw Kit  | MDVS62-ND         | 1.04 | 79.00       | 357.50 | 80610210306 |
| 3    | Jack Screw Kit  | MDVS35-ND         | .71  | 53.72       | 243.10 | 80610407613 |
| 4    | Screw Mount Kit | MDSMK1-ND         | .79  | 60.04       | 271.70 | 80610210330 |
| 5    | Jack Socket Kit | MDVS44-ND         | 1.77 | 134.30      | 607.75 | 80610210272 |
| 6    | Jack Socket Kit | MDVS73-ND         | 1.60 | 121.66      | 550.55 | 80610210322 |
| 7    | Jack Socket Kit | MDVS50-ND         | 1.77 | 134.30      | 607.75 | 80610210280 |
| 8    | Jack Socket Kit | MDVS81-ND         | 1.85 | 140.62      | 636.35 | 80610210314 |

## 3M Gray Flat Cable 3365 Series

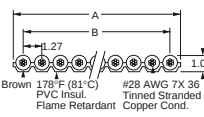
**PHYSICAL:** • Insulation Material: Polyvinyl Chloride (PVC) • Flammability Rating: UL VW-1 • Color: Gray • Marking: Red Edge • Conductors: 28  
AWG 7x36 Tinned Stranded Copper  
**ELECTRICAL:** • Voltage Rating: 300 V • Insulation Resistance: >1 x 10<sup>10</sup>Ω/10 ft.  
**ENVIRONMENTAL:** • Temperature Rating: -4°F to +221°F (-20°C to +105°C)



| No. of<br>Contacts | Dimensions (mm) |       | Digi-Key<br>Part No. | Note: X In Part No. = Ft. Per Roll |        |        |        |         |         |
|--------------------|-----------------|-------|----------------------|------------------------------------|--------|--------|--------|---------|---------|
|                    | "A"             | "B"   |                      | *Price Per Roll                    |        |        |        |         |         |
|                    |                 |       |                      | 5 ft.                              | 10 ft. | 25 ft. | 50 ft. | 100 ft. | 300 ft. |
| 10                 | 12.70           | 11.43 | MC10G-X-ND           | 1.98                               | 3.67   | 8.18   | 14.11  | 25.40   | 67.72   |
| 14                 | 17.78           | 16.51 | MC14G-X-ND           | 2.77                               | 5.14   | 11.46  | 19.75  | 35.56   | 94.82   |
| 16                 | 20.32           | 19.05 | MC16G-X-ND           | 3.16                               | 5.87   | 13.09  | 22.58  | 40.64   | 108.36  |
| 20                 | 25.40           | 24.13 | MC20G-X-ND           | 3.95                               | 7.34   | 16.37  | 28.23  | 50.81   | 135.48  |
| 24                 | 30.48           | 29.21 | MC24G-X-ND           | 4.74                               | 8.81   | 19.64  | 33.87  | 60.96   | 162.56  |
| 26                 | 33.02           | 31.75 | MC26G-X-ND           | 5.14                               | 9.54   | 21.28  | 36.69  | 66.04   | 176.12  |
| 34                 | 43.18           | 41.91 | MC34G-X-ND           | 6.72                               | 12.47  | 27.83  | 47.98  | 86.36   | 230.30  |
| 37                 | 46.99           | 45.72 | MC37G-X-ND           | 7.31                               | 13.58  | 30.28  | 52.21  | 93.98   | 250.62  |
| 40                 | 50.80           | 49.53 | MC40G-X-ND           | 7.90                               | 14.68  | 32.74  | 56.45  | 101.60  | 270.94  |
| 50                 | 63.50           | 62.23 | MC50G-X-ND           | 9.88                               | 18.34  | 40.92  | 70.55  | 127.00  | 338.66  |
| 60                 | 76.20           | 74.93 | MC60G-X-ND           | 11.85                              | 22.01  | 49.11  | 84.67  | 152.40  | 406.40  |
| 64                 | 81.28           | 80.01 | MC64G-X-ND           | 12.64                              | 23.48  | 52.38  | 90.31  | 162.56  | 433.50  |

## 3M Color Coded Flat Cable 3302 Series

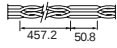
**PHYSICAL:** • Insulation Material: Polyvinyl Chloride (PVC) • Flammability Rating: UL VW-1 • Color: 10 Color Repeat, Clear Carrier • Conductors: 28  
AWG 7x36 Tinned Stranded Copper  
**ELECTRICAL:** • Voltage Rating: 300 V • Insulation Resistance: >1 x 10<sup>9</sup>Ω/10 ft.  
**ENVIRONMENTAL:** • Temperature Rating: -4°F to +176°F (-20°C to +80°C)



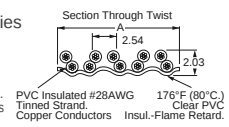
| No. of<br>Contacts | Dimensions (mm) |       | Digi-Key<br>Part No. | Note: X In Part No. = Ft. Per Roll<br>*Price Per Roll |        |        |        |         |         |
|--------------------|-----------------|-------|----------------------|-------------------------------------------------------|--------|--------|--------|---------|---------|
|                    | "A"             | "B"   |                      | 5 ft.                                                 | 10 ft. | 25 ft. | 50 ft. | 100 ft. | 300 ft. |
| 10                 | 12.70           | 11.43 | MC10M-X-ND           | 3.06                                                  | 5.67   | 12.66  | 21.83  | 39.29   | 104.76  |
| 14                 | 17.78           | 16.51 | MC14M-X-ND           | 4.28                                                  | 7.95   | 17.73  | 30.56  | 55.01   | 146.70  |
| 16                 | 20.32           | 19.05 | MC16M-X-ND           | 4.89                                                  | 9.08   | 20.27  | 34.94  | 62.89   | 167.72  |
| 20                 | 25.40           | 24.13 | MC20M-X-ND           | 6.11                                                  | 11.35  | 25.32  | 43.65  | 78.57   | 209.52  |
| 24                 | 30.48           | 29.21 | MC24M-X-ND           | 7.33                                                  | 13.62  | 30.38  | 52.39  | 94.30   | 251.46  |
| 26                 | 33.02           | 31.75 | MC26M-X-ND           | 7.95                                                  | 14.76  | 32.92  | 56.75  | 102.16  | 272.42  |
| 34                 | 43.18           | 41.91 | MC34M-X-ND           | 10.39                                                 | 19.29  | 43.03  | 74.20  | 133.55  | 356.14  |
| 37                 | 46.99           | 45.72 | MC37M-X-ND           | 11.31                                                 | 21.00  | 46.84  | 80.76  | 145.37  | 387.66  |
| 40                 | 50.80           | 49.53 | MC40M-X-ND           | 12.22                                                 | 22.70  | 50.63  | 87.30  | 157.14  | 419.04  |
| 50                 | 63.50           | 62.23 | MC50M-X-ND           | 15.28                                                 | 28.37  | 63.29  | 109.12 | 196.42  | 523.78  |
| 60                 | 76.20           | 74.93 | MC60M-X-ND           | 18.33                                                 | 34.05  | 75.95  | 130.95 | 235.71  | 628.56  |
| 64                 | 81.28           | 80.01 | MC64M-X-ND           | 19.55                                                 | 36.31  | 81.01  | 139.67 | 251.41  | 670.42  |

## 3M Twisted Pair Flat Cable 1700 Series

**PHYSICAL:** • Insulation Material: Polyvinyl Chloride (PVC) • Flammability Rating: UL VW-1  
**ELECTRICAL:** • Voltage Rating: 300 V • Insulation Resistance: >1 x 10<sup>9</sup>Ω/10 ft.  
**ENVIRONMENTAL:** • Temperature Rating: -4°F to +176°F (-20°C to +80°C)



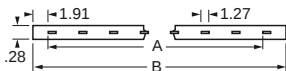
Standard product has alt. 45.72cm twisted sections and 5.08cm flat sections.



| No. of<br>Contacts | Dimensions (mm) |       | Digi-Key<br>Part No. | Note: X In Part No. = Ft. Per Roll<br>*Price Per Roll |        |        |        |          |
|--------------------|-----------------|-------|----------------------|-------------------------------------------------------|--------|--------|--------|----------|
|                    | "A"             | "B"   |                      | 5 ft.                                                 | 10 ft. | 25 ft. | 50 ft. | 100 ft.† |
| 10                 | 12.70           | 11.43 | MC10F-X-ND           | 2.74                                                  | 5.10   | 11.37  | 19.60  | 31.36    |
| 14                 | 17.78           | 16.51 | MC14F-X-ND           | 3.84                                                  | 7.13   | 15.91  | 27.44  | 43.90    |
| 16                 | 20.32           | 19.05 | MC16F-X-ND           | 4.39                                                  | 8.78   | 18.19  | 31.36  | 50.18    |
| 20                 | 25.40           | 24.13 | MC20F-X-ND           | 5.49                                                  | 10.19  | 22.74  | 39.20  | 62.72    |
| 26                 | 33.02           | 31.75 | MC26F-X-ND           | 7.13                                                  | 13.25  | 29.55  | 50.95  | 81.52    |
| 34                 | 43.18           | 41.91 | MC34F-X-ND           | 9.33                                                  | 17.33  | 38.65  | 66.64  | 106.62   |
| 36                 | 45.72           | 44.45 | MC36F-X-ND           | 9.88                                                  | 18.35  | 40.93  | 70.56  | 112.90   |
| 40                 | 50.80           | 49.53 | MC40F-X-ND           | 10.98                                                 | 20.38  | 45.47  | 78.40  | 125.44   |
| 50                 | 63.50           | 62.23 | MC50F-X-ND           | 13.72                                                 | 25.48  | 56.84  | 98.00  | 156.80   |
| 60                 | 76.20           | 74.93 | MC60F-X-ND           | 16.46                                                 | 30.58  | 68.21  | 117.60 | 188.16   |
| 64                 | 81.28           | 80.01 | MC64F-X-ND           | 17.56                                                 | 32.61  | 72.75  | 125.44 | 200.70   |

# AMP

## 2.54mm Flat Flex Cable



| Conductors | Dimensions (mm)<br>"A" "B" |       |
|------------|----------------------------|-------|
| 2          | 2.54                       | 7.62  |
| 3          | 5.08                       | 10.16 |
| 4          | 7.62                       | 12.70 |
| 5          | 10.16                      | 15.24 |
| 6          | 12.70                      | 17.78 |
| 8          | 17.78                      | 22.86 |
| 9          | 20.32                      | 25.40 |
| 10         | 22.86                      | 27.94 |
| 11         | 25.40                      | 30.48 |
| 12         | 27.94                      | 33.02 |
| 13         | 30.48                      | 35.56 |
| 14         | 33.02                      | 38.10 |
| 15         | 35.56                      | 40.64 |
| 16         | 38.10                      | 43.18 |
| 18         | 43.18                      | 48.26 |
| 20         | 48.26                      | 53.34 |

### Material:

- Conductors: Unplated copper per QQ-C502
- Insulation: Flame retardant polyester film

### Performance Characteristics:

- Current Rating: 2 amperes (28 AWG equivalent)
- Voltage Rating: 300 volts
- Temperature Rating: -20° to +105°C
- Insulation Resistance: 5000 megohms (min.)
- Insulation Flammability: Polyester, self-extinguishing per UL Flame Test VW-1

### Typical Electrical Values:

- Resistance: 55 ohms/1000 feet (304.8 meters) max.
- Capacitance: 10.8 pF/ft (max.)
- Impedance: 128 ohms

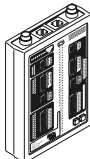
## Flex Cable

| No. of<br>Con-<br>tacts | (Note: "X" in Digi-Key Part No. Represents No. of Feet) | Digi-Key<br>Part No. | 5     | 10    | Pricing | 50     | 100 |
|-------------------------|---------------------------------------------------------|----------------------|-------|-------|---------|--------|-----|
| 2                       | AF02-X-ND                                               | 1.97                 | 3.51  | 8.47  | 16.33   | 30.24  |     |
| 3                       | AF03-X-ND                                               | 2.55                 | 4.56  | 11.00 | 21.21   | 39.27  |     |
| 4                       | AF04-X-ND                                               | 2.74                 | 4.90  | 11.82 | 22.79   | 42.21  |     |
| 5                       | AF05-X-ND                                               | 3.64                 | 6.50  | 15.68 | 30.24   | 56.00  |     |
| 6                       | AF06-X-ND                                               | 3.70                 | 6.61  | 15.96 | 30.78   | 57.00  |     |
| 8                       | AF08-X-ND                                               | 4.29                 | 7.66  | 18.48 | 35.64   | 66.00  |     |
| 9                       | AF09-X-ND                                               | 4.69                 | 8.36  | 20.18 | 38.93   | 72.09  |     |
| 10                      | AF10-X-ND                                               | 5.20                 | 9.28  | 22.41 | 43.21   | 80.03  |     |
| 11                      | AF11-X-ND                                               | 5.03                 | 8.97  | 21.65 | 41.76   | 77.33  |     |
| 12                      | AF12-X-ND                                               | 5.61                 | 10.02 | 24.17 | 46.62   | 86.34  |     |
| 13                      | AF13-X-ND                                               | 8.60                 | 15.34 | 37.03 | 71.42   | 132.26 |     |
| 14                      | AF14-X-ND                                               | 6.55                 | 11.69 | 28.22 | 54.43   | 100.80 |     |
| 15                      | AF15-X-ND                                               | 7.01                 | 12.52 | 30.22 | 58.28   | 107.92 |     |
| 16                      | AF16-X-ND                                               | 8.50                 | 15.16 | 36.60 | 70.59   | 130.73 |     |
| 18                      | AF18-X-ND                                               | 8.60                 | 15.35 | 37.06 | 71.47   | 132.36 |     |
| 20                      | AF20-X-ND                                               | 15.62                | 27.88 | 67.30 | 129.80  | 240.37 |     |

## Weidmüller

Paladin Tools

## PC Cable Tester

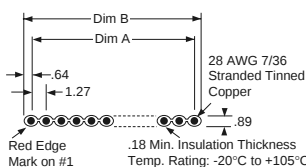


Tests continuity of PC cables. Identifies open, shorted and cross connected wires. Tests combinations of coax: RG 58, 59, 62 BNC; RJ45 and RJ11 telephone cables; D-Sub 9 Pin (male/female); D-Sub 15 Pin (including H.D. and male/female); D-Sub 25 Pin (male/female). Tests shield continuity. Battery included.

PAL1570-ND.....\$166.66

# AMP

## 1.27mm Centerline IDC Ribbon Cable, PVC Insulation



| Conductors | Dimensions (mm)<br>"A" "B" |       |
|------------|----------------------------|-------|
| 10         | 11.43                      | 12.70 |
| 14         | 16.51                      | 17.78 |
| 16         | 19.05                      | 20.32 |
| 20         | 24.13                      | 25.40 |
| 24         | 29.21                      | 30.48 |
| 25         | 30.48                      | 31.75 |
| 26         | 31.75                      | 33.02 |
| 34         | 41.91                      | 43.18 |
| 37         | 45.72                      | 46.99 |
| 40         | 49.53                      | 50.80 |
| 50         | 62.23                      | 63.50 |
| 60         | 74.93                      | 76.20 |
| 64         | 80.01                      | 81.28 |

## 1.27mm Centerline Gray IDC Ribbon Cable

### SPECIFICATIONS

Electrical Voltage Rating: 300 Volts. Impedance: 105 Ohms nom. (GND, SIG, GND). Insulation Resistance: 10<sup>10</sup> Ohms/10 ft (3.048m). Insulation Material: Gray PVC, UL VW-1; CSA FT1. Capacitance: 15pF/ft at MHz max. Propagation Delay: 1.41 ns/ft nom. Crosstalk: 10 ft sample 5 ns rise time: Near End -4.0% max., Far End -6.0% max. UL Style: 2651.

| No. of<br>Con-<br>tacts | (Note: "X" in Digi-Key Part No. Represents No. of Feet) | Digi-Key<br>Part No. | 5    | 10    | 25    | 50    | 100 |
|-------------------------|---------------------------------------------------------|----------------------|------|-------|-------|-------|-----|
| 10                      | AC10G-X-ND                                              | .91                  | 1.62 | 3.90  | 7.52  | 7.96  |     |
| 14                      | AC14G-X-ND                                              | 1.27                 | 2.26 | 5.47  | 10.54 | 11.14 |     |
| 16                      | AC16G-X-ND                                              | 1.45                 | 2.58 | 6.24  | 12.03 | 12.71 |     |
| 20                      | AC20G-X-ND                                              | 1.67                 | 2.98 | 7.18  | 13.85 | 14.64 |     |
| 24                      | AC24G-X-ND                                              | 2.19                 | 3.91 | 9.44  | 18.21 | 19.24 |     |
| 25                      | AC25G-X-ND                                              | 2.28                 | 4.06 | 9.80  | 18.90 | 20.00 |     |
| 26                      | AC26G-X-ND                                              | 2.17                 | 3.87 | 9.34  | 18.01 | 19.05 |     |
| 34                      | AC34G-X-ND                                              | 2.74                 | 5.06 | 12.22 | 23.56 | 28.75 |     |
| 37                      | AC37G-X-ND                                              | 3.48                 | 6.21 | 15.00 | 28.93 | 36.40 |     |
| 40                      | AC40G-X-ND                                              | 3.34                 | 5.95 | 14.37 | 27.72 | 30.98 |     |
| 50                      | AC50G-X-ND                                              | 4.17                 | 7.44 | 17.96 | 34.64 | 37.67 |     |
| 60                      | AC60G-X-ND                                              | 5.01                 | 8.93 | 21.56 | 41.58 | 45.21 |     |
| 64                      | AC64G-X-ND                                              | 5.34                 | 9.53 | 23.00 | 44.35 | 48.22 |     |

## 1.27mm Centerline Multi-Colored IDC Ribbon Cable

### ELECTRICAL SPECIFICATIONS

Voltage Rating: 300V RMS. Current Rating: 1 AMP. Conductor Resistance: 68 Ohms/1000 ft (304.8m). Insulation Resistance: >1x10<sup>10</sup> Ohms/10 ft (3.048m). Impedance: 105 Ohms. Capacitance @ 1 MHz: 15 pF/ft (49 pF/m). Inductance @ 1 MHz: 20 µH/ft (.66 µH/m). Propagation Delay: 1.4 ns/ft (4.6 ns/m).

### MECHANICAL SPECIFICATIONS

Conductor: 28 AWG (7x36) Tinned Copper. Insulation: .010" (.254mm) nom. Wall Color Coded PVC. Substrate: .010" (.254mm) nom. Wall Clear PVC. Pitch: .050" ±.005" (1.27±.013mm). Color: Brown, Red, Orange, Yellow, Green, Blue, Violet, Grey, White, Black, Repeat.

UL File: E53793 Style: 2884

Temperature Rating: -20°C to +80°C UL;  
-20°C to +105°C CSA

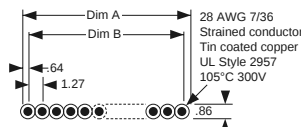
Flammability Rating: UL: VW-1; CSA: FT-1

| No. of<br>Con-<br>tacts | (Note: "X" in Digi-Key Part No. Represents No. of Feet) | Digi-Key<br>Part No. | 5     | 10    | 25    | 50     | 100 |
|-------------------------|---------------------------------------------------------|----------------------|-------|-------|-------|--------|-----|
| 10                      | AC10M-X-ND                                              | 2.85                 | 5.09  | 12.29 | 23.69 | 37.73  |     |
| 14                      | AC14M-X-ND                                              | 3.31                 | 5.90  | 14.25 | 27.49 | 43.77  |     |
| 16                      | AC16M-X-ND                                              | 3.54                 | 6.31  | 15.23 | 29.38 | 46.78  |     |
| 20                      | AC20M-X-ND                                              | 3.99                 | 7.13  | 17.20 | 33.17 | 52.83  |     |
| 24                      | AC24M-X-ND                                              | 4.39                 | 7.84  | 18.92 | 36.49 | 58.11  |     |
| 25                      | AC25M-X-ND                                              | 4.51                 | 8.04  | 19.41 | 37.44 | 59.62  |     |
| 26                      | AC26M-X-ND                                              | 4.68                 | 8.35  | 20.15 | 38.85 | 61.88  |     |
| 34                      | AC34M-X-ND                                              | 7.13                 | 19.14 | 30.72 | 59.24 | 94.34  |     |
| 37                      | AC37M-X-ND                                              | 7.47                 | 13.33 | 32.19 | 62.07 | 98.86  |     |
| 40                      | AC40M-X-ND                                              | 7.81                 | 13.95 | 33.66 | 64.92 | 103.39 |     |
| 50                      | AC50M-X-ND                                              | 8.78                 | 15.67 | 37.84 | 72.97 | 116.21 |     |
| 60                      | AC60M-X-ND                                              | 10.10                | 18.02 | 43.49 | 83.88 | 133.58 |     |
| 64                      | AC64M-X-ND                                              | 10.72                | 19.14 | 46.19 | 62.07 | 141.88 |     |

# OKI ELECTRIC CO., LTD.

## Ribbon Cable

### Physical Specifications (Dimensions)



| Conductors | Dimensions (mm)<br>"A" "B" |       |
|------------|----------------------------|-------|
| 10         | 12.70                      | 11.43 |
| 14         | 17.78                      | 16.51 |
| 16         | 20.32                      | 19.05 |
| 20         | 25.40                      | 24.13 |
| 24         | 30.48                      | 29.21 |
| 26         | 33.02                      | 31.75 |
| 34         | 43.18                      | 41.91 |
| 36         | 45.72                      | 44.45 |
| 40         | 50.80                      | 49.53 |
| 50         | 63.50                      | 62.23 |
| 60         | 76.20                      | 74.93 |
| 64         | 81.28                      | 80.01 |

### FLAT CABLE SPECIFICATIONS

Insulation Material: PVC, UL VW-1. Capacitance pF/ft.: 12.6. Color: Color-coded is standard 10 color repeat (brown, red, orange, yellow, green, blue, purple, gray, white, black). Gray has single-edge strip for pin one orientation. Inductance µH/ft.: 20. Edge Marking: None. Propagation Delay ns/ft.: 1.4. Center Spacing in (mm): .050" (1.27mm). Insulation Resistance: 1x10<sup>10</sup> ohms 110 ft. 10F (3 m) sample used, measured at 500 V. Conductor: Stranded copper, tinned. Rise Time ns: 3. Conductor Size: #28 AWG 7x36. Voltage Rating: 300 V RMS. Impedance, ohms: 100. Impedance, capacitance, inductance, and propagation delay were measured Ground-Signal-Ground on a time-domain reflectometer. Temperature Rating: -20 to +105°C. Maximum storage temperature for unterminated bulk cable is 120°F (50°C). UL Style Number: 2651.

## Multi-Color Ribbon Cable\*

With Standard 10 Color Repeat Sequence

| No. of<br>Con-<br>tacts | (Note: "X" in Digi-Key Part No. Represents No. of Feet) | Digi-Key<br>Part No. | 5     | 10    | 25    | 50     | 100 |
|-------------------------|---------------------------------------------------------|----------------------|-------|-------|-------|--------|-----|
| 9                       | R012-X-ND                                               | 1.13                 | 2.02  | 4.88  | 9.42  | 17.44  |     |
| 10                      | R000-X-ND                                               | 1.27                 | 2.26  | 5.46  | 10.53 | 19.50  |     |
| 14                      | R001-X-ND                                               | 1.78                 | 3.18  | 7.67  | 14.78 | 27.38  |     |
| 16                      | R002-X-ND                                               | 2.03                 | 3.63  | 8.75  | 16.88 | 31.25  |     |
| 20                      | R003-X-ND                                               | 2.54                 | 4.54  | 10.96 | 21.13 | 39.13  |     |
| 24                      | R004-X-ND                                               | 3.06                 | 5.45  | 13.16 | 25.38 | 47.00  |     |
| 25                      | R011-X-ND                                               | 3.19                 | 5.69  | 13.74 | 26.49 | 49.06  |     |
| 26                      | R005-X-ND                                               | 3.30                 | 5.89  | 14.23 | 27.44 | 50.81  |     |
| 34                      | R006-X-ND                                               | 4.31                 | 7.69  | 18.55 | 35.78 | 66.25  |     |
| 36                      | R010-X-ND                                               | 5.48                 | 9.77  | 23.59 | 45.50 | 84.25  |     |
| 37                      | R013-X-ND                                               | 4.67                 | 8.33  | 20.11 | 38.78 | 71.81  |     |
| 40                      | R007-X-ND                                               | 5.09                 | 9.08  | 21.91 | 42.26 | 78.25  |     |
| 50                      | R008-X-ND                                               | 6.36                 | 11.35 | 27.41 | 52.85 | 97.88  |     |
| 60                      | R009-X-ND                                               | 7.60                 | 13.56 | 32.73 | 63.11 | 116.88 |     |
| 64                      | R014-X-ND                                               | 8.09                 | 14.44 | 34.86 | 67.23 | 124.50 |     |

\* Cable available in 200 ft reel, Please call for pricing

## Gray Ribbon Cable\*

With Single Edge Red Strip For Pin One Orientation

| No. of<br>Con-<br>tacts | (Note: "X" in Digi-Key Part No. Represents No. of Feet) | Digi-Key<br>Part No. | 5     | 10    | 25    | 50     | 100 |
|-------------------------|---------------------------------------------------------|----------------------|-------|-------|-------|--------|-----|
| 9                       | R019-X-ND                                               | .93                  | 1.66  | 4.01  | 7.73  | 14.31  |     |
| 10                      | R020-X-ND                                               | .87                  | 1.55  | 3.75  | 7.22  | 13.38  |     |
| 14                      | R021-X-ND                                               | 1.24                 | 2.20  | 5.32  | 10.26 | 19.00  |     |
| 16                      | R022-X-ND                                               | 1.40                 | 2.49  | 6.02  | 11.61 | 21.50  |     |
| 20                      | R023-X-ND                                               | 1.76                 | 3.13  | 7.56  | 14.58 | 27.00  |     |
| 24                      | R024-X-ND                                               | 2.10                 | 3.74  | 9.03  | 17.42 | 32.25  |     |
| 26                      | R025-X-ND                                               | 2.29                 | 4.09  | 9.87  | 19.04 | 35.25  |     |
| 34                      | R026-X-ND                                               | 2.99                 | 5.34  | 12.88 | 24.84 | 46.00  |     |
| 40                      | R027-X-ND                                               | 3.51                 | 6.27  | 15.14 | 29.19 | 54.06  |     |
| 50                      | R028-X-ND                                               | 4.39                 | 7.83  | 18.90 | 36.45 | 67.50  |     |
| 60                      | R029-X-ND                                               | 5.25                 | 9.37  | 22.63 | 43.64 | 80.81  |     |
| 64                      | R030-X-ND                                               | 10.08                | 17.98 | 43.40 | 83.70 | 155.00 |     |

\* Cable available in 200 ft reel, Please call for pricing

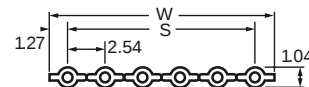
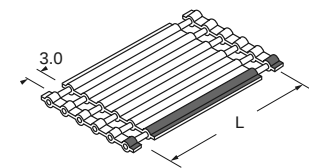


## 2.54mm Round Conductor Flat Cable in Precut Lengths

26 AWG (7 x 34)  
Stranded, Topcoat

### Features:

- Gray PVC insulation.
- U.L. temperature rating -20°C to 105°C.
- U.L. voltage 300 V. max.
- U.L. flammability rating VW-1.
- U.L. Style No. 2651.
- U.L. recognized (File #E61522).
- CSA certification (File #LL61126).



| No. of<br>Positions | Dim. S<br>(mm) | Dim. W<br>(Ref.) (mm) |
|---------------------|----------------|-----------------------|
| 3                   | 5.08           | 7.62                  |
| 4                   | 7.62           | 10.16                 |
| 5                   | 10.16          | 12.70                 |
| 6                   | 12.70          | 15.24                 |
| 7                   | 15.24          | 17.78                 |
| 8                   | 17.78          | 20.32                 |
| 9                   | 20.32          | 22.86                 |
| 10                  | 22.86          | 25.40                 |

|      | "L"<br>(mm) | Digi-Key<br>Part No. | Pricing |       | Molex<br>Part No. |
|------|-------------|----------------------|---------|-------|-------------------|
| Pos. |             |                      | 1       | 10    |                   |
| 3    | 50.80       | WM03-02-ND           | .44     | 3.94  | 28100-0264        |
|      | 101.60      | WM03-04-ND           | .54     | 4.74  | 28100-0265        |
|      | 152.40      | WM03-06-ND           | .65     | 5.77  | 28100-0266        |
| 4    | 50.80       | WM04-02-ND           | .62     | 5.52  | 28100-0268        |
|      | 101.60      | WM04-04-ND           | .77     | 6.85  | 28100-0269        |
|      | 152.40      | WM04-06-ND           | .96     | 8.46  | 28100-0270        |
| 5    | 50.80       | WM05-02-ND           | .64     | 5.70  | 28100-0272        |
|      | 101.60      | WM05-04-ND           | .81     | 7.16  | 28100-0273        |
|      | 152.40      | WM05-06-ND           | 1.02    | 8.99  | 28100-0274        |
| 6    | 50.80       | WM06-02-ND           | .67     | 5.89  | 28100-0276        |
|      | 101.60      | WM06-04-ND           | .84     | 7.47  | 28100-0277        |
|      | 152.40      | WM06-06-ND           | 1.07    | 9.49  | 28100-0278        |
| 7    | 50.80       | WM07-02-ND           | .68     | 6.01  | 28100-0280        |
|      | 101.60      | WM07-04-ND           | .89     | 7.84  | 28100-0281        |
|      | 152.40      | WM07-06-ND           | 1.13    | 9.98  | 28100-0282        |
| 8    | 50.80       | WM08-02-ND           | .70     | 6.20  | 28100-0284        |
|      | 101.60      | WM08-04-ND           | .93     | 8.22  | 28100-0285        |
|      | 152.40      | WM08-06-ND           | 1.19    | 10.57 | 28100-0286        |
| 9    | 50.80       | WM09-02-ND           | .72     | 6.33  | 28100-0288        |
|      | 101.60      | WM09-04-ND           | .96     | 8.59  | 28100-0289        |
|      | 152.40      | WM09-06-ND           | 1.25    | 11.07 | 28100-0290        |
| 10   | 50.80       | WM10-02-ND           | .74     | 6.57  | 28100-0292        |
|      | 101.60      | WM10-04-ND           | 1.02    | 8.99  | 28100-0293        |
| 10   | 152.40      | WM10-06-ND           | 1.32    | 11.72 | 28100-0294        |

# Sullins .025" (.64mm) Square Headers

## Features

• Available in 36-pin version or 1 to 35 size to meet your application. • Temperature: -65°C to +125°C. • UL Flammability Rating: 94V-0. • Current Rating: 5 amperes.

## Materials

• Insulator Material: Black thermoplastic polyester. • Contact Material: CA510, phosphor bronze. • Contact Plating: Gold — .000010 Gold (Head Only); Tin — .000100 Tin.

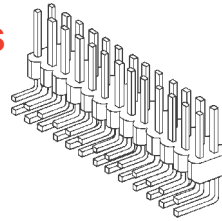
## TO PURCHASE A 36 PIN HEADER...

| Contact Finish                | Dimensions (mm)                                                                     |             | Digi-Key Part No. | Pricing |        |           | Sullins Part No. |  |
|-------------------------------|-------------------------------------------------------------------------------------|-------------|-------------------|---------|--------|-----------|------------------|--|
|                               | A                                                                                   | B           |                   | 1       | 10     | 100       |                  |  |
| Single Row Straight (36 Pins) |                                                                                     |             |                   |         |        |           |                  |  |
| Tin                           | 5.84                                                                                | 3.05        | S1012-36-ND       | 1.03    | 9.18   | 75.60     | PTC36SAAN        |  |
|                               | 5.84                                                                                | 5.59        | S1022-36-ND       | 1.77    | 15.81  | 130.20    | PTC36SABN        |  |
|                               | 5.84                                                                                | 8.13        | S1032-36-ND       | 1.91    | 17.09  | 140.70    | PTC36SACN        |  |
|                               | 5.84                                                                                | 10.67       | S1042-36-ND       | 2.08    | 18.62  | 153.30    | PTC36SADN        |  |
|                               | 5.84                                                                                | 13.21       | S1052-36-ND       | 2.22    | 19.89  | 163.80    | PTC36SAEN        |  |
|                               | 5.84                                                                                | 15.75       | S1062-36-ND       | 2.76    | 24.74  | 203.70    | PTC36SAFN        |  |
|                               | 5.84                                                                                | 18.29       | S1072-36-ND       | 2.94    | 26.27  | 216.30    | PTC36SAGN        |  |
|                               | 5.84                                                                                | 20.83       | S1082-36-ND       | 3.11    | 27.80  | 228.90    | PTC36SAHN        |  |
|                               | 8.08                                                                                | 3.05        | S1212-36-ND       | 1.28    | 11.48  | 94.50     | PTC36SFAN        |  |
|                               | 8.08                                                                                | 5.59        | S1222-36-ND       | 2.11    | 18.87  | 155.40    | PTC36SFBN        |  |
| Gold                          | 8.08                                                                                | 8.13        | S1232-36-ND       | 2.28    | 20.40  | 168.00    | PTC36SFCN        |  |
|                               | 8.08                                                                                | 10.67       | S1242-36-ND       | 2.45    | 21.93  | 180.60    | PTC36SFDN        |  |
|                               | 8.08                                                                                | 13.21       | S1252-36-ND       | 3.31    | 29.58  | 243.60    | PTC36SFEN        |  |
|                               | 5.84                                                                                | 3.05        | S1011-36-ND       | 1.28    | 11.48  | 94.50     | PZC36SAAN        |  |
|                               | 5.84                                                                                | 5.59        | S1021-36-ND       | 2.14    | 19.13  | 157.50    | PZC36SABN        |  |
|                               | 5.84                                                                                | 8.13        | S1031-36-ND       | 2.59    | 23.49  | 198.45    | PZC36SACN        |  |
|                               | 5.84                                                                                | 10.67       | S1041-36-ND       | 2.45    | 21.93  | 180.60    | PZC36SADN        |  |
|                               | 5.84                                                                                | 13.21       | S1051-36-ND       | 2.62    | 23.46  | 193.20    | PZC36SAEN        |  |
|                               | 5.84                                                                                | 15.75       | S1061-36-ND       | 3.19    | 28.56  | 235.20    | PZC36SAFN        |  |
|                               | 5.84                                                                                | 18.29       | S1071-36-ND       | 3.36    | 30.09  | 247.80    | PZC36SAGN        |  |
| Tin                           | 5.84                                                                                | 20.83       | S1081-36-ND       | 3.53    | 31.62  | 260.40    | PZC36SAHN        |  |
|                               | 8.08                                                                                | 3.05        | S1211-36-ND       | 1.62    | 14.54  | 119.70    | PZC36SFAN        |  |
|                               | 8.08                                                                                | 5.59        | S1221-36-ND       | 2.59    | 23.21  | 191.10    | PZC36SFBN        |  |
|                               | 8.08                                                                                | 8.13        | S1231-36-ND       | 2.76    | 24.74  | 203.70    | PZC36SFCN        |  |
|                               | 8.08                                                                                | 10.67       | S1241-36-ND       | 2.94    | 26.27  | 216.30    | PZC36SFDN        |  |
|                               | 8.08                                                                                | 13.21       | S1251-36-ND       | 3.85    | 34.43  | 283.50    | PZC36SFEN        |  |
|                               | Single Row Right-Angle (36 Pins)                                                    |             |                   |         |        |           |                  |  |
|                               | 5.84                                                                                | 2.54        | S1112-36-ND       | 1.51    | 13.52  | 111.30    | PTC36SBAN        |  |
|                               | 5.84                                                                                | 5.08        | S1122-36-ND       | 1.94    | 17.34  | 142.80    | PTC36SBBN        |  |
|                               | 5.84                                                                                | 7.62        | S1132-36-ND       | 2.79    | 24.99  | 205.80    | PTC36SBCN        |  |
| 5.84                          | 10.16                                                                               | S1142-36-ND | 3.76              | 33.66   | 277.20 | PTC36SBDN |                  |  |
| 5.84                          | 12.70                                                                               | S1152-36-ND | 4.02              | 35.96   | 296.10 | PTC36SBDN |                  |  |
| Gold                          | 8.08                                                                                | 2.54        | S1312-36-ND       | 1.94    | 17.34  | 142.80    | PTC36SGAN        |  |
|                               | 8.08                                                                                | 5.08        | S1322-36-ND       | 3.48    | 31.11  | 256.20    | PTC36SGBN        |  |
|                               | 5.84                                                                                | 2.54        | S1111-36-ND       | 1.82    | 16.32  | 134.40    | PZC36SBAN        |  |
|                               | 5.84                                                                                | 5.08        | S1121-36-ND       | 2.28    | 20.40  | 168.00    | PZC36SBBN        |  |
|                               | 5.84                                                                                | 7.62        | S1131-36-ND       | 3.22    | 28.82  | 237.30    | PZC36SBCN        |  |
|                               | 5.84                                                                                | 10.16       | S1141-36-ND       | 4.25    | 38.00  | 312.90    | PZC36SBDN        |  |
|                               | 5.84                                                                                | 12.70       | S1151-36-ND       | 4.50    | 40.29  | 331.80    | PZC36SBDN        |  |
|                               | 8.08                                                                                | 2.54        | S1311-36-ND       | 2.34    | 20.91  | 172.20    | PZC36SGAN        |  |
|                               | 8.08                                                                                | 5.08        | S1321-36-ND       | 4.02    | 35.96  | 296.10    | PZC36SGBN        |  |
|                               | Dual Row Straight (72 Pins)                                                         |             |                   |         |        |           |                  |  |
| Tin                           | 5.84                                                                                | 3.05        | S2012-36-ND       | 1.85    | 16.58  | 136.50    | PTC36DAAN        |  |
|                               | 5.84                                                                                | 5.59        | S2022-36-ND       | 2.76    | 24.74  | 203.70    | PTC36DABN        |  |
|                               | 5.84                                                                                | 8.13        | S2032-36-ND       | 3.96    | 35.45  | 291.90    | PTC36DACN        |  |
|                               | 5.84                                                                                | 10.67       | S2042-36-ND       | 4.30    | 38.51  | 317.10    | PTC36DADN        |  |
|                               | 5.84                                                                                | 13.21       | S2052-36-ND       | 4.65    | 41.57  | 342.30    | PTC36DAEN        |  |
|                               | 5.84                                                                                | 15.75       | S2062-36-ND       | 5.96    | 53.30  | 438.90    | PTC36DAFN        |  |
|                               | 5.84                                                                                | 18.29       | S2072-36-ND       | 6.33    | 56.61  | 466.20    | PTC36DAGN        |  |
|                               | 5.84                                                                                | 20.83       | S2082-36-ND       | 6.70    | 59.93  | 493.50    | PTC36DAHN        |  |
|                               | 8.08                                                                                | 3.05        | S2212-36-ND       | 2.34    | 20.91  | 172.20    | PTC36DFAN        |  |
|                               | 8.08                                                                                | 5.59        | S2222-36-ND       | 3.65    | 32.64  | 268.80    | PTC36DFBN        |  |
| Gold                          | 8.08                                                                                | 8.13        | S2232-36-ND       | 3.99    | 35.70  | 294.00    | PTC36DFCN        |  |
|                               | 8.08                                                                                | 10.67       | S2242-36-ND       | 4.33    | 38.76  | 319.20    | PTC36DFDN        |  |
|                               | 8.08                                                                                | 13.21       | S2252-36-ND       | 5.59    | 49.98  | 411.60    | PTC36DFEN        |  |
|                               | 5.84                                                                                | 3.05        | S2011-36-ND       | 2.37    | 21.17  | 174.30    | PZC36DAAN        |  |
|                               | 5.84                                                                                | 5.59        | S2021-36-ND       | 3.48    | 31.11  | 256.20    | PZC36DABN        |  |
|                               | 5.84                                                                                | 8.13        | S2031-36-ND       | 4.82    | 43.10  | 354.90    | PZC36DACN        |  |
|                               | 5.84                                                                                | 10.67       | S2041-36-ND       | 5.16    | 46.16  | 380.10    | PZC36DADN        |  |
|                               | 5.84                                                                                | 13.21       | S2051-36-ND       | 5.50    | 49.22  | 405.30    | PZC36DAEN        |  |
|                               | 5.84                                                                                | 15.75       | S2061-36-ND       | 6.90    | 61.71  | 508.20    | PZC36DAFN        |  |
|                               | 5.84                                                                                | 18.29       | S2071-36-ND       | 7.27    | 65.03  | 535.50    | PZC36DAGN        |  |
| Tin                           | 5.84                                                                                | 20.83       | S2081-36-ND       | 7.67    | 68.60  | 564.90    | PZC36DAHN        |  |
|                               | 8.08                                                                                | 3.05        | S2211-36-ND       | 3.02    | 27.03  | 222.60    | PZC36DFAN        |  |
|                               | 8.08                                                                                | 5.59        | S2221-36-ND       | 4.62    | 41.31  | 340.20    | PZC36DFBN        |  |
|                               | 8.08                                                                                | 8.13        | S2231-36-ND       | 4.96    | 44.37  | 365.40    | PZC36DFCN        |  |
|                               | 8.08                                                                                | 10.67       | S2241-36-ND       | 5.30    | 47.43  | 390.60    | PZC36DFDN        |  |
|                               | 8.08                                                                                | 13.21       | S2251-36-ND       | 6.67    | 59.67  | 491.40    | PZC36DFEN        |  |
|                               | Dual Row Right-Angle (72 Pins)                                                      |             |                   |         |        |           |                  |  |
|                               | 5.84                                                                                | 3.05        | S2112-36-ND       | 2.79    | 24.99  | 205.80    | PTC36DBAN        |  |
|                               | 5.84                                                                                | 5.59        | S2122-36-ND       | 4.05    | 36.21  | 298.20    | PTC36DBBN        |  |
|                               | 5.84                                                                                | 8.13        | S2132-36-ND       | 6.10    | 54.57  | 449.40    | PTC36DBCN        |  |
| 5.84                          | 10.67                                                                               | S2142-36-ND | 6.70              | 59.93   | 493.50 | PTC36DBDN |                  |  |
| 5.84                          | 13.21                                                                               | S2152-36-ND | 7.30              | 65.28   | 537.60 | PTC36DBEN |                  |  |
| Gold                          | 8.08                                                                                | 3.05        | S2312-36-ND       | 5.33    | 47.69  | 392.70    | PTC36DGBAN       |  |
|                               | 8.08                                                                                | 5.59        | S2322-36-ND       | 6.58    | 58.91  | 485.10    | PTC36DGBN        |  |
|                               | 5.84                                                                                | 3.05        | S2111-36-ND       | 3.42    | 30.60  | 252.00    | PZC36DBAN        |  |
|                               | 5.84                                                                                | 5.59        | S2121-36-ND       | 4.79    | 42.84  | 352.80    | PZC36DBBN        |  |
|                               | 5.84                                                                                | 8.13        | S2131-36-ND       | 7.07    | 63.24  | 520.80    | PZC36DBCN        |  |
|                               | 5.84                                                                                | 10.67       | S2141-36-ND       | 7.64    | 68.34  | 562.80    | PZC36DBDN        |  |
|                               | 5.84                                                                                | 13.21       | S2151-36-ND       | 8.24    | 73.70  | 606.90    | PZC36DBEN        |  |
|                               | 8.08                                                                                | 3.05        | S2311-36-ND       | 6.30    | 56.36  | 464.10    | PZC36DGBAN       |  |
|                               | 8.08                                                                                | 5.59        | S2321-36-ND       | 7.67    | 68.60  | 564.90    | PZC36DGBN        |  |
|                               | Shorting Jumpers                                                                    |             |                   |         |        |           |                  |  |
| Tin                           |  | S9000-ND    | —                 | 93      | —      | STC02SYAN |                  |  |
| Au Flash                      |                                                                                     | S9001-ND    | —                 | 1.16    | —      | SPC02SYAN |                  |  |
| Gold                          |                                                                                     | S9002-ND    | —                 | 1.31    | —      | SSC02SYAN |                  |  |

## TO PURCHASE A 1-35 PIN HEADER...

| STEP 1<br>Digi-Key<br>Part No.   | STEP 2<br>Base<br>Price | STEP 3<br>Pin<br>Adder |
|----------------------------------|-------------------------|------------------------|
| Single Row Straight (36 Pins)    |                         |                        |
| S1012-XX-ND                      | .39                     | .02                    |
| S1022-XX-ND                      | .83                     | .03                    |
| S1032-XX-ND                      | .98                     | .03                    |
| S1042-XX-ND                      | .81                     | .04                    |
| S1052-XX-ND                      | .96                     | .04                    |
| S1062-XX-ND                      | 1.18                    | .05                    |
| S1072-XX-ND                      | 1.38                    | .05                    |
| S1082-XX-ND                      | 1.20                    | .06                    |
| S1212-XX-ND                      | .66                     | .02                    |
| S1222-XX-ND                      | .84                     | .04                    |
| S1232-XX-ND                      | 1.02                    | .04                    |
| S1242-XX-ND                      | 1.21                    | .04                    |
| S1252-XX-ND                      | 1.41                    | .06                    |
| S1011-XX-ND                      | .66                     | .02                    |
| S1021-XX-ND                      | .87                     | .04                    |
| S1031-XX-ND                      | 1.05                    | .04                    |
| S1041-XX-ND                      | 1.21                    | .04                    |
| S1051-XX-ND                      | 1.03                    | .05                    |
| S1061-XX-ND                      | 1.29                    | .06                    |
| S1071-XX-ND                      | 1.47                    | .06                    |
| S1081-XX-ND                      | 1.65                    | .06                    |
| S1211-XX-ND                      | .67                     | .03                    |
| S1221-XX-ND                      | 1.00                    | .05                    |
| S1231-XX-ND                      | 1.18                    | .05                    |
| S1241-XX-ND                      | 1.38                    | .05                    |
| S1251-XX-ND                      | 1.64                    | .07                    |
| Single Row Right-Angle (36 Pins) |                         |                        |
| S1112-XX-ND                      | .55                     | .03                    |
| S1122-XX-ND                      | .66                     | .04                    |
| S1132-XX-ND                      | 1.21                    | .05                    |
| S1142-XX-ND                      | 1.54                    | .07                    |
| S1152-XX-ND                      | 1.82                    | .07                    |
| S1312-XX-ND                      | .66                     | .04                    |
| S1322-XX-ND                      | 1.60                    | .06                    |
| S1111-XX-ND                      | .89                     | .03                    |
| S1121-XX-ND                      | 1.02                    | .04                    |
| S1131-XX-ND                      | 1.32                    | .06                    |
| S1141-XX-ND                      | 1.71                    | .08                    |
| S1151-XX-ND                      | 1.98                    | .08                    |
| S1311-XX-ND                      | 1.09                    | .04                    |
| S1321-XX-ND                      | 1.82                    | .07                    |
| Dual Row Straight (72 Pins)      |                         |                        |
| S2012-XX-ND                      | .92                     | .03                    |
| S2022-XX-ND                      | 1.18                    | .05                    |
| S2032-XX-ND                      | 1.76                    | .07                    |
| S2042-XX-ND                      | 1.76                    | .08                    |
| S2052-XX-ND                      | 2.14                    | .08                    |
| S2062-XX-ND                      | 2.48                    | .11                    |
| S2072-XX-ND                      | 2.52                    | .12                    |
| S2082-XX-ND                      | 2.92                    | .12                    |
| S2212-XX-ND                      | 1.09                    | .04                    |
| S2222-XX-ND                      | 1.42                    | .07                    |
| S2232-XX-ND                      | 1.79                    | .07                    |
| S2242-XX-ND                      | 1.80                    | .08                    |
| S2252-XX-ND                      | 2.44                    | .10                    |
| S2011-XX-ND                      | 1.12                    | .04                    |
| S2021-XX-ND                      | 1.60                    | .06                    |
| S2031-XX-ND                      | 1.97                    | .09                    |
| S2041-XX-ND                      | 2.33                    | .09                    |
| S2051-XX-ND                      | 2.34                    | .10                    |
| S2061-XX-ND                      | 2.77                    | .13                    |
| S2071-XX-ND                      | 3.17                    | .13                    |
| S2081-XX-ND                      | 3.24                    | .14                    |
| S2211-XX-ND                      | 1.46                    | .05                    |
| S2221-XX-ND                      | 2.11                    | .08                    |
| S2231-XX-ND                      | 2.12                    | .09                    |
| S2241-XX-ND                      | 2.12                    | .10                    |
| S2251-XX-ND                      | 2.88                    | .12                    |
| Dual Row Right-Angle (72 Pins)   |                         |                        |
| S2112-XX-ND                      | 1.21                    | .05                    |
| S2122-XX-ND                      | 1.85                    | .07                    |
| S2132-XX-ND                      | 2.63                    | .11                    |
| S2142-XX-ND                      | 2.92                    | .12                    |
| S2152-XX-ND                      | 3.20                    | .13                    |
| S2312-XX-ND                      | 2.16                    | .10                    |
| S2322-XX-ND                      | 2.79                    | .12                    |
| S2111-XX-ND                      | 1.53                    | .06                    |
| S2121-XX-ND                      | 1.93                    | .09                    |
| S2131-XX-ND                      | 2.96                    | .13                    |
| S2141-XX-ND                      | 3.21                    | .14                    |
| S2151-XX-ND                      | 3.50                    | .15                    |
| S2311-XX-ND                      | 2.84                    | .11                    |
| S2321-XX-ND                      | 3.24                    | .14                    |

Available in  
1 to 36  
Pin Versions!



## HOW TO ORDER - 4 EASY STEPS

How do I order an S1012 header with 16 pins?

Call Digi-Key where you'll happily receive the price

or  
Determine the cost yourself

S □ □ □ □ - □ □ - ND

Base Part Number      Number of Desired Pins per row

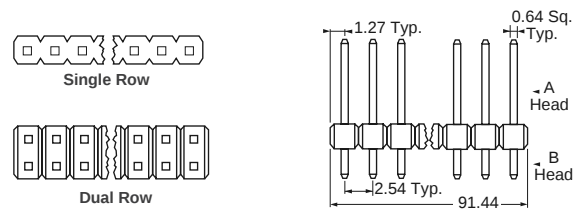
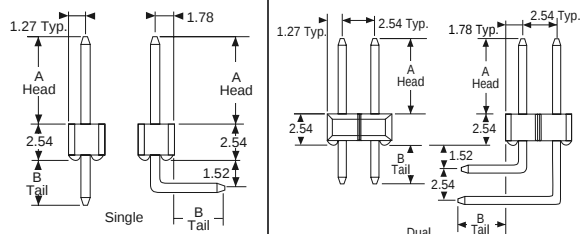
- Step 1. Select needed "Digi-Key Part Number" and number of pins desired.
- Step 2. Begin with appropriate "Base Price" of your selected Part Number (refer to chart).
- Step 3. Multiply the number of pins you desire by "Pin Adder" of your selected Part Number (refer to chart).
- Step 4. Add Step 2 & Step 3 together for Final Cost!

Our Example

Your Digi-Key Part Number

- Step 1. S1012-16-ND      S \_ \_ \_ \_ - \_ \_ - ND
- Step 2. .39
- Step 3. 16 x .02 = .32      \_ \_ x \_ \_ = \_ \_
- Step 4. Your Cost = \$.71      Your Cost = \$ \_ \_

NOTE: For quantities of 10 or more, call 1-800-DIGI-KEY.



1-800-344-4539

218-681-6674 • FAX: 218-681-3380 • www.digikey.com

# MTA .100" (2.54mm) Receptacles and Post Headers

## IDC RECEPTABLES

• Wire-to-post connectors preloaded with dual beam contacts • Connectors and headers are end-to-end stackable • Connectors preloaded with IDC contact • All contacts are slotted for insulation displacement (IDC) terminal technique • Contacts are lubricated to prevent fretting corrosion • Meets the material requirements of Table 23.1 of UL1410 Standards for Television Receiver and Video Products (wire-to-post connectors only) • Recognized under the Component Program of Underwriters Laboratories Inc., File No. E28476 • Certified by Canadian Standards Association

**Performance Data:** Voltage Rating: 250 vac. Current Rating: 4 amp max. Low-Level Resistance: 5 mΩ max. initial Dielectric Withstanding Voltage: 750 vac/1 min. Insulation Resistance: 5000 MΩ min. initial. Operating Temperature: -55°C to +105°C

**Material and Finish – Receptacles:** UL94V-2 rated, type 6/6 nylon (28 AWG - Green; 26 AWG - Blue; 24 AWG - White; 22 AWG - Red). Contacts: Phosphor bronze, post tin plated, .000030 (0.00076).

## CST-100 CRIMP CONTACTS AND HOUSINGS

• High current rating • Mates with MTA and similar competitive notched headers • Recognized under the Component Program of Underwriters Laboratories Inc., File No. E28476 • Certified by Canadian Standards Association, File No. LR7189

**Performance Data:** Voltage Rating: 250 vac. Current Rating: 4 amp max. Low-Level Resistance: 6 mΩ max. initial, 10 mΩ max. final. Insulation Resistance: 1000 MΩ min. initial, 100 MΩ min. final. Operating Temperature: -55°C to +105°C

**Material and Finish:** Phosphor bronze, pretempered. Wire Range: 22-26 AWG. Max. Ins. Diameter: .065

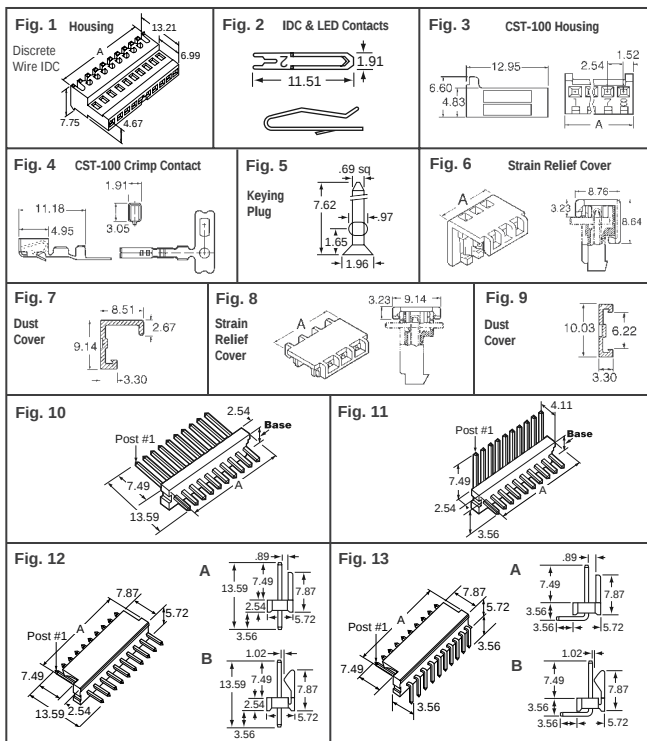
**LED CONNECTORS** are designed to mate with .36mm-.51mm diameter posts or square leads.

**Material and Finish – Receptacles:** UL94V-2 rated, type 6/6 nylon (28 AWG - Green; 26 AWG - Blue; 24 AWG - White; 22 AWG - Red). Contacts: Phosphor bronze, post tin plated, .000030 (0.00076).

**REPLACEMENT IDC CONTACTS – Material and Finish:** Phosphor bronze, post tin plated; .000030 (0.00076).

**KEYING PLUG WITH CARRIER STRIP (10 plugs per strip) – Material:** UL94V-2 rated, type 6/6 nylon, natural color

**POST HEADERS – Material For Housing:** Polyester UL94V-0 rated, natural. Posts: Tin plated copper alloy.



| Fig.                                       | Description                                              | Circuits | Dim. "A" (mm) | Digi-Key Part No. | 1    | Pricing 25 | 50    | AMP Part No. |
|--------------------------------------------|----------------------------------------------------------|----------|---------------|-------------------|------|------------|-------|--------------|
| <b>Receptables, .100" (2.54mm) Centers</b> |                                                          |          |               |                   |      |            |       |              |
| 1                                          | Closed End w/ Lock, w/out Polarizing Tabs, 28 AWG, Green | 2        | 5.08          | A19050-ND         | .26  | 4.95       | 8.80  | 640443-2     |
|                                            |                                                          | 3        | 7.62          | A19051-ND         | .33  | 7.43       | 13.20 | 640443-3     |
|                                            |                                                          | 4        | 10.16         | A19052-ND         | .44  | 9.90       | 17.60 | 640443-4     |
|                                            |                                                          | 5        | 12.70         | A19053-ND         | .55  | 12.37      | 22.00 | 640443-5     |
|                                            |                                                          | 6        | 15.24         | A19054-ND         | .60  | 13.50      | 24.00 | 640443-6     |
|                                            |                                                          | 7        | 17.78         | A19055-ND         | .70  | 15.75      | 28.00 | 640443-7     |
|                                            |                                                          | 8        | 20.32         | A19056-ND         | .80  | 18.00      | 32.00 | 640443-8     |
|                                            |                                                          | 9        | 22.86         | A19057-ND         | .90  | 20.25      | 36.00 | 640443-9     |
|                                            |                                                          | 10       | 25.40         | A19058-ND         | 1.00 | 22.50      | 40.00 | 1-640443-0   |
|                                            |                                                          | 11       | 27.94         | A19059-ND         | 1.10 | 24.75      | 44.00 | 1-640443-1   |
|                                            |                                                          | 12       | 30.48         | A19060-ND         | 1.20 | 27.00      | 48.00 | 1-640443-2   |
|                                            |                                                          | 13       | 33.02         | A19061-ND         | 1.30 | 29.25      | 52.00 | 1-640443-3   |
|                                            |                                                          | 14       | 35.56         | A19062-ND         | 1.40 | 31.50      | 56.00 | 1-640443-4   |
|                                            |                                                          | 2        | 5.08          | A19132-ND         | .26  | 4.95       | 8.80  | 640623-2     |
| 1                                          | Feed-Thru w/ Lock, w/out Polarizing Tabs, 28 AWG, Green  | 3        | 7.62          | A19133-ND         | .33  | 7.43       | 13.20 | 640623-3     |
|                                            |                                                          | 4        | 10.16         | A19134-ND         | .44  | 9.90       | 17.60 | 640623-4     |
|                                            |                                                          | 5        | 12.70         | A19135-ND         | .55  | 12.37      | 22.00 | 640623-5     |
|                                            |                                                          | 6        | 15.24         | A19136-ND         | .60  | 13.50      | 24.00 | 640623-6     |
|                                            |                                                          | 7        | 17.78         | A19137-ND         | .70  | 15.75      | 28.00 | 640623-7     |
|                                            |                                                          | 8        | 20.32         | A19138-ND         | .80  | 18.00      | 32.00 | 640623-8     |
|                                            |                                                          | 9        | 22.86         | A19139-ND         | .90  | 20.25      | 36.00 | 640623-9     |
|                                            |                                                          | 10       | 25.40         | A19140-ND         | 1.00 | 22.50      | 40.00 | 1-640623-0   |
|                                            |                                                          | 11       | 27.94         | A19141-ND         | 1.10 | 24.75      | 44.00 | 1-640623-1   |
|                                            |                                                          | 12       | 30.48         | A19142-ND         | 1.20 | 27.00      | 48.00 | 1-640623-2   |
|                                            |                                                          | 13       | 33.02         | A19143-ND         | 1.30 | 29.25      | 52.00 | 1-640623-3   |
|                                            |                                                          | 14       | 35.56         | A19144-ND         | 1.40 | 31.50      | 56.00 | 1-640623-4   |

| Fig. | Description                                              | Circuits | Dim. "A" (mm) | Digi-Key Part No. | 1    | Pricing 25 | 50    | AMP Part No. |
|------|----------------------------------------------------------|----------|---------------|-------------------|------|------------|-------|--------------|
| 1    | Closed End w/ Lock, w/out Polarizing Tabs, 26 AWG, Blue  | 2        | 5.08          | A19030-ND         | .26  | 4.95       | 8.80  | 640442-2     |
|      |                                                          | 3        | 7.62          | A19031-ND         | .33  | 7.43       | 13.20 | 640442-3     |
|      |                                                          | 4        | 10.16         | A19032-ND         | .44  | 9.90       | 17.60 | 640442-4     |
|      |                                                          | 5        | 12.70         | A19033-ND         | .55  | 12.37      | 22.00 | 640442-5     |
|      |                                                          | 6        | 15.24         | A19034-ND         | .60  | 13.50      | 24.00 | 640442-6     |
|      |                                                          | 7        | 17.78         | A19035-ND         | .70  | 15.75      | 28.00 | 640442-7     |
|      |                                                          | 8        | 20.32         | A19036-ND         | .80  | 18.00      | 32.00 | 640442-8     |
|      |                                                          | 9        | 22.86         | A19037-ND         | .90  | 20.25      | 36.00 | 640442-9     |
|      |                                                          | 10       | 25.40         | A19038-ND         | 1.00 | 22.50      | 40.00 | 1-640442-0   |
|      |                                                          | 11       | 27.94         | A19039-ND         | 1.10 | 24.75      | 44.00 | 1-640442-1   |
|      |                                                          | 12       | 30.48         | A19040-ND         | 1.20 | 27.00      | 48.00 | 1-640442-2   |
|      |                                                          | 13       | 33.02         | A19041-ND         | 1.30 | 29.25      | 52.00 | 1-640442-3   |
|      |                                                          | 14       | 35.56         | A19042-ND         | 1.40 | 31.50      | 56.00 | 1-640442-4   |
|      |                                                          | 2        | 5.08          | A19112-ND         | .26  | 4.95       | 8.80  | 640622-2     |
| 1    | Feed-Thru w/ Lock, w/out Polarizing Tabs, 26 AWG, Blue   | 3        | 7.62          | A19113-ND         | .33  | 7.43       | 13.20 | 640622-3     |
|      |                                                          | 4        | 10.16         | A19114-ND         | .44  | 10.21      | 18.15 | 640622-4     |
|      |                                                          | 5        | 12.70         | A19115-ND         | .55  | 12.37      | 22.00 | 640622-5     |
|      |                                                          | 6        | 15.24         | A19116-ND         | .60  | 13.50      | 24.00 | 640622-6     |
|      |                                                          | 7        | 17.78         | A19117-ND         | .70  | 15.75      | 28.00 | 640622-7     |
|      |                                                          | 8        | 20.32         | A19118-ND         | .80  | 18.00      | 32.00 | 640622-8     |
|      |                                                          | 9        | 22.86         | A19119-ND         | .90  | 20.25      | 36.00 | 640622-9     |
|      |                                                          | 10       | 25.40         | A19120-ND         | 1.00 | 22.50      | 40.00 | 1-640622-0   |
|      |                                                          | 11       | 27.94         | A19121-ND         | 1.10 | 24.75      | 44.00 | 1-640622-1   |
|      |                                                          | 12       | 30.48         | A19122-ND         | 1.20 | 27.00      | 48.00 | 1-640622-2   |
|      |                                                          | 13       | 33.02         | A19130-ND         | 1.30 | 29.25      | 52.00 | 1-640622-3   |
|      |                                                          | 14       | 35.56         | A19131-ND         | 1.40 | 31.50      | 56.00 | 1-640622-4   |
|      |                                                          | 2        | 5.08          | A1901-ND          | .12  | 2.24       | 3.98  | 640441-2     |
| 1    | Closed End w/ Lock, w/out Polarizing Tabs, 24 AWG, White | 3        | 7.62          | A19020-ND         | .33  | 7.43       | 13.20 | 640441-3     |
|      |                                                          | 4        | 10.16         | A1902-ND          | .12  | 2.75       | 4.89  | 640441-4     |
|      |                                                          | 5        | 12.70         | A19021-ND         | .55  | 12.37      | 22.00 | 640441-5     |
|      |                                                          | 6        | 15.24         | A1903-ND          | .27  | 6.14       | 10.92 | 640441-6     |
|      |                                                          | 7        | 17.78         | A19022-ND         | .32  | 7.17       | 12.75 | 640441-7     |
|      |                                                          | 8        | 20.32         | A1904-ND          | .80  | 18.00      | 32.00 | 640441-8     |
|      |                                                          | 9        | 22.86         | A19023-ND         | .90  | 20.25      | 36.00 | 640441-9     |
|      |                                                          | 10       | 25.40         | A1905-ND          | 1.00 | 22.50      | 40.00 | 1-640441-0   |
|      |                                                          | 11       | 27.94         | A19024-ND         | 1.10 | 24.75      | 44.00 | 1-640441-1   |
|      |                                                          | 12       | 30.48         | A19025-ND         | 1.20 | 27.00      | 48.00 | 1-640441-2   |
|      |                                                          | 13       | 33.02         | A19026-ND         | 1.30 | 29.25      | 52.00 | 1-640441-3   |
|      |                                                          | 14       | 35.56         | A19027-ND         | 1.40 | 31.50      | 56.00 | 1-640441-4   |
|      |                                                          | 2        | 5.08          | A19091-ND         | .26  | 4.95       | 8.80  | 640621-2     |
| 1    | Feed-Thru w/ Lock, w/out Polarizing Tabs, 24 AWG, White  | 3        | 7.62          | A19092-ND         | .33  | 7.43       | 13.20 | 640621-3     |
|      |                                                          | 4        | 10.16         | A19093-ND         | .44  | 9.90       | 17.60 | 640621-4     |
|      |                                                          | 5        | 12.70         | A19094-ND         | .55  | 12.37      | 22.00 | 640621-5     |
|      |                                                          | 6        | 15.24         | A19095-ND         | .60  | 13.50      | 24.00 | 640621-6     |
|      |                                                          | 7        | 17.78         | A19096-ND         | .70  | 15.75      | 28.00 | 640621-7     |
|      |                                                          | 8        | 20.32         | A19097-ND         | .80  | 18.00      | 32.00 | 640621-8     |
|      |                                                          | 9        | 22.86         | A19098-ND         | .90  | 20.25      | 36.00 | 640621-9     |
|      |                                                          | 10       | 25.40         | A19099-ND         | 1.00 | 22.50      | 40.00 | 1-640621-0   |
|      |                                                          | 11       | 27.94         | A19100-ND         | 1.10 | 24.75      | 44.00 | 1-640621-1   |
|      |                                                          | 12       | 30.48         | A19101-ND         | 1.20 | 27.00      | 48.00 | 1-640621-2   |
|      |                                                          | 13       | 33.02         | A19110-ND         | 1.30 | 29.25      | 52.00 | 1-640621-3   |
|      |                                                          | 14       | 35.56         | A19111-ND         | 1.40 | 31.50      | 56.00 | 1-640621-4   |
|      |                                                          | 2        | 5.08          | A1906-ND          | .12  | 2.24       | 3.98  | 640440-2     |
| 1    | Closed End w/ Lock, w/out Polarizing Tabs, 22 AWG, Red   | 3        | 7.62          | A19010-ND         | .12  | 2.72       | 4.83  | 640440-3     |
|      |                                                          | 4        | 10.16         | A1907-ND          | .20  | 4.50       | 8.01  | 640440-4     |
|      |                                                          | 5        | 12.70         | A19011-ND         | .26  | 5.74       | 10.21 | 640440-5     |
|      |                                                          | 6        | 15.24         | A1908-ND          | .27  | 6.14       | 10.92 | 640440-6     |
|      |                                                          | 7        | 17.78         | A19012-ND         | .32  | 7.17       | 12.75 | 640440-7     |
|      |                                                          | 8        | 20.32         | A1909-ND          | .36  | 8.17       | 14.52 | 640440-8     |
|      |                                                          | 9        | 22.86         | A19013-ND         | .90  | 20.25      | 36.00 | 640440-9     |
|      |                                                          | 10       | 25.40         | A1910-ND          | .46  | 10.25      | 18.23 | 1-640440-0   |
|      |                                                          | 11       | 27.94         | A19014-ND         | 1.10 | 24.75      | 44.00 | 1-640440-1   |
|      |                                                          | 12       | 30.48         | A19015-ND         | .58  | 13.16      | 23.39 | 1-640440-2   |
|      |                                                          | 13       | 33.02         | A19016-ND         | 1.30 | 29.25      | 52.00 | 1-640440-3   |
|      |                                                          | 14       | 35.56         | A19017-ND         | 1.40 | 31.50      | 56.00 | 1-640440-4   |
|      |                                                          | 2        | 5.08          | A19070-ND         | .26  | 4.95       | 8.80  | 640620-2     |
| 1    | Feed-Thru w/ Lock, w/out Polarizing Tabs, 22 AWG, Red    | 3        | 7.62          | A19071-ND         | .33  | 7.43       | 13.20 | 640620-3     |
|      |                                                          | 4        | 10.16         | A19072-ND         | .44  | 9.90       | 17.60 | 640620-4     |
|      |                                                          | 5        | 12.70         | A19073-ND         | .55  | 12.37      | 22.00 | 640620-5     |
|      |                                                          | 6        | 15.24         | A19074-ND         | .60  | 13.50      | 24.00 | 640620-6     |
|      |                                                          | 7        | 17.78         | A19075-ND         | .70  | 15.75      | 28.00 | 640620-7     |
|      |                                                          | 8        | 20.32         | A19076-ND         | .80  | 18.00      | 32.00 | 640620-8     |
|      |                                                          | 9        | 22.86         | A19077-ND         | .90  | 20.25      | 36.00 | 640620-9     |
|      |                                                          | 10       | 25.40         | A19078-ND         | 1.00 | 22.50      | 40.00 | 1-640620-0   |
|      |                                                          | 11       | 27.94         | A19079-ND         | 1.10 | 24.75      | 44.00 | 1-640620-1   |
|      |                                                          | 12       | 30.48         | A19080-ND         | 1.20 | 27.00      | 48.00 | 1-640620-2   |
|      |                                                          | 13       | 33.02         | A19081-ND         | 1.30 | 29.25      | 52.00 | 1-640620-3   |
|      |                                                          | 14       | 35.56         | A19090-ND         | 1.40 | 31.50      | 56.00 | 1-640620-4   |
|      |                                                          | 2        | 5.08          | A19070-ND         | .26  | 4.95       | 8.80  | 640620-2     |

## Replacement IDC Contacts

|                                                                              |                                                          |                       |       |           |     |       |       |            |
|------------------------------------------------------------------------------|----------------------------------------------------------|-----------------------|-------|-----------|-----|-------|-------|------------|
| 2                                                                            | Standard, 28 AWG                                         | —                     | —     | A19313-ND | —   | 1.37  | 2.44  | 640639-1   |
|                                                                              | Standard, 26 AWG                                         | —                     | —     | A19290-ND | —   | 1.55  | 2.75  | 640638-2   |
|                                                                              | Standard, 24 AWG                                         | —                     | —     | A19312-ND | —   | 1.55  | 2.75  | 640637-1   |
|                                                                              | Standard, 22 AWG                                         | —                     | —     | A19311-ND | —   | 1.55  | 2.75  | 640636-1   |
| CST-100 Crimp Housings (Contacts Sold Separately)                            |                                                          |                       |       |           |     |       |       |            |
| 3                                                                            | 22-26 AWG, White                                         | 2                     | 5.59  | A19490-ND | .26 | 2.67  | 4.75  | 770602-2   |
|                                                                              |                                                          | 3                     | 8.13  | A19491-ND | .27 | 4.00  | 7.12  | 770602-3   |
|                                                                              |                                                          | 4                     | 10.67 | A19492-ND | .28 | 5.34  | 9.49  | 770602-4   |
|                                                                              |                                                          | 5                     | 13.21 | A19493-ND | .30 | 6.67  | 11.86 | 770602-5   |
|                                                                              |                                                          | 6                     | 15.75 | A19494-ND | .36 | 8.01  | 14.24 | 770602-6   |
|                                                                              |                                                          | 7                     | 18.29 | A19495-ND | .42 | 9.34  | 16.61 | 770602-7   |
|                                                                              |                                                          | 8                     | 20.83 | A19496-ND | .47 | 10.68 | 18.98 | 770602-8   |
|                                                                              |                                                          | 9                     | 23.37 | A19497-ND | .53 | 12.01 | 21.36 | 770602-9   |
|                                                                              |                                                          | 10                    | 25.91 | A19498-ND | .59 | 13.35 | 23.73 | 1-770602-0 |
|                                                                              |                                                          | 11                    | 28.45 | A19499-ND | .65 | 14.68 | 26.10 | 1-770602-1 |
|                                                                              |                                                          | 12                    | 30.99 | A19500-ND | .71 | 16.02 | 28.47 | 1-770602-2 |
|                                                                              |                                                          | 13                    | 33.53 | A19510-ND | .77 | 17.35 | 30.85 | 1-770602-3 |
|                                                                              |                                                          | 14                    | 36.07 | A19511-ND | .83 | 18.69 | 33.22 | 1-770602-4 |
|                                                                              |                                                          | CST-100 Crimp Contact |       |           |     |       |       |            |
| 4                                                                            | 22-26 AWG, 4 AMP Max.                                    | —                     | —     | A19520-ND | —   | 1.60  | 2.85  | 770666-1   |
| LED Receptacles (mate with .36-.51mm diameter posts), 1.00" (2.54mm) centers |                                                          |                       |       |           |     |       |       |            |
| 1                                                                            | Closed End w/ Lock, w/out Polarizing Tabs, 28 AWG, Green | 2                     | 5.08  | A19180-ND | .26 | 4.95  | 8.80  | 641537-2   |
|                                                                              |                                                          | 3                     | 7.62  | A19181-ND | .33 | 7.43  | 13.20 | 641537-3   |
| 1                                                                            | Feed-Thru w/ Lock, w/out Polarizing Tabs, 28 AWG, Green  | 2                     | 5.08  | A19220-ND | .26 | 4.95  | 8.80  | 641656-2   |
|                                                                              |                                                          | 3                     | 7.62  | A19221-ND | .33 | 7.43  | 13.20 | 641656-3   |

| Fig.                                        | Description                                                    | Circuits                                                            | Dim. "A"<br>(mm)                    | Digi-Key<br>Part No. | 1    | Pricing<br>25 | 50    | AMP<br>Part No. |       |          |
|---------------------------------------------|----------------------------------------------------------------|---------------------------------------------------------------------|-------------------------------------|----------------------|------|---------------|-------|-----------------|-------|----------|
| 1                                           | Closed End w/ Lock,<br>w/out Polarizing Tabs,<br>26 AWG, Blue  | 2                                                                   | 5.08                                | A19170-ND            | .26  | 4.95          | 8.80  | 641536-2        |       |          |
|                                             |                                                                | 3                                                                   | 7.62                                | A19171-ND            | .33  | 7.43          | 13.20 | 641536-3        |       |          |
| 1                                           | Feed-Thru w/ Lock,<br>w/out Polarizing Tabs,<br>26 AWG, Blue   | 2                                                                   | 5.08                                | A19210-ND            | .26  | 4.95          | 8.80  | 641655-2        |       |          |
|                                             |                                                                | 3                                                                   | 7.62                                | A19211-ND            | .33  | 7.43          | 13.20 | 641655-3        |       |          |
| 1                                           | Closed End w/ Lock,<br>w/out Polarizing Tabs,<br>24 AWG, White | 2                                                                   | 5.08                                | A19160-ND            | .26  | 4.95          | 8.80  | 641535-2        |       |          |
|                                             |                                                                | 3                                                                   | 7.62                                | A19161-ND            | .33  | 7.43          | 13.20 | 641535-3        |       |          |
| 1                                           | Feed-Thru w/ Lock,<br>w/out Polarizing Tabs,<br>24 AWG, White  | 2                                                                   | 5.08                                | A19200-ND            | .26  | 4.95          | 8.80  | 641654-2        |       |          |
|                                             |                                                                | 3                                                                   | 7.62                                | A19201-ND            | .33  | 7.43          | 13.20 | 641654-3        |       |          |
| 1                                           | Closed End w/ Lock,<br>w/out Polarizing Tabs,<br>22 AWG, Red   | 2                                                                   | 5.08                                | A19150-ND            | .26  | 4.95          | 8.80  | 641534-2        |       |          |
|                                             |                                                                | 3                                                                   | 7.62                                | A19151-ND            | .33  | 7.43          | 13.20 | 641534-3        |       |          |
| 1                                           | Feed-Thru w/ Lock,<br>w/out Polarizing Tabs,<br>22 AWG, Red    | 2                                                                   | 5.08                                | A19190-ND            | .26  | 4.95          | 8.80  | 641653-2        |       |          |
|                                             |                                                                | 3                                                                   | 7.62                                | A19191-ND            | .33  | 7.43          | 13.20 | 641653-3        |       |          |
| Replacement LED Contacts                    |                                                                |                                                                     |                                     |                      |      |               |       |                 |       |          |
| 2                                           | LED, 28 AWG                                                    | —                                                                   | —                                   | A19317-ND            | —    | 1.55          | 2.75  | 641646-1        |       |          |
|                                             | LED, 26 AWG                                                    | —                                                                   | —                                   | A19316-ND            | —    | 1.55          | 2.75  | 641645-1        |       |          |
|                                             | LED, 24 AWG                                                    | —                                                                   | —                                   | A19315-ND            | —    | 1.55          | 2.75  | 641644-1        |       |          |
|                                             | LED, 22 AWG                                                    | —                                                                   | —                                   | A19314-ND            | —    | 1.55          | 2.75  | 641643-1        |       |          |
| Keying Plugs with Carrier Strip             |                                                                |                                                                     |                                     |                      |      |               |       |                 |       |          |
| 5                                           | 10 Plugs per Strip                                             | —                                                                   | —                                   | A19310-ND            | .05  | 1.15          | 2.05  | 641994-1        |       |          |
| Accessories, 2.54 Centers                   |                                                                |                                                                     |                                     |                      |      |               |       |                 |       |          |
| 6                                           | Closed End<br>Strain Relief Covers,<br>White                   | 2                                                                   | 5.08                                | A19230-ND            | .29  | 6.61          | 11.76 | 643075-2        |       |          |
|                                             |                                                                | 3                                                                   | 7.62                                | A19231-ND            | .97  | 21.90         | 38.94 | 643075-3        |       |          |
|                                             |                                                                | 4                                                                   | 10.16                               | A19232-ND            | .32  | 7.19          | 12.79 | 643075-4        |       |          |
|                                             |                                                                | 5                                                                   | 12.70                               | A19233-ND            | .98  | 22.06         | 39.22 | 643075-5        |       |          |
|                                             |                                                                | 6                                                                   | 15.24                               | A19234-ND            | .33  | 7.46          | 13.25 | 643075-6        |       |          |
|                                             |                                                                | 7                                                                   | 17.78                               | A19235-ND            | .99  | 22.22         | 39.49 | 643075-7        |       |          |
|                                             |                                                                | 8                                                                   | 20.32                               | A19236-ND            | .99  | 22.29         | 39.63 | 643075-8        |       |          |
|                                             |                                                                | 9                                                                   | 22.86                               | A19237-ND            | .99  | 22.37         | 39.77 | 643075-9        |       |          |
|                                             |                                                                | 10                                                                  | 25.40                               | A19238-ND            | 1.00 | 22.45         | 39.91 | 1-643075-0      |       |          |
|                                             |                                                                | 11                                                                  | 27.94                               | A19239-ND            | 1.00 | 22.53         | 40.05 | 1-643075-1      |       |          |
|                                             |                                                                | 12                                                                  | 30.48                               | A19240-ND            | 1.00 | 22.61         | 40.19 | 1-643075-2      |       |          |
|                                             |                                                                | 13                                                                  | 33.02                               | A19241-ND            | 1.01 | 22.68         | 40.33 | 1-643075-3      |       |          |
|                                             |                                                                | 14                                                                  | 35.56                               | A19242-ND            | 1.01 | 22.76         | 40.47 | 1-643075-4      |       |          |
|                                             |                                                                | 7                                                                   | Closed End<br>Dust Covers,<br>White | 2                    | 5.08 | A19250-ND     | .11   | 2.41            | 4.28  | 640550-2 |
| 3                                           | 7.62                                                           |                                                                     |                                     | A19251-ND            | .29  | 2.98          | 5.29  | 640550-3        |       |          |
| 4                                           | 10.16                                                          |                                                                     |                                     | A19252-ND            | .33  | 3.67          | 6.53  | 640550-4        |       |          |
| 5                                           | 12.70                                                          |                                                                     |                                     | A19253-ND            | .38  | 4.25          | 7.56  | 640550-5        |       |          |
| 6                                           | 15.24                                                          |                                                                     |                                     | A19254-ND            | .39  | 4.79          | 8.52  | 640550-6        |       |          |
| 7                                           | 17.78                                                          |                                                                     |                                     | A19255-ND            | .42  | 5.35          | 9.51  | 640550-7        |       |          |
| 8                                           | 20.32                                                          |                                                                     |                                     | A19256-ND            | .44  | 5.98          | 10.63 | 640550-8        |       |          |
| 9                                           | 22.86                                                          |                                                                     |                                     | A19257-ND            | .48  | 6.49          | 11.55 | 640550-9        |       |          |
| 10                                          | 25.40                                                          |                                                                     |                                     | A19258-ND            | .52  | 7.01          | 12.46 | 1-640550-0      |       |          |
| 11                                          | 27.94                                                          |                                                                     |                                     | A19259-ND            | .56  | 7.52          | 13.37 | 1-640550-1      |       |          |
| 12                                          | 30.48                                                          |                                                                     |                                     | A19260-ND            | .62  | 8.37          | 14.89 | 1-640550-2      |       |          |
| 13                                          | 33.02                                                          |                                                                     |                                     | A19261-ND            | .65  | 8.80          | 15.64 | 1-640550-3      |       |          |
| 14                                          | 35.56                                                          |                                                                     |                                     | A19262-ND            | .70  | 9.45          | 16.80 | 1-640550-4      |       |          |
| 8                                           | Feed-Thru<br>Strain Relief Covers<br>White                     |                                                                     |                                     | 2                    | 5.08 | A19270-ND     | .27   | 6.01            | 10.69 | 643077-2 |
|                                             |                                                                | 3                                                                   | 7.62                                | A19271-ND            | .30  | 6.68          | 11.88 | 643077-3        |       |          |
|                                             |                                                                | 4                                                                   | 10.16                               | A19272-ND            | .40  | 8.91          | 15.84 | 643077-4        |       |          |
|                                             |                                                                | 5                                                                   | 12.70                               | A19273-ND            | .50  | 11.14         | 19.80 | 643077-5        |       |          |
|                                             |                                                                | 6                                                                   | 15.24                               | A19274-ND            | .54  | 12.15         | 21.60 | 643077-6        |       |          |
|                                             |                                                                | 7                                                                   | 17.78                               | A19275-ND            | .56  | 12.60         | 22.40 | 643077-7        |       |          |
|                                             |                                                                | 8                                                                   | 20.32                               | A19276-ND            | .64  | 14.40         | 25.60 | 643077-8        |       |          |
|                                             |                                                                | 9                                                                   | 22.86                               | A19277-ND            | .72  | 16.20         | 28.80 | 643077-9        |       |          |
|                                             |                                                                | 10                                                                  | 25.40                               | A19278-ND            | 1.08 | 24.27         | 43.14 | 1-643077-0      |       |          |
|                                             |                                                                | 11                                                                  | 27.94                               | A19279-ND            | 1.00 | 22.53         | 40.05 | 1-643077-1      |       |          |
|                                             |                                                                | 12                                                                  | 30.48                               | A19280-ND            | 1.00 | 22.61         | 40.19 | 1-643077-2      |       |          |
|                                             |                                                                | 13                                                                  | 33.02                               | A19281-ND            | 1.01 | 22.68         | 40.33 | 1-643077-3      |       |          |
|                                             |                                                                | 14                                                                  | 35.56                               | A19282-ND            | 1.01 | 22.76         | 40.47 | 1-643077-4      |       |          |
|                                             |                                                                | 9                                                                   | Feed-Thru<br>Dust Covers<br>White   | 3                    | 7.62 | A19291-ND     | .26   | 2.98            | 5.29  | 640642-3 |
| 4                                           | 10.16                                                          |                                                                     |                                     | A19292-ND            | .27  | 3.67          | 6.53  | 640642-4        |       |          |
| 5                                           | 12.70                                                          |                                                                     |                                     | A19293-ND            | .31  | 4.25          | 7.56  | 640642-5        |       |          |
| 6                                           | 15.24                                                          |                                                                     |                                     | A19294-ND            | .36  | 4.79          | 8.52  | 640642-6        |       |          |
| 7                                           | 17.78                                                          |                                                                     |                                     | A19295-ND            | .40  | 5.35          | 9.51  | 640642-7        |       |          |
| 8                                           | 20.32                                                          |                                                                     |                                     | A19296-ND            | .44  | 5.98          | 10.63 | 640642-8        |       |          |
| 9                                           | 22.86                                                          |                                                                     |                                     | A19297-ND            | .48  | 6.49          | 11.55 | 640642-9        |       |          |
| 10                                          | 25.40                                                          |                                                                     |                                     | A19298-ND            | .52  | 7.01          | 12.46 | 1-640642-0      |       |          |
| 11                                          | 27.94                                                          |                                                                     |                                     | A19299-ND            | .56  | 7.52          | 13.37 | 1-640642-1      |       |          |
| 12                                          | 30.48                                                          |                                                                     |                                     | A19300-ND            | .62  | 8.37          | 14.89 | 1-640642-2      |       |          |
| 13                                          | 33.02                                                          |                                                                     |                                     | A19301-ND            | .65  | 8.80          | 15.64 | 1-640642-3      |       |          |
| 14                                          | 35.56                                                          |                                                                     |                                     | A19302-ND            | .70  | 9.45          | 16.80 | 1-640642-4      |       |          |
| Post Headers, 2.54 Centers (5.08 Wide Base) |                                                                |                                                                     |                                     |                      |      |               |       |                 |       |          |
| 10                                          | Straight Post<br>.64 Square                                    |                                                                     |                                     | 2                    | 5.08 | A19111-ND     | .22   | 4.31            | 7.66  | 640452-2 |
|                                             |                                                                | 3                                                                   | 7.62                                | A19330-ND            | .23  | 4.40          | 7.82  | 640452-3        |       |          |
|                                             |                                                                | 4                                                                   | 10.16                               | A1912-ND             | .26  | 5.87          | 10.43 | 640452-4        |       |          |
|                                             |                                                                | 5                                                                   | 12.70                               | A19331-ND            | .33  | 7.33          | 13.04 | 640452-5        |       |          |
|                                             |                                                                | 6                                                                   | 15.24                               | A1913-ND             | .36  | 8.00          | 14.22 | 640452-6        |       |          |
|                                             |                                                                | 7                                                                   | 17.78                               | A19332-ND            | .41  | 9.33          | 16.59 | 640452-7        |       |          |
|                                             |                                                                | 8                                                                   | 20.32                               | A1914-ND             | .47  | 10.67         | 18.96 | 640452-8        |       |          |
|                                             |                                                                | 9                                                                   | 22.86                               | A19333-ND            | .53  | 12.00         | 21.33 | 640452-9        |       |          |
|                                             |                                                                | 10                                                                  | 25.40                               | A1915-ND             | .59  | 13.33         | 23.70 | 1-640452-0      |       |          |
| 11                                          | Right Angle Post<br>.64 Square                                 | 2                                                                   | 5.08                                | A1916-ND             | .20  | 3.05          | 5.42  | 640453-2        |       |          |
|                                             |                                                                | 3                                                                   | 7.62                                | A19340-ND            | .24  | 4.58          | 8.13  | 640453-3        |       |          |
|                                             |                                                                | 4                                                                   | 10.16                               | A1917-ND             | .27  | 6.10          | 10.85 | 640453-4        |       |          |
|                                             |                                                                | 5                                                                   | 12.70                               | A19341-ND            | .34  | 7.63          | 13.56 | 640453-5        |       |          |
|                                             |                                                                | 6                                                                   | 15.24                               | A1918-ND             | .37  | 8.32          | 14.79 | 640453-6        |       |          |
|                                             |                                                                | 7                                                                   | 17.78                               | A19342-ND            | .43  | 9.71          | 17.26 | 640453-7        |       |          |
|                                             |                                                                | 8                                                                   | 20.32                               | A1919-ND             | .49  | 11.09         | 19.72 | 640453-8        |       |          |
|                                             |                                                                | 9                                                                   | 22.86                               | A19343-ND            | .55  | 12.48         | 22.19 | 640453-9        |       |          |
|                                             |                                                                | 10                                                                  | 25.40                               | A1920-ND             | .62  | 13.87         | 24.65 | 1-640453-0      |       |          |
|                                             |                                                                | Narrow Base Post Headers, .100" (2.54mm) Centers (2.34mm Wide Base) |                                     |                      |      |               |       |                 |       |          |
| 10                                          | Straight Post<br>.64 Square<br>w/o Retentive Legs              | 2                                                                   | 4.78                                | A19350-ND            | .21  | 3.57          | 6.34  | 644456-2        |       |          |
|                                             |                                                                | 3                                                                   | 7.32                                | A19351-ND            | .23  | 4.40          | 7.82  | 644456-3        |       |          |
|                                             |                                                                | 4                                                                   | 9.86                                | A19352-ND            | .26  | 5.87          | 10.44 | 644456-4        |       |          |
|                                             |                                                                | 5                                                                   | 12.40                               | A19353-ND            | .33  | 7.33          | 13.04 | 644456-5        |       |          |
|                                             |                                                                | 6                                                                   | 14.94                               | A19354-ND            | .36  | 8.00          | 14.22 | 644456-6        |       |          |
|                                             |                                                                | 7                                                                   | 17.48                               | A19355-ND            | .41  | 9.33          | 16.59 | 644456-7        |       |          |
|                                             |                                                                | 8                                                                   | 20.02                               | A19356-ND            | .47  | 10.67         | 18.96 | 644456-8        |       |          |
|                                             |                                                                | 9                                                                   | 22.56                               | A19357-ND            | .53  | 12.00         | 21.33 | 644456-9        |       |          |

| Fig.                                                       | Description                                                                       | Circuits | Dim. "A"<br>(mm)                                      | Digi-Key<br>Part No. | 1             | Pricing<br>25 | 50           | AMP<br>Part No. |
|------------------------------------------------------------|-----------------------------------------------------------------------------------|----------|-------------------------------------------------------|----------------------|---------------|---------------|--------------|-----------------|
| 10                                                         | Straight Post<br>.64 Square<br>w/o Retentive Legs                                 | 10       | 25.10                                                 | A19358-ND            | .59           | 13.33         | 23.70        | 1-644456-0      |
|                                                            |                                                                                   | 11       | 27.64                                                 | A19359-ND            | .65           | 14.67         | 26.07        | 1-644456-1      |
|                                                            |                                                                                   | 12       | 30.18                                                 | A19360-ND            | .71           | 16.00         | 28.44        | 1-644456-2      |
|                                                            |                                                                                   | 13       | 32.72                                                 | A19361-ND            | .77           | 17.33         | 30.82        | 1-644456-3      |
|                                                            |                                                                                   | 14       | 35.26                                                 | A19362-ND            | .83           | 18.67         | 33.19        | 1-644456-4      |
| 10                                                         | Straight Post<br>.64 Square<br>with Retentive Legs                                | 2        | 5.08                                                  | A19370-ND            | .20           | 3.93          | 6.98         | 644695-2        |
|                                                            |                                                                                   | 3        | 7.62                                                  | A19371-ND            | .22           | 4.84          | 8.61         | 644695-3        |
|                                                            |                                                                                   | 4        | 10.16                                                 | A19372-ND            | .29           | 6.45          | 11.47        | 644695-4        |
|                                                            |                                                                                   | 5        | 12.70                                                 | A19373-ND            | .36           | 8.07          | 14.34        | 644695-5        |
|                                                            |                                                                                   | 6        | 15.24                                                 | A19374-ND            | .39           | 8.80          | 15.64        | 644695-6        |
|                                                            |                                                                                   | 7        | 17.78                                                 | A19375-ND            | .46           | 10.27         | 18.25        | 644695-7        |
|                                                            |                                                                                   | 8        | 20.32                                                 | A19376-ND            | .52           | 11.73         | 20.86        | 644695-8        |
|                                                            |                                                                                   | 9        | 22.86                                                 | A19377-ND            | .59           | 13.20         | 23.47        | 644695-9        |
|                                                            |                                                                                   | 10       | 25.40                                                 | A19378-ND            | .65           | 14.67         | 26.07        | 1-644695-0      |
|                                                            |                                                                                   | 11       | 27.94                                                 | A19379-ND            | .72           | 16.13         | 28.68        | 1-644695-1      |
|                                                            |                                                                                   | 12       | 30.48                                                 | A19380-ND            | .78           | 17.60         | 31.29        | 1-644695-2      |
|                                                            |                                                                                   | 13       | 33.02                                                 | A19381-ND            | .85           | 19.07         | 33.90        | 1-644695-3      |
|                                                            |                                                                                   | 14       | 35.56                                                 | A19382-ND            | .91           | 20.53         | 36.51        | 1-644695-4      |
| 11                                                         | Right Angle Post<br>.64 Square<br>w/o Retentive Legs                              | 2        | 5.08                                                  | A19390-ND            | .20           | 3.05          | 5.42         | 644457-2        |
|                                                            |                                                                                   | 3        | 7.62                                                  | A19391-ND            | .24           | 4.58          | 8.13         | 644457-3        |
|                                                            |                                                                                   | 4        | 10.16                                                 | A19392-ND            | .27           | 6.10          | 10.85        | 644457-4        |
|                                                            |                                                                                   | 5        | 12.70                                                 | A19393-ND            | .34           | 7.63          | 13.56        | 644457-5        |
|                                                            |                                                                                   | 6        | 15.24                                                 | A19394-ND            | .37           | 8.32          | 14.79        | 644457-6        |
|                                                            |                                                                                   | 7        | 17.78                                                 | A19395-ND            | .43           | 9.71          | 17.26        | 644457-7        |
|                                                            |                                                                                   | 8        | 20.32                                                 | A19396-ND            | .49           | 11.09         | 19.72        | 644457-8        |
|                                                            |                                                                                   | 9        | 22.86                                                 | A19397-ND            | .55           | 12.48         | 22.19        | 644457-9        |
|                                                            |                                                                                   | 10       | 25.40                                                 | A19398-ND            | .62           | 13.87         | 24.65        | 1-644457-0      |
|                                                            |                                                                                   | 11       | 27.94                                                 | A19399-ND            | .68           | 15.25         | 27.12        | 1-644457-1      |
|                                                            |                                                                                   | 12       | 30.48                                                 | A19400-ND            | .74           | 16.64         | 29.58        | 1-644457-2      |
|                                                            |                                                                                   | 13       | 33.02                                                 | A19401-ND            | .80           | 18.03         | 32.05        | 1-644457-3      |
|                                                            |                                                                                   | 14       | 35.56                                                 | A19402-ND            | .86           | 19.41         | 34.51        | 1-644457-4      |
|                                                            |                                                                                   | 11       | Right Angle Post<br>.64 Square<br>with Retentive Legs | 2                    | 5.08          | A19410-ND     | .20          | 3.32            |
| 3                                                          | 7.62                                                                              |          |                                                       | A19411-ND            | .22           | 5.03          | 8.95         | 644694-3        |
| 4                                                          | 10.16                                                                             |          |                                                       | A19412-ND            | .30           | 6.71          | 11.93        | 644694-4        |
| 5                                                          | 12.70                                                                             |          |                                                       | A19413-ND            | .37           | 8.39          | 14.91        | 644694-5        |
| 6                                                          | 15.24                                                                             |          |                                                       | A19414-ND            | .41           | 9.15          | 16.27        | 644694-6        |
| 7                                                          | 17.78                                                                             |          |                                                       | A19415-ND            | .47           | 10.68         | 18.98        | 644694-7        |
| 8                                                          | 20.32                                                                             |          |                                                       | A19416-ND            | .54           | 12.20         | 21.69        | 644694-8        |
| 9                                                          | 22.86                                                                             |          |                                                       | A19417-ND            | .61           | 13.73         | 24.41        | 644694-9        |
| 10                                                         | 25.40                                                                             |          |                                                       | A19418-ND            | .68           | 15.25         | 27.12        | 1-644694-0      |
| 11                                                         | 27.94                                                                             |          |                                                       | A19419-ND            | .75           | 16.78         | 29.83        | 1-644694-1      |
| 12                                                         | 30.48                                                                             |          |                                                       | A19420-ND            | .81           | 18.30         | 32.54        | 1-644694-2      |
| 13                                                         | 33.02                                                                             |          |                                                       | A19421-ND            | .88           | 19.83         | 35.25        | 1-644694-3      |
| 14                                                         | 35.56                                                                             |          |                                                       | A19422-ND            | .95           | 21.35         | 37.96        | 1-644694-4      |
| Polarized Headers, .100" (2.54mm) Centers                  |                                                                                   |          |                                                       |                      |               |               |              |                 |
| 12A                                                        | Straight Post<br>.64 Square                                                       | 2        | 5.08                                                  | A19423-ND            | .21           | 3.23          | 5.74         | 640454-2        |
|                                                            |                                                                                   | 3        | 7.62                                                  | A19430-ND            | .22           | 4.84          | 8.60         | 640454-3        |
|                                                            |                                                                                   | 4        | 10.16                                                 | A19431-ND            | .29           | 6.45          | 11.47        | 640454-4        |
|                                                            |                                                                                   | 5        | 12.70                                                 | A19432-ND            | .36           | 8.07          | 14.34        | 640454-5        |
|                                                            |                                                                                   | 6        | 15.24                                                 | A19433-ND            | .39           | 8.80          | 15.64        | 640454-6        |
|                                                            |                                                                                   | 7        | 17.78                                                 | A19434-ND            | .46           | 10.27         | 18.25        | 640454-7        |
|                                                            |                                                                                   | 8        | 20.32                                                 | A19435-ND            | .52           | 11.73         | 20.86        | 640454-8        |
|                                                            |                                                                                   | 9        | 22.86                                                 | A19436-ND            | .59           | 13.20         | 23.47        | 640454-9        |
|                                                            |                                                                                   | 10       | 25.40                                                 | A19437-ND            | .65           | 14.67         | 26.07        | 1-640454-0      |
|                                                            |                                                                                   | 11       | 27.94                                                 | A19438-ND            | .72           | 16.13         | 28.68        | 1-640454-1      |
|                                                            |                                                                                   | 12       | 30.48                                                 | A19439-ND            | .78           | 17.60         | 31.29        | 1-640454-2      |
|                                                            |                                                                                   | 13       | 33.02                                                 | A19440-ND            | .85           | 19.07         | 33.90        | 1-640454-3      |
|                                                            |                                                                                   | 14       | 35.56                                                 | A19441-ND            | .91           | 20.53         | 36.51        | 1-640454-4      |
|                                                            |                                                                                   | 13A      | Right Angle Post<br>.64 Square                        | 2                    | 5.08          | A19450-ND     | .21          | 3.23            |
| 3                                                          | 7.62                                                                              |          |                                                       | A19451-ND            | .22           | 4.84          | 8.60         | 640455-3        |
| 4                                                          | 10.16                                                                             |          |                                                       | A19452-ND            | .29           | 6.45          | 11.47        | 640455-4        |
| 5                                                          | 12.70                                                                             |          |                                                       | A19453-ND            | .36           | 8.07          | 14.34        | 640455-5        |
| 6                                                          | 15.24                                                                             |          |                                                       | A19454-ND            | .39           | 8.80          | 15.64        | 640455-6        |
| 7                                                          | 17.78                                                                             |          |                                                       | A19455-ND            | .57           | 12.83         | 22.81        | 640455-7        |
| 8                                                          | 20.32                                                                             |          |                                                       | A19456-ND            | .52           | 11.73         | 20.86        | 640455-8        |
| 9                                                          | 22.86                                                                             |          |                                                       | A19457-ND            | .59           | 13.20         | 23.47        | 640455-9        |
| 10                                                         | 25.40                                                                             |          |                                                       | A19458-ND            | .65           | 14.67         | 26.07        | 1-640455-0      |
| 11                                                         | 27.94                                                                             |          |                                                       | A19459-ND            | .72           | 16.13         | 28.68        | 1-640455-1      |
| 12                                                         | 30.48                                                                             |          |                                                       | A19460-ND            | .78           | 17.60         | 31.29        | 1-640455-2      |
| 13                                                         | 33.02                                                                             |          |                                                       | A19461-ND            | .85           | 19.07         | 33.90        | 1-640455-3      |
| 14                                                         | 35.56                                                                             |          |                                                       | A19462-ND            | .91           | 20.53         | 36.51        | 1-640455-4      |
| Post Headers, .100" (2.54mm) Centers, Friction Lock Header |                                                                                   |          |                                                       |                      |               |               |              |                 |
| 12B                                                        | Straight Post<br>.64 Square                                                       | 2        | 5.08                                                  | A1921-ND             | .11           | 1.73          | 3.08         | 640456-2        |
|                                                            |                                                                                   | 3        | 7.62                                                  | A19470-ND            | .12           | 2.60          | 4.62         | 640456-3        |
|                                                            |                                                                                   | 4        | 10.16                                                 | A1922-ND             | .15           | 3.47          | 6.16         | 640456-4        |
|                                                            |                                                                                   | 5        | 12.70                                                 | A19471-ND            | .15           | 3.28          | 5.94         | 640456-5        |
|                                                            |                                                                                   | 6        | 15.24                                                 | A1923-ND             | .19           | 4.39          | 7.80         | 640456-6        |
|                                                            |                                                                                   | 7        | 17.78                                                 | A19472-ND            | .20           | 4.56          | 8.10         | 640456-7        |
|                                                            |                                                                                   | 8        | 20.32                                                 | A1924-ND             | .21           | 4.82          | 8.58         | 640456-8        |
|                                                            |                                                                                   | 9        | 22.86                                                 | A19473-ND            | .59           | 13.20         | 23.47        | 640456-9        |
|                                                            |                                                                                   | 10       | 25.40                                                 | A1925-ND             | .26           | 5.79          | 10.29        | 1-640456-0      |
|                                                            |                                                                                   | 11       | 27.94                                                 | A19474-ND            | .72           | 16.13         | 28.68        | 1-640456-1      |
|                                                            |                                                                                   | 12       | 30.48                                                 | A19475-ND            | .39           | 8.77          | 15.59        | 1-640456-2      |
|                                                            |                                                                                   | 13       | 33.02                                                 | A19476-ND            | .85           | 19.07         | 33.90        | 1-640456-3      |
|                                                            |                                                                                   | 14       | 35.56                                                 | A19477-ND            | .91           | 20.53         | 36.51        | 1-640456-4      |
|                                                            |                                                                                   | 13B      | Right Angle Post<br>.64 Square                        | 2                    | 5.08          | A1926-ND      | .21          | 3.23            |
| 3                                                          | 7.62                                                                              |          |                                                       | A19480-ND            | .22           | 4.84          | 8.60         | 640457-3        |
| 4                                                          | 10.16                                                                             |          |                                                       | A1927-ND             | .29           | 6.45          | 11.47        | 640457-4        |
| 5                                                          | 12.70                                                                             |          |                                                       | A19481-ND            | .36           | 8.07          | 14.34        | 640457-5        |
| 7                                                          | 17.78                                                                             |          |                                                       | A19482-ND            | .46           | 10.27         | 18.25        | 640457-7        |
| 8                                                          | 20.32                                                                             |          |                                                       | A1929-ND             | .52           | 11.73         | 20.86        | 640457-8        |
| 9                                                          | 22.86                                                                             |          |                                                       | A19483-ND            | .39           | 8.80          | 15.64        | 640457-9        |
| 10                                                         | 25.40                                                                             |          |                                                       | A1930-ND             | .59           | 13.20         | 23.47        | 640457-0        |
| 11                                                         | 27.94                                                                             |          |                                                       | A19484-ND            | .65           | 14.67         | 26.07        | 1-640457-1      |
| 12                                                         | 30.48                                                                             |          |                                                       | A19485-ND            | .72           | 16.13         | 28.68        | 1-640457-2      |
| 13                                                         | 33.02                                                                             |          |                                                       | A19486-ND            | .78           | 17.60         | 31.29        | 1-640457-3      |
| 14                                                         | 35.56                                                                             |          |                                                       | A19487-ND            | .85           | 19.07         | 33.90        | 1-640457-4      |
| A9982-ND                                                   | T-Handle Tool for MTA .100" (2.54mm) Crimp Die for MTA .100" (2.54mm) Receptacles |          |                                                       |                      |               |               | \$17.25 each | 59803-1         |
| A1998-ND                                                   | (Must be used with handle A2031-ND)                                               |          |                                                       |                      |               |               |              |                 |
| A2031-ND                                                   | Manual Pistol Grip Handle for Metal & All-Plastic Shell Connectors.               |          |                                                       |                      | \$103.74 each | 58246-1       |              |                 |
|                                                            | (Must order crimp die separately.)                                                |          |                                                       |                      |               |               |              |                 |
| A19530-ND                                                  | Crimp Tool for CST-100 w/Die                                                      |          |                                                       |                      | \$55.50 each  | 58074-1       |              |                 |
| A19531-ND                                                  | Die Set for CST-100 (use with A9996)                                              |          |                                                       |                      | \$150.00 each | 58517-1       |              |                 |
| A9996-ND                                                   | Crimp Tool Handle for CST-100                                                     |          |                                                       |                      | \$102.00 each | 58517-2       |              |                 |
|                                                            |                                                                                   |          |                                                       |                      | \$63.75 each  | 354940-1      |              |                 |

## MTA .156" (3.96mm) Receptacles and Post Headers

### IDC CONNECTORS

• Wire-to-post connectors preloaded with dual beam contacts • Connectors and headers are end-to-end stackable • Connectors preloaded with IDC contacts • All contacts are slotted for insulation displacement (IDC) terminal technique • Contacts are lubricated to prevent fretting corrosion • Meets the material requirements of Table 23.1 of UL1410 Standards for Television Receiver and Video Products (wire-to-post connectors only) • Recognized under the Component Program of Underwriters Laboratories Inc., File No. E28476 • Certified by Canadian Standards Association, File No. LR7189

**Performance Data:** Voltage Rating: 250 vac. Current Rating: 5 amp max. for Connector. **Low-Level Resistance:** 3 mΩ max. initial. **Dielectric Withstanding Voltage:** 1250 vac/1 min. **Insulation Resistance:** 5000 MΩ min. initial. **Operating Temperature:** -55°C to +105°C

**Material and Finish - Housing:** UL94V-2 rated, type 6/6 nylon (24 AWG - White; 22 AWG - Red; 20 AWG - Yellow; 18 AWG - Orange). **Contacts:** Phosphor bronze, post tin plated, .000030 (0.00076).

### SL-156 CRIMP CONTACTS AND HOUSINGS

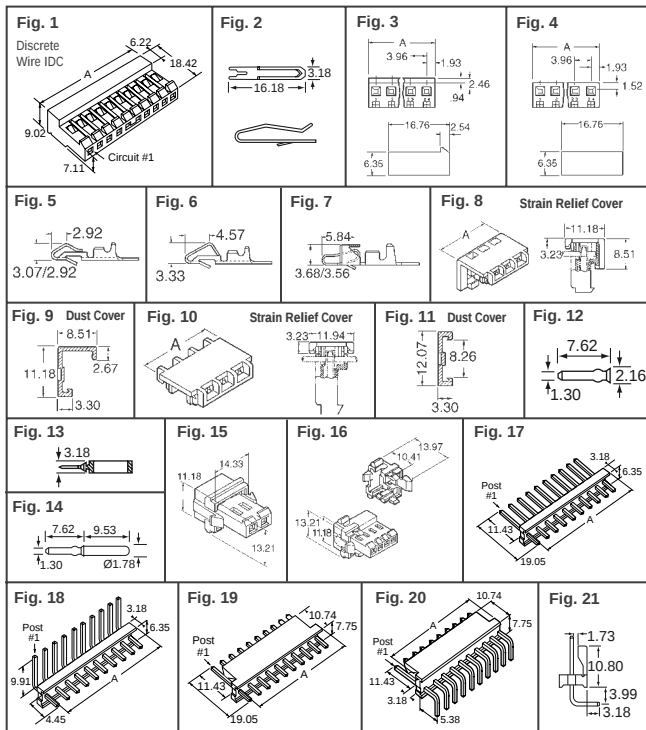
• High current rating • Mates with MTA and similar competitive notched headers • Recognized under the Component Program of Underwriters Laboratories Inc., File No. E28476 • Certified by Canadian Standards Association, File No. LR7189

**Contacts Material and Finish:** Phosphor bronze, pretinned .000030 (0.00076). **Wire Range:** 18-24 AWG. **Max. Ins. Diameter:** .065. **Current Rating:** 5 Amp max.

**KEYING PLUG WITH CARRIER STRIP (10 plugs per strip) - Material:** UL94V-2 rated, type 6/6 nylon, natural color

**REPLACEMENT IDC CONTACTS - Material and Finish:** Phosphor bronze, post tin plated; .000030 (0.00076).

**POST HEADERS - Material For Housing:** Polyester 94V-0 rated, natural. **Posts:** Tin plated copper alloy.



| Fig.                                       | Description                                            | Circuits | Dim. "A" (mm) | Digi-Key Part No. | 1    | Pricing 25 | 50    | AMP Part No. |
|--------------------------------------------|--------------------------------------------------------|----------|---------------|-------------------|------|------------|-------|--------------|
| <b>Receptacles, .156" (3.96mm) centers</b> |                                                        |          |               |                   |      |            |       |              |
| 1                                          | Closed End w/Lock, w/out Polarizing Tabs 24 AWG, White | 2        | 7.92          | A19630-ND         | .26  | 5.78       | 10.27 | 640429-2     |
|                                            |                                                        | 3        | 11.89         | A19631-ND         | .38  | 8.66       | 15.40 | 640429-3     |
|                                            |                                                        | 4        | 15.85         | A19632-ND         | .51  | 11.55      | 20.53 | 640429-4     |
|                                            |                                                        | 5        | 19.81         | A19633-ND         | .64  | 14.44      | 25.67 | 640429-5     |
|                                            |                                                        | 6        | 23.77         | A19634-ND         | .70  | 15.75      | 28.00 | 640429-6     |
|                                            |                                                        | 7        | 27.74         | A19635-ND         | .82  | 18.38      | 32.67 | 640429-7     |
|                                            |                                                        | 8        | 31.70         | A19636-ND         | .93  | 21.00      | 37.33 | 640429-8     |
|                                            |                                                        | 9        | 35.66         | A19637-ND         | 1.05 | 23.63      | 42.00 | 640429-9     |
|                                            |                                                        | 10       | 39.62         | A19638-ND         | 1.17 | 26.25      | 46.67 | 1-640429-0   |
|                                            |                                                        | 11       | 43.59         | A19639-ND         | 1.28 | 28.88      | 51.33 | 1-640429-1   |
|                                            |                                                        | 12       | 47.55         | A19640-ND         | 1.40 | 31.50      | 56.00 | 1-640429-2   |
| 1                                          | Feed-Thru w/Lock, w/out Polarizing Tabs 24 AWG, White  | 2        | 7.92          | A19720-ND         | .26  | 5.78       | 10.27 | 640602-2     |
|                                            |                                                        | 3        | 11.89         | A19721-ND         | .38  | 8.66       | 15.40 | 640602-3     |
|                                            |                                                        | 4        | 15.85         | A19722-ND         | .51  | 11.55      | 20.53 | 640602-4     |
|                                            |                                                        | 5        | 19.81         | A19723-ND         | .64  | 14.44      | 25.67 | 640602-5     |
|                                            |                                                        | 6        | 23.77         | A19724-ND         | .70  | 15.75      | 28.00 | 640602-6     |
|                                            |                                                        | 7        | 27.74         | A19725-ND         | .82  | 18.37      | 32.67 | 640602-7     |
|                                            |                                                        | 8        | 31.70         | A19726-ND         | .93  | 21.00      | 37.33 | 640602-8     |
|                                            |                                                        | 9        | 35.66         | A19727-ND         | 1.05 | 23.63      | 42.00 | 640602-9     |
|                                            |                                                        | 10       | 39.62         | A19728-ND         | 1.17 | 26.25      | 46.67 | 1-640602-0   |
|                                            |                                                        | 11       | 43.59         | A19729-ND         | 1.28 | 28.88      | 51.33 | 1-640602-1   |
|                                            |                                                        | 12       | 47.55         | A19730-ND         | 1.40 | 31.50      | 56.00 | 1-640602-2   |
| 1                                          | Closed End w/Lock, w/out Polarizing Tabs 22 AWG, Red   | 2        | 7.92          | A19610-ND         | .26  | 5.78       | 10.27 | 640428-2     |
|                                            |                                                        | 3        | 11.89         | A19611-ND         | .38  | 8.66       | 15.40 | 640428-3     |
|                                            |                                                        | 4        | 15.85         | A19612-ND         | .51  | 11.55      | 20.53 | 640428-4     |
|                                            |                                                        | 5        | 19.81         | A19613-ND         | .64  | 14.44      | 25.67 | 640428-5     |
|                                            |                                                        | 6        | 23.77         | A19614-ND         | .70  | 15.75      | 28.00 | 640428-6     |
|                                            |                                                        | 7        | 27.74         | A19615-ND         | .82  | 18.38      | 32.67 | 640428-7     |
|                                            |                                                        | 8        | 31.70         | A19616-ND         | .93  | 21.00      | 37.33 | 640428-8     |
|                                            |                                                        | 9        | 35.66         | A19617-ND         | 1.05 | 23.63      | 42.00 | 640428-9     |
|                                            |                                                        | 10       | 39.62         | A19618-ND         | 1.17 | 26.25      | 46.67 | 1-640428-0   |
|                                            |                                                        | 11       | 43.59         | A19619-ND         | 1.28 | 28.88      | 51.33 | 1-640428-1   |
|                                            |                                                        | 12       | 47.55         | A19620-ND         | 1.40 | 31.50      | 56.00 | 1-640428-2   |

| Fig.                                             | Description                                                     | Circuits | Dim. "A"<br>(mm)                                                  | Digi-Key<br>Part No. | 1    | Pricing<br>25 | 50    | AMP<br>Part No. |
|--------------------------------------------------|-----------------------------------------------------------------|----------|-------------------------------------------------------------------|----------------------|------|---------------|-------|-----------------|
| 1                                                | Feed-Thru w/Lock,<br>w/out Polarizing Tabs<br>22 AWG, Red       | 2        | 7.92                                                              | A19700-ND            | .26  | 5.78          | 10.27 | 640601-2        |
|                                                  |                                                                 | 3        | 11.89                                                             | A19701-ND            | .38  | 8.66          | 15.40 | 640601-3        |
|                                                  |                                                                 | 4        | 15.85                                                             | A19702-ND            | .51  | 11.55         | 20.53 | 640601-4        |
|                                                  |                                                                 | 5        | 19.81                                                             | A19703-ND            | .64  | 14.44         | 25.67 | 640601-5        |
|                                                  |                                                                 | 6        | 23.77                                                             | A19704-ND            | .70  | 15.75         | 28.00 | 640601-6        |
|                                                  |                                                                 | 7        | 27.74                                                             | A19705-ND            | .82  | 18.38         | 32.67 | 640601-7        |
|                                                  |                                                                 | 8        | 31.70                                                             | A19706-ND            | .93  | 21.00         | 37.33 | 640601-8        |
|                                                  |                                                                 | 9        | 35.66                                                             | A19707-ND            | 1.05 | 23.63         | 42.00 | 640601-9        |
|                                                  |                                                                 | 10       | 39.62                                                             | A19708-ND            | 1.17 | 26.25         | 46.67 | 1-640601-0      |
|                                                  |                                                                 | 11       | 43.59                                                             | A19709-ND            | 1.28 | 28.88         | 51.33 | 1-640601-1      |
|                                                  |                                                                 | 12       | 47.55                                                             | A19710-ND            | 1.40 | 31.50         | 56.00 | 1-640601-2      |
|                                                  |                                                                 | 1        | Closed End w/Lock,<br>w/out Polarizing Tabs<br>20 AWG, Yellow     | 2                    | 7.92 | A19590-ND     | .26   | 5.78            |
| 3                                                | 11.89                                                           |          |                                                                   | A19591-ND            | .38  | 8.66          | 15.40 | 640427-3        |
| 4                                                | 15.85                                                           |          |                                                                   | A19592-ND            | .51  | 11.55         | 20.53 | 640427-4        |
| 5                                                | 19.81                                                           |          |                                                                   | A19593-ND            | .64  | 14.44         | 25.67 | 640427-5        |
| 6                                                | 23.77                                                           |          |                                                                   | A19594-ND            | .70  | 15.75         | 28.00 | 640427-6        |
| 7                                                | 27.74                                                           |          |                                                                   | A19595-ND            | .82  | 18.38         | 32.67 | 640427-7        |
| 8                                                | 31.70                                                           |          |                                                                   | A19596-ND            | .93  | 21.00         | 37.33 | 640427-8        |
| 9                                                | 35.66                                                           |          |                                                                   | A19597-ND            | .75  | 16.88         | 30.00 | 640427-9        |
| 10                                               | 39.62                                                           |          |                                                                   | A19598-ND            | 1.17 | 26.25         | 46.67 | 1-640427-0      |
| 11                                               | 43.59                                                           |          |                                                                   | A19599-ND            | 1.28 | 28.88         | 51.33 | 1-640427-1      |
| 12                                               | 47.55                                                           |          |                                                                   | A19600-ND            | 1.40 | 31.50         | 56.00 | 1-640427-2      |
| 1                                                | Feed-Thru w/Lock,<br>w/out Polarizing Tabs<br>20 AWG, Yellow    |          |                                                                   | 2                    | 7.92 | A19680-ND     | .26   | 5.78            |
|                                                  |                                                                 | 3        | 11.89                                                             | A19681-ND            | .38  | 8.66          | 15.40 | 640600-3        |
|                                                  |                                                                 | 4        | 15.85                                                             | A19682-ND            | .51  | 11.55         | 20.53 | 640600-4        |
|                                                  |                                                                 | 5        | 19.81                                                             | A19683-ND            | .64  | 14.44         | 25.67 | 640600-5        |
|                                                  |                                                                 | 6        | 23.77                                                             | A19684-ND            | .70  | 15.75         | 28.00 | 640600-6        |
|                                                  |                                                                 | 7        | 27.74                                                             | A19685-ND            | .82  | 18.37         | 32.67 | 640600-7        |
|                                                  |                                                                 | 8        | 31.70                                                             | A19686-ND            | .93  | 21.00         | 37.33 | 640600-8        |
|                                                  |                                                                 | 9        | 35.66                                                             | A19687-ND            | 1.05 | 23.63         | 42.00 | 640600-9        |
|                                                  |                                                                 | 10       | 39.62                                                             | A19688-ND            | 1.17 | 26.25         | 46.67 | 1-640600-0      |
|                                                  |                                                                 | 11       | 43.59                                                             | A19689-ND            | 1.28 | 28.88         | 51.33 | 1-640600-1      |
|                                                  |                                                                 | 12       | 47.55                                                             | A19690-ND            | 1.40 | 31.50         | 56.00 | 1-640600-2      |
|                                                  |                                                                 | 1        | Closed End w/Lock,<br>w/out Polarizing Tabs<br>18 AWG, Orange     | 2                    | 7.92 | A1951-ND      | .26   | 5.78            |
| 3                                                | 11.89                                                           |          |                                                                   | A1952-ND             | .38  | 8.66          | 15.40 | 640426-3        |
| 4                                                | 15.85                                                           |          |                                                                   | A1953-ND             | .51  | 11.55         | 20.53 | 640426-4        |
| 5                                                | 19.81                                                           |          |                                                                   | A1954-ND             | .64  | 14.44         | 25.67 | 640426-5        |
| 6                                                | 23.77                                                           |          |                                                                   | A1953-ND             | .33  | 7.43          | 13.22 | 640426-6        |
| 7                                                | 27.74                                                           |          |                                                                   | A19582-ND            | .82  | 18.38         | 32.67 | 640426-7        |
| 8                                                | 31.70                                                           |          |                                                                   | A1954-ND             | .93  | 21.00         | 37.33 | 640426-8        |
| 9                                                | 35.66                                                           |          |                                                                   | A19583-ND            | 1.05 | 23.63         | 42.00 | 640426-9        |
| 10                                               | 39.62                                                           |          |                                                                   | A1955-ND             | 1.17 | 26.25         | 46.67 | 1-640426-0      |
| 11                                               | 43.59                                                           |          |                                                                   | A19584-ND            | 1.28 | 28.88         | 51.33 | 1-640426-1      |
| 12                                               | 47.55                                                           |          |                                                                   | A19585-ND            | 1.40 | 31.50         | 56.00 | 1-640426-2      |
| 1                                                | Feed-Thru w/Lock,<br>w/out Polarizing Tabs<br>18 AWG, Orange    |          |                                                                   | 2                    | 7.92 | A19660-ND     | .26   | 5.78            |
|                                                  |                                                                 | 3        | 11.89                                                             | A19661-ND            | .38  | 8.66          | 15.40 | 640599-3        |
|                                                  |                                                                 | 4        | 15.85                                                             | A19662-ND            | .51  | 11.55         | 20.53 | 640599-4        |
|                                                  |                                                                 | 5        | 19.81                                                             | A19663-ND            | .64  | 14.44         | 25.67 | 640599-5        |
|                                                  |                                                                 | 6        | 23.77                                                             | A19664-ND            | .70  | 15.75         | 28.00 | 640599-6        |
|                                                  |                                                                 | 7        | 27.74                                                             | A19665-ND            | .82  | 18.38         | 32.67 | 640599-7        |
|                                                  |                                                                 | 8        | 31.70                                                             | A19666-ND            | .93  | 21.00         | 37.33 | 640599-8        |
|                                                  |                                                                 | 9        | 35.66                                                             | A19667-ND            | 1.05 | 23.63         | 42.00 | 640599-9        |
|                                                  |                                                                 | 10       | 39.62                                                             | A19668-ND            | 1.17 | 26.25         | 46.67 | 1-640599-0      |
|                                                  |                                                                 | 11       | 43.59                                                             | A19669-ND            | 1.28 | 28.88         | 51.33 | 1-640599-1      |
|                                                  |                                                                 | 12       | 47.55                                                             | A19670-ND            | 1.40 | 31.50         | 56.00 | 1-640599-2      |
|                                                  |                                                                 | 1        | Closed End w/out Lock,<br>w/out Polarizing Tabs<br>18 AWG, Orange | 2                    | 7.92 | A1956-ND      | .26   | 5.78            |
| 3                                                | 11.89                                                           |          |                                                                   | A1950-ND             | .38  | 8.66          | 15.40 | 640431-3        |
| 4                                                | 15.85                                                           |          |                                                                   | A1957-ND             | .51  | 11.55         | 20.53 | 640431-4        |
| 5                                                | 19.81                                                           |          |                                                                   | A19651-ND            | .64  | 14.44         | 25.67 | 640431-5        |
| 6                                                | 23.77                                                           |          |                                                                   | A1958-ND             | .70  | 15.75         | 28.00 | 640431-6        |
| 7                                                | 27.74                                                           |          |                                                                   | A19652-ND            | .82  | 18.38         | 32.67 | 640431-7        |
| 8                                                | 31.70                                                           |          |                                                                   | A1959-ND             | .93  | 21.00         | 37.33 | 640431-8        |
| 9                                                | 35.66                                                           |          |                                                                   | A1953-ND             | 1.05 | 23.63         | 42.00 | 640431-9        |
| 10                                               | 39.62                                                           |          |                                                                   | A1960-ND             | 1.17 | 26.25         | 46.67 | 1-640431-0      |
| 11                                               | 43.59                                                           |          |                                                                   | A19654-ND            | 1.28 | 28.88         | 51.33 | 1-640431-1      |
| 12                                               | 47.55                                                           |          |                                                                   | A19655-ND            | 1.40 | 31.50         | 56.00 | 1-640431-2      |
| Replacement IDC Contacts, .156" (3.96mm) Centers |                                                                 |          |                                                                   |                      |      |               |       |                 |
| 2                                                | Tin Plated, 18 AWG                                              | —        | —                                                                 | A19820-ND            | .25  | 2.44          | 4.35  | 640631-2        |
|                                                  | Tin Plated, 20 AWG                                              | —        | —                                                                 | A19825-ND            | .25  | 2.44          | 4.35  | 640632-2        |
|                                                  | Tin Plated, 22 AWG                                              | —        | —                                                                 | A19830-ND            | .25  | 2.44          | 4.35  | 640633-2        |
|                                                  | Tin Plated, 24 AWG                                              | —        | —                                                                 | A19835-ND            | .25  | 2.44          | 4.35  | 640634-2        |
| SL-156 Crimp Housings (Contacts Sold Separately) |                                                                 |          |                                                                   |                      |      |               |       |                 |
| 3                                                | With Lock Ramp,<br>Without Polarizing Tabs<br>UL94V-0, White    | 2        | 7.82                                                              | A19950-ND            | .25  | 2.38          | 4.23  | 640250-2        |
|                                                  |                                                                 | 3        | 11.81                                                             | A19951-ND            | .17  | 2.19          | 3.89  | 640250-3        |
|                                                  |                                                                 | 4        | 15.75                                                             | A19952-ND            | .32  | 4.76          | 8.46  | 640250-4        |
|                                                  |                                                                 | 5        | 19.74                                                             | A19953-ND            | .21  | 3.61          | 6.42  | 640250-5        |
|                                                  |                                                                 | 6        | 23.70                                                             | A19954-ND            | .23  | 4.38          | 7.79  | 640250-6        |
|                                                  |                                                                 | 7        | 27.69                                                             | A19955-ND            | .23  | 4.46          | 7.93  | 640250-7        |
|                                                  |                                                                 | 8        | 31.65                                                             | A19956-ND            | .29  | 5.90          | 10.48 | 640250-8        |
|                                                  |                                                                 | 9        | 35.61                                                             | A19957-ND            | .48  | 10.70         | 19.03 | 640250-9        |
|                                                  |                                                                 | 10       | 39.57                                                             | A19958-ND            | .53  | 11.89         | 21.14 | 1-640250-0      |
|                                                  |                                                                 | 11       | 43.56                                                             | A19959-ND            | .58  | 13.08         | 23.26 | 1-640250-1      |
|                                                  |                                                                 | 12       | 47.52                                                             | A19960-ND            | .39  | 8.77          | 15.60 | 1-640250-2      |
| 4                                                | Without Lock Ramp,<br>Without Polarizing Tabs<br>UL94V-0, White | 2        | 7.82                                                              | A19970-ND            | .25  | 2.38          | 4.23  | 640251-2        |
|                                                  |                                                                 | 3        | 11.81                                                             | A19971-ND            | .28  | 3.57          | 6.34  | 640251-3        |
|                                                  |                                                                 | 4        | 15.75                                                             | A19972-ND            | .32  | 4.76          | 8.46  | 640251-4        |
|                                                  |                                                                 | 5        | 19.74                                                             | A19973-ND            | .35  | 5.95          | 10.57 | 640251-5        |
|                                                  |                                                                 | 6        | 23.70                                                             | A19974-ND            | .27  | 5.16          | 9.17  | 640251-6        |
|                                                  |                                                                 | 7        | 27.69                                                             | A19975-ND            | .43  | 8.33          | 14.80 | 640251-7        |
|                                                  |                                                                 | 8        | 31.65                                                             | A19976-ND            | .47  | 9.51          | 16.92 | 640251-8        |
|                                                  |                                                                 | 9        | 35.61                                                             | A19977-ND            | .48  | 10.70         | 19.03 | 640251-9        |
|                                                  |                                                                 | 10       | 39.57                                                             | A19978-ND            | .53  | 11.89         | 21.14 | 1-640251-0      |
|                                                  |                                                                 | 11       | 43.56                                                             | A19979-ND            | .58  | 13.08         | 23.26 | 1-640251-1      |
|                                                  |                                                                 | 12       | 47.52                                                             | A19980-ND            | .63  | 14.27         | 25.37 | 1-640251-2      |
| SL-156 Crimp Contacts                            |                                                                 |          |                                                                   |                      |      |               |       |                 |
| 5                                                | Brass, Bright Tin Plated<br>High Force, 6.5 Amp                 | —        | —                                                                 | A19990-ND            | .31  | 5.20          | 9.25  | 640706-1        |
| 5                                                | Brass, Pre-tin Plated<br>High Force, 6.5 Amp                    | —        | —                                                                 | A19991-ND            | .26  | 4.07          | 7.24  | 640706-2        |
| 6                                                | Brass, Tin Plated<br>Low Force, 6.5 Amp                         | —        | —                                                                 | A19992-ND            | .31  | 5.23          | 9.29  | 640707-1        |
| 7                                                | Phosphor Bronze, Tin<br>Plated, Hooded, 10 Amp                  | —        | —                                                                 | A19993-ND            | .31  | 5.26          | 9.36  | 770522-1        |
| SL-156 Keying Plugs and Pins                     |                                                                 |          |                                                                   |                      |      |               |       |                 |
| —                                                | Plug, Keying                                                    | —        | —                                                                 | A19994-ND            | .21  | 1.68          | 2.98  | 640254-1        |
| —                                                | Pin, Keypin                                                     | —        | —                                                                 | A19995-ND            | .25  | 2.07          | 3.67  | 640255-1        |

| Fig.                                             | Description                                                                               | Circuits | Dim. "A" (mm)                 | Digi-Key Part No. | 1     | Pricing 25 50 | AMP Part No. |           |          |
|--------------------------------------------------|-------------------------------------------------------------------------------------------|----------|-------------------------------|-------------------|-------|---------------|--------------|-----------|----------|
| Accessories, .156" (3.96mm) Centers              |                                                                                           |          |                               |                   |       |               |              |           |          |
| 8                                                | Closed End Strain Relief Covers, White                                                    | 2        | 7.92                          | A19740-ND         | .33   | 7.35 13.07    | 643067-2     |           |          |
|                                                  |                                                                                           | 3        | 11.89                         | A19741-ND         | 1.04  | 23.40 41.61   | 643067-3     |           |          |
|                                                  |                                                                                           | 4        | 15.85                         | A19742-ND         | 1.04  | 23.49 41.76   | 643067-4     |           |          |
|                                                  |                                                                                           | 5        | 19.81                         | A19743-ND         | 1.05  | 23.57 41.91   | 643067-5     |           |          |
|                                                  |                                                                                           | 6        | 23.77                         | A19744-ND         | 1.05  | 23.66 42.05   | 643067-6     |           |          |
|                                                  |                                                                                           | 7        | 27.74                         | A19745-ND         | 1.06  | 23.74 42.20   | 643067-7     |           |          |
|                                                  |                                                                                           | 8        | 31.70                         | A19746-ND         | 1.06  | 23.82 42.35   | 643067-8     |           |          |
|                                                  |                                                                                           | 9        | 35.66                         | A19747-ND         | 1.06  | 23.91 42.50   | 643067-9     |           |          |
|                                                  |                                                                                           | 10       | 39.62                         | A19748-ND         | 1.07  | 23.99 42.65   | 1-643067-0   |           |          |
|                                                  |                                                                                           | 11       | 43.59                         | A19749-ND         | 1.07  | 24.07 42.80   | 1-643067-1   |           |          |
|                                                  |                                                                                           | 12       | 47.55                         | A19750-ND         | 1.07  | 24.16 42.94   | 1-643067-2   |           |          |
|                                                  |                                                                                           | 9        | Closed End Dust Covers, White | 2                 | 7.92  | A19760-ND     | .25          | 2.80 4.97 | 640551-2 |
| 3                                                | 11.89                                                                                     |          |                               | A19761-ND         | .28   | 3.49 6.20     | 640551-3     |           |          |
| 4                                                | 15.85                                                                                     |          |                               | A19762-ND         | .28   | 3.50 6.22     | 640551-4     |           |          |
| 5                                                | 19.81                                                                                     |          |                               | A19763-ND         | .25   | 4.86 8.65     | 640551-5     |           |          |
| 6                                                | 23.77                                                                                     |          |                               | A19764-ND         | .31   | 6.26 11.12    | 640551-6     |           |          |
| 7                                                | 27.74                                                                                     |          |                               | A19765-ND         | .29   | 6.24 11.10    | 640551-7     |           |          |
| 8                                                | 31.70                                                                                     |          |                               | A19766-ND         | .31   | 6.93 12.32    | 640551-8     |           |          |
| 9                                                | 35.66                                                                                     |          |                               | A19767-ND         | .34   | 7.62 13.55    | 640551-9     |           |          |
| 10                                               | 39.62                                                                                     |          |                               | A19768-ND         | .37   | 8.31 14.77    | 1-640551-0   |           |          |
| 11                                               | 43.59                                                                                     |          |                               | A19769-ND         | .40   | 8.93 15.87    | 1-640551-1   |           |          |
| 12                                               | 47.55                                                                                     |          |                               | A19770-ND         | .42   | 9.51 16.91    | 1-640551-2   |           |          |
| 10                                               | Feed-Thru Strain Relief Covers, White                                                     |          |                               | 2                 | 7.92  | A19780-ND     | .23          | 5.20 9.24 | 643071-2 |
|                                                  |                                                                                           | 3        | 11.89                         | A19781-ND         | .35   | 7.80 13.86    | 643071-3     |           |          |
|                                                  |                                                                                           | 4        | 15.85                         | A19782-ND         | .46   | 10.40 18.48   | 643071-4     |           |          |
|                                                  |                                                                                           | 5        | 19.81                         | A19783-ND         | .51   | 11.55 20.53   | 643071-5     |           |          |
|                                                  |                                                                                           | 6        | 23.77                         | A19784-ND         | .56   | 12.60 22.40   | 643071-6     |           |          |
|                                                  |                                                                                           | 7        | 27.74                         | A19785-ND         | .65   | 14.70 26.13   | 643071-7     |           |          |
|                                                  |                                                                                           | 8        | 31.70                         | A19786-ND         | .70   | 15.76 28.02   | 643071-8     |           |          |
|                                                  |                                                                                           | 9        | 35.66                         | A19787-ND         | .74   | 16.54 29.40   | 643071-9     |           |          |
|                                                  |                                                                                           | 10       | 39.62                         | A19788-ND         | 1.07  | 23.99 42.65   | 1-643071-0   |           |          |
|                                                  |                                                                                           | 11       | 43.59                         | A19789-ND         | 1.07  | 24.07 42.80   | 1-643071-1   |           |          |
|                                                  |                                                                                           | 12       | 47.55                         | A19790-ND         | 1.07  | 24.16 42.94   | 1-643071-2   |           |          |
|                                                  |                                                                                           | 11       | Feed-Thru Dust Covers, White  | 3                 | 11.89 | A19801-ND     | .26          | 3.49 6.20 | 640643-3 |
| 4                                                | 15.85                                                                                     |          |                               | A19802-ND         | .28   | 4.17 7.42     | 640643-4     |           |          |
| 5                                                | 19.81                                                                                     |          |                               | A19803-ND         | .31   | 4.86 8.65     | 640643-5     |           |          |
| 6                                                | 23.77                                                                                     |          |                               | A19804-ND         | .33   | 5.55 9.87     | 640643-6     |           |          |
| 7                                                | 27.74                                                                                     |          |                               | A19805-ND         | .37   | 6.24 11.10    | 640643-7     |           |          |
| 8                                                | 31.70                                                                                     |          |                               | A19806-ND         | .41   | 6.93 12.32    | 640643-8     |           |          |
| 9                                                | 35.66                                                                                     |          |                               | A19807-ND         | .45   | 7.62 13.55    | 640643-9     |           |          |
| 10                                               | 39.62                                                                                     |          |                               | A19808-ND         | .49   | 8.31 14.77    | 1-640643-0   |           |          |
| 11                                               | 43.59                                                                                     |          |                               | A19809-ND         | .53   | 8.93 15.87    | 1-640643-1   |           |          |
| 12                                               | 47.55                                                                                     |          |                               | A19810-ND         | .56   | 9.51 16.91    | 1-640643-2   |           |          |
| Keying Plugs                                     |                                                                                           |          |                               |                   |       |               |              |           |          |
| 12                                               | Loose Piece, Flush Used w/Keyed Headers                                                   |          |                               | —                 | —     | A19845-ND     | .25          | 2.96 5.26 | 640629-1 |
| 13                                               | On Carrier Strip, Flush 10 per Strip                                                      | —        | —                             | A19840-ND         | .25   | 2.96 5.26     | 641623-1     |           |          |
| 14                                               | Long Nose Used with Staked Post                                                           | —        | —                             | A19850-ND         | .25   | 2.96 5.26     | 640630-1     |           |          |
| Panel Mount End Caps                             |                                                                                           |          |                               |                   |       |               |              |           |          |
| 15                                               | Black Nylon                                                                               | 2        | —                             | A19860-ND         | .47   | 10.49 18.65   | 641533-1     |           |          |
| 16                                               | Black Nylon                                                                               | 3-24     | —                             | A19855-ND         | .65   | 14.52 25.81   | 641440-1     |           |          |
| Flat Square Post Headers, .156" (3.96mm) Centers |                                                                                           |          |                               |                   |       |               |              |           |          |
| 17                                               | Straight Post .045" (1.14mm) Square Standard UL94V-0 Tin Plated .125" (3.18mm) Soldertail | 2        | 7.92                          | A1961-ND          | .25   | 3.46 6.16     | 640383-2     |           |          |
|                                                  |                                                                                           | 3        | 11.89                         | A1962-ND          | .27   | 5.20 9.24     | 640383-3     |           |          |
|                                                  |                                                                                           | 4        | 15.85                         | A1963-ND          | .31   | 6.93 12.32    | 640383-4     |           |          |
|                                                  |                                                                                           | 5        | 19.81                         | A1964-ND          | .38   | 8.66 15.40    | 640383-5     |           |          |
|                                                  |                                                                                           | 6        | 23.77                         | A1965-ND          | .42   | 9.45 16.80    | 640383-6     |           |          |
|                                                  |                                                                                           | 7        | 27.74                         | A1967-ND          | .49   | 11.02 19.60   | 640383-7     |           |          |
|                                                  |                                                                                           | 8        | 31.70                         | A1964-ND          | .56   | 12.60 22.40   | 640383-8     |           |          |
|                                                  |                                                                                           | 9        | 35.66                         | A1963-ND          | .63   | 14.18 25.20   | 640383-9     |           |          |
|                                                  |                                                                                           | 10       | 39.62                         | A1965-ND          | .70   | 15.75 28.00   | 1-640383-0   |           |          |
|                                                  |                                                                                           | 11       | 43.59                         | A19874-ND         | .77   | 17.33 30.80   | 1-640383-1   |           |          |
|                                                  |                                                                                           | 12       | 47.55                         | A19875-ND         | .84   | 18.90 33.60   | 1-640383-2   |           |          |

| Fig.                                                                                                                                     | Description                                                                                         | Circuits  | Dim. "A" (mm) | Digi-Key Part No. | 1     | Pricing 25 | 50    | AMP Part No. |
|------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------|-----------|---------------|-------------------|-------|------------|-------|--------------|
| 18                                                                                                                                       | Right Angle Post .045" (1.14mm) Square Standard UL94V-0<br>Tin Plated .125" (3.18mm)<br>Solder tail | 2         | 7.92          | A1966-ND          | .26   | 4.62       | 8.21  | 640385-2     |
|                                                                                                                                          |                                                                                                     | 3         | 11.89         | A1967-ND          | .31   | 6.93       | 12.32 | 640385-3     |
|                                                                                                                                          |                                                                                                     | 4         | 15.85         | A1967-ND          | .41   | 9.24       | 16.43 | 640385-4     |
|                                                                                                                                          |                                                                                                     | 5         | 19.81         | A1967-ND          | .51   | 11.55      | 20.53 | 640385-5     |
|                                                                                                                                          |                                                                                                     | 6         | 23.77         | A1968-ND          | .56   | 12.60      | 22.40 | 640385-6     |
|                                                                                                                                          |                                                                                                     | 7         | 27.74         | A19878-ND         | .65   | 14.70      | 26.13 | 640385-7     |
|                                                                                                                                          |                                                                                                     | 8         | 31.70         | A1969-ND          | .75   | 16.80      | 29.87 | 640385-8     |
|                                                                                                                                          |                                                                                                     | 9         | 35.66         | A19879-ND         | .84   | 18.90      | 33.60 | 640385-9     |
|                                                                                                                                          |                                                                                                     | 10        | 39.62         | A1970-ND          | .93   | 21.00      | 37.33 | 1-640385-0   |
|                                                                                                                                          |                                                                                                     | 11        | 43.59         | A19880-ND         | 1.03  | 23.10      | 41.07 | 1-640385-1   |
| 12                                                                                                                                       | 47.55                                                                                               | A19881-ND | 1.12          | 25.20             | 44.80 | 1-640385-2 |       |              |
| Straight Post Headers, .156 (3.96mm) Centers, Friction Lock Header                                                                       |                                                                                                     |           |               |                   |       |            |       |              |
| 19                                                                                                                                       | Square Post .045" (1.14mm) Square Standard UL94V-0<br>Tin Plated .125" (3.18mm)<br>Solder tail      | 2         | 7.92          | A1971-ND          | .11   | 1.89       | 3.35  | 640445-2     |
|                                                                                                                                          |                                                                                                     | 3         | 11.89         | A19890-ND         | .10   | 2.36       | 4.19  | 640445-3     |
|                                                                                                                                          |                                                                                                     | 4         | 15.85         | A1972-ND          | .15   | 3.37       | 6.00  | 640445-4     |
|                                                                                                                                          |                                                                                                     | 5         | 19.81         | A19891-ND         | .19   | 4.39       | 7.80  | 640445-5     |
|                                                                                                                                          |                                                                                                     | 6         | 23.77         | A1973-ND          | .22   | 5.06       | 9.00  | 640445-6     |
|                                                                                                                                          |                                                                                                     | 7         | 27.74         | A19892-ND         | .24   | 5.40       | 9.60  | 640445-7     |
|                                                                                                                                          |                                                                                                     | 8         | 31.70         | A1974-ND          | .29   | 6.49       | 11.53 | 640445-8     |
|                                                                                                                                          |                                                                                                     | 9         | 35.66         | A19893-ND         | .36   | 7.80       | 13.60 | 640445-9     |
|                                                                                                                                          |                                                                                                     | 10        | 39.62         | A1975-ND          | .36   | 8.07       | 14.35 | 1-640445-0   |
|                                                                                                                                          |                                                                                                     | 11        | 43.59         | A19894-ND         | 1.03  | 23.10      | 41.07 | 1-640445-1   |
| 12                                                                                                                                       | 47.55                                                                                               | A19895-ND | .42           | 9.47              | 16.84 | 1-640445-2 |       |              |
| 19                                                                                                                                       | Round Post .045" (1.14mm) Square Standard UL94V-0<br>Tin Plated .125" (3.18mm)<br>Solder tail       | 2         | 7.92          | A19900-ND         | .26   | 4.62       | 8.21  | 640388-2     |
|                                                                                                                                          |                                                                                                     | 3         | 11.89         | A19901-ND         | .31   | 6.93       | 12.32 | 640388-3     |
|                                                                                                                                          |                                                                                                     | 4         | 15.85         | A19902-ND         | .41   | 9.24       | 16.43 | 640388-4     |
|                                                                                                                                          |                                                                                                     | 5         | 19.81         | A19903-ND         | .51   | 11.55      | 20.53 | 640388-5     |
|                                                                                                                                          |                                                                                                     | 6         | 23.77         | A19904-ND         | .56   | 12.60      | 22.40 | 640388-6     |
|                                                                                                                                          |                                                                                                     | 7         | 27.74         | A19905-ND         | .65   | 14.70      | 26.13 | 640388-7     |
|                                                                                                                                          |                                                                                                     | 8         | 31.70         | A19906-ND         | .75   | 16.80      | 29.87 | 640388-8     |
|                                                                                                                                          |                                                                                                     | 9         | 35.66         | A19907-ND         | .84   | 18.90      | 33.60 | 640388-9     |
|                                                                                                                                          |                                                                                                     | 10        | 39.62         | A19908-ND         | .93   | 21.00      | 37.33 | 1-640388-0   |
|                                                                                                                                          |                                                                                                     | 11        | 43.59         | A19909-ND         | 1.03  | 23.10      | 41.07 | 1-640388-1   |
| 12                                                                                                                                       | 47.55                                                                                               | A19910-ND | 1.12          | 25.20             | 44.80 | 1-640388-2 |       |              |
| Right Angle Post Headers, .156 (3.96mm) Centers, Friction Lock Header                                                                    |                                                                                                     |           |               |                   |       |            |       |              |
| 20                                                                                                                                       | Right Angle Post .045 Square, Front Bend<br>Standard UL94V-0 .125" (3.18mm)<br>Solder tail          | 2         | 7.92          | A1976-ND          | .31   | 6.93       | 12.32 | 640389-2     |
|                                                                                                                                          |                                                                                                     | 3         | 11.89         | A19920-ND         | .46   | 10.39      | 18.48 | 640389-3     |
|                                                                                                                                          |                                                                                                     | 4         | 15.85         | A1977-ND          | .62   | 13.86      | 24.64 | 640389-4     |
|                                                                                                                                          |                                                                                                     | 5         | 19.81         | A19921-ND         | .77   | 17.33      | 30.80 | 640389-5     |
|                                                                                                                                          |                                                                                                     | 6         | 23.77         | A1978-ND          | .84   | 18.90      | 33.60 | 640389-6     |
|                                                                                                                                          |                                                                                                     | 7         | 27.74         | A19922-ND         | .98   | 22.05      | 39.20 | 640389-7     |
|                                                                                                                                          |                                                                                                     | 8         | 31.70         | A1979-ND          | 1.12  | 25.20      | 44.80 | 640389-8     |
|                                                                                                                                          |                                                                                                     | 9         | 35.66         | A19923-ND         | 1.26  | 28.35      | 50.40 | 640389-9     |
|                                                                                                                                          |                                                                                                     | 10        | 39.62         | A1980-ND          | 1.40  | 31.50      | 56.00 | 1-640389-0   |
|                                                                                                                                          |                                                                                                     | 11        | 43.59         | A19924-ND         | 1.54  | 34.65      | 61.60 | 1-640389-1   |
| 12                                                                                                                                       | 47.55                                                                                               | A19925-ND | 1.68          | 37.80             | 67.20 | 1-640389-2 |       |              |
| 21                                                                                                                                       | Right Angle Post .045" (1.14mm) Square Rear Bend<br>Standard UL94V-0 .125" (3.18mm)<br>Solder tail  | 2         | 7.92          | A19930-ND         | .31   | 6.93       | 12.32 | 640387-2     |
|                                                                                                                                          |                                                                                                     | 3         | 11.89         | A19931-ND         | .46   | 10.39      | 18.48 | 640387-3     |
|                                                                                                                                          |                                                                                                     | 4         | 15.85         | A19932-ND         | .62   | 13.86      | 24.64 | 640387-4     |
|                                                                                                                                          |                                                                                                     | 5         | 19.81         | A19933-ND         | .77   | 17.33      | 30.80 | 640387-5     |
|                                                                                                                                          |                                                                                                     | 6         | 23.77         | A19934-ND         | .84   | 18.90      | 33.60 | 640387-6     |
|                                                                                                                                          |                                                                                                     | 7         | 27.74         | A19935-ND         | .98   | 22.05      | 39.20 | 640387-7     |
|                                                                                                                                          |                                                                                                     | 8         | 31.70         | A19936-ND         | 1.12  | 25.20      | 44.80 | 640387-8     |
|                                                                                                                                          |                                                                                                     | 9         | 35.66         | A19937-ND         | 1.26  | 28.35      | 50.40 | 640387-9     |
|                                                                                                                                          |                                                                                                     | 10        | 39.62         | A19938-ND         | 1.40  | 31.50      | 56.00 | 1-640387-0   |
|                                                                                                                                          |                                                                                                     | 11        | 43.59         | A19939-ND         | 1.54  | 34.65      | 61.60 | 1-640387-1   |
| 12                                                                                                                                       | 47.55                                                                                               | A19940-ND | 1.68          | 37.80             | 67.20 | 1-640387-2 |       |              |
| A19996-ND Crimp Tool w/Die ..... \$381.00 each 90123-5                                                                                   |                                                                                                     |           |               |                   |       |            |       |              |
| A9981-ND T-Handle Tool for MTA .156" (3.96mm) ..... \$18.00 each 59804-1                                                                 |                                                                                                     |           |               |                   |       |            |       |              |
| A9987-ND MATE-N-LOCK® Crimp Tool for 24-18 AWG ..... \$337.82 each 90123-2                                                               |                                                                                                     |           |               |                   |       |            |       |              |
| A1999-ND Crimp Die for MTA .156" (3.96mm) Receptacles ..... \$103.74 each 58247-1                                                        |                                                                                                     |           |               |                   |       |            |       |              |
| A2031-ND Manual Pistol Grip Tool for Metal & All-Plastic Shell Connectors. (Must order crimp die separately.) ..... \$55.50 each 58074-1 |                                                                                                     |           |               |                   |       |            |       |              |

## 3M Board Mount Interconnect Products

**Finish Options:** • 10-microinch selective gold over 50-microinch nickel on contact post; 100-microinch 90/10 solder plate on tail portion • 100-microinch 90/10 solder plate on posts and tails

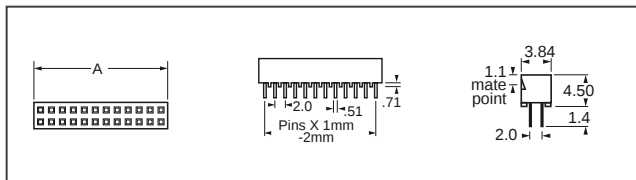
### 2400 Series:

• Material: Glass filled polyester • Flammability: UL94V-0 • Color: Gray • Phosphor bronze plating • 100-microinch nickel underplating • Gold wiping area • 200-microinch 60/40 tin on solder tails • Current Rating: 3 Amps • Withstanding Voltage: 100 Vac. • Temperature Rating: -55°C to +105°C • UL File No. E88080, CSA File No. LR 40971

| Fig. | No. of Posts | Dimensions (mm) |          |       |      |              | Solder Plated                  |            | Gold Plated                    |                |
|------|--------------|-----------------|----------|-------|------|--------------|--------------------------------|------------|--------------------------------|----------------|
|      |              | L               | A(Ref)   | B     | C    | D            | Digi-Key Part No.              | Price Each | Digi-Key Part No.              | Price Each     |
| 1    | 36           | 5.97            | 12.19    | 3.68  | —    | —            | N/A                            |            | 929647-09-36-ND                | 1.83           |
|      |              |                 | 13.84    | 5.33  | —    | —            | 929834-02-36-ND                | 1.02       | 929647-02-36-ND                | 1.93           |
|      |              |                 | 18.92    | 10.41 | —    | —            | 929834-03-36-ND                | 1.08       | 929647-03-36-ND                | 2.43           |
|      |              |                 | 21.46    | 12.95 | —    | —            | 929834-04-36-ND                | 1.44       | 929647-04-36-ND                | 2.68           |
|      |              |                 | 24.00    | 15.49 | —    | —            | 929834-05-36-ND                | 1.23       | 929647-05-36-ND                | 2.95           |
|      |              |                 | 31.62    | 23.11 | —    | —            | 929834-07-36-ND                | 1.39       | 929647-07-36-ND                | 4.12           |
| 2    | 72           | 5.97            | 13.59    | 3.30  | —    | —            | 929400-01-36-ND                | .96        | 929450-01-36-ND                | 1.93           |
|      |              |                 | 12.19    | 3.68  | —    | —            | 929836-09-36-ND                | 2.02       | 929665-09-36-ND                | 3.87           |
|      |              |                 | 13.84    | 5.33  | —    | —            | 929836-02-36-ND                | 2.20       | 929665-02-36-ND                | 4.08           |
|      |              |                 | 16.38    | 7.87  | —    | —            | 929836-08-36-ND                | 2.25       | 929665-08-36-ND                | 4.72           |
|      |              |                 | 18.92    | 10.41 | —    | —            | N/A                            |            | 929665-03-36-ND                | 5.08           |
|      |              |                 | 21.46    | 12.95 | —    | —            | 929836-04-36-ND                | 3.08       | 929665-04-36-ND                | 5.57           |
| 3    | 36           | 5.97            | 15.06    | 4.44  | —    | —            | 929710-10-36-ND                | 2.27       | 929715-10-36-ND                | 4.49           |
|      |              |                 | 21.03    | 10.41 | —    | —            | 929710-03-36-ND                | 2.60       | 929715-03-36-ND                | 5.64           |
|      |              |                 | 4.57     | 2.67  | 1.78 | 1.91         | 929835-01-36-ND                | .89        | N/A                            | —              |
|      |              |                 | 5.46     | 3.56  | 1.78 | 1.91         | 929838-04-36-ND                | 2.37       | 929667-04-36-ND                | 5.03           |
|      |              |                 | 12.19    | 10.29 | 1.78 | 1.91         | 929832-02-36-ND                | 3.04       | 929667-02-36-ND                | 6.88           |
|      |              |                 | 7.49     | 91.44 | —    | —            | 929500-01-36-ND                | 1.04       | 929550-01-36-ND                | 2.41           |
| 4    | 72           | 5.97            | N/A      | —     | 3.18 | —            | 929974-01-10-ND                | .68        | N/A                            | —              |
|      |              |                 | N/A      | —     | 3.18 | —            | 929974-01-36-ND                | 1.23       | 929850-01-36-ND                | 1.91           |
|      |              |                 | N/A      | —     | —    | —            | 929975-01-36-ND                | 2.04       | 929852-01-36-ND                | 3.35           |
|      |              |                 | N/A      | —     | —    | —            | 929955-06-ND<br>(10µ in. gold) |            | 929955-06-ND<br>(10µ in. gold) | 1.46<br>per 10 |
|      |              |                 | N/A      | —     | —    | —            | 929957-08-ND<br>(30µ in. gold) |            | 929957-08-ND<br>(30µ in. gold) | 1.87<br>per 10 |
|      |              |                 | N/A      | —     | —    | —            | —                              | —          | —                              | —              |
| 8    | 2            | N/A             | SHUNTS!! | —     | —    | 929950-00-ND | 1.04<br>per 10                 | —          | —                              |                |
|      |              |                 |          |       |      |              |                                |            |                                |                |



## 3M 2mm x 2mm Vertical Socket



**Features:** • High temperature dielectric • IR, vapor & wave solder compatible • Available in thru hole • Industry standard compatible • Minimizes PC board stacking heights • End stackable feature • Side stackable feature

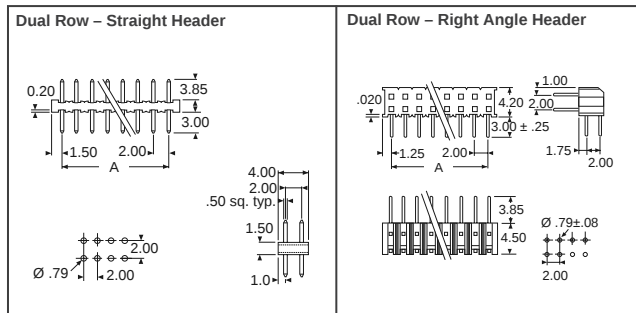
**Physical Specifications:** • **Insulation Material:** High Temperature Glass Filled Polyester (PCT) • **Color:** Natural • **Marking:** Molded orientation delta • **Contact Material:** Beryllium copper • **Contact Plating:** • Wiping area: 30µ" gold plate • Solder Tails: 100µ" 90/10 SnPb plate • Underplate: 50µ" nickel

**Electrical Specifications:** • Current Rating: 1.5Amp • Insulation Resistance: 5000 Megohms @ 250 volts min. • Withstanding Voltage: 500 VDC @ Sea level

**Environmental Specifications:** • Operating Temperature: -55° to +105°C

| No. of Pos.              | Dim. A | Digi-Key Part No. | 1    | Pricing 100 | 500     | 3M Part No. |
|--------------------------|--------|-------------------|------|-------------|---------|-------------|
| Socket Vertical PC Mount |        |                   |      |             |         |             |
| 8                        | .310   | 3M1008-ND         | 1.04 | 79.00       | 357.50  | 80130079876 |
| 10                       | .389   | 3M1010-ND         | 1.29 | 97.96       | 443.30  | 80130079884 |
| 12                       | .467   | 3M1012-ND         | 1.54 | 116.92      | 529.10  | 80130079892 |
| 20                       | .782   | 3M1020-ND         | 2.58 | 195.92      | 896.60  | 80130079934 |
| 24                       | .940   | 3M1024-ND         | 3.10 | 235.42      | 1065.35 | 80130079959 |
| 30                       | 1.176  | 3M1030-ND         | 3.87 | 293.88      | 1329.90 | 80130079983 |
| 40                       | 1.570  | 3M1040-ND         | 5.16 | 391.84      | 1773.20 | 80130080031 |
| 44                       | 1.727  | 3M1044-ND         | 5.68 | 431.34      | 1951.95 | 80130080056 |
| 50                       | 1.964  | 3M1050-ND         | 6.45 | 489.80      | 2216.50 | 80130080080 |
| 60                       | 2.357  | 3M1060-ND         | 7.74 | 587.76      | 2659.80 | 80130080130 |

## 2mm x 2mm Pin Strip Headers



**Features:** • Industry standard compatible • High temperature dielectric • IR, vapor & wave solder compatible • Straight Solder Tail • Maximizes use of PC board space • Mates with boardmount and wiremount products • End stackable feature • Side stackable feature

**Physical Specifications:** • **Contact Plating:** • Wiping area: Gold - MIL-G-45204, Type II, Grade C • Solder Tails: 200µ" 90/10 Tin Lead - MIL-P-81728 • Underplate: 100µ" nickel - QQ-N-290, Class 2 • **Contact Material:** Copper Alloy • **Insulation Material:** • Right Angle: Glass Filled Polyester (PCT) • Straight: Liquid Crystal Polymer (LCP) • **Flammability:** UL 94V-0 • **Color:** • Natural

**Electrical Specifications:** • Current Rating: 1.5Amp • Insulation Resistance: >5x10<sup>9</sup> Ohms @ 250 VDC • Withstanding Voltage: 500 VDC @ Sea level

**Environmental Specifications:** • Operating Temperature: -55° to +105°C

| No. of Pos.                 | Dim. A | Digi-Key Part No. | 1    | Pricing 100 | 500     | 3M Part No. |
|-----------------------------|--------|-------------------|------|-------------|---------|-------------|
| Dual Row Straight Header    |        |                   |      |             |         |             |
| 8                           | .295   | 3M1108-ND         | .83  | 63.20       | 286.00  | 80130076609 |
| 10                          | .374   | 3M1110-ND         | 1.04 | 79.00       | 357.50  | 80130076484 |
| 12                          | .453   | 3M1112-ND         | 1.25 | 94.80       | 429.00  | 80130076369 |
| 20                          | .768   | 3M1120-ND         | 2.08 | 158.00      | 715.00  | 80130075882 |
| 24                          | .925   | 3M1124-ND         | 2.50 | 189.60      | 858.00  | 80130075643 |
| 30                          | 1.162  | 3M1130-ND         | 3.12 | 237.00      | 1072.50 | 80130075288 |
| 40                          | 1.556  | 3M1140-ND         | 4.16 | 316.00      | 1430.00 | 80130074687 |
| 44                          | 1.714  | 3M1144-ND         | 4.58 | 347.60      | 1573.00 | 80130074448 |
| 50                          | 1.950  | 3M1150-ND         | 5.20 | 395.00      | 1787.50 | 80130074083 |
| 60                          | 2.344  | 3M1160-ND         | 4.99 | 379.20      | 1716.00 | 80130077086 |
| Dual Row Right Angle Header |        |                   |      |             |         |             |
| 8                           | .295   | 3M1208-ND         | .94  | 71.10       | 321.75  | 80130076625 |
| 10                          | .374   | 3M1210-ND         | 1.16 | 88.48       | 400.40  | 80130076500 |
| 12                          | .453   | 3M1212-ND         | 1.41 | 107.44      | 486.20  | 80130076385 |
| 20                          | .768   | 3M1220-ND         | 2.35 | 178.54      | 807.95  | 80130075908 |
| 24                          | .925   | 3M1224-ND         | 2.81 | 213.30      | 965.25  | 80130075668 |
| 30                          | 1.162  | 3M1230-ND         | 3.52 | 267.02      | 1208.35 | 80130075304 |
| 40                          | 1.556  | 3M1240-ND         | 4.70 | 357.08      | 1615.90 | 80130074703 |
| 44                          | 1.714  | 3M1244-ND         | 5.16 | 391.84      | 1773.20 | 80130074463 |
| 50                          | 1.950  | 3M1250-ND         | 5.67 | 445.56      | 2016.30 | 80130074109 |
| 60                          | 2.344  | 3M1260-ND         | 5.87 | 445.56      | 2016.30 | 80130077102 |

## 3M 2mm Wiremount Socket

### 2mm Wiremount Socket - 1mm Pitch Cable

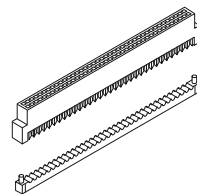
**Features:** • Industry standard compatible • Mates with 2mm x 2mm grid pin strips • Low profile • Preassembled covers • Available with and without strain relief

**Physical Specifications:** • **Insulation Material:** Glass Filled Polyester (PBT), Flammability: UL 94 V-0 • **Color:** Gray • **Contact Material:** Beryllium copper • **Contact Plating:** • Underplate and U-slot: 50µ" Nickel, QQ-N-290, Class 2 • Wiping area: Gold Mil-G-45204, Type II, Grade C • **Marking:** Orientation triangle and 3M logo

**Electrical Specifications:** • Current Rating: 1Amp • Insulation Resistance: >1x10<sup>9</sup>Ω at 500 Vdc • Withstanding Voltage: 1000Vrms at Sea Level

**Environmental Specifications:** • Operating Temperature Rating: -55° to +105°C

**Rating:** UL File No. E86982, CSA File No. LR#48869



### 1.0mm Round Conductor Flat Cable - 28AWG Stranded, PVC

**Features:** • Close spacing permits high signal density • 28AWG wire on 1mm centers permits mass termination to 2 mm connectors • Zippable for branching or discrete termination • Stranded wire provides flexibility and extended product life

**Physical Specifications:** • **Insulation Material:** Polyvinyl Chloride (PVC) • **Color:** Gray • **Marking:** Red Edge • **Conductors:** 28 AWG, 7 x 36 Tinned Stranded Copper

**Electrical Specifications:** • Voltage Rating: 300V • Insulation Resistance: >1x10<sup>9</sup>Ω/3m (10 ft) • Characteristic Impedance: 92Ω Unbalanced, 146Ω Balanced • Capacitance: 55.50 pF/m Unbalanced, 32.77 pF/m Balanced • Inductance: 0.47 µH/m Unbalanced, 0.70 µH/m Balanced • Propagation Delay: 4.95 ns/m Unbalanced, 4.78 ns/m Balanced

**Environmental Specifications:** • Temperature Rating Operating: -20°C to +105°C • Flammability Rating: UL: VW-1, CSA: FT1

**Rating:** UL File No. E42769, Style 2651 CSA File No. LL 53649 (optional)

| No. of Pos.                      | Digi-Key Part No. | 1    | Pricing 100 | 500     | 3M Part No. |
|----------------------------------|-------------------|------|-------------|---------|-------------|
| IDC Socket Gold                  |                   |      |             |         |             |
| 10                               | MSA10A-ND         | 1.98 | 150.10      | 679.25  | 80610492326 |
| 12                               | MSA12A-ND         | 2.29 | 173.80      | 786.50  | 80610492680 |
| 44                               | MSA44A-ND         | 4.47 | 339.70      | 1537.25 | 80610490098 |
| 50                               | MSA50A-ND         | 4.68 | 355.50      | 1608.75 | 80610490213 |
| IDC Socket Gold w/ Strain Relief |                   |      |             |         |             |
| 10                               | MSE10A-ND         | 2.39 | 181.70      | 822.25  | 80610492359 |
| 12                               | MSE12A-ND         | 2.60 | 197.50      | 893.75  | 80610492714 |
| 44                               | MSE44A-ND         | 4.78 | 363.40      | 1644.50 | 80610490452 |
| 50                               | MSE50A-ND         | 4.99 | 379.20      | 1716.00 | 80610490338 |

| No. of Pos. | Digi-Key Part No. | (NOTE: "X" in Digi-Key Part No. Represents Number of Meters.) Price Per Meters |       |        |        |        | 3M Part No. |
|-------------|-------------------|--------------------------------------------------------------------------------|-------|--------|--------|--------|-------------|
|             |                   | 5                                                                              | 10    | 25     | 50     | 100    |             |
|             |                   | Ribbon Cable Gray                                                              |       |        |        |        |             |
| 10          | MC10L-X-ND        | 7.81                                                                           | 14.50 | 32.35  | 55.78  | 89.24  | 80610707335 |
| 12          | MC12L-X-ND        | 9.37                                                                           | 17.40 | 38.82  | 66.93  | 107.08 | 80610707343 |
| 44          | MC44L-X-ND        | 34.58                                                                          | 64.22 | 143.26 | 247.00 | 395.20 | 80610707509 |
| 50          | MC50L-X-ND        | 39.29                                                                          | 72.96 | 162.76 | 280.63 | 449.00 | 80610707533 |

100m. Reel quantity may contain splices. Splice position will be marked on the reel.

## AMP 2mm Ribbon Connectors

### 2mm Ribbon Connectors

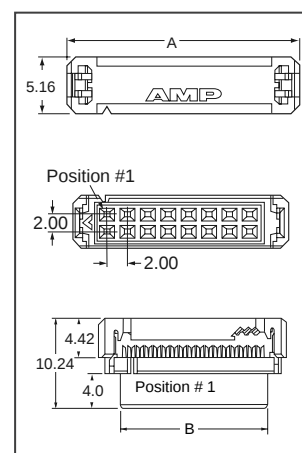
The new 2.0 (.079) AMP-LATCH® receptacle connector family features contacts on a true 2.0 x 2.0 (.079 x .079) mating grid for 1.0 (.039) pitch ribbon. These receptacles feature insulation displacement contacts (IDC) with a top/bottom single beam contact orientation. Contacts are beryllium copper, duplex plated 0.00076 (.000030) gold in the mating area and 0.00254 (.000100) min. tin-lead on termination end all over 0.00127 (.000050) nickel underplating. Contact mating area is 1.54 (.061) from the face of the housing and they accept 0.50mm (.0197) round or square posts.

#### Product Facts:

• True hard metric 2.0 x 2.0 mating grid for 1.0 pitch ribbon cable • Insulation displacement (IDC), beryllium copper contacts, duplex plated gold-over-nickel • U.L. 94V-0 rated thermoplastic components

#### Performance Data:

• Durability: 150 cycles • Termination Resistance: 25 milliohms max. • Mating Force: 1.67 N max. • Unmating Force: 0.14 N min. • Operating Temperature: -65°C to +105°C



| No. of Pos. | Dimensions A B | Digi-Key Part No. | 1    | 25    | 100    | Pricing 500 | 1,000   | 5,000    | AMP Part No. |
|-------------|----------------|-------------------|------|-------|--------|-------------|---------|----------|--------------|
| Receptacle  |                |                   |      |       |        |             |         |          |              |
| 40          | 45.19 40.41    | ASA40K-ND         | 3.23 | 73.21 | 207.42 | 915.11      | 1622.79 | 1525.18M | 1-111626-9   |
| 44          | 49.17 44.40    | ASA44K-ND         | 3.54 | 80.15 | 227.08 | 1001.84     | 1776.59 | 1669.73M | 1-111626-0   |
| 50          | 55.17 50.39    | ASA50K-ND         | 4.04 | 91.37 | 258.89 | 1142.18     | 2025.46 | 1903.63M | 1-111626-1   |

### 2mm Ribbon Cable

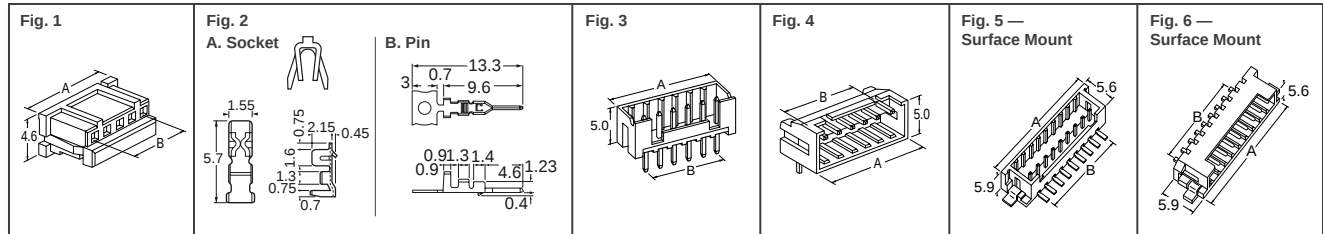
| No. of Pos. | Dimensions |       | Digi-Key Part No. | Note: X in Part No. = Ft Per Roll<br>*Price Per Roll |      |       |       |       |        | AMP Part No. |
|-------------|------------|-------|-------------------|------------------------------------------------------|------|-------|-------|-------|--------|--------------|
|             | A          | B     |                   | 5ft                                                  | 10ft | 25ft  | 50ft  | 100ft | 500ft  |              |
| 40          | 39.79      | 39.00 | AM40G-X-ND        | 3.58                                                 | 5.87 | 14.18 | 27.34 | 50.63 | 135.70 | 1-57051-1    |
| 44          | 43.79      | 43.00 | AM44G-X-ND        | 2.86                                                 | 5.10 | 12.30 | 23.72 | 43.93 | 149.30 | 1-57051-2    |
| 50          | 49.79      | 49.00 | AM50G-X-ND        | 3.97                                                 | 7.08 | 17.10 | 32.98 | 61.08 | 169.74 | 1-57051-3    |

1-800-344-4539

218-681-6674 • FAX: 218-681-3380 • www.digikey.com

**DF3 SERIES - Single Row Connectors**

Specifications • Current Capacity: 3A with AWG24 cable • Rated Voltage: 250VAC • Insulation Res.: Min. 1000MΩ at 500VDC • Withstand Voltage: 650VAC • Contact Res.: Max. 30MΩ at 0.1ADC

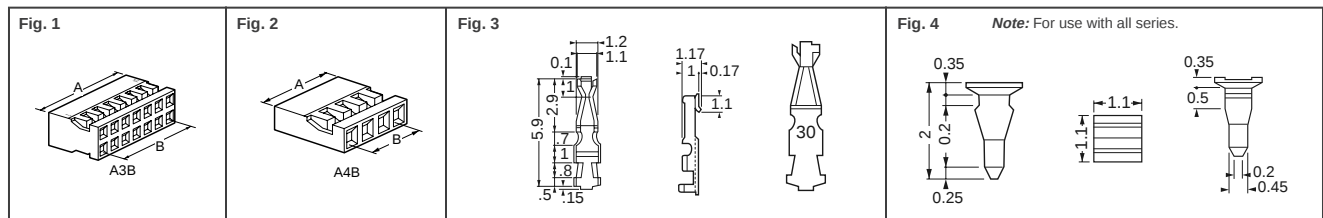


|                           | No. of Pins                        | Dimensions (mm)                   |      | Digi-Key Part No. | Pricing  |       |        | Hirose Part No. |
|---------------------------|------------------------------------|-----------------------------------|------|-------------------|----------|-------|--------|-----------------|
| Fig.                      |                                    | A                                 | B    |                   | 1        | 25    | 100    |                 |
| Single Row Crimp Socket   |                                    |                                   |      |                   |          |       |        |                 |
| 1                         | 2                                  | 6.0                               | 2.0  | H2083-ND          | .10      | 2.18  | 7.25   | DF3-2S-2C       |
|                           | 3                                  | 8.0                               | 4.0  | H2084-ND          | .11      | 2.33  | 7.75   | DF3-3S-2C       |
|                           | 4                                  | 10.0                              | 6.0  | H2085-ND          | .11      | 2.33  | 7.75   | DF3-4S-2C       |
|                           | 5                                  | 12.0                              | 8.0  | H2086-ND          | .12      | 2.48  | 8.25   | DF3-5S-2C       |
|                           | 6                                  | 14.0                              | 10.0 | H2087-ND          | .12      | 2.55  | 8.50   | DF3-6S-2C       |
|                           | 7                                  | 16.0                              | 12.0 | H2088-ND          | .13      | 2.70  | 9.00   | DF3-7S-2C       |
|                           | 8                                  | 18.0                              | 14.0 | H2089-ND          | .13      | 2.70  | 9.00   | DF3-8S-2C       |
|                           | 9                                  | 20.0                              | 16.0 | H2146-ND          | .14      | 3.00  | 10.00  | DF3-9S-2C       |
|                           | 10                                 | 22.0                              | 18.0 | H2091-ND          | .15      | 3.15  | 10.50  | DF3-10S-2C      |
|                           | 11                                 | 24.0                              | 20.0 | H2092-ND          | .15      | 3.23  | 10.75  | DF3-11S-2C      |
|                           | 12                                 | 26.0                              | 22.0 | H2093-ND          | .16      | 3.38  | 11.25  | DF3-12S-2C      |
|                           | 13                                 | 28.0                              | 24.0 | H2290-ND          | .25      | 3.38  | 11.25  | DF3-13S-2C      |
|                           | 14                                 | 30.0                              | 26.0 | H2291-ND          | .25      | 3.75  | 12.50  | DF3-14S-2C      |
|                           | 15                                 | 32.0                              | 28.0 | H2292-ND          | .25      | 3.75  | 12.50  | DF3-15S-2C      |
|                           | 2A                                 | Crimp Contact for DF3 Socket, Tin |      |                   | H2138-ND | —     | —      | 2.22            |
|                           | Crimp Contact for DF3 Socket, Gold |                                   |      | H2305-ND          | —        | —     | 6.56   | DF3-2428SCC     |
| 2B                        | Crimp Contact for DF3 Pin, Tin     |                                   |      | H2306-ND          | —        | —     | 3.03   | DF3-EP2428PC    |
|                           | Crimp Contact for DF3 Pin, Gold    |                                   |      | H2307-ND          | —        | —     | 14.73  | DF3-EP2428PCA   |
| —                         | Crimp Tool for DF3 Socket          |                                   |      | H9997-ND          | 642.45   | —     | —      | DF3-TA2428HC    |
|                           | Crimp Tool for DF3 Pin             |                                   |      | H2308-ND          | 664.90   | —     | —      | DF3EP-TA2428HC  |
| Vertical Protected Header |                                    |                                   |      |                   |          |       |        |                 |
| 3                         | 2                                  | 6.0                               | 2.0  | H2094-ND          | .16      | 1.98  | 6.61   | DF3A-2P-2DSA    |
|                           | 3                                  | 8.0                               | 4.0  | H2095-ND          | .20      | 2.37  | 7.90   | DF3A-3P-2DSA    |
|                           | 4                                  | 10.0                              | 6.0  | H2096-ND          | .23      | 2.72  | 9.07   | DF3A-4P-2DSA    |
|                           | 5                                  | 12.0                              | 8.0  | H2097-ND          | .30      | 3.65  | 12.17  | DF3A-5P-2DSA    |
|                           | 6                                  | 14.0                              | 10.0 | H2098-ND          | .31      | 3.77  | 12.55  | DF3A-6P-2DSA    |
|                           | 7                                  | 16.0                              | 12.0 | H2099-ND          | .32      | 3.92  | 13.06  | DF3A-7P-2DSA    |
|                           | 8                                  | 18.0                              | 14.0 | H2147-ND          | .26      | 5.52  | 18.40  | DF3A-8P-2DSA    |
|                           | 9                                  | 20.0                              | 16.0 | H2101-ND          | .50      | 6.05  | 20.17  | DF3A-9P-2DSA    |
|                           | 10                                 | 22.0                              | 18.0 | H2102-ND          | .53      | 6.39  | 21.31  | DF3A-10P-2DSA   |
|                           | 11                                 | 24.0                              | 20.0 | H2103-ND          | .54      | 6.52  | 21.72  | DF3A-11P-2DSA   |
|                           | 12                                 | 26.0                              | 22.0 | H2104-ND          | .55      | 6.68  | 22.26  | DF3A-12P-2DSA   |
|                           | 13                                 | 28.0                              | 24.0 | H2293-ND          | 1.63     | 35.03 | 116.75 | DF3A-13P-2DSA   |
|                           | 14                                 | 30.0                              | 26.0 | H2294-ND          | 1.71     | 36.68 | 122.25 | DF3A-14P-2DSA   |
|                           | 15                                 | 32.0                              | 28.0 | H2295-ND          | 1.79     | 38.33 | 127.75 | DF3A-15P-2DSA   |
|                           | Right Angle Protected Header       |                                   |      |                   |          |       |        |                 |
| 4                         | 2                                  | 6.0                               | 2.0  | H2105-ND          | .19      | 2.30  | 7.68   | DF3A-2P-2DS     |
|                           | 3                                  | 8.0                               | 4.0  | H2106-ND          | .23      | 2.74  | 9.14   | DF3A-3P-2DS     |
|                           | 4                                  | 10.0                              | 6.0  | H2107-ND          | .26      | 3.21  | 10.69  | DF3A-4P-2DS     |
|                           | 5                                  | 12.0                              | 8.0  | H2108-ND          | .38      | 4.57  | 15.24  | DF3A-5P-2DS     |
|                           | 6                                  | 14.0                              | 10.0 | H2109-ND          | .39      | 4.70  | 15.65  | DF3A-6P-2DS     |

| Fig.                                               | No. of Pins | Dimensions (mm) | Digi-Key Part No. | Pricing          | Hirose Part No. |
|----------------------------------------------------|-------------|-----------------|-------------------|------------------|-----------------|
|                                                    |             | A B             |                   | 1 25 100         |                 |
| 4                                                  | 7           | 16.0 12.0       | H2110-ND          | .41 4.95 16.50   | DF3A-7P-2DS     |
|                                                    | 8           | 18.0 14.0       | H2111-ND          | .57 6.90 23.02   | DF3A-8P-2DS     |
|                                                    | 9           | 20.0 16.0       | H2112-ND          | .59 7.08 23.62   | DF3A-9P-2DS     |
|                                                    | 10          | 22.0 18.0       | H2113-ND          | .68 8.25 27.51   | DF3A-10P-2DS    |
|                                                    | 11          | 24.0 20.0       | H2114-ND          | .70 8.41 28.04   | DF3A-11P-2DS    |
|                                                    | 12          | 26.0 22.0       | H2115-ND          | .72 8.67 28.90   | DF3A-12P-2DS    |
|                                                    | 13          | 28.0 24.0       | H2310-ND          | .41 8.81 29.37   | DF3A-13P-2DS    |
|                                                    | 14          | 30.0 26.0       | H2311-ND          | .43 9.22 30.73   | DF3A-14P-2DS    |
|                                                    | 15          | 32.0 28.0       | H2312-ND          | .44 9.36 31.20   | DF3A-15P-2DS    |
| <b>Surface Mount Vertical Header</b>               |             |                 |                   |                  |                 |
| 5                                                  | 2           | 8.5 2.0         | H2116-ND          | .77 9.30 31.00   | DF3-2P-2V(20)   |
|                                                    | 3           | 10.5 4.0        | H2117-ND          | .81 9.75 32.50   | DF3-3P-2V(20)   |
|                                                    | 4           | 12.5 6.0        | H2118-ND          | .84 10.20 34.00  | DF3-4P-2V(20)   |
|                                                    | 5           | 14.5 8.0        | H2119-ND          | .90 10.88 36.25  | DF3-5P-2V(20)   |
|                                                    | 6           | 16.5 10.0       | H2148-ND          | .53 11.33 37.75  | DF3-6P-2V(20)   |
|                                                    | 7           | 18.5 12.0       | H2121-ND          | .97 11.70 39.00  | DF3-7P-2V(20)   |
|                                                    | 8           | 20.5 14.0       | H2122-ND          | 1.00 12.15 40.50 | DF3-8P-2V(20)   |
|                                                    | 9           | 22.5 16.0       | H2123-ND          | 1.11 13.43 44.75 | DF3-9P-2V(20)   |
|                                                    | 10          | 24.5 18.0       | H2124-ND          | 1.15 13.88 46.25 | DF3-10P-2V(20)  |
|                                                    | 11          | 26.5 20.0       | H2125-ND          | 1.25 15.08 50.25 | DF3-11P-2V(20)  |
|                                                    | 12          | 28.5 22.0       | H2126-ND          | 1.28 15.53 51.75 | DF3-12P-2V(20)  |
|                                                    | 13          | 30.5 24.0       | H2313-ND          | .78 16.73 55.75  | DF3-13P-2V(20)  |
|                                                    | 14          | 32.5 26.0       | H2314-ND          | .82 17.48 58.25  | DF3-14P-2V(20)  |
|                                                    | 15          | 34.5 28.0       | H2315-ND          | .86 18.45 61.50  | DF3-15P-2V(20)  |
| <b>Surface Mount Horizontal Right Angle Header</b> |             |                 |                   |                  |                 |
| 6                                                  | 2           | 8.5 2.0         | H2127-ND          | .78 9.45 31.50   | DF3-2P-2H(20)   |
|                                                    | 3           | 10.5 4.0        | H2128-ND          | .82 9.90 33.00   | DF3-3P-2H(20)   |
|                                                    | 4           | 12.5 6.0        | H2129-ND          | .86 10.35 34.50  | DF3-4P-2H(20)   |
|                                                    | 5           | 14.5 8.0        | H2130-ND          | .91 11.03 36.75  | DF3-5P-2H(20)   |
|                                                    | 6           | 16.5 10.0       | H2131-ND          | .95 11.48 38.25  | DF3-6P-2H(20)   |
|                                                    | 7           | 18.5 12.0       | H2149-ND          | .56 11.93 39.75  | DF3-7P-2H(20)   |
|                                                    | 8           | 20.5 14.0       | H2133-ND          | 1.02 12.38 41.25 | DF3-8P-2H(20)   |
|                                                    | 9           | 22.5 16.0       | H2134-ND          | 1.13 13.65 45.50 | DF3-9P-2H(20)   |
|                                                    | 10          | 24.5 18.0       | H2135-ND          | 1.17 14.10 47.00 | DF3-10P-2H(20)  |
|                                                    | 11          | 26.5 20.0       | H2136-ND          | 1.27 15.38 51.25 | DF3-11P-2H(20)  |
|                                                    | 12          | 28.5 22.0       | H2137-ND          | 1.30 15.75 52.50 | DF3-12P-2H(20)  |
|                                                    | 13          | 30.5 24.0       | H2316-ND          | .79 17.03 56.75  | DF3-13P-2H(20)  |
|                                                    | 14          | 32.5 26.0       | H2317-ND          | .83 17.78 59.25  | DF3-14P-2H(20)  |
|                                                    | 15          | 34.5 28.0       | H2318-ND          | .88 18.83 62.75  | DF3-15P-2H(20)  |

**A3B/A4B SERIES - Crimp Connectors**

Specifications • Current Rating: 2A at 1P • Voltage: 200VAC at 1P • Insulation Res.: 1000MΩ or more at 500VDC • Withstanding Voltage: 650VAC r.m.s. for 1 minute • Contact Res.: 15mΩ or less at 100mADC.



| Fig.                         | No. of Pins | Dim. (mm) | Digi-Key Part No. | Pricing        | Hirose Part No. |
|------------------------------|-------------|-----------|-------------------|----------------|-----------------|
|                              |             | A B       |                   | 1 25 100       |                 |
| <b>Dual Row Crimp Socket</b> |             |           |                   |                |                 |
| 1                            | 4           | 4.0 2.0   | H2001-ND          | .23 5.03 13.40 | A3B-4D-2C       |
|                              | 6           | 6.0 4.0   | H2002-ND          | .25 5.33 14.20 | A3B-6D-2C       |
|                              | 8           | 8.0 6.0   | H2003-ND          | .26 5.63 15.00 | A3B-8D-2C       |
|                              | 10          | 10.0 8.0  | H2004-ND          | .28 5.93 15.80 | A3B-10D-2C      |
|                              | 12          | 12.0 10.0 | H2005-ND          | .29 6.23 16.60 | A3B-12D-2C      |
|                              | 14          | 14.0 12.0 | H2006-ND          | .30 6.53 17.40 | A3B-14D-2C      |
|                              | 18          | 18.0 16.0 | H2007-ND          | .32 6.90 18.40 | A3B-18D-2C      |
|                              | 20          | 20.0 18.0 | H2008-ND          | .34 7.20 19.20 | A3B-20D-2C      |
|                              | 24          | 24.0 22.0 | H2009-ND          | .36 7.65 20.40 | A3B-24D-2C      |
|                              | 28          | 28.0 26.0 | H2010-ND          | .37 8.03 21.40 | A3B-28D-2C      |

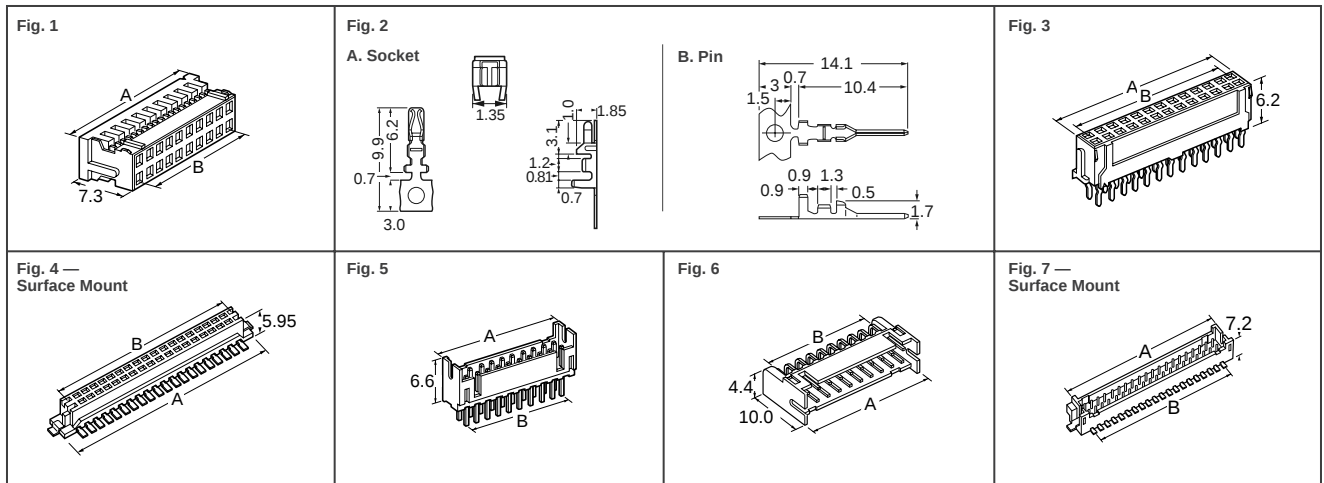
| Fig.                           | No. of Pins                          | Dim. (mm) | Digi-Key Part No. | Pricing         | Hirose Part No. |
|--------------------------------|--------------------------------------|-----------|-------------------|-----------------|-----------------|
|                                |                                      | A B       |                   | 1 25 100        |                 |
| <b>Single Row Crimp Socket</b> |                                      |           |                   |                 |                 |
| 2                              | 2                                    | 4.0 2.0   | H2011-ND          | .23 4.88 13.00  | A4B-2S-2C       |
|                                | 3                                    | 6.0 4.0   | H2012-ND          | .23 4.95 13.20  | A4B-3S-2C       |
|                                | 4                                    | 8.0 6.0   | H2013-ND          | .23 5.03 13.40  | A4B-4S-2C       |
|                                | 5                                    | 10.0 8.0  | H2014-ND          | .24 5.10 13.60  | A4B-5S-2C       |
|                                | 6                                    | 12.0 10.0 | H2015-ND          | .24 5.18 13.80  | A4B-6S-2C       |
|                                | 8                                    | 16.0 14.0 | H2016-ND          | .25 5.40 14.40  | A4B-8S-2C       |
|                                | 10                                   | 20.0 18.0 | H2017-ND          | .26 5.55 14.80  | A4B-10S-2C      |
|                                | 12                                   | 24.0 22.0 | H2018-ND          | .27 5.70 15.20  | A4B-12S-2C      |
|                                | Crimp Terminal for A3B-A4B Type      |           | H9999-ND          | — — 3.96        | A3B-2630SCC     |
|                                | Crimp Tool for A3B-A4B Type          |           | H9998-ND          | 925.72 — —      | A3B-TA2630HC    |
|                                | Polarizing Key for Socket Connectors |           | H2000-ND          | 2.97/10 — 11.89 | A3-GPIN(A)      |

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# DF11 SERIES - Dual Row Connectors

Specifications: • Current Capacity: 3A with AWG24 cable • Rated Voltage: 250VAC • Insulation Res.: Min. 1000MΩ at 500VDC • Withstand Voltage: 650VAC • Contact Res.: Max. 30MΩ at 0.1ADC



| Fig.                                | No.<br>of<br>Pins                | Dimensions<br>(mm)                 |          | Digi-Key<br>Part No. | Pricing  |        |                | Hirose<br>Part No. |
|-------------------------------------|----------------------------------|------------------------------------|----------|----------------------|----------|--------|----------------|--------------------|
|                                     |                                  | A                                  | B        |                      | 1        | 25     | 100            |                    |
| Dual Row Crimp Socket               |                                  |                                    |          |                      |          |        |                |                    |
| 1                                   | 4                                | 6.0                                | 2.0      | H2019-ND             | .22      | 4.73   | 15.75          | DF11-4DS-2C        |
|                                     | 6                                | 8.0                                | 4.0      | H2021-ND             | .25      | 5.33   | 17.75          | DF11-6DS-2C        |
|                                     | 8                                | 10.0                               | 6.0      | H2022-ND             | .24      | 5.18   | 17.25          | DF11-8DS-2C        |
|                                     | 10                               | 12.0                               | 8.0      | H2023-ND             | .28      | 6.00   | 20.00          | DF11-10DS-2C       |
|                                     | 12                               | 14.0                               | 10.0     | H2024-ND             | .27      | 5.78   | 19.25          | DF11-12DS-2C       |
|                                     | 14                               | 16.0                               | 12.0     | H2140-ND             | .28      | 6.00   | 20.00          | DF11-14DS-2C       |
|                                     | 16                               | 18.0                               | 14.0     | H2025-ND             | .20      | 4.35   | 14.50          | DF11-16DS-2C       |
|                                     | 18                               | 20.0                               | 16.0     | H2026-ND             | .30      | 6.53   | 21.75          | DF11-18DS-2C       |
|                                     | 20                               | 22.0                               | 18.0     | H2027-ND             | .21      | 4.58   | 15.25          | DF11-20DS-2C       |
|                                     | 22                               | 24.0                               | 20.0     | H2028-ND             | .34      | 7.28   | 24.25          | DF11-22DS-2C       |
|                                     | 24                               | 26.0                               | 22.0     | H2029-ND             | .35      | 7.50   | 25.00          | DF11-24DS-2C       |
|                                     | 26                               | 28.0                               | 24.0     | H2261-ND             | .36      | 7.80   | 26.00          | DF11-26DS-2C       |
|                                     | 28                               | 30.0                               | 26.0     | H2262-ND             | .38      | 8.10   | 27.00          | DF11-28DS-2C       |
|                                     | 30                               | 32.0                               | 28.0     | H2263-ND             | .39      | 8.40   | 28.00          | DF11-30DS-2C       |
|                                     | 32                               | 34.0                               | 30.0     | H2264-ND             | .40      | 8.63   | 28.75          | DF11-32DS-2C       |
|                                     | 2A                               | Crimp Contact for DF11 Socket, Tin |          |                      | H2139-ND | —      | —              | 1.85               |
| Crimp Contact for DF11 Socket, Gold |                                  |                                    | H2300-ND | —                    | —        | 7.43   | DF11-2428SCA   |                    |
| 2B                                  | Crimp Contact for DF11 Pin, Tin  |                                    |          | H2301-ND             | —        | —      | 5.98           | DF11-EP2428PC      |
|                                     | Crimp Contact for DF11 Pin, Gold |                                    |          | H2302-ND             | —        | —      | 9.42           | DF11-EP2428PCA     |
| —                                   | Crimp Tool for DF11 Socket       |                                    |          | H9995-ND             | 799.57   | —      | —              | DF11-TA2428HC      |
|                                     | Crimp Tool for DF11 Pin          |                                    |          | H2304-ND             | 799.16   | —      | —              | DF11EP-TA2428HC    |
|                                     | Extraction Tool for DF11 Socket  |                                    |          | H9996-ND             | 6.62     | —      | —              | DF-C-PO(B)         |
| Vertical PCB Socket                 |                                  |                                    |          |                      |          |        |                |                    |
| 3                                   | 8                                | 10.0                               | 6.0      | H2030-ND             | .99      | 21.15  | 70.50          | DF11-8DS-2DSA      |
|                                     | 10                               | 12.0                               | 8.0      | H2031-ND             | 1.07     | 23.03  | 76.75          | DF11-10DS-2DSA     |
|                                     | 12                               | 14.0                               | 10.0     | H2141-ND             | 1.17     | 24.98  | 83.25          | DF11-12DS-2DSA     |
|                                     | 14                               | 16.0                               | 12.0     | H2033-ND             | 1.26     | 26.93  | 89.75          | DF11-14DS-2DSA     |
|                                     | 16                               | 18.0                               | 14.0     | H2034-ND             | 1.38     | 29.48  | 98.25          | DF11-16DS-2DSA     |
|                                     | 18                               | 20.0                               | 16.0     | H2035-ND             | 1.47     | 31.43  | 104.75         | DF11-18DS-2DSA     |
|                                     | 20                               | 22.0                               | 18.0     | H2036-ND             | 1.60     | 34.20  | 114.00         | DF11-20DS-2DSA     |
|                                     | 22                               | 24.0                               | 20.0     | H2037-ND             | 1.69     | 36.15  | 120.50         | DF11-22DS-2DSA     |
|                                     | 24                               | 26.0                               | 22.0     | H2038-ND             | 1.78     | 38.10  | 127.00         | DF11-24DS-2DSA     |
|                                     | 26                               | 28.0                               | 24.0     | H2265-ND             | 1.87     | 40.05  | 133.50         | DF11-26DS-2DSA     |
|                                     | 28                               | 30.0                               | 26.0     | H2266-ND             | 1.95     | 41.85  | 139.50         | DF11-28DS-2DSA     |
|                                     | 30                               | 32.0                               | 28.0     | H2267-ND             | 2.04     | 43.73  | 145.75         | DF11-30DS-2DSA     |
| 32                                  | 34.0                             | 30.0                               | H2268-ND | 2.14                 | 45.83    | 152.75 | DF11-32DS-2DSA |                    |
| Surface Mount Vertical Socket       |                                  |                                    |          |                      |          |        |                |                    |
| 4                                   | 4                                | 8.5                                | 2.0      | H2039-ND             | .89      | 18.98  | 63.25          | DF11-4DS-2V(20)    |
|                                     | 6                                | 10.5                               | 4.0      | H2040-ND             | .99      | 21.23  | 70.75          | DF11-6DS-2V(20)    |
|                                     | 8                                | 12.5                               | 6.0      | H2041-ND             | 1.10     | 23.63  | 78.75          | DF11-8DS-2V(20)    |
|                                     | 10                               | 14.5                               | 8.0      | H2042-ND             | 1.20     | 25.80  | 86.00          | DF11-10DS-2V(20)   |
|                                     | 12                               | 16.5                               | 10.0     | H2043-ND             | 1.32     | 28.35  | 94.50          | DF11-12DS-2V(20)   |
|                                     | 14                               | 18.5                               | 12.0     | H2142-ND             | 1.42     | 30.53  | 101.75         | DF11-14DS-2V(20)   |
|                                     | 16                               | 20.5                               | 14.0     | H2045-ND             | 1.55     | 33.15  | 110.50         | DF11-16DS-2V(20)   |
|                                     | 18                               | 22.5                               | 16.0     | H2046-ND             | 1.65     | 35.40  | 118.00         | DF11-18DS-2V(20)   |
|                                     | 20                               | 24.5                               | 18.0     | H2047-ND             | 1.76     | 37.65  | 125.50         | DF11-20DS-2V(20)   |
|                                     | 22                               | 26.5                               | 20.0     | H2048-ND             | 1.86     | 39.83  | 132.75         | DF11-22DS-2V(20)   |

| Fig.                                  | No. of Pins | Dimensions (mm) |      | Digi-Key Part No. | Pricing |       |        | Hirose Part No.    |
|---------------------------------------|-------------|-----------------|------|-------------------|---------|-------|--------|--------------------|
|                                       |             | A               | B    |                   | 1       | 25    | 100    |                    |
| 4                                     | 24          | 28.5            | 22.0 | H2049-ND          | 1.96    | 42.08 | 140.25 | DF11-24DS-2V(20)   |
|                                       | 26          | 30.5            | 24.0 | H2270-ND          | 2.09    | 44.85 | 149.50 | DF11-26DS-2V(20)   |
|                                       | 28          | 32.5            | 26.0 | H2271-ND          | 2.20    | 47.10 | 157.00 | DF11-28DS-2V(20)   |
|                                       | 30          | 34.5            | 28.0 | H2272-ND          | 2.30    | 49.35 | 164.50 | DF11-30DS-2V(20)   |
|                                       | 32          | 36.5            | 30.0 | H2273-ND          | 2.40    | 51.53 | 171.75 | DF11-32DS-2V(20)   |
| <b>Vertical Protected Header</b>      |             |                 |      |                   |         |       |        |                    |
| 5                                     | 4           | 6.0             | 2.0  | H2143-ND          | .37     | 8.03  | 26.75  | DF11-4DP-2DSA(20)  |
|                                       | 6           | 8.0             | 4.0  | H2051-ND          | .42     | 9.00  | 30.00  | DF11-6DP-2DSA(20)  |
|                                       | 8           | 10.0            | 6.0  | H2052-ND          | .45     | 9.60  | 32.00  | DF11-8DP-2DSA(20)  |
|                                       | 10          | 12.0            | 8.0  | H2053-ND          | .51     | 10.88 | 36.25  | DF11-10DP-2DSA(20) |
|                                       | 12          | 14.0            | 10.0 | H2054-ND          | .57     | 12.15 | 40.50  | DF11-12DP-2DSA(20) |
|                                       | 14          | 16.0            | 12.0 | H2055-ND          | .62     | 13.35 | 44.50  | DF11-14DP-2DSA(20) |
|                                       | 16          | 18.0            | 14.0 | H2056-ND          | .54     | 11.63 | 38.75  | DF11-16DP-2DSA(20) |
|                                       | 18          | 20.0            | 16.0 | H2057-ND          | .74     | 15.83 | 52.75  | DF11-18DP-2DSA(20) |
|                                       | 20          | 22.0            | 18.0 | H2058-ND          | .69     | 14.78 | 49.25  | DF11-20DP-2DSA(20) |
|                                       | 22          | 24.0            | 20.0 | H2059-ND          | .89     | 19.13 | 63.75  | DF11-22DP-2DSA(20) |
|                                       | 24          | 26.0            | 22.0 | H2060-ND          | .94     | 20.18 | 67.25  | DF11-24DP-2DSA(20) |
|                                       | 26          | 28.0            | 24.0 | H2275-ND          | .99     | 21.23 | 70.75  | DF11-26DP-2DSA(20) |
| 5                                     | 28          | 30.0            | 26.0 | H2276-ND          | 1.04    | 22.35 | 74.50  | DF11-28DP-2DSA(20) |
|                                       | 30          | 32.0            | 28.0 | H2277-ND          | 1.09    | 23.25 | 77.50  | DF11-30DP-2DSA(20) |
| 5                                     | 32          | 34.0            | 30.0 | H2278-ND          | 1.15    | 24.68 | 82.25  | DF11-32DP-2DSA(20) |
| <b>Right Angle Protected Header</b>   |             |                 |      |                   |         |       |        |                    |
| 6                                     | 4           | 6.0             | 2.0  | H2061-ND          | .41     | 8.70  | 29.00  | DF11-4DP-2DS(22)   |
|                                       | 6           | 8.0             | 4.0  | H2062-ND          | .46     | 9.90  | 33.00  | DF11-6DP-2DS(22)   |
|                                       | 8           | 10.0            | 6.0  | H2063-ND          | .49     | 10.58 | 35.25  | DF11-8DP-2DS(22)   |
|                                       | 10          | 12.0            | 8.0  | H2145-ND          | .56     | 11.93 | 39.75  | DF11-10DP-2DS(22)  |
|                                       | 12          | 14.0            | 10.0 | H2065-ND          | .63     | 13.50 | 45.00  | DF11-12DP-2DS(22)  |
|                                       | 14          | 16.0            | 12.0 | H2066-ND          | .69     | 14.78 | 49.25  | DF11-14DP-2DS(22)  |
|                                       | 16          | 18.0            | 14.0 | H2067-ND          | .63     | 13.43 | 44.75  | DF11-16DP-2DS(22)  |
|                                       | 18          | 20.0            | 16.0 | H2068-ND          | .83     | 17.70 | 59.00  | DF11-18DP-2DS(22)  |
|                                       | 20          | 22.0            | 18.0 | H2069-ND          | .90     | 19.28 | 64.25  | DF11-20DP-2DS(22)  |
|                                       | 22          | 24.0            | 20.0 | H2070-ND          | 1.01    | 21.60 | 72.00  | DF11-22DP-2DS(22)  |
|                                       | 24          | 26.0            | 22.0 | H2071-ND          | 1.06    | 22.80 | 76.00  | DF11-24DP-2DS(22)  |
|                                       | 26          | 28.0            | 24.0 | H2280-ND          | 1.12    | 24.08 | 80.25  | DF11-26DP-2DS(22)  |
| 6                                     | 28          | 30.0            | 26.0 | H2281-ND          | 1.18    | 25.28 | 84.25  | DF11-28DP-2DS(22)  |
|                                       | 30          | 32.0            | 28.0 | H2282-ND          | 1.24    | 26.63 | 88.75  | DF11-30DP-2DS(22)  |
| 6                                     | 32          | 34.0            | 30.0 | H2283-ND          | 1.30    | 27.83 | 92.75  | DF11-32DP-2DS(22)  |
| <b>Surface Mount Protected Header</b> |             |                 |      |                   |         |       |        |                    |
| 7                                     | 4           | 2.0             | 8.5  | H2072-ND          | .99     | 21.23 | 70.75  | DF11-4DP-2V(20)    |
|                                       | 6           | 4.0             | 10.5 | H2073-ND          | 1.11    | 23.78 | 79.25  | DF11-6DP-2V(20)    |
|                                       | 8           | 6.0             | 12.5 | H2074-ND          | 1.18    | 25.20 | 84.00  | DF11-8DP-2V(20)    |
|                                       | 10          | 8.0             | 14.5 | H2075-ND          | 1.26    | 27.00 | 90.00  | DF11-10DP-2V(20)   |
|                                       | 12          | 10.0            | 16.5 | H2076-ND          | 1.33    | 28.50 | 95.00  | DF11-12DP-2V(20)   |
|                                       | 14          | 12.0            | 18.5 | H2077-ND          | 1.41    | 30.30 | 101.00 | DF11-14DP-2V(20)   |
|                                       | 16          | 14.0            | 20.5 | H2078-ND          | 1.49    | 31.95 | 106.50 | DF11-16DP-2V(20)   |
|                                       | 18          | 16.0            | 22.5 | H2079-ND          | 1.58    | 33.83 | 112.75 | DF11-18DP-2V(20)   |
|                                       | 20          | 18.0            | 24.5 | H2080-ND          | 1.63    | 34.95 | 116.50 | DF11-20DP-2V(20)   |
|                                       | 22          | 20.0            | 26.5 | H2081-ND          | 1.72    | 36.75 | 122.50 | DF11-22DP-2V(20)   |
|                                       | 24          | 22.0            | 28.5 | H2082-ND          | 1.80    | 38.55 | 128.50 | DF11-24DP-2V(20)   |
|                                       | 26          | 24.0            | 30.5 | H2285-ND          | 2.09    | 44.85 | 149.50 | DF11-26DP-2V(20)   |
| 7                                     | 28          | 26.0            | 32.5 | H2286-ND          | 2.20    | 47.10 | 157.00 | DF11-28DP-2V(20)   |
|                                       | 30          | 28.0            | 34.5 | H2287-ND          | 2.30    | 49.35 | 164.50 | DF11-30DP-2V(20)   |
| 7                                     | 32          | 30.0            | 36.5 | H2288-ND          | 2.40    | 51.53 | 171.75 | DF11-32DP-2V(20)   |

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# 2mm Milli-Grid™ Connectors

**HEADERS:** **Electrical:** • Current: 2.0A • Dielectric Withstanding Voltage: 500V (Shrouded Vertical, SMT, and Right Angle: 1000V) • Insulation Resistance: 1000MΩ min. **Physical:** • Housing: 4/6 nylon, UL 94V-0 (Right Angle: Black glass-filled polyester, UL 94V-0) • Contact: Phosphor Bronze • Plating: 15µ" Select Gold • Temperature: -55 to +105°C

**RECEPTACLE:** **Electrical:** • Voltage: 125V • Current: 1.0A • Contact Resistance: 25mΩ max. (Side Entry, Side Entry SMT, and Top/Bottom Entry: 15mΩ max.) • Dielectric Withstanding Voltage: 500V AC (Top/Bottom Entry: 1000V) • Insulation Resistance: 1000MΩ min. **Physical:** • Housing: Black glass-filled LCP, UL 94V-0 (Top/Bottom Entry: Black

LCP, UL 94V-0, Side Entry and Side Entry SMT: Black nylon, UL 94V-0) • Contact: Phosphor Bronze • Plating: 15µ" Select Gold • Temperature: -55 to +105°C

**CRIMP TERMINAL:** **Electrical:** • Voltage: 125V • Current: **26AWG:** 1.5, **28AWG:** 1.0, and **30AWG:** 0.5 • Contact Resistance: 40mΩ max. **Physical:** • Contact: Phosphor Bronze • Plating: 15µ" Select Gold • Temperature: -40 to +105°C • Wire Range: 26-30AWG • Insulation Range: 1.40mm diameter max.

**CRIMP HOUSING:** **Physical:** • Housing: Black glass-filled polyester, UL 94V-0 • Temperature: -55 to +105°C

Fig. 1 – Vertical

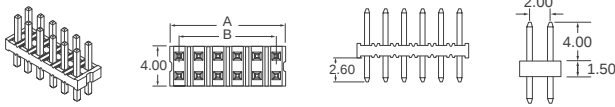


Fig. 2 – Right Angle

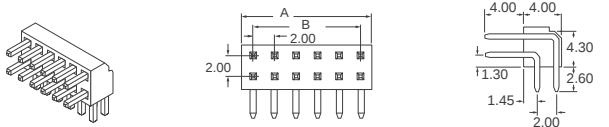


Fig. 3 – Shrouded Vertical

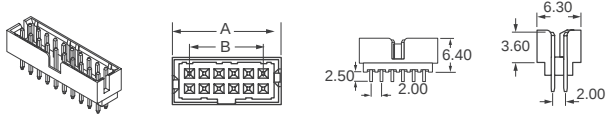


Fig. 4 – Shrouded Right Angle

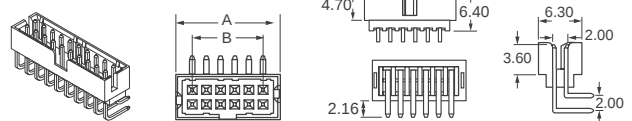


Fig. 5 – Shrouded SMT

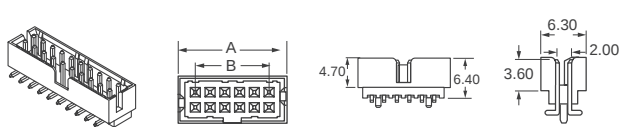
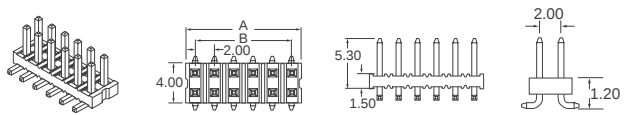


Fig. 6 – Vertical SMT



| Fig.                        | Cir-<br>cuits | Dimension (mm)<br>A B | Digi-Key<br>Part No. | 1    | Pricing<br>10 100 | Molex<br>Part No. |
|-----------------------------|---------------|-----------------------|----------------------|------|-------------------|-------------------|
| Headers — Vertical          |               |                       |                      |      |                   |                   |
| 1                           | 4             | 3.90 2.00             | WM18201-ND           | .72  | 6.00 38.30        | 87089-0416        |
|                             | 6             | 5.90 4.00             | WM18202-ND           | .87  | 7.19 45.88        | 87089-0616        |
|                             | 8             | 7.90 6.00             | WM18203-ND           | 1.00 | 8.32 53.10        | 87089-0816        |
|                             | 10            | 9.90 8.00             | WM18204-ND           | 1.13 | 9.34 59.57        | 87089-1016        |
|                             | 12            | 11.90 10.00           | WM18205-ND           | 1.36 | 11.25 71.78       | 87089-1216        |
|                             | 14            | 13.90 12.00           | WM18206-ND           | 1.41 | 11.66 74.37       | 87089-1416        |
|                             | 16            | 15.90 14.00           | WM18207-ND           | 1.61 | 13.31 84.92       | 87089-1616        |
|                             | 18            | 17.90 16.00           | WM18208-ND           | 1.81 | 14.99 95.65       | 87089-1816        |
|                             | 20            | 19.90 18.00           | WM18209-ND           | 2.02 | 16.70 106.56      | 87089-2016        |
|                             | 22            | 21.90 20.00           | WM18210-ND           | 2.22 | 18.36 117.11      | 87089-2216        |
|                             | 24            | 23.90 22.00           | WM18211-ND           | 2.42 | 20.04 127.84      | 87089-2416        |
|                             | 26            | 25.90 24.00           | WM18212-ND           | 2.61 | 21.63 138.01      | 87089-2616        |
|                             | 28            | 27.90 26.00           | WM18213-ND           | 2.81 | 23.32 148.74      | 87089-2816        |
|                             | 30            | 29.90 28.00           | WM18214-ND           | 3.01 | 24.97 159.29      | 87089-3016        |
|                             | 32            | 31.90 30.00           | WM18215-ND           | 2.81 | 23.32 148.74      | 87089-3216        |
| 2                           | 34            | 33.90 32.00           | WM18216-ND           | 2.99 | 24.80 158.18      | 87089-3416        |
|                             | 36            | 35.90 34.00           | WM18217-ND           | 3.16 | 26.22 167.24      | 87089-3616        |
|                             | 38            | 37.90 36.00           | WM18218-ND           | 3.34 | 27.70 176.68      | 87089-3816        |
|                             | 40            | 39.90 38.00           | WM18219-ND           | 3.52 | 29.15 185.93      | 87089-4016        |
|                             | 42            | 41.90 40.00           | WM18220-ND           | 3.70 | 30.62 195.36      | 87089-4216        |
|                             | 44            | 43.90 42.00           | WM18221-ND           | 3.87 | 32.05 204.43      | 87089-4416        |
|                             | 46            | 45.90 44.00           | WM18222-ND           | 4.05 | 33.52 213.86      | 87089-4616        |
|                             | 48            | 47.90 46.00           | WM18223-ND           | 4.22 | 34.95 222.93      | 87089-4816        |
|                             | 50            | 49.90 48.00           | WM18224-ND           | 4.40 | 36.45 232.55      | 87089-5016        |
| Headers — Right Angle       |               |                       |                      |      |                   |                   |
| 1                           | 4             | 4.00 2.00             | WM18112-ND           | .85  | 7.08 45.14        | 87049-0416        |
|                             | 6             | 6.00 4.00             | WM18113-ND           | 1.16 | 9.63 61.42        | 87049-0616        |
|                             | 8             | 8.00 6.00             | WM18114-ND           | 1.09 | 8.99 57.35        | 87049-0816        |
|                             | 10            | 10.00 8.00            | WM18115-ND           | 1.29 | 10.70 68.27       | 87049-1016        |
|                             | 12            | 12.00 10.00           | WM18116-ND           | 1.39 | 11.54 73.63       | 87049-1216        |
|                             | 14            | 14.00 12.00           | WM18117-ND           | 1.63 | 13.49 86.03       | 87049-1416        |
|                             | 16            | 16.00 14.00           | WM18118-ND           | 1.55 | 12.85 81.96       | 87049-1616        |
|                             | 18            | 18.00 16.00           | WM18119-ND           | 1.74 | 14.44 92.13       | 87049-1816        |
|                             | 20            | 20.00 18.00           | WM18120-ND           | 1.94 | 16.07 102.49      | 87049-2016        |
|                             | 22            | 22.00 20.00           | WM18121-ND           | 2.13 | 17.66 112.67      | 87049-2216        |
|                             | 24            | 24.00 22.00           | WM18122-ND           | 2.32 | 19.26 122.84      | 87049-2416        |
|                             | 26            | 26.00 24.00           | WM18123-ND           | 2.52 | 20.88 133.20      | 87049-2616        |
|                             | 28            | 28.00 26.00           | WM18124-ND           | 2.71 | 22.48 143.38      | 87049-2816        |
|                             | 30            | 30.00 28.00           | WM18125-ND           | 2.91 | 24.07 153.55      | 87049-3016        |
|                             | 32            | 32.00 30.00           | WM18126-ND           | 3.10 | 25.69 163.91      | 87049-3216        |
| 2                           | 34            | 34.00 32.00           | WM18127-ND           | 3.29 | 27.29 174.09      | 87049-3416        |
|                             | 36            | 36.00 34.00           | WM18128-ND           | 3.49 | 28.88 184.26      | 87049-3616        |
|                             | 38            | 38.00 36.00           | WM18129-ND           | 3.68 | 30.51 194.62      | 87049-3816        |
|                             | 40            | 40.00 38.00           | WM18130-ND           | 3.87 | 32.10 204.80      | 87049-4016        |
|                             | 42            | 42.00 40.00           | WM18131-ND           | 4.07 | 33.70 214.97      | 87049-4216        |
|                             | 44            | 44.00 42.00           | WM18132-ND           | 4.26 | 35.32 225.33      | 87049-4416        |
|                             | 46            | 46.00 44.00           | WM18133-ND           | 4.46 | 36.92 235.51      | 87049-4616        |
|                             | 48            | 48.00 46.00           | WM18134-ND           | 4.65 | 38.51 245.68      | 87049-4816        |
|                             | 50            | 50.00 48.00           | WM18135-ND           | 4.84 | 40.14 256.04      | 87049-5016        |
| Headers — Shrouded Vertical |               |                       |                      |      |                   |                   |
| 3                           | 4             | 6.65 2.00             | WM18058-ND           | .79  | 6.55 41.81        | 87331-0420        |
|                             | 6             | 8.65 4.00             | WM18059-ND           | .93  | 7.74 49.40        | 87331-0620        |
|                             | 8             | 10.65 6.00            | WM18060-ND           | 1.05 | 8.73 55.69        | 87331-0820        |
|                             | 10            | 12.65 8.00            | WM18061-ND           | 1.30 | 10.76 68.64       | 87331-1020        |
|                             | 12            | 14.65 10.00           | WM18062-ND           | 1.56 | 12.91 82.33       | 87331-1220        |
|                             | 14            | 16.65 12.00           | WM18063-ND           | 1.82 | 15.11 96.39       | 87331-1420        |
|                             | 16            | 18.65 14.00           | WM18064-ND           | 2.08 | 17.26 110.08      | 87331-1620        |
|                             | 18            | 20.65 16.00           | WM18065-ND           | 2.34 | 19.37 123.58      | 87331-1820        |
|                             | 20            | 22.65 18.00           | WM18066-ND           | 2.60 | 21.52 137.27      | 87331-2020        |
|                             | 22            | 24.65 20.00           | WM18067-ND           | 2.86 | 23.72 151.33      | 87331-2220        |

| Fig.                                | Cir-<br>cuits | Dimension (mm) |            | Digi-Key<br>Part No. | 1            | Pricing<br>10 100 | Molex<br>Part No. |
|-------------------------------------|---------------|----------------|------------|----------------------|--------------|-------------------|-------------------|
| Headers — Shrouded Vertical (cont.) |               |                |            |                      |              |                   |                   |
| 3                                   | 24            | 26.65          | 22.00      | WM18068-ND           | 3.12         | 25.87 165.02      | 87331-2420        |
|                                     | 30            | 32.65          | 28.00      | WM18069-ND           | 3.90         | 32.28 205.91      | 87331-3020        |
|                                     | 40            | 42.65          | 38.00      | WM18070-ND           | 5.20         | 43.09 274.91      | 87331-4020        |
|                                     | 44            | 46.65          | 42.00      | WM18071-ND           | 5.72         | 47.39 302.29      | 87331-4420        |
|                                     | 50            | 52.65          | 48.00      | WM18072-ND           | 6.49         | 53.80 343.18      | 87331-5020        |
| Headers — Shrouded Right Angle      |               |                |            |                      |              |                   |                   |
| 4                                   | 4             | 6.65           | 2.00       | WM18088-ND           | 1.03         | 8.56 54.58        | 87333-0420        |
|                                     | 6             | 8.65           | 4.00       | WM18089-ND           | 1.37         | 11.31 72.15       | 87333-0620        |
|                                     | 8             | 10.65          | 6.00       | WM18090-ND           | 1.40         | 11.60 74.00       | 87333-0820        |
|                                     | 10            | 12.65          | 8.00       | WM18091-ND           | 1.44         | 11.95 76.22       | 87333-1020        |
|                                     | 12            | 14.65          | 10.00      | WM18092-ND           | 1.73         | 14.33 91.39       | 87333-1220        |
|                                     | 14            | 16.65          | 12.00      | WM18093-ND           | 2.02         | 16.76 106.93      | 87333-1420        |
|                                     | 16            | 18.65          | 14.00      | WM18094-ND           | 2.31         | 19.14 122.10      | 87333-1620        |
|                                     | 18            | 20.65          | 16.00      | WM18095-ND           | 2.60         | 21.52 137.27      | 87333-1820        |
|                                     | 20            | 22.65          | 18.00      | WM18096-ND           | 2.88         | 23.90 152.44      | 87333-2020        |
|                                     | 22            | 24.65          | 20.00      | WM18097-ND           | 3.18         | 26.33 167.98      | 87333-2220        |
|                                     | 24            | 26.65          | 22.00      | WM18098-ND           | 3.47         | 28.71 183.15      | 87333-2420        |
|                                     | 30            | 32.65          | 28.00      | WM18099-ND           | 4.33         | 35.84 228.66      | 87333-3020        |
|                                     | 40            | 42.65          | 38.00      | WM18100-ND           | 5.78         | 47.85 305.25      | 87333-4020        |
|                                     | 44            | 46.65          | 42.00      | WM18101-ND           | 6.35         | 52.61 335.59      | 87333-4420        |
|                                     | 50            | 52.65          | 48.00      | WM18102-ND           | 7.22         | 59.80 381.47      | 87333-5020        |
| Headers — Shrouded SMT              |               |                |            |                      |              |                   |                   |
| 5                                   | 4             | 6.65           | 2.00       | WM18073-ND           | 1.80         | 14.88 94.91       | 87332-0420        |
|                                     | 6             | 8.65           | 4.00       | WM18074-ND           | 1.87         | 15.46 98.61       | 87332-0620        |
|                                     | 8             | 10.65          | 6.00       | WM18075-ND           | 2.04         | 16.88 107.67      | 87332-0820        |
|                                     | 10            | 12.65          | 8.00       | WM18076-ND           | 2.08         | 17.26 110.08      | 87332-1020        |
|                                     | 12            | 14.65          | 10.00      | WM18077-ND           | 2.32         | 19.26 122.84      | 87332-1220        |
|                                     | 14            | 16.65          | 12.00      | WM18078-ND           | 2.51         | 20.82 132.83      | 87332-1420        |
|                                     | 16            | 18.65          | 14.00      | WM18079-ND           | 2.75         | 22.82 145.60      | 87332-1620        |
|                                     | 18            | 20.65          | 16.00      | WM18080-ND           | 2.97         | 24.62 157.07      | 87332-1820        |
|                                     | 20            | 22.65          | 18.00      | WM18081-ND           | 3.16         | 26.16 166.87      | 87332-2020        |
|                                     | 22            | 24.65          | 20.00      | WM18082-ND           | 3.47         | 28.77 183.52      | 87332-2220        |
|                                     | 24            | 26.65          | 22.00      | WM18083-ND           | 3.79         | 31.38 200.17      | 87332-2420        |
|                                     | 30            | 32.65          | 28.00      | WM18084-ND           | 4.52         | 37.47 239.02      | 87332-3020        |
|                                     | 40            | 42.65          | 38.00      | WM18085-ND           | 5.78         | 47.85 305.25      | 87332-4020        |
|                                     | 44            | 46.65          | 42.00      | WM18086-ND           | 6.35         | 52.61 335.59      | 87332-4420        |
|                                     | 50            | 52.65          | 48.00      | WM18087-ND           | 7.22         | 59.80 381.47      | 87332-5020        |
| Headers — Vertical SMT              |               |                |            |                      |              |                   |                   |
| 6                                   | 8             | 7.90           | 6.00       | WM18158-ND           | 1.72         | 14.27 91.02       | 87267-0850        |
|                                     | 10            | 9.90           | 8.00       | WM18159-ND           | 1.94         | 16.07 102.49      | 87267-1050        |
|                                     | 12            | 11.90          | 10.00      | WM18160-ND           | 2.15         | 17.84 113.78      | 87267-1250        |
|                                     | 14            | 13.90          | 12.00      | WM18161-ND           | 2.31         | 19.14 122.10      | 87267-1450        |
|                                     | 16            | 15.90          | 14.00      | WM18162-ND           | 2.53         | 20.94 133.57      | 87267-1650        |
|                                     | 18            | 17.90          | 16.00      | WM18163-ND           | 2.71         | 22.48 143.38      | 87267-1850        |
|                                     | 20            | 19.90          | 18.00      | WM18164-ND           | 2.87         | 23.78 151.70      | 87267-2050        |
|                                     | 22            | 21.90          | 20.00      | WM18165-ND           | 3.16         | 26.16 166.87      | 87267-2250        |
|                                     | 24            | 23.90          | 22.00      | WM18166-ND           | 3.44         | 28.54 182.04      | 87267-2450        |
|                                     | 26            | 25.90          | 24.00      | WM18167-ND           | 3.73         | 30.91 197.21      | 87267-2650        |
|                                     | 28            | 27.90          | 26.00      | WM18168-ND           | 4.02         | 33.29 212.38      | 87267-2850        |
|                                     | 30            | 29.90          | 28.00      | WM18169-ND           | 4.09         | 33.90 216.27      | 87267-3050        |
|                                     | 32            | 31.90          | 30.00      | WM18170-ND           | 4.36         | 36.13 230.51      | 87267-3250        |
|                                     | 34            | 33.90          | 32.00      | WM18171-ND           | 4.63         | 38.40 244.94      | 87267-3450        |
|                                     | 36            | 35.90          | 34.00      | WM18172-ND           | 4.91         | 40.66 259.37      | 87267-3650        |
|                                     | 38            | 37.90          | 36.00      | WM18173-ND           | 5.17         | 42.80 273.06      | 87267-3850        |
| 40                                  | 39.90         | 38.00          | WM18174-ND | 5.30                 | 43.88 279.91 | 87267-4050        |                   |
| 42                                  | 41.90         | 40.00          | WM18175-ND | 5.43                 | 44.95 286.75 | 87267-4250        |                   |
| 44                                  | 43.90         | 42.00          | WM18176-ND | 5.68                 | 47.10 300.44 | 87267-4450        |                   |
| 46                                  | 45.90         | 44.00          | WM18177-ND | 5.94                 | 49.21 313.95 | 87267-4650        |                   |
| 48                                  | 47.90         | 46.00          | WM18178-ND | 6.20                 | 51.36 327.64 | 87267-4850        |                   |
| 50                                  | 49.90         | 48.00          | WM18179-ND | 6.46                 | 53.61 341.33 | 87267-5050        |                   |

Fig. 7 – Vertical, Dual Row Through-Hole

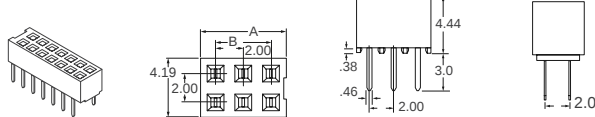


Fig. 8 – Side Entry

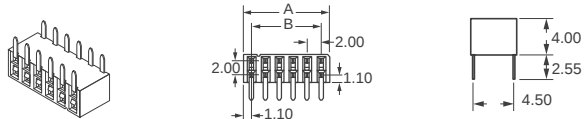


Fig. 9 – Side Entry SMT

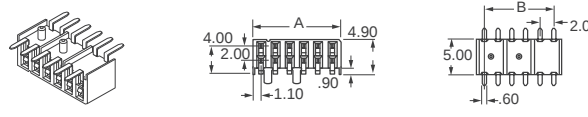


Fig. 10 – Top/Bottom Entry SMT (VLP2R)

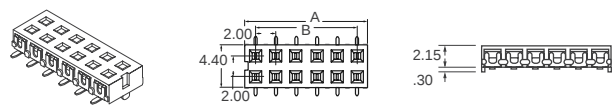


Fig. 11 – Vertical, Dual Row Top/Bottom Entry, SMT

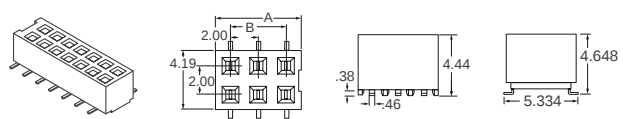


Fig. 12 – Crimp Housing

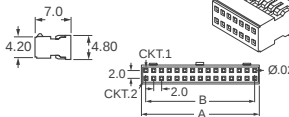
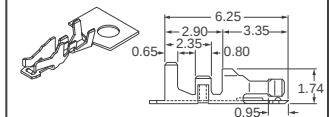


Fig. 13 – Crimp Terminal



| Fig.                                                         | Cir-<br>cuits | Dimension (mm)<br>A B | Digi-Key<br>Part No. | 1     | Pricing<br>10 100 | Molex<br>Part No. |
|--------------------------------------------------------------|---------------|-----------------------|----------------------|-------|-------------------|-------------------|
| Board-to-Board Receptacle<br>Vertical, Dual Row Through-Hole |               |                       |                      |       |                   |                   |
| 7                                                            | 4             | 4.19 2.00             | WM18000-ND           | 1.82  | 15.11 96.39       | 79107-0001        |
|                                                              | 6             | 6.19 4.00             | WM18001-ND           | 2.08  | 17.20 109.71      | 79107-0002        |
|                                                              | 8             | 8.19 6.00             | WM18002-ND           | 2.32  | 19.26 122.84      | 79107-0003        |
|                                                              | 10            | 10.19 8.00            | WM18003-ND           | 2.58  | 21.34 136.16      | 79107-0004        |
|                                                              | 12            | 12.19 10.00           | WM18004-ND           | 2.83  | 23.43 149.48      | 79107-0005        |
|                                                              | 14            | 14.19 12.00           | WM18005-ND           | 3.01  | 24.97 159.29      | 79107-0006        |
|                                                              | 16            | 16.19 14.00           | WM18006-ND           | 3.28  | 27.17 173.35      | 79107-0007        |
|                                                              | 18            | 18.19 16.00           | WM18007-ND           | 3.53  | 29.26 186.67      | 79107-0008        |
|                                                              | 20            | 20.19 18.00           | WM18008-ND           | 3.70  | 30.68 195.73      | 79107-0009        |
|                                                              | 22            | 22.19 20.00           | WM18009-ND           | 3.87  | 32.05 204.43      | 79107-0010        |
|                                                              | 24            | 24.19 22.00           | WM18010-ND           | 4.22  | 34.95 222.93      | 79107-0011        |
|                                                              | 30            | 30.19 28.00           | WM18011-ND           | 5.27  | 43.70 278.80      | 79107-0014        |
| 8                                                            | 40            | 40.19 38.00           | WM18012-ND           | 7.04  | 58.32 372.04      | 79107-0019        |
|                                                              | 44            | 44.19 42.00           | WM18013-ND           | 7.74  | 64.15 409.22      | 79107-0021        |
|                                                              | 50            | 50.19 48.00           | WM18014-ND           | 8.80  | 72.88 464.91      | 79107-0024        |
| Receptacle — Side Entry                                      |               |                       |                      |       |                   |                   |
| 8                                                            | 8             | 8.20 6.00             | WM18136-ND           | 3.16  | 26.16 166.87      | 87264-0850        |
|                                                              | 10            | 10.20 8.00            | WM18137-ND           | 3.23  | 26.77 170.76      | 87264-1050        |
|                                                              | 12            | 12.20 10.00           | WM18138-ND           | 3.37  | 27.96 178.34      | 87264-1250        |
|                                                              | 14            | 14.20 12.00           | WM18139-ND           | 3.52  | 29.15 185.93      | 87264-1450        |
|                                                              | 16            | 16.20 14.00           | WM18140-ND           | 4.02  | 33.29 212.38      | 87264-1650        |
|                                                              | 18            | 18.20 16.00           | WM18141-ND           | 4.52  | 37.47 239.02      | 87264-1850        |
|                                                              | 20            | 20.20 18.00           | WM18142-ND           | 5.02  | 41.62 265.48      | 87264-2050        |
|                                                              | 22            | 22.20 20.00           | WM18143-ND           | 5.53  | 45.79 292.12      | 87264-2250        |
|                                                              | 24            | 24.20 22.00           | WM18144-ND           | 6.03  | 49.94 318.57      | 87264-2450        |
|                                                              | 26            | 26.20 24.00           | WM18145-ND           | 6.53  | 54.11 345.21      | 87264-2650        |
|                                                              | 28            | 28.20 26.00           | WM18146-ND           | 7.03  | 58.26 371.67      | 87264-2850        |
|                                                              | 30            | 30.20 28.00           | WM18147-ND           | 7.54  | 62.44 398.31      | 87264-3050        |
| 9                                                            | 32            | 32.20 30.00           | WM18148-ND           | 8.04  | 66.58 424.76      | 87264-3250        |
|                                                              | 34            | 34.20 32.00           | WM18149-ND           | 8.54  | 70.76 451.40      | 87264-3450        |
|                                                              | 36            | 36.20 34.00           | WM18150-ND           | 9.04  | 74.91 477.86      | 87264-3650        |
|                                                              | 38            | 38.20 36.00           | WM18151-ND           | 9.54  | 79.08 504.50      | 87264-3850        |
|                                                              | 40            | 40.20 38.00           | WM18152-ND           | 10.05 | 83.23 530.95      | 87264-4050        |
|                                                              | 42            | 42.20 40.00           | WM18153-ND           | 10.55 | 87.41 557.59      | 87264-4250        |
|                                                              | 44            | 44.20 42.00           | WM18154-ND           | 11.05 | 91.55 584.05      | 87264-4450        |
|                                                              | 46            | 46.20 44.00           | WM18155-ND           | 11.55 | 95.73 610.69      | 87264-4650        |
|                                                              | 48            | 48.20 46.00           | WM18156-ND           | 12.05 | 99.88 637.14      | 87264-4850        |
|                                                              | 50            | 50.20 48.00           | WM18157-ND           | 12.56 | 104.05 663.78     | 87264-5050        |
| Receptacle — Side Entry SMT                                  |               |                       |                      |       |                   |                   |
| 9                                                            | 10            | 10.20 8.00            | WM18180-ND           | 4.95  | 41.04 261.78      | 87368-1020        |
|                                                              | 12            | 12.20 10.00           | WM18181-ND           | 5.08  | 42.08 268.44      | 87368-1220        |
|                                                              | 14            | 14.20 12.00           | WM18182-ND           | 5.35  | 44.34 282.87      | 87368-1420        |
|                                                              | 16            | 16.20 14.00           | WM18183-ND           | 5.60  | 46.40 296.00      | 87368-1620        |
|                                                              | 18            | 18.20 16.00           | WM18184-ND           | 5.92  | 49.04 312.84      | 87368-1820        |
|                                                              | 20            | 20.20 18.00           | WM18185-ND           | 6.06  | 50.23 320.42      | 87368-2020        |
|                                                              | 22            | 22.20 20.00           | WM18186-ND           | 6.16  | 51.01 325.42      | 87368-2220        |
|                                                              | 24            | 24.20 22.00           | WM18187-ND           | 6.72  | 55.65 355.02      | 87368-2420        |
|                                                              | 26            | 26.20 24.00           | WM18188-ND           | 7.28  | 60.29 384.62      | 87368-2620        |
|                                                              | 28            | 28.20 26.00           | WM18189-ND           | 7.84  | 64.93 414.22      | 87368-2820        |
|                                                              | 30            | 30.20 28.00           | WM18190-ND           | 8.40  | 69.57 443.82      | 87368-3020        |
|                                                              | 32            | 32.20 30.00           | WM18191-ND           | 8.95  | 74.18 473.23      | 87368-3220        |
| 9                                                            | 34            | 34.20 32.00           | WM18192-ND           | 9.51  | 78.82 502.83      | 87368-3420        |
|                                                              | 36            | 36.20 34.00           | WM18193-ND           | 10.07 | 83.46 532.43      | 87368-3620        |
|                                                              | 38            | 38.20 36.00           | WM18194-ND           | 10.63 | 88.10 562.03      | 87368-3820        |
|                                                              | 40            | 40.20 38.00           | WM18195-ND           | 11.19 | 92.74 591.63      | 87368-4020        |
|                                                              | 42            | 42.20 40.00           | WM18196-ND           | 11.75 | 97.38 621.23      | 87368-4220        |
|                                                              | 44            | 44.20 42.00           | WM18197-ND           | 12.31 | 102.02 650.83     | 87368-4420        |
|                                                              | 46            | 46.20 44.00           | WM18198-ND           | 12.87 | 106.66 680.43     | 87368-4620        |
|                                                              | 48            | 48.20 46.00           | WM18199-ND           | 13.43 | 111.30 710.03     | 87368-4820        |
|                                                              | 50            | 50.20 48.00           | WM18200-ND           | 14.00 | 116.00 740.00     | 87368-5020        |

| Fig.                                                                  | Cir-<br>cuits             | Dimension (mm)<br>A B | Digi-Key<br>Part No. | 1          | Pricing<br>10 100 | Molex<br>Part No. |
|-----------------------------------------------------------------------|---------------------------|-----------------------|----------------------|------------|-------------------|-------------------|
| Receptacle — Top/Bottom Entry SMT (VLP2R)                             |                           |                       |                      |            |                   |                   |
| 10                                                                    | 4                         | 4.00 2.00             | WM18103-ND           | 3.30       | 27.35 174.46      | 87340-0422        |
|                                                                       | 6                         | 6.00 4.00             | WM18104-ND           | 3.79       | 31.38 200.17      | 87340-0622        |
|                                                                       | 8                         | 8.00 6.00             | WM18105-ND           | 4.59       | 38.05 242.72      | 87340-0822        |
|                                                                       | 10                        | 10.00 8.00            | WM18106-ND           | 5.74       | 47.56 303.40      | 87340-1022        |
|                                                                       | 12                        | 12.00 10.00           | WM18107-ND           | 6.89       | 57.07 364.08      | 87340-1222        |
|                                                                       | 14                        | 14.00 12.00           | WM18108-ND           | 8.04       | 66.58 424.76      | 87340-1422        |
|                                                                       | 16                        | 16.00 14.00           | WM18109-ND           | 9.18       | 76.10 485.44      | 87340-1622        |
|                                                                       | 18                        | 18.00 16.00           | WM18110-ND           | 10.33      | 85.61 546.12      | 87340-1822        |
|                                                                       | 20                        | 20.00 18.00           | WM18111-ND           | 11.48      | 95.12 606.80      | 87340-2022        |
| Board-to-Board Receptacle<br>Vertical, Dual Row Top/Bottom Entry, SMT |                           |                       |                      |            |                   |                   |
| 11                                                                    | 4                         | 4.19 2.00             | WM18015-ND           | 2.01       | 16.65 106.19      | 79109-0001        |
|                                                                       | 6                         | 6.19 4.00             | WM18016-ND           | 2.28       | 18.91 120.62      | 79109-0002        |
|                                                                       | 8                         | 8.19 6.00             | WM18017-ND           | 2.56       | 21.17 135.05      | 79109-0003        |
|                                                                       | 10                        | 10.19 8.00            | WM18018-ND           | 2.84       | 23.49 149.85      | 79109-0004        |
|                                                                       | 12                        | 12.19 10.00           | WM18019-ND           | 3.12       | 25.81 164.65      | 79109-0005        |
|                                                                       | 14                        | 14.19 12.00           | WM18020-ND           | 3.31       | 27.46 175.20      | 79109-0006        |
|                                                                       | 16                        | 16.19 14.00           | WM18021-ND           | 3.81       | 31.58 201.47      | 79109-0007        |
|                                                                       | 18                        | 18.19 16.00           | WM18022-ND           | 3.88       | 32.16 205.17      | 79109-0008        |
|                                                                       | 20                        | 20.19 18.00           | WM18023-ND           | 4.07       | 33.70 214.97      | 79109-0009        |
|                                                                       | 22                        | 22.19 20.00           | WM18024-ND           | 4.27       | 35.38 225.70      | 79109-0010        |
|                                                                       | 24                        | 24.19 22.00           | WM18025-ND           | 4.64       | 38.45 245.31      | 79109-0011        |
|                                                                       | 30                        | 30.19 28.00           | WM18026-ND           | 5.81       | 48.11 306.92      | 79109-0014        |
| 12                                                                    | 40                        | 40.19 38.00           | WM18027-ND           | 7.74       | 64.15 409.22      | 79109-0019        |
|                                                                       | 44                        | 44.19 42.00           | WM18028-ND           | 8.52       | 70.56 450.11      | 79109-0021        |
|                                                                       | 50                        | 50.19 48.00           | WM18029-ND           | 9.67       | 80.13 511.16      | 79109-0024        |
| Crimp Housing — Standard                                              |                           |                       |                      |            |                   |                   |
| 12                                                                    | 4                         | 4.20 2.00             | WM18030-ND           | .44        | 3.68 23.50        | 51110-0450        |
|                                                                       | 6                         | 6.20 4.00             | WM18031-ND           | .45        | 3.74 23.87        | 51110-0650        |
|                                                                       | 8                         | 8.20 6.00             | WM18032-ND           | .50        | 4.12 26.27        | 51110-0850        |
|                                                                       | 10                        | 10.20 8.00            | WM18033-ND           | .53        | 4.38 27.94        | 51110-1050        |
|                                                                       | 12                        | 12.20 10.00           | WM18034-ND           | .56        | 4.61 29.42        | 51110-1250        |
|                                                                       | 14                        | 14.20 12.00           | WM18035-ND           | .65        | 5.37 34.23        | 51110-1450        |
|                                                                       | 16                        | 16.20 14.00           | WM18036-ND           | .77        | 6.38 40.70        | 51110-1650        |
|                                                                       | 18                        | 18.20 16.00           | WM18037-ND           | .84        | 6.93 44.22        | 51110-1850        |
|                                                                       | 20                        | 20.20 18.00           | WM18038-ND           | .93        | 7.71 49.21        | 51110-2050        |
|                                                                       | 22                        | 22.20 20.00           | WM18039-ND           | 1.03       | 8.50 54.21        | 51110-2250        |
|                                                                       | 24                        | 24.20 22.00           | WM18040-ND           | 1.12       | 9.28 59.20        | 51110-2450        |
|                                                                       | 26                        | 26.20 24.00           | WM18041-ND           | 1.20       | 9.98 63.64        | 51110-2650        |
| 12                                                                    | 28                        | 28.20 26.00           | WM18042-ND           | 1.30       | 10.76 68.64       | 51110-2850        |
|                                                                       | 30                        | 30.20 28.00           | WM18043-ND           | 1.39       | 11.54 73.63       | 51110-3050        |
| Crimp Housing — With Polarization Keys                                |                           |                       |                      |            |                   |                   |
| 12                                                                    | 8                         | 8.20 6.00             | WM18044-ND           | .50        | 4.12 26.27        | 51110-0851        |
|                                                                       | 10                        | 10.20 8.00            | WM18045-ND           | .53        | 4.38 27.94        | 51110-1051        |
|                                                                       | 12                        | 12.20 10.00           | WM18046-ND           | .56        | 4.61 29.42        | 51110-1251        |
|                                                                       | 14                        | 14.20 12.00           | WM18047-ND           | .65        | 5.37 34.23        | 51110-1451        |
|                                                                       | 16                        | 16.20 14.00           | WM18048-ND           | .77        | 6.38 40.70        | 51110-1651        |
|                                                                       | 18                        | 18.20 16.00           | WM18049-ND           | .84        | 6.93 44.22        | 51110-1851        |
|                                                                       | 20                        | 20.20 18.00           | WM18050-ND           | .93        | 7.71 49.21        | 51110-2051        |
|                                                                       | 22                        | 22.20 20.00           | WM18051-ND           | 1.03       | 8.50 54.21        | 51110-2251        |
|                                                                       | 24                        | 24.20 22.00           | WM18052-ND           | 1.12       | 9.28 59.20        | 51110-2451        |
|                                                                       | 26                        | 26.20 24.00           | WM18053-ND           | 1.20       | 9.98 63.64        | 51110-2651        |
|                                                                       | 28                        | 28.20 26.00           | WM18054-ND           | 1.30       | 10.76 68.64       | 51110-2851        |
|                                                                       | 30                        | 30.20 28.00           | WM18055-ND           | 1.39       | 11.54 73.63       | 51110-3051        |
| 13                                                                    | Crimp Terminal (26-30AWG) |                       | WM18056-ND           | —          | 1.48 9.44         | 50394-8100        |
| Hand Tool for 2mm Crimp Contacts                                      |                           |                       |                      | WM18057-ND | 165.00 — —        | 11-01-0204        |

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# NEW! 0.5mm Flex Connectors

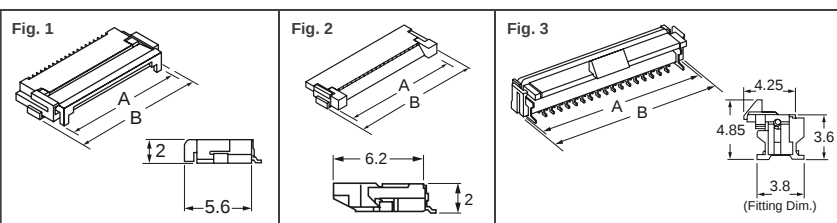
## "Flip-Lock" SMT/ZIF Type Flexible Printed Circuit Board Connectors

The FH12 Series of miniature connectors for FPC/FFC use brings form to the newly developed "flip-lock" concept and can be used with SMT (surface mount technology) to eliminate the problems of the contemporary slide-lock system.

These connectors have a contact spacing of 0.5mm, are suited to high density mounting, and are based on a single-action ZIF (zero insertion force) structure for easy connections. Types with top or bottom contacts, and vertical mounting are available to suit your applications.

**Materials/Finish:** • Insulation: Polyamide resin, beige; PPS resin, dark brown (UL94V-0) • Contacts: Phosphor bronze, solder plating.

**Electrical:** • Rated Current: 0.4A • Insulation Resistance: 500MΩ or greater at 100V DC • Withstand Voltage: 150V AC for one minute • Contact Resistance: 50mΩ or less (Note: When all conductors are to continuously carry the rated current, set the current to 70% of the rated current value).



| Fig.                                          | No. of Pos. | Dimensions (mm) |      | Digi-Key Part No. | Cut Tape Pricing |       |        |        | Digi-Key Part No. | Tape & Reel Pricing |           |          |           | Hirose Part No. |
|-----------------------------------------------|-------------|-----------------|------|-------------------|------------------|-------|--------|--------|-------------------|---------------------|-----------|----------|-----------|-----------------|
|                                               |             | A               | B    |                   | 1                | 10    | 100    | 250    |                   | 1,000               | 2,000     | 4,000    | 6,000     |                 |
| <b>Horizontal Mount — Bottom Contact Type</b> |             |                 |      |                   |                  |       |        |        |                   |                     |           |          |           |                 |
| 1                                             | 10          | 8.1             | 9.1  | HFI10CT-ND        | 1.42             | 11.60 | 64.31  | 153.64 | HFI10TR-ND        | —                   | 525.03/M  | —        | 508.75/M  | FH12-10S-0.5SH  |
|                                               | 20          | 13.1            | 14.1 | HFI20CT-ND        | 1.75             | 14.22 | 78.84  | 188.37 | HFI20TR-ND        | —                   | 643.71/M  | —        | 623.75/M  | FH12-20S-0.5SH  |
|                                               | 24          | 15.1            | 16.1 | HFI24CT-ND        | 1.88             | 15.35 | 85.08  | 203.28 | HFI24TR-ND        | —                   | 694.67/M  | —        | 673.13/M  | FH12-24S-0.5SH  |
|                                               | 30          | 18.1            | 19.1 | HFI30CT-ND        | 2.07             | 16.84 | 93.38  | 223.10 | HFI30TR-ND        | —                   | 762.39/M  | —        | 738.75/M  | FH12-30S-0.5SH  |
|                                               | 40          | 23.1            | 24.1 | HFI40CT-ND        | 2.53             | 20.59 | 114.16 | 272.74 | HFI40TR-ND        | —                   | 932.03/M  | —        | 903.13/M  | FH12-40S-0.5SH  |
|                                               | 50          | 28.1            | 29.1 | HFI50CT-ND        | 2.85             | 23.20 | 128.61 | 307.29 | HFI50TR-ND        | —                   | 1050.06/M | —        | 1017.50/M | FH12-50S-0.5SH  |
| <b>Horizontal Mount — Top Contact Type</b>    |             |                 |      |                   |                  |       |        |        |                   |                     |           |          |           |                 |
| 2                                             | 10          | 8.35            | 9.1  | HFK10CT-ND        | 1.10             | 8.98  | 49.77  | 118.91 | HFK10TR-ND        | —                   | 425.25/M  | 406.35/M | 393.75/M  | FH12A-10S-0.5SH |
|                                               | 20          | 13.35           | 14.1 | HFK20CT-ND        | 1.42             | 11.60 | 64.31  | 153.64 | HFK20TR-ND        | —                   | 549.45/M  | 525.03/M | 508.75/M  | FH12A-20S-0.5SH |
|                                               | 24          | 15.35           | 16.1 | HFK24CT-ND        | 1.56             | 12.73 | 70.55  | 168.55 | HFK24TR-ND        | —                   | 602.78/M  | 575.99/M | 558.13/M  | FH12A-24S-0.5SH |
|                                               | 30          | 18.35           | 19.1 | HFK30CT-ND        | 1.79             | 14.59 | 80.90  | 193.28 | HFK30TR-ND        | —                   | 691.20/M  | 660.48/M | 640.00/M  | FH12A-30S-0.5SH |
|                                               | 40          | 23.35           | 24.1 | HFK40CT-ND        | 2.16             | 17.58 | 97.49  | 232.92 | HFK40TR-ND        | —                   | 832.95/M  | 795.93/M | 771.25/M  | FH12A-40S-0.5SH |
|                                               | 50          | 28.35           | 29.1 | HFK50CT-ND        | 2.53             | 20.59 | 114.16 | 272.74 | HFK50TR-ND        | —                   | 975.38/M  | 932.03/M | 903.13/M  | FH12A-50S-0.5SH |
| <b>Vertical Mount</b>                         |             |                 |      |                   |                  |       |        |        |                   |                     |           |          |           |                 |
| 3                                             | 10          | 6.5             | 8.2  | HFL10CT-ND        | 1.10             | 8.98  | 49.77  | 118.91 | HFL10TR-ND        | 425.25              | 406.35/M  | —        | —         | FH12-10S-0.5SV  |
|                                               | 20          | 11.5            | 13.2 | HFL20CT-ND        | 1.47             | 11.97 | 66.36  | 158.55 | HFL20TR-ND        | 567.00              | 541.80/M  | —        | —         | FH12-20S-0.5SV  |
|                                               | 24          | 13.5            | 15.2 | HFL24CT-ND        | 1.61             | 13.11 | 72.68  | 173.65 | HFL24TR-ND        | 621.00              | 593.40/M  | —        | —         | FH12-24S-0.5SV  |
|                                               | 30          | 16.5            | 18.2 | HFL30CT-ND        | 1.84             | 14.96 | 82.95  | 198.19 | HFL30TR-ND        | 708.75              | 677.25/M  | —        | —         | FH12-30S-0.5SV  |
|                                               | 40          | 21.5            | 23.2 | HFL40CT-ND        | 2.25             | 18.33 | 101.59 | 242.73 | HFL40TR-ND        | 868.05              | 829.47/M  | —        | —         | FH12-40S-0.5SV  |
|                                               | 50          | 26.5            | 28.2 | HFL50CT-ND        | 2.62             | 21.35 | 118.34 | 282.75 | HFL50TR-ND        | 1011.15             | 966.21/M  | —        | —         | FH12-50S-0.5SV  |

# 1mm Flex Connectors

## 1mm Pitch Flexible Printed Circuit Connectors (Figures 1 and 2)

**Features:** • High-density packaging achieved by 1 mm pitch contacts • Dual-side contact construction allows FPC and FFC conductors to be inserted in either direction • Enhanced contact reliability through high contact pressure • Applicable to 0.25mm to 0.35mm thick flexible printed circuit boards • Uses PBT (UL94V-0) insulating materials which are highly resistant to solvents and high temperature • Kinked dip posts for board retention during wave soldering

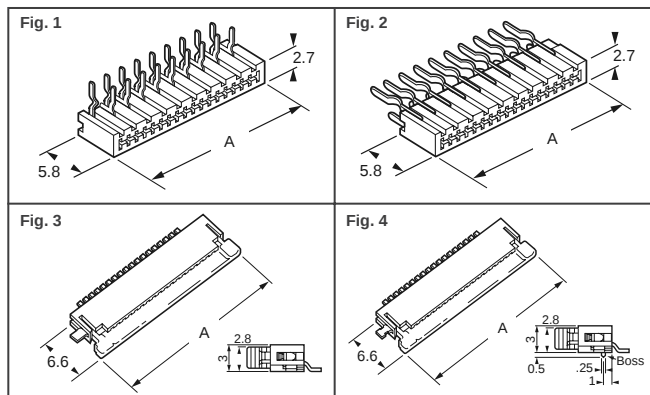
**Material/Finish:** • Insulator: Polybutylene phthalate, black • Contacts: Phosphor bronze, tin-lead plated

**Electrical:** • Rated Current: 0.5A • Insulation Resistance: At 100V DC, 500MΩ min. • Withstanding Voltage: 150V AC for 1 minute • Contact Resistance: 40mΩ max.

## SMT ZIF Type Flexible PCB Connectors (Figures 3 and 4)

**Features:** • Low profile type with 3mm packaged height; 1mm pitch permits high-density packaging • Excellent workability is offered by the ZIF structure which provides positive contact by only lightly inserting FPC/FFC and then pushing in the movable locking flap • Recommended thickness of flexible circuit board is 0.25mm to 0.30mm • PPS (UL94V-0) with excellent solvent resistance and high temperature resistance is used for the insulation material • The SMT type connectors permit high density and automatic packaging on circuit boards • Also available in embossed tape packaging.

**Material/Finish:** • Insulator: PPS resin, natural finish • Contact: Phosphor bronze, tin plating  
**Electrical:** • Rated Current: 0.5A • Insulator Resistance: 500MΩ at 100VDC min. • Withstanding Voltage: 150V AC for 1 minute at specified value • Contact Resistance: 25mΩ max.



| Fig.               | No. of Pos. | Dim. A (mm) | Digi-Key Part No. | Pricing |       |       |        | Hirose Part No. |
|--------------------|-------------|-------------|-------------------|---------|-------|-------|--------|-----------------|
|                    |             |             |                   | 1       | 10    | 100   | 250    |                 |
| <b>Right Angle</b> |             |             |                   |         |       |       |        |                 |
| 1                  | 6           | 8           | HFG06T-ND         | .42     | 3.42  | 24.00 | 46.80  | FH21-6S-1DS     |
|                    | 8           | 10          | HFG08T-ND         | .49     | 3.99  | 28.00 | 54.60  | FH21-8S-1DS     |
|                    | 10          | 12          | HFG10T-ND         | .63     | 5.13  | 36.00 | 70.20  | FH21-10S-1DS    |
|                    | 12          | 14          | HFG12T-ND         | .70     | 5.70  | 40.00 | 78.00  | FH21-12S-1DS    |
|                    | 14          | 16          | HFG14T-ND         | .81     | 6.56  | 46.00 | 89.70  | FH21-14S-1DS    |
|                    | 16          | 18          | HFG16T-ND         | .91     | 7.41  | 52.00 | 101.40 | FH21-16S-1DS    |
|                    | 18          | 20          | HFG18T-ND         | .98     | 7.98  | 56.00 | 109.20 | FH21-18S-1DS    |
|                    | 20          | 22          | HFG20T-ND         | 1.12    | 9.12  | 64.00 | 124.80 | FH21-20S-1DS    |
|                    | 22          | 24          | HFG22T-ND         | 1.16    | 9.41  | 66.00 | 128.70 | FH21-22S-1DS    |
|                    | 24          | 26          | HFG24T-ND         | 1.26    | 10.26 | 72.00 | 140.40 | FH21-24S-1DS    |
|                    | 26          | 28          | HFG26T-ND         | 1.37    | 11.12 | 78.00 | 152.10 | FH21-26S-1DS    |
|                    | 28          | 30          | HFG28T-ND         | 1.51    | 12.26 | 86.00 | 167.70 | FH21-28S-1DS    |
|                    | 30          | 32          | HFG30T-ND         | 1.54    | 12.54 | 88.00 | 171.60 | FH21-30S-1DS    |
| <b>Straight</b>    |             |             |                   |         |       |       |        |                 |
| 2                  | 6           | 8           | HFF06T-ND         | .39     | 3.14  | 22.00 | 42.90  | FH21-6S-1DSA    |
|                    | 8           | 10          | HFF08T-ND         | .46     | 3.71  | 26.00 | 50.70  | FH21-8S-1DSA    |
|                    | 10          | 12          | HFF10T-ND         | .56     | 4.56  | 32.00 | 62.40  | FH21-10S-1DSA   |
|                    | 12          | 14          | HFF12T-ND         | .63     | 5.13  | 36.00 | 70.20  | FH21-12S-1DSA   |
|                    | 14          | 16          | HFF14T-ND         | .70     | 5.70  | 40.00 | 78.00  | FH21-14S-1DSA   |
|                    | 16          | 18          | HFF16T-ND         | .81     | 6.56  | 46.00 | 89.70  | FH21-16S-1DSA   |
|                    | 18          | 20          | HFF18T-ND         | .88     | 7.13  | 50.00 | 97.50  | FH21-18S-1DSA   |
|                    | 20          | 22          | HFF20T-ND         | 1.02    | 8.27  | 58.00 | 113.10 | FH21-20S-1DSA   |
|                    | 22          | 24          | HFF22T-ND         | 1.05    | 8.55  | 60.00 | 117.00 | FH21-22S-1DSA   |
|                    | 24          | 26          | HFF24T-ND         | 1.12    | 9.12  | 64.00 | 124.80 | FH21-24S-1DSA   |
|                    | 26          | 28          | HFF26T-ND         | 1.19    | 9.69  | 68.00 | 132.60 | FH21-26S-1DSA   |
|                    | 28          | 30          | HFF28T-ND         | 1.33    | 10.83 | 76.00 | 148.20 | FH21-28S-1DSA   |
|                    | 30          | 32          | HFF30T-ND         | 1.37    | 11.12 | 78.00 | 152.10 | FH21-30S-1DSA   |

| Fig.                                     | No. of Pos. | Dim. A (mm) | Digi-Key Part No. | Pricing |       |        |        | Hirose Part No. |
|------------------------------------------|-------------|-------------|-------------------|---------|-------|--------|--------|-----------------|
|                                          |             |             |                   | 1       | 10    | 100    | 250    |                 |
| <b>SMT Flex Without Board Mount Boss</b> |             |             |                   |         |       |        |        |                 |
| 3                                        | 6           | 12.2        | HFE06F-ND         | .95     | 7.70  | 54.00  | 105.30 | FH10A-6S-1SH    |
|                                          | 8           | 14.2        | HFE08F-ND         | 1.09    | 8.84  | 62.00  | 120.90 | FH10A-8S-1SH    |
|                                          | 10          | 16.2        | HFE10F-ND         | 1.19    | 9.69  | 68.00  | 132.60 | FH10A-10S-1SH   |
|                                          | 12          | 18.2        | HFE12F-ND         | 1.30    | 10.55 | 74.00  | 144.30 | FH10A-12S-1SH   |
|                                          | 14          | 20.2        | HFE14F-ND         | 1.37    | 11.12 | 78.00  | 152.10 | FH10A-14S-1SH   |
|                                          | 16          | 22.2        | HFE16F-ND         | 1.54    | 12.54 | 88.00  | 171.60 | FH10A-16S-1SH   |
|                                          | 18          | 24.2        | HFE18F-ND         | 1.68    | 13.68 | 96.00  | 187.20 | FH10A-18S-1SH   |
|                                          | 20          | 26.2        | HFE20F-ND         | 1.75    | 14.25 | 100.00 | 195.00 | FH10A-20S-1SH   |
|                                          | 22          | 28.2        | HFE22F-ND         | 1.82    | 14.82 | 104.00 | 202.80 | FH10A-22S-1SH   |
|                                          | 24          | 30.2        | HFE24F-ND         | 1.89    | 15.39 | 108.00 | 210.60 | FH10A-24S-1SH   |
|                                          | 26          | 31.2        | HFE26F-ND         | 2.21    | 17.96 | 126.00 | 245.70 | FH10A-26S-1SH   |
|                                          | 28          | 34.2        | HFE28F-ND         | 2.28    | 18.53 | 130.00 | 253.50 | FH10A-28S-1SH   |
|                                          | 30          | 36.2        | HFE30F-ND         | 2.35    | 19.10 | 134.00 | 261.30 | FH10A-30S-1SH   |
| <b>SMT Flex With Board Mount Boss</b>    |             |             |                   |         |       |        |        |                 |
| 4                                        | 6           | 12.2        | HFH06T-ND         | .95     | 7.70  | 42.66  | 101.93 | FH10A-6S-1SHB   |
|                                          | 8           | 14.2        | HFH08T-ND         | 1.09    | 8.84  | 48.98  | 117.03 | FH10A-8S-1SHB   |
|                                          | 10          | 16.2        | HFH10T-ND         | 1.19    | 9.69  | 53.72  | 128.35 | FH10A-10S-1SHB  |
|                                          | 12          | 18.2        | HFH12T-ND         | 1.30    | 10.55 | 58.46  | 139.68 | FH10A-12S-1SHB  |
|                                          | 14          | 20.2        | HFH14T-ND         | 1.37    | 11.12 | 61.62  | 147.23 | FH10A-14S-1SHB  |
|                                          | 16          | 22.2        | HFH16T-ND         | 1.54    | 12.54 | 69.52  | 166.10 | FH10A-16S-1SHB  |
|                                          | 18          | 24.2        | HFH18T-ND         | 1.68    | 13.68 | 75.84  | 181.20 | FH10A-18S-1SHB  |
|                                          | 20          | 26.2        | HFH20T-ND         | 1.75    | 14.25 | 79.00  | 188.75 | FH10A-20S-1SHB  |
|                                          | 22          | 28.2        | HFH22T-ND         | 1.82    | 14.82 | 82.16  | 196.30 | FH10A-22S-1SHB  |
|                                          | 24          | 30.2        | HFH24T-ND         | 1.89    | 15.39 | 85.32  | 203.85 | FH10A-24S-1SHB  |
|                                          | 26          | 32.2        | HFH26T-ND         | 2.21    | 17.96 | 99.54  | 237.83 | FH10A-26S-1SHB  |
|                                          | 28          | 34.2        | HFH28T-ND         | 2.28    | 18.53 | 102.70 | 245.38 | FH10A-28S-1SHB  |
|                                          | 30          | 36.2        | HFH30T-ND         | 2.35    | 19.10 | 105.86 | 252.93 | FH10A-30S-1SHB  |

**1-800-344-4539**

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## 0.5mm and 1mm Flat Flex Cable

Parlex custom jumper cables are available with flat conductors of desired length, stripped at both ends. The insulation has been stripped from one side only, exposing one surface of the conductors. Conductors have been pre-tinned for direct insertion into connectors.

### Features:

• Superior Mechanical and Shielding Performance • Meets FCC, CIS PR/VE effectivity requirements for inter connects • High flexibility rating of 10 million flex cycles on a .6" (15.24mm) radius with

optimum design layout • Selective shielding to both sides giving a full 360° of shielding effectiveness • Superior mechanical and abrasion resistance.

### Cable Characteristics:

• Conductors: Cu., tin/lead plated • Current Rating: 0.5A (0.5mm); 1.50A (1mm) • Voltage Rating: 300 volts • Insulation: polyester  
• Temperature Rating: -55°C to 105°C • Dielectric Strength: 2500 volts/mil • U.L. Flame Rating: VW-1 • U.L. Styles: 2643 & 20566



## NEW! 0.5mm Flat Flex Cable

| No. of Pos.                             | Dim. A (mm) | Dig-Key Part No. | Pricing |       |        |        | Parlex Part No. |
|-----------------------------------------|-------------|------------------|---------|-------|--------|--------|-----------------|
|                                         |             |                  | 1       | 10    | 100    | 250    |                 |
| 2" (5.08cm) Unshielded Flat Flex Cable  |             |                  |         |       |        |        |                 |
| 10                                      | 5.5         | HFF-10U-02-ND    | 3.60    | 30.00 | 220.00 | 466.00 | 0.5MM-10-2-B    |
| 20                                      | 10.5        | HFF-20U-02-ND    | 3.74    | 31.13 | 228.25 | 483.48 | 0.5MM-20-2-B    |
| 24                                      | 12.5        | HFF-24U-02-ND    | 3.78    | 31.50 | 231.00 | 489.30 | 0.5MM-24-2-B    |
| 30                                      | 15.5        | HFF-30U-02-ND    | 3.83    | 31.88 | 233.75 | 495.13 | 0.5MM-30-2-B    |
| 36                                      | 18.5        | HFF-36U-02-ND    | 3.87    | 32.25 | 236.50 | 500.95 | 0.5MM-36-2-B    |
| 40                                      | 20.5        | HFF-40U-02-ND    | 3.92    | 32.63 | 239.25 | 506.78 | 0.5MM-40-2-B    |
| 50                                      | 25.5        | HFF-50U-02-ND    | 4.05    | 33.75 | 247.50 | 524.25 | 0.5MM-50-2-B    |
| 4" (10.16cm) Unshielded Flat Flex Cable |             |                  |         |       |        |        |                 |
| 10                                      | 5.5         | HFF-10U-04-ND    | 4.05    | 33.75 | 247.50 | 524.25 | 0.5MM-10-4-B    |
| 20                                      | 10.5        | HFF-20U-04-ND    | 4.28    | 35.63 | 261.25 | 553.38 | 0.5MM-20-4-B    |
| 24                                      | 12.5        | HFF-24U-04-ND    | 4.37    | 36.38 | 266.75 | 565.03 | 0.5MM-24-4-B    |

| No. of Pos.                             | Dim. A (mm) | Digi-Key Part No. | Pricing |       |        |        | Parlex Part No. |
|-----------------------------------------|-------------|-------------------|---------|-------|--------|--------|-----------------|
|                                         |             |                   | 1       | 10    | 100    | 250    |                 |
| 30                                      | 15.5        | HFF-30U-04-ND     | 4.50    | 37.50 | 275.00 | 582.50 | 0.5MM-30-4-B    |
| 36                                      | 18.5        | HFF-36U-04-ND     | 4.64    | 38.63 | 283.25 | 599.98 | 0.5MM-36-4-B    |
| 40                                      | 20.5        | HFF-40U-04-ND     | 4.73    | 39.38 | 288.75 | 611.63 | 0.5MM-40-4-B    |
| 50                                      | 25.5        | HFF-50U-04-ND     | 4.95    | 41.25 | 302.50 | 640.75 | 0.5MM-50-4-B    |
| 6" (15.24cm) Unshielded Flat Flex Cable |             |                   |         |       |        |        |                 |
| 10                                      | 5.5         | HFF-10U-06-ND     | 4.50    | 37.50 | 275.00 | 582.50 | 0.5MM-10-6-B    |
| 20                                      | 10.5        | HFF-20U-06-ND     | 4.95    | 41.25 | 302.50 | 640.75 | 0.5MM-20-6-B    |
| 24                                      | 12.5        | HFF-24U-06-ND     | 5.18    | 43.13 | 316.25 | 669.88 | 0.5MM-24-6-B    |
| 30                                      | 15.5        | HFF-30U-06-ND     | 5.40    | 45.00 | 330.00 | 699.00 | 0.5MM-30-6-B    |
| 36                                      | 18.5        | HFF-36U-06-ND     | 5.54    | 46.13 | 338.25 | 716.48 | 0.5MM-36-6-B    |
| 40                                      | 20.5        | HFF-40U-06-ND     | 5.63    | 46.88 | 343.75 | 728.13 | 0.5MM-40-6-B    |
| 50                                      | 25.5        | HFF-50U-06-ND     | 5.85    | 48.75 | 357.50 | 757.25 | 0.5MM-50-6-B    |

## 1mm Flat Flex Cable

| No. of Pos.                                       | Dim. A (mm) | Digi-Key Part No. | 1    | 10    | 100    | 250    | Parlex Part No. |
|---------------------------------------------------|-------------|-------------------|------|-------|--------|--------|-----------------|
| NEW! 2" (5.08cm) Unshielded Flat Flex Cable NEW!  |             |                   |      |       |        |        |                 |
| 6                                                 | 7.15        | HF06U-02-ND       | 2.25 | 18.75 | 137.50 | 291.25 | 1.00MM-6-2-B    |
| 8                                                 | 9.15        | HF08U-02-ND       | 2.48 | 20.63 | 151.25 | 320.38 | 1.00MM-8-2-B    |
| 10                                                | 11.15       | HF10U-02-ND       | 2.70 | 22.50 | 165.00 | 349.50 | 1.00MM-10-2-B   |
| 12                                                | 13.15       | HF12U-02-ND       | 2.93 | 24.38 | 178.75 | 378.63 | 1.00MM-12-2-B   |
| 14                                                | 15.15       | HF14U-02-ND       | 3.15 | 26.25 | 192.50 | 407.75 | 1.00MM-14-2-B   |
| 16                                                | 17.15       | HF16U-02-ND       | 3.38 | 28.13 | 206.25 | 436.88 | 1.00MM-16-2-B   |
| 18                                                | 19.15       | HF18U-02-ND       | 3.60 | 30.00 | 220.00 | 466.00 | 1.00MM-18-2-B   |
| 20                                                | 21.15       | HF20U-02-ND       | 3.83 | 31.88 | 233.75 | 495.13 | 1.00MM-20-2-B   |
| 22                                                | 23.15       | HF22U-02-ND       | 4.05 | 33.75 | 247.50 | 524.25 | 1.00MM-22-2-B   |
| 24                                                | 25.15       | HF24U-02-ND       | 4.28 | 35.63 | 261.25 | 553.38 | 1.00MM-24-2-B   |
| 26                                                | 27.15       | HF26U-02-ND       | 4.50 | 37.50 | 275.00 | 582.50 | 1.00MM-26-2-B   |
| 28                                                | 29.15       | HF28U-02-ND       | 4.73 | 39.38 | 288.75 | 611.63 | 1.00MM-28-2-B   |
| 30                                                | 31.15       | HF30U-02-ND       | 4.95 | 41.25 | 302.50 | 640.75 | 1.00MM-30-2-B   |
| NEW! 3" (7.62cm) Unshielded Flat Flex Cable NEW!  |             |                   |      |       |        |        |                 |
| 6                                                 | 7.15        | HF06U-03-ND       | 2.48 | 20.63 | 151.25 | 320.38 | 1.00MM-6-3-B    |
| 8                                                 | 9.15        | HF08U-03-ND       | 2.70 | 22.50 | 165.00 | 349.50 | 1.00MM-8-3-B    |
| 10                                                | 11.15       | HF10U-03-ND       | 2.93 | 24.38 | 178.75 | 378.63 | 1.00MM-10-3-B   |
| 12                                                | 13.15       | HF12U-03-ND       | 3.15 | 26.25 | 192.50 | 407.75 | 1.00MM-12-3-B   |
| 14                                                | 15.15       | HF14U-03-ND       | 3.38 | 28.13 | 206.25 | 436.88 | 1.00MM-14-3-B   |
| 16                                                | 17.15       | HF16U-03-ND       | 3.60 | 30.00 | 220.00 | 466.00 | 1.00MM-16-3-B   |
| 18                                                | 19.15       | HF18U-03-ND       | 3.83 | 31.88 | 233.75 | 495.13 | 1.00MM-18-3-B   |
| 20                                                | 21.15       | HF20U-03-ND       | 4.05 | 33.75 | 247.50 | 524.25 | 1.00MM-20-3-B   |
| 22                                                | 23.15       | HF22U-03-ND       | 4.28 | 35.63 | 261.25 | 553.38 | 1.00MM-22-3-B   |
| 24                                                | 25.15       | HF24U-03-ND       | 4.50 | 37.50 | 275.00 | 582.50 | 1.00MM-24-3-B   |
| 26                                                | 27.15       | HF26U-03-ND       | 4.73 | 39.38 | 288.75 | 611.63 | 1.00MM-26-3-B   |
| 28                                                | 29.15       | HF28U-03-ND       | 4.95 | 41.25 | 302.50 | 640.75 | 1.00MM-28-3-B   |
| 30                                                | 31.15       | HF30U-03-ND       | 5.18 | 43.13 | 316.25 | 669.88 | 1.00MM-30-3-B   |
| NEW! 4" (10.16cm) Unshielded Flat Flex Cable NEW! |             |                   |      |       |        |        |                 |
| 6                                                 | 7.15        | HF06U-04-ND       | 2.70 | 22.50 | 165.00 | 349.50 | 1.00MM-6-4-B    |
| 8                                                 | 9.15        | HF08U-04-ND       | 2.93 | 24.38 | 178.75 | 378.63 | 1.00MM-8-4-B    |
| 10                                                | 11.15       | HF10U-04-ND       | 3.15 | 26.25 | 192.50 | 407.75 | 1.00MM-10-4-B   |
| 12                                                | 13.15       | HF12U-04-ND       | 3.38 | 28.13 | 206.25 | 436.88 | 1.00MM-12-4-B   |
| 14                                                | 15.15       | HF14U-04-ND       | 3.60 | 30.00 | 220.00 | 466.00 | 1.00MM-14-4-B   |
| 16                                                | 17.15       | HF16U-04-ND       | 3.83 | 31.88 | 233.75 | 495.13 | 1.00MM-16-4-B   |
| 18                                                | 19.15       | HF18U-04-ND       | 4.05 | 33.75 | 247.50 | 524.25 | 1.00MM-18-4-B   |
| 20                                                | 21.15       | HF20U-04-ND       | 4.28 | 35.63 | 261.25 | 553.38 | 1.00MM-20-4-B   |
| 22                                                | 23.15       | HF22U-04-ND       | 4.50 | 37.50 | 275.00 | 582.50 | 1.00MM-22-4-B   |
| 24                                                | 25.15       | HF24U-04-ND       | 4.73 | 39.38 | 288.75 | 611.63 | 1.00MM-24-4-B   |
| 26                                                | 27.15       | HF26U-04-ND       | 4.95 | 41.25 | 302.50 | 640.75 | 1.00MM-26-4-B   |
| 28                                                | 29.15       | HF28U-04-ND       | 5.18 | 43.13 | 316.25 | 669.88 | 1.00MM-28-4-B   |
| 30                                                | 31.15       | HF30U-04-ND       | 5.40 | 45.00 | 330.00 | 699.00 | 1.00MM-30-4-B   |
| NEW! 5" (12.70cm) Unshielded Flat Flex Cable NEW! |             |                   |      |       |        |        |                 |
| 6                                                 | 7.15        | HF06U-05-ND       | 2.93 | 24.38 | 178.75 | 378.63 | 1.00MM-6-5-B    |
| 8                                                 | 9.15        | HF08U-05-ND       | 3.15 | 26.25 | 192.50 | 407.75 | 1.00MM-8-5-B    |
| 10                                                | 11.15       | HF10U-05-ND       | 3.38 | 28.13 | 206.25 | 436.88 | 1.00MM-10-5-B   |
| 12                                                | 13.15       | HF12U-05-ND       | 3.60 | 30.00 | 220.00 | 466.00 | 1.00MM-12-5-B   |
| 14                                                | 15.15       | HF14U-05-ND       | 3.83 | 31.88 | 233.75 | 495.13 | 1.00MM-14-5-B   |
| 16                                                | 17.15       | HF16U-05-ND       | 4.05 | 33.75 | 247.50 | 524.25 | 1.00MM-16-5-B   |
| 18                                                | 19.15       | HF18U-05-ND       | 4.28 | 35.63 | 261.25 | 553.38 | 1.00MM-18-5-B   |
| 20                                                | 21.15       | HF20U-05-ND       | 4.50 | 37.50 | 275.00 | 582.50 | 1.00MM-20-5-B   |
| 22                                                | 23.15       | HF22U-05-ND       | 4.73 | 39.38 | 288.75 | 611.63 | 1.00MM-22-5-B   |
| 24                                                | 25.15       | HF24U-05-ND       | 4.95 | 41.25 | 302.50 | 640.75 | 1.00MM-24-5-B   |
| 26                                                | 27.15       | HF26U-05-ND       | 5.18 | 43.13 | 316.25 | 669.88 | 1.00MM-26-5-B   |
| 28                                                | 29.15       | HF28U-05-ND       | 5.40 | 45.00 | 330.00 | 699.00 | 1.00MM-28-5-B   |
| 30                                                | 31.15       | HF30U-05-ND       | 5.63 | 46.88 | 343.75 | 728.13 | 1.00MM-30-5-B   |
| 6" (15.24cm) Unshielded Flat Flex Cable           |             |                   |      |       |        |        |                 |
| 6                                                 | 7.15        | HF06U-06-ND       | 3.15 | 26.25 | 192.50 | 407.75 | 1.00MM-6-6-B    |
| 8                                                 | 9.15        | HF08U-06-ND       | 3.38 | 28.13 | 206.25 | 436.88 | 1.00MM-8-6-B    |
| 10                                                | 11.15       | HF10U-06-ND       | 3.60 | 30.00 | 220.00 | 466.00 | 1.00MM-10-6-B   |
| 12                                                | 13.15       | HF12U-06-ND       | 3.83 | 31.88 | 233.75 | 495.13 | 1.00MM-12-6-B   |
| 14                                                | 15.15       | HF14U-06-ND       | 4.05 | 33.75 | 247.50 | 524.25 | 1.00MM-14-6-B   |
| 16                                                | 17.15       | HF16U-06-ND       | 4.28 | 35.63 | 261.25 | 553.38 | 1.00MM-16-6-B   |

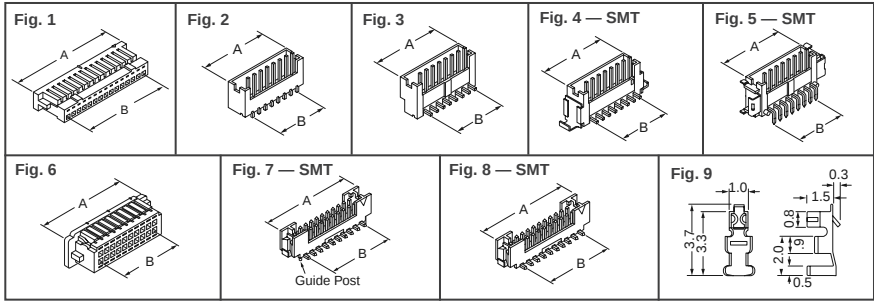
| No. of Pos.                                        | Dim. A (mm) | Digi-Key Part No. | Pricing |       |        |         | Parlex Part No. |
|----------------------------------------------------|-------------|-------------------|---------|-------|--------|---------|-----------------|
|                                                    |             |                   | 1       | 10    | 100    | 250     |                 |
| 18                                                 | 19.15       | HF18U-06-ND       | 4.50    | 37.50 | 275.00 | 582.50  | 1.00MM-18-6-B   |
| 20                                                 | 21.15       | HF20U-06-ND       | 4.73    | 39.38 | 288.75 | 611.63  | 1.00MM-20-6-B   |
| 22                                                 | 23.15       | HF22U-06-ND       | 4.95    | 41.25 | 302.50 | 640.75  | 1.00MM-22-6-B   |
| 24                                                 | 25.15       | HF24U-06-ND       | 5.18    | 43.13 | 316.25 | 669.88  | 1.00MM-24-6-B   |
| 26                                                 | 27.15       | HF26U-06-ND       | 5.40    | 45.00 | 330.00 | 699.00  | 1.00MM-26-6-B   |
| 28                                                 | 29.15       | HF28U-06-ND       | 5.63    | 46.88 | 343.75 | 728.13  | 1.00MM-28-6-B   |
| 30                                                 | 31.15       | HF30U-06-ND       | 5.85    | 48.75 | 357.50 | 757.25  | 1.00MM-30-6-B   |
| NEW! 8" (20.32cm) Unshielded Flat Flex Cable NEW!  |             |                   |         |       |        |         |                 |
| 6                                                  | 7.15        | HF06U-08-ND       | 3.60    | 30.00 | 220.00 | 466.00  | 1.00MM-6-8-B    |
| 8                                                  | 9.15        | HF08U-08-ND       | 3.83    | 31.88 | 233.75 | 495.13  | 1.00MM-8-8-B    |
| 10                                                 | 11.15       | HF10U-08-ND       | 4.05    | 33.75 | 247.50 | 524.25  | 1.00MM-10-8-B   |
| 12                                                 | 13.15       | HF12U-08-ND       | 4.28    | 35.63 | 261.25 | 553.38  | 1.00MM-12-8-B   |
| 14                                                 | 15.15       | HF14U-08-ND       | 4.50    | 37.50 | 275.00 | 582.50  | 1.00MM-14-8-B   |
| 16                                                 | 17.15       | HF16U-08-ND       | 4.73    | 39.38 | 288.75 | 611.63  | 1.00MM-16-8-B   |
| 18                                                 | 19.15       | HF18U-08-ND       | 4.95    | 41.25 | 302.50 | 640.75  | 1.00MM-18-8-B   |
| 20                                                 | 21.15       | HF20U-08-ND       | 5.18    | 43.13 | 316.25 | 669.88  | 1.00MM-20-8-B   |
| 22                                                 | 23.15       | HF22U-08-ND       | 5.40    | 45.00 | 330.00 | 699.00  | 1.00MM-22-8-B   |
| 24                                                 | 25.15       | HF24U-08-ND       | 5.63    | 46.88 | 343.75 | 728.13  | 1.00MM-24-8-B   |
| 26                                                 | 27.15       | HF26U-08-ND       | 5.85    | 48.75 | 357.50 | 757.25  | 1.00MM-26-8-B   |
| 28                                                 | 29.15       | HF28U-08-ND       | 6.08    | 50.63 | 371.25 | 786.38  | 1.00MM-28-8-B   |
| 30                                                 | 31.15       | HF30U-08-ND       | 6.30    | 52.50 | 385.00 | 815.50  | 1.00MM-30-8-B   |
| NEW! 10" (25.40cm) Unshielded Flat Flex Cable NEW! |             |                   |         |       |        |         |                 |
| 6                                                  | 7.15        | HF06U-10-ND       | 4.05    | 33.75 | 247.50 | 524.25  | 1.00MM-6-10-B   |
| 8                                                  | 9.15        | HF08U-10-ND       | 4.28    | 35.63 | 261.25 | 553.38  | 1.00MM-8-10-B   |
| 10                                                 | 11.15       | HF10U-10-ND       | 4.50    | 37.50 | 275.00 | 582.50  | 1.00MM-10-10-B  |
| 12                                                 | 13.15       | HF12U-10-ND       | 4.73    | 39.38 | 288.75 | 611.63  | 1.00MM-12-10-B  |
| 14                                                 | 15.15       | HF14U-10-ND       | 4.95    | 41.25 | 302.50 | 640.75  | 1.00MM-14-10-B  |
| 16                                                 | 17.15       | HF16U-10-ND       | 5.18    | 43.13 | 316.25 | 669.88  | 1.00MM-16-10-B  |
| 18                                                 | 19.15       | HF18U-10-ND       | 5.40    | 45.00 | 330.00 | 699.00  | 1.00MM-18-10-B  |
| 20                                                 | 21.15       | HF20U-10-ND       | 5.63    | 46.88 | 343.75 | 728.13  | 1.00MM-20-10-B  |
| 22                                                 | 23.15       | HF22U-10-ND       | 5.85    | 48.75 | 357.50 | 757.25  | 1.00MM-22-10-B  |
| 24                                                 | 25.15       | HF24U-10-ND       | 6.08    | 50.63 | 371.25 | 786.38  | 1.00MM-24-10-B  |
| 26                                                 | 27.15       | HF26U-10-ND       | 6.30    | 52.50 | 385.00 | 815.50  | 1.00MM-26-10-B  |
| 28                                                 | 29.15       | HF28U-10-ND       | 6.53    | 54.38 | 398.75 | 844.63  | 1.00MM-28-10-B  |
| 30                                                 | 31.15       | HF30U-10-ND       | 6.75    | 56.25 | 412.50 | 873.75  | 1.00MM-30-10-B  |
| 12" (30.48cm) Unshielded Flat Flex Cable           |             |                   |         |       |        |         |                 |
| 6                                                  | 7.15        | HF06U-12-ND       | 4.50    | 37.50 | 275.00 | 582.50  | 1.00MM-6-12-B   |
| 8                                                  | 9.15        | HF08U-12-ND       | 4.73    | 39.38 | 288.75 | 611.63  | 1.00MM-8-12-B   |
| 10                                                 | 11.15       | HF10U-12-ND       | 4.95    | 41.25 | 302.50 | 640.75  | 1.00MM-10-12-B  |
| 12                                                 | 13.15       | HF12U-12-ND       | 5.18    | 43.13 | 316.25 | 669.88  | 1.00MM-12-12-B  |
| 14                                                 | 15.15       | HF14U-12-ND       | 5.40    | 45.00 | 330.00 | 699.00  | 1.00MM-14-12-B  |
| 16                                                 | 17.15       | HF16U-12-ND       | 5.63    | 46.88 | 343.75 | 728.13  | 1.00MM-16-12-B  |
| 18                                                 | 19.15       | HF18U-12-ND       | 5.85    | 48.75 | 357.50 | 757.25  | 1.00MM-18-12-B  |
| 20                                                 | 21.15       | HF20U-12-ND       | 6.08    | 50.63 | 371.25 | 786.38  | 1.00MM-20-12-B  |
| 22                                                 | 23.15       | HF22U-12-ND       | 6.30    | 52.50 | 385.00 | 815.50  | 1.00MM-22-12-B  |
| 24                                                 | 25.15       | HF24U-12-ND       | 6.53    | 54.38 | 398.75 | 844.63  | 1.00MM-24-12-B  |
| 26                                                 | 27.15       | HF26U-12-ND       | 6.75    | 56.25 | 412.50 | 873.75  | 1.00MM-26-12-B  |
| 28                                                 | 29.15       | HF28U-12-ND       | 6.98    | 58.13 | 426.25 | 902.88  | 1.00MM-28-12-B  |
| 30                                                 | 31.15       | HF30U-12-ND       | 7.20    | 60.00 | 440.00 | 932.00  | 1.00MM-30-12-B  |
| 18" (45.72cm) Unshielded Flat Flex Cable           |             |                   |         |       |        |         |                 |
| 6                                                  | 7.15        | HF06U-18-ND       | 5.85    | 48.75 | 357.50 | 757.25  | 1.00MM-6-18-B   |
| 8                                                  | 9.15        | HF08U-18-ND       | 6.08    | 50.63 | 371.25 | 786.38  | 1.00MM-8-18-B   |
| 10                                                 | 11.15       | HF10U-18-ND       | 6.30    | 52.50 | 385.00 | 815.50  | 1.00MM-10-18-B  |
| 12                                                 | 13.15       | HF12U-18-ND       | 6.53    | 54.38 | 398.75 | 844.63  | 1.00MM-12-18-B  |
| 14                                                 | 15.15       | HF14U-18-ND       | 6.75    | 56.25 | 412.50 | 873.75  | 1.00MM-14-18-B  |
| 16                                                 | 17.15       | HF16U-18-ND       | 6.98    | 58.13 | 426.25 | 902.88  | 1.00MM-16-18-B  |
| 18                                                 | 19.15       | HF18U-18-ND       | 7.20    | 60.00 | 440.00 | 932.00  | 1.00MM-18-18-B  |
| 20                                                 | 21.15       | HF20U-18-ND       | 7.43    | 61.88 | 453.75 | 961.13  | 1.00MM-20-18-B  |
| 22                                                 | 23.15       | HF22U-18-ND       | 7.65    | 63.75 | 467.50 | 990.25  | 1.00MM-22-18-B  |
| 24                                                 | 25.15       | HF24U-18-ND       | 7.88    | 65.63 | 481.25 | 1019.38 | 1.00MM-24-18-B  |
| 26                                                 | 27.15       | HF26U-18-ND       | 8.10    | 67.50 | 495.00 | 1048.50 | 1.00MM-26-18-B  |
| 28                                                 | 29.15       | HF28U-18-ND       | 8.33    | 69.38 | 508.75 | 1077.63 | 1.00MM-28-18-B  |
| 30                                                 | 31.15       | HF30U-18-ND       | 8.55    | 71.25 | 522.50 | 1106.75 | 1.00MM-30-18-B  |

## 1.25mm Connectors – DF13 Series

**DF13 Series** is 1.25mm pitch, compact "PCB-to-Wire" Nylon Connectors best suited for high density applications requiring reduced cost production, and light-weight.

**Electrical Specifications:** • Current Capacity: 1A • Rated Voltage: AC150V • Insulation Resistance: Condition: DC100, Standard Value: Minimum 500MΩ • Withstanding Voltage: Condition: At specified value, Standard Value: AC500V • Contact Resistance: Condition: At DC0.1A, Standard Value: Max. 30mΩ.

**Material & Finish:** Pin Header Insulator: Polyamide resin, beige, UL94V-0. Pin Header Contact: Brass, tin plating. Pin Header Hardware: Brass, tin plating. Crimp Socket Insulator: Polyamide resin, beige, UL94V-0. Crimp Socket Contact: Phosphor bronze, tin plating.



| No. of Pins                                        | Dim. (mm)   | Digi-Key Part No. | Pricing       | Hirose Part No. |
|----------------------------------------------------|-------------|-------------------|---------------|-----------------|
| A                                                  | B           |                   | 1 25 100      |                 |
| <b>Fig. 1 — Single Row Crimp Socket Connectors</b> |             |                   |               |                 |
| 2                                                  | 4.15 1.25   | H2179-ND          | 13 2.75 6.22  | DF13-2S-1.25C   |
| 3                                                  | 5.40 2.50   | H2180-ND          | 13 2.87 6.51  | DF13-3S-1.25C   |
| 4                                                  | 6.65 3.75   | H2181-ND          | 17 3.64 8.25  | DF13-4S-1.25C   |
| 5                                                  | 7.90 5.00   | H2182-ND          | 18 3.80 8.60  | DF13-5S-1.25C   |
| 6                                                  | 9.15 6.25   | H2183-ND          | 18 3.93 8.91  | DF13-6S-1.25C   |
| 7                                                  | 10.40 7.50  | H2184-ND          | 19 4.07 9.21  | DF13-7S-1.25C   |
| 8                                                  | 11.65 8.75  | H2185-ND          | 27 5.84 13.24 | DF13-8S-1.25C   |
| 10                                                 | 14.15 11.25 | H2186-ND          | 29 6.14 13.91 | DF13-10S-1.25C  |
| 11                                                 | 15.40 12.50 | H2187-ND          | 30 6.49 14.71 | DF13-11S-1.25C  |
| 12                                                 | 16.65 13.75 | H2188-ND          | 31 6.63 15.03 | DF13-12S-1.25C  |
| 14                                                 | 19.15 16.25 | H2189-ND          | 33 7.18 16.27 | DF13-14S-1.25C  |
| 15                                                 | 20.40 17.50 | H2259-ND          | 34 7.31 16.56 | DF13-15S-1.25C  |

| No. of Pins                                                 | Dim. (mm)   | Digi-Key Part No. | Pricing         | Hirose Part No.  |
|-------------------------------------------------------------|-------------|-------------------|-----------------|------------------|
| A                                                           | B           |                   | 1 25 100        |                  |
| <b>Fig. 2 — Single Row Connectors — Vertical Pin Header</b> |             |                   |                 |                  |
| 2                                                           | 4.15 1.25   | H2191-ND          | 22 4.72 15.73   | DF13-2P-1.25DSA  |
| 3                                                           | 5.40 2.50   | H2192-ND          | 27 5.76 19.20   | DF13-3P-1.25DSA  |
| 4                                                           | 6.65 3.75   | H2193-ND          | 35 7.55 25.15   | DF13-4P-1.25DSA  |
| 5                                                           | 7.90 5.00   | H2194-ND          | 40 8.56 28.83   | DF13-5P-1.25DSA  |
| 6                                                           | 9.15 6.25   | H2195-ND          | 45 9.59 31.95   | DF13-6P-1.25DSA  |
| 7                                                           | 10.40 7.50  | H2196-ND          | 50 10.63 35.43  | DF13-7P-1.25DSA  |
| 8                                                           | 11.65 8.75  | H2197-ND          | 62 13.22 44.05  | DF13-8P-1.25DSA  |
| 10                                                          | 14.15 11.25 | H2198-ND          | 71 15.26 50.88  | DF13-10P-1.25DSA |
| 12                                                          | 16.65 13.75 | H2200-ND          | 91 19.50 65.00  | DF13-12P-1.25DSA |
| 14                                                          | 19.15 16.25 | H2201-ND          | 99 21.17 70.55  | DF13-14P-1.25DSA |
| 15                                                          | 20.40 17.50 | H2202-ND          | 112 24.05 80.18 | DF13-15P-1.25DSA |

| No. of Pins                                                    | Dim. (mm) | Digi-Key Part No. | Pricing       | Hirose Part No.     |
|----------------------------------------------------------------|-----------|-------------------|---------------|---------------------|
| A                                                              | B         |                   | 1 25 100      |                     |
| <b>Fig. 3 — Single Row Connectors — Right Angle Pin Header</b> |           |                   |               |                     |
| 2                                                              | 4.15 1.25 | H2199-ND          | 24 5.18 17.25 | DF13-2P-1.25DS(20)* |
| 3                                                              | 5.40 2.50 | H2200-ND          | 30 6.45 21.50 | DF13-3P-1.25DS(20)* |
| 4                                                              | 6.65 3.75 | H2201-ND          | 39 8.40 28.00 | DF13-4P-1.25DS(20)* |

| No. of Pins                                                                | Dim. (mm)   | Digi-Key Part No. | Pricing         | Hirose Part No.     |
|----------------------------------------------------------------------------|-------------|-------------------|-----------------|---------------------|
| A                                                                          | B           |                   | 1 25 100        |                     |
| <b>Fig. 4 — Single Row Connectors — SMT-Compatible Vertical Pin Header</b> |             |                   |                 |                     |
| 2                                                                          | 4.15 1.25   | H2207-ND          | 48 10.28 34.25  | DF13-2P-1.25V(20)*  |
| 3                                                                          | 5.40 2.50   | H2208-ND          | 50 10.65 35.50  | DF13-3P-1.25V(20)*  |
| 4                                                                          | 6.65 3.75   | H2209-ND          | 55 11.85 39.50  | DF13-4P-1.25V(20)*  |
| 5                                                                          | 7.90 5.00   | H2210-ND          | 57 12.23 40.75  | DF13-5P-1.25V(20)*  |
| 6                                                                          | 9.15 6.25   | H2211-ND          | 63 13.58 45.25  | DF13-6P-1.25V(20)*  |
| 7                                                                          | 10.40 7.50  | H2212-ND          | 70 14.93 49.75  | DF13-7P-1.25V(20)*  |
| 8                                                                          | 11.65 8.75  | H2213-ND          | 83 17.85 59.50  | DF13-8P-1.25V(20)*  |
| 10                                                                         | 14.15 11.25 | H2214-ND          | 96 20.55 68.50  | DF13-10P-1.25V(20)* |
| 11                                                                         | 15.40 12.50 | H2215-ND          | 103 22.13 73.75 | DF13-11P-1.25V(20)* |
| 12                                                                         | 16.65 13.75 | H2216-ND          | 110 23.65 78.50 | DF13-12P-1.25V(20)* |
| 14                                                                         | 19.15 16.25 | H2217-ND          | 124 26.55 88.50 | DF13-14P-1.25V(20)* |
| 15                                                                         | 20.40 17.50 | H2218-ND          | 130 27.83 92.75 | DF13-15P-1.25V(20)* |

| No. of Pins                                                                   | Dim. (mm)  | Digi-Key Part No. | Pricing        | Hirose Part No.    |
|-------------------------------------------------------------------------------|------------|-------------------|----------------|--------------------|
| A                                                                             | B          |                   | 1 25 100       |                    |
| <b>Fig. 5 — Single Row Connectors — SMT-Compatible Right Angle Pin Header</b> |            |                   |                |                    |
| 2                                                                             | 4.15 1.25  | H2219-ND          | 37 7.95 26.50  | DF13-2P-1.25H(20)* |
| 3                                                                             | 5.40 2.50  | H2220-ND          | 42 8.93 29.75  | DF13-3P-1.25H(20)* |
| 4                                                                             | 6.65 3.75  | H2221-ND          | 50 10.65 35.50 | DF13-4P-1.25H(20)* |
| 5                                                                             | 7.90 5.00  | H2222-ND          | 54 11.63 38.75 | DF13-5P-1.25H(20)* |
| 6                                                                             | 9.15 6.25  | H2223-ND          | 60 12.90 43.00 | DF13-6P-1.25H(20)* |
| 7                                                                             | 10.40 7.50 | H2224-ND          | 66 14.10 47.00 | DF13-7P-1.25H(20)* |
| 8                                                                             | 11.65 8.75 | H2225-ND          | 79 16.95 56.50 | DF13-8P-1.25H(20)* |

| No. of Pins                                      | Dim. (mm)   | Digi-Key Part No. | Pricing         | Hirose Part No.     |
|--------------------------------------------------|-------------|-------------------|-----------------|---------------------|
| A                                                | B           |                   | 1 25 100        |                     |
| <b>Fig. 6 — Dual Row Crimp Socket Connectors</b> |             |                   |                 |                     |
| 10                                               | 14.15 11.25 | H2226-ND          | 91 19.58 65.25  | DF13-10P-1.25H(20)* |
| 11                                               | 15.40 12.50 | H2227-ND          | 107 22.88 76.25 | DF13-11P-1.25H(20)* |
| 12                                               | 16.65 13.75 | H2228-ND          | 104 22.35 74.50 | DF13-12P-1.25H(20)* |
| 14                                               | 19.15 16.25 | H2229-ND          | 118 25.20 84.00 | DF13-14P-1.25H(20)* |
| 15                                               | 20.40 17.50 | H2230-ND          | 123 26.33 87.75 | DF13-15P-1.25H(20)* |

| No. of Pins                                                                          | Dim. (mm)   | Digi-Key Part No. | Pricing       | Hirose Part No. |
|--------------------------------------------------------------------------------------|-------------|-------------------|---------------|-----------------|
| A                                                                                    | B           |                   | 1 25 100      |                 |
| <b>Fig. 7 — Dual Row Sockets, Straight Pin Headers with Guide Posts - SMT (gold)</b> |             |                   |               |                 |
| 10                                                                                   | 14.15 11.25 | H2231-ND          | 15 3.20 7.26  | DF13-10DS-1.25C |
| 12                                                                                   | 16.65 13.75 | H2232-ND          | 18 3.89 8.82  | DF13-12DS-1.25C |
| 30                                                                                   | 22.90 17.50 | H2233-ND          | 21 4.58 10.39 | DF13-30DS-1.25C |
| 40                                                                                   | 29.15 23.75 | H2234-ND          | 24 5.22 11.83 | DF13-40DS-1.25C |

| No. of Pins                                                                          | Dim. (mm)   | Digi-Key Part No. | Pricing           | Hirose Part No.       |
|--------------------------------------------------------------------------------------|-------------|-------------------|-------------------|-----------------------|
| A                                                                                    | B           |                   | 1 25 100          |                       |
| <b>Fig. 8 — Dual Row Sockets, Straight Pin Headers with Guide Posts - SMT (gold)</b> |             |                   |                   |                       |
| 10                                                                                   | 12.10 5.00  | H2235-ND          | 1.13 24.30 81.00  | DF13A-10DP-1.25V(50)* |
| 20                                                                                   | 18.35 11.25 | H2236-ND          | 1.89 40.58 135.25 | DF13A-20DP-1.25V(50)* |
| 30                                                                                   | 24.60 17.50 | H2237-ND          | 2.54 54.38 181.25 | DF13A-30DP-1.25V(50)* |
| 40                                                                                   | 30.85 23.75 | H2238-ND          | 3.27 70.05 233.50 | DF13A-40DP-1.25V(50)* |

| No. of Pins                           | Dim. (mm) | Digi-Key Part No. | Pricing  | Hirose Part No. |
|---------------------------------------|-----------|-------------------|----------|-----------------|
| A                                     | B         |                   | 1 25 100 |                 |
| <b>Fig. 9 — Socket Crimp Terminal</b> |           |                   |          |                 |
| Socket Crimp Contacts:                |           |                   |          |                 |
| Tin Plating, AWG 26-30                |           |                   |          |                 |
| H9992-ND                              |           |                   |          |                 |
| 3.45/100                              |           |                   |          |                 |
| DF13-2630SCF                          |           |                   |          |                 |
| Socket Crimp Contacts:                |           |                   |          |                 |
| Gold Plating, AWG 26-30               |           |                   |          |                 |
| H9991-ND                              |           |                   |          |                 |
| 5.31/100                              |           |                   |          |                 |
| DF13-2630SCFA                         |           |                   |          |                 |
| Crimp Tool for DF13                   |           |                   |          |                 |
| H9994-ND                              |           |                   |          |                 |
| 989.81 ea.                            |           |                   |          |                 |
| DF13-TB2630HC                         |           |                   |          |                 |

\* (20) indicates tin plating; (50) indicates gold plating.

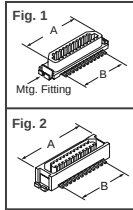
## 1mm Connectors – DF9 Series

**SMT (w/Reinforced Hardware) 1mm Center Line Board-to-Board Connector**

• 4.3mm mated height between PCBs. Insulator is manufactured from polyamide to withstand the high temperatures resulting from VPS, IR, and Heat blow soldering. PCB contact is a "Gull-Wing" type design to ensure reliable performance. Designed to control and accept dimensional changes by thermo-elasticity. Reinforcement hardware is provided to eliminate mechanical stress to solder joints during mating and unmating cycles.

**Electrical:** • Rated Current: 0.5A • Rated Voltage: AC150V • Insulation Resistance: Condition: DC100V, Standard Value: Min. 500MΩ • Withstanding Voltage: Condition: At standard value, Standard Value: 50m or less • Contact Resistance: Condition: At 0.1 ADC, Standard Value: 50m or less.

**Material & Finish:** • Receptacle Header Insulator: Polyamide resin, beige (natural), UL94V-0 • Receptacle Header Connector: Phosphor bronze, tin plating • Receptacle Header Fitting: Brass, tin plating.

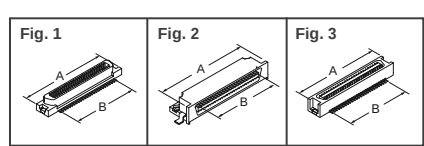


| No. of Pins                                | Dim. (mm)   | Digi-Key Part No. | Pricing            | Hirose Part No.* |
|--------------------------------------------|-------------|-------------------|--------------------|------------------|
| A                                          | B           |                   | 1 25 100           |                  |
| <b>Fig. 1 — Receptacle with Guide Post</b> |             |                   |                    |                  |
| 9                                          | 8.30 3.00   | H2152-ND          | 1.93 41.25 137.50  | DF9-9S-1V(20)    |
| 11                                         | 9.30 4.00   | H2153-ND          | 2.03 43.50 145.00  | DF9-11S-1V(20)   |
| 13                                         | 10.30 5.00  | H2154-ND          | 2.14 45.75 152.50  | DF9-13S-1V(20)   |
| 15                                         | 11.30 6.00  | H2155-ND          | 2.31 49.50 165.00  | DF9-15S-1V(20)   |
| 17                                         | 12.30 7.00  | H2156-ND          | 2.42 51.75 172.50  | DF9-17S-1V(20)   |
| 19                                         | 13.30 8.00  | H2157-ND          | 2.49 53.25 177.50  | DF9-19S-1V(20)   |
| 21                                         | 14.30 9.00  | H2158-ND          | 2.63 56.25 187.50  | DF9-21S-1V(20)   |
| 23                                         | 15.30 10.00 | H2159-ND          | 2.73 58.50 195.00  | DF9-23S-1V(20)   |
| 25                                         | 16.30 11.00 | H2160-ND          | 2.84 60.75 202.50  | DF9-25S-1V(20)   |
| 31                                         | 19.30 14.00 | H2161-ND          | 2.07 44.25 147.50  | DF9-31S-1V(20)   |
| 41                                         | 24.30 19.00 | H2162-ND          | 3.19 68.25 227.50  | DF9-41S-1V(20)   |
| 51                                         | 29.30 24.00 | H2163-ND          | 5.11 109.50 365.00 | DF9-51S-1V(54)   |

| No. of Pins                                         | Dim. (mm)   | Digi-Key Part No. | Pricing            | Hirose Part No.* |
|-----------------------------------------------------|-------------|-------------------|--------------------|------------------|
| A                                                   | B           |                   | 1 25 100           |                  |
| <b>Fig. 2 — Pin Header with Reinforced Hardware</b> |             |                   |                    |                  |
| 9                                                   | 8.30 3.00   | H2258-ND          | 1.96 42.00 140.00  | DF9-9P-1V(20)    |
| 11                                                  | 9.30 4.00   | H2259-ND          | 2.07 44.25 147.50  | DF9-11P-1V(20)   |
| 13                                                  | 10.30 5.00  | H2260-ND          | 2.14 45.75 152.50  | DF9-13P-1V(20)   |
| 15                                                  | 11.30 6.00  | H2261-ND          | 2.35 50.25 167.50  | DF9-15P-1V(20)   |
| 17                                                  | 12.30 7.00  | H2262-ND          | 2.45 52.50 175.00  | DF9-17P-1V(20)   |
| 19                                                  | 13.30 8.00  | H2263-ND          | 2.56 54.75 182.50  | DF9-19P-1V(20)   |
| 21                                                  | 14.30 9.00  | H2264-ND          | 2.66 57.00 190.00  | DF9-21P-1V(20)   |
| 23                                                  | 15.30 10.00 | H2265-ND          | 2.77 59.25 197.50  | DF9-23P-1V(20)   |
| 25                                                  | 16.30 11.00 | H2266-ND          | 2.87 61.50 205.00  | DF9-25P-1V(20)   |
| 31                                                  | 19.30 14.00 | H2267-ND          | 3.10 75.75 192.50  | DF9-31P-1V(20)   |
| 41                                                  | 24.30 19.00 | H2268-ND          | 2.79 68.25 227.50  | DF9-41P-1V(20)   |
| 51                                                  | 29.30 24.00 | H2269-ND          | 5.11 109.50 365.00 | DF9-51P-1V(54)   |

\* (20) indicates tin plating; (54) indicates gold plating.

## 1.27mm Connectors FX2 Series – Surface Mount



**FX2 Series** is a 1.27mm mil spacing, 2 piece connector for use in board-to-board application • High performance PPS resin insulator is compatible to VPS, IR and hot air reflow • Gull wing-shaped lead is used for ease of checking soldered connection • Use of positioning boss for substrate packaging offers improved handling capability • Solder-fixing reinforcement bracket, which disperses inserting/extracting stress, is available for optional specification.

**Electrical:** • Rated Current: 0.5A • Rated Voltage: 125VAC • Insulation Resistance: More than 100MΩ at 250VDC • Withstanding Voltage: 300VAC • Contact Resistance: Less than 45 mΩ at 100mA DC • Durability: 500 times mating cycles.

**Insulator Material & Finish:** • Dip Type: Black polyamide resin, UL94V-0 • SMT Type: Light Brown PPS resin, UL94V-0 • Socket: Black PBT resin and polyamide resin, UL94V-0.

**Contact Material & Finish:** • Receptacle Header: Phosphor bronze with selective gold plating • Socket: Beryllium copper with selective gold plating.

| No. of Pins                              | Dim. (mm)   | Digi-Key Part No. | Pricing            | Hirose Part No. |
|------------------------------------------|-------------|-------------------|--------------------|-----------------|
| A                                        | B           |                   | 1 25 100           |                 |
| <b>Fig. 1 — Straight Type Receptacle</b> |             |                   |                    |                 |
| 20                                       | 22.75 11.43 | H2248-ND          | 4.13 88.50 295.00  | FX2-20S-1.27SV  |
| 40                                       | 35.45 24.13 | H2249-ND          | 5.29 113.25 377.50 | FX2-40S-1.27SV  |
| 52                                       | 43.07 31.75 | H2250-ND          | 5.99 128.25 427.50 | FX2-52S-1.27SV  |
| 60                                       | 48.15 36.83 | H2251-ND          | 6.44 138.00 460.00 | FX2-60S-1.27SV  |
| 80                                       | 60.85 49.53 | H2252-ND          | 7.35 157.50 525.00 | FX2-80S-1.27SV  |

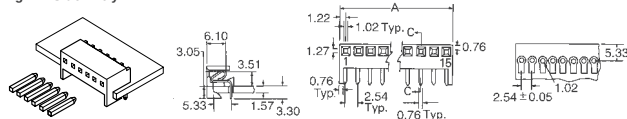
| No. of Pins                        | Dim. (mm)    | Digi-Key Part No. | Pricing            | Hirose Part No. |
|------------------------------------|--------------|-------------------|--------------------|-----------------|
| A                                  | B            |                   | 1 25 100           |                 |
| <b>Fig. 2 — Right Angle Header</b> |              |                   |                    |                 |
| 20                                 | 22.75 12.065 | H2243-ND          | 2.45 52.50 175.00  | FX2-20P-0.635SH |
| 40                                 | 35.45 24.765 | H2244-ND          | 3.26 69.75 232.50  | FX2-40P-0.635SH |
| 52                                 | 43.07 32.385 | H2245-ND          | 3.82 81.75 272.50  | FX2-52P-0.635SH |
| 60                                 | 48.15 37.465 | H2246-ND          | 4.13 88.50 295.00  | FX2-60P-0.635SH |
| 80                                 | 60.85 50.165 | H2247-ND          | 5.04 108.00 360.00 | FX2-80P-0.635SH |

| Fig. 3 — Straight Header |       |       |          |      |        |        |                |
|--------------------------|-------|-------|----------|------|--------|--------|----------------|
| 20                       | 22.75 | 11.43 | H2253-ND | 3.96 | 84.75  | 282.50 | FX2-20P-1.27SV |
| 40                       | 35.45 | 24.13 | H2254-ND | 5.01 | 107.25 | 357.50 | FX2-40P-1.27SV |
| 52                       | 43.07 | 31.75 | H2255-ND | 5.71 | 122.25 | 407.50 | FX2-52P-1.27SV |
| 60                       | 48.15 | 36.83 | H2256-ND | 6.13 | 131.25 | 437.50 | FX2-60P-1.27SV |
| 80                       | 60.85 | 49.53 | H2257-ND | 7.21 | 154.50 | 515.00 | FX2-80P-1.27SV |

## .100 (2.54mm) P.C. Board Connectors

94V-O Material, Mates with .64mm square pins, end-to-end stackable.

**Fig. 1 – Side Entry**



**Fig. 2 – Bottom Entry**

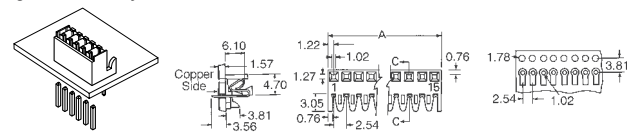
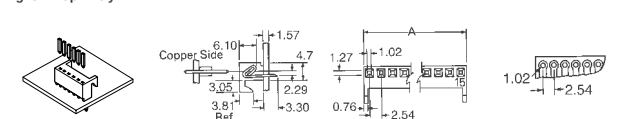


Fig. 3 – Top Entry



| Fig.                         | Cir-<br>cuits                       | Dimension<br>"A" (mm) | Digi-Key<br>Part No. | Pricing   |       |            | Molex<br>Part No. |
|------------------------------|-------------------------------------|-----------------------|----------------------|-----------|-------|------------|-------------------|
| 2.54mm P.C. Board Connectors |                                     |                       |                      |           |       |            |                   |
| 1                            | 2                                   | 4.98                  | WM3000-ND            | .26       | 2.32  | 18.00      | 22-15-2026        |
|                              | 3                                   | 7.52                  | WM3001-ND            | .39       | 3.45  | 26.78      | 22-15-2036        |
|                              | 4                                   | 10.06                 | WM3002-ND            | .53       | 4.64  | 36.00      | 22-15-2046        |
|                              | 5                                   | 12.60                 | WM3003-ND            | .66       | 5.77  | 44.78      | 22-15-2056        |
|                              | 6                                   | 15.14                 | WM3004-ND            | .79       | 6.96  | 54.00      | 22-15-2066        |
|                              | 7                                   | 17.68                 | WM3005-ND            | .92       | 8.09  | 62.78      | 22-15-2076        |
|                              | 8                                   | 20.22                 | WM3006-ND            | 1.06      | 9.28  | 72.00      | 22-15-2086        |
|                              | 9                                   | 22.76                 | WM3007-ND            | 1.18      | 10.41 | 80.78      | 22-15-2096        |
|                              | 10                                  | 25.30                 | WM3008-ND            | 1.32      | 11.60 | 90.00      | 22-15-2106        |
|                              | 11                                  | 27.84                 | WM3009-ND            | 1.45      | 12.73 | 98.78      | 22-15-2116        |
|                              | 12                                  | 30.38                 | WM3010-ND            | 1.58      | 13.92 | 108.00     | 22-15-2126        |
|                              | 2                                   | 2                     | 4.98                 | WM3100-ND | .29   | 2.60       | 16.80             |
| 3                            |                                     | 7.52                  | WM3101-ND            | .44       | 3.94  | 25.40      | 22-14-2034        |
| 4                            |                                     | 10.06                 | WM3102-ND            | .59       | 5.21  | 33.60      | 22-14-2044        |
| 5                            |                                     | 12.60                 | WM3103-ND            | .75       | 6.60  | 42.60      | 22-14-2054        |
| 6                            |                                     | 15.14                 | WM3104-ND            | .88       | 7.81  | 50.40      | 22-14-2064        |
| 7                            |                                     | 17.68                 | WM3105-ND            | 1.05      | 9.27  | 59.80      | 22-14-2074        |
| 8                            |                                     | 20.22                 | WM3106-ND            | 1.18      | 10.42 | 67.20      | 22-14-2084        |
| 9                            |                                     | 22.76                 | WM3107-ND            | 1.32      | 11.69 | 75.40      | 22-14-2094        |
| 10                           |                                     | 25.30                 | WM3108-ND            | 1.47      | 13.02 | 84.00      | 22-14-2104        |
| 11                           |                                     | 27.84                 | WM3109-ND            | 1.61      | 14.29 | 92.20      | 22-14-2114        |
| 12                           |                                     | 30.38                 | WM3110-ND            | 1.76      | 15.62 | 100.80     | 22-14-2124        |
| 3                            |                                     | 2                     | 4.98                 | WM3200-ND | .28   | 2.48       | 16.00             |
|                              | 3                                   | 7.52                  | WM3201-ND            | .42       | 3.69  | 23.80      | 22-02-2035        |
|                              | 4                                   | 10.06                 | WM3202-ND            | .56       | 4.96  | 32.00      | 22-02-2045        |
|                              | 5                                   | 12.60                 | WM3203-ND            | .71       | 6.29  | 40.60      | 22-02-2055        |
|                              | 6                                   | 15.14                 | WM3204-ND            | .84       | 7.44  | 48.00      | 22-02-2065        |
|                              | 7                                   | 17.68                 | WM3205-ND            | .98       | 8.65  | 55.80      | 22-02-2075        |
|                              | 8                                   | 20.22                 | WM3206-ND            | 1.12      | 9.92  | 64.00      | 22-02-2085        |
|                              | 9                                   | 22.76                 | WM3207-ND            | 1.28      | 11.35 | 73.20      | 22-02-2095        |
|                              | 10                                  | 25.30                 | WM3208-ND            | 1.40      | 12.40 | 80.00      | 22-02-2105        |
|                              | 11                                  | 27.84                 | WM3209-ND            | 1.56      | 13.86 | 89.40      | 22-02-2115        |
|                              | 12                                  | 30.38                 | WM3210-ND            | 1.68      | 14.88 | 96.00      | 22-02-2125        |
|                              | 2.54mm P.C. Board Connectors - Gold |                       |                      |           |       |            |                   |
| 1                            | 2                                   | 4.98                  | WM3211-ND            | .29       | 2.60  | 16.80      | 22-16-2020        |
|                              | 3                                   | 7.52                  | WM3212-ND            | .44       | 3.89  | 25.09      | 22-16-2030        |
|                              | 4                                   | 10.06                 | WM3213-ND            | .58       | 5.17  | 33.38      | 22-16-2040        |
|                              | 5                                   | 12.60                 | WM3214-ND            | .73       | 6.46  | 41.66      | 22-16-2050        |
|                              | 6                                   | 15.14                 | WM3215-ND            | .88       | 7.81  | 50.40      | 22-16-2060        |
|                              | 7                                   | 17.68                 | WM3216-ND            | 1.03      | 9.10  | 58.69      | 22-16-2070        |
|                              | 8                                   | 20.22                 | WM3217-ND            | 1.17      | 10.38 | 66.98      | 22-16-2080        |
|                              | 9                                   | 22.76                 | WM3218-ND            | 1.31      | 11.63 | 75.04      | 22-16-2090        |
|                              | 10                                  | 25.30                 | WM3219-ND            | 1.47      | 12.99 | 83.78      | 22-16-2100        |
|                              | 11                                  | 27.84                 | WM3220-ND            | 1.61      | 14.27 | 92.06      | 22-16-2110        |
|                              | 12                                  | 30.38                 | WM3221-ND            | 1.76      | 15.55 | 100.35     | 22-16-2120        |
|                              | 2                                   | 2                     | 4.98                 | WM3222-ND | .31   | 2.74       | 17.70             |
| 3                            |                                     | 7.52                  | WM3223-ND            | .46       | 4.06  | 26.21      | 22-17-3032        |
| 4                            |                                     | 10.06                 | WM3224-ND            | .62       | 5.45  | 35.17      | 22-17-3042        |
| 5                            |                                     | 12.60                 | WM3225-ND            | .76       | 6.77  | 43.68      | 22-17-3052        |
| 6                            |                                     | 15.14                 | WM3226-ND            | .92       | 8.16  | 52.64      | 22-17-3062        |
| 7                            |                                     | 17.68                 | WM3227-ND            | 1.07      | 9.51  | 61.38      | 22-17-3072        |
| 8                            |                                     | 20.22                 | WM3228-ND            | 1.23      | 10.90 | 70.34      | 22-17-3082        |
| 9                            |                                     | 22.76                 | WM3229-ND            | 1.38      | 12.22 | 78.85      | 22-17-3092        |
| 10                           |                                     | 25.30                 | WM3230-ND            | 1.54      | 13.61 | 87.81      | 22-17-3102        |
| 11                           |                                     | 27.84                 | WM3231-ND            | 1.69      | 14.96 | 96.54      | 22-17-3112        |
| 12                           |                                     | 30.38                 | WM3232-ND            | 1.85      | 16.35 | 105.50     | 22-17-3122        |
| 3                            |                                     | 2                     | 4.98                 | WM3233-ND | .29   | 2.60       | 16.80             |
|                              | 3                                   | 7.52                  | WM3234-ND            | .44       | 3.89  | 25.09      | 22-18-2031        |
|                              | 4                                   | 10.06                 | WM3235-ND            | .58       | 5.17  | 33.38      | 22-18-2041        |
|                              | 5                                   | 12.60                 | WM3236-ND            | .73       | 6.46  | 41.66      | 22-18-2051        |
|                              | 6                                   | 15.14                 | WM3237-ND            | .88       | 7.81  | 50.40      | 22-18-2061        |
|                              | 7                                   | 17.68                 | WM3238-ND            | 1.03      | 9.10  | 58.69      | 22-18-2071        |
|                              | 8                                   | 20.22                 | WM3239-ND            | 1.17      | 10.38 | 66.98      | 22-18-2081        |
| 9                            | 22.76                               | WM3240-ND             | 1.31                 | 11.63     | 75.04 | 22-18-2091 |                   |

### .156 (3.96mm) P.C. Board Connectors

94V-2 Nylon Housing. Mates with 1.14mm pins.

**Fig. 4 – Side Entry**

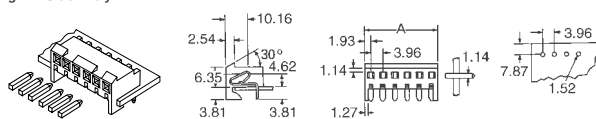


Fig. 5 – Bottom Entry

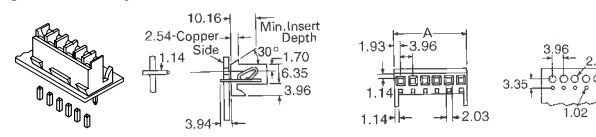
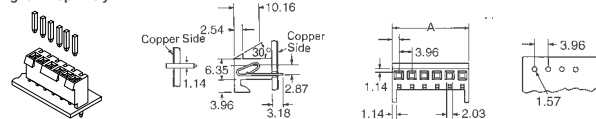


Fig. 6 – Top Entry



| Fig. | Cir-<br>cuts                        | Dimension<br>"A" (mm) | Digi-Key<br>Part No. | Pricing   |       |        | Molex<br>Part No. |
|------|-------------------------------------|-----------------------|----------------------|-----------|-------|--------|-------------------|
|      |                                     |                       |                      | 1         | 10    | 100    |                   |
| 3    | 10                                  | 25.30                 | WM3241-ND            | 1.47      | 12.99 | 83.78  | 22-18-2101        |
|      | 11                                  | 27.84                 | WM3242-ND            | 1.61      | 14.27 | 92.06  | 22-18-2111        |
|      | 12                                  | 30.38                 | WM3243-ND            | 1.76      | 15.55 | 100.35 | 22-18-2121        |
|      | 3.96mm P.C. Board Connectors        |                       |                      |           |       |        |                   |
| 4    | 3                                   | 11.68                 | WM3300-ND            | .50       | 4.46  | 28.80  | 09-52-3031        |
|      | 4                                   | 15.75                 | WM3301-ND            | .68       | 5.98  | 38.60  | 09-52-3041        |
|      | 5                                   | 19.81                 | WM3302-ND            | .83       | 7.38  | 47.60  | 09-52-3051        |
|      | 6                                   | 23.62                 | WM3303-ND            | 1.00      | 8.84  | 57.00  | 09-52-3061        |
|      | 7                                   | 27.69                 | WM3304-ND            | 1.17      | 10.35 | 66.80  | 09-52-3071        |
|      | 8                                   | 31.50                 | WM3305-ND            | 1.33      | 11.81 | 76.20  | 09-52-3081        |
|      | 9                                   | 35.56                 | WM3306-ND            | 1.51      | 13.33 | 86.00  | 09-52-3091        |
|      | 10                                  | 39.62                 | WM3307-ND            | 1.67      | 14.82 | 95.60  | 09-52-3101        |
| 5    | 11                                  | 43.43                 | WM3308-ND            | 1.84      | 16.28 | 105.00 | 09-52-3111        |
|      | 12                                  | 47.50                 | WM3309-ND            | 2.01      | 17.79 | 114.80 | 09-52-3121        |
|      | 3                                   | 11.68                 | WM3400-ND            | .53       | 4.65  | 30.00  | 09-52-3032        |
|      | 4                                   | 15.75                 | WM3401-ND            | .70       | 6.23  | 40.20  | 09-52-3042        |
|      | 5                                   | 19.81                 | WM3402-ND            | .88       | 7.75  | 50.00  | 09-52-3052        |
|      | 6                                   | 23.62                 | WM3403-ND            | 1.05      | 9.27  | 59.80  | 09-52-3062        |
|      | 7                                   | 27.69                 | WM3404-ND            | 1.37      | 12.09 | 78.00  | 09-52-3072        |
|      | 8                                   | 31.50                 | WM3405-ND            | 1.41      | 12.46 | 80.40  | 09-52-3082        |
| 6    | 9                                   | 35.56                 | WM3406-ND            | 1.58      | 13.98 | 90.20  | 09-52-3092        |
|      | 10                                  | 39.62                 | WM3407-ND            | 1.76      | 15.56 | 100.40 | 09-52-3102        |
|      | 11                                  | 43.43                 | WM3408-ND            | 1.93      | 17.08 | 110.20 | 09-52-3112        |
|      | 12                                  | 47.50                 | WM3409-ND            | 2.11      | 18.69 | 120.60 | 09-52-3122        |
|      | 3                                   | 11.68                 | WM3500-ND            | .50       | 4.46  | 28.80  | 09-52-3033        |
|      | 4                                   | 15.75                 | WM3501-ND            | .68       | 5.98  | 38.60  | 09-52-3043        |
|      | 5                                   | 19.81                 | WM3502-ND            | .83       | 7.38  | 47.60  | 09-52-3053        |
|      | 6                                   | 23.62                 | WM3503-ND            | 1.00      | 8.84  | 57.00  | 09-52-3063        |
| 7    | 7                                   | 27.69                 | WM3504-ND            | 1.17      | 10.35 | 66.80  | 09-52-3073        |
|      | 8                                   | 31.50                 | WM3505-ND            | 1.33      | 11.81 | 76.20  | 09-52-3083        |
|      | 9                                   | 35.56                 | WM3506-ND            | 1.51      | 13.33 | 86.00  | 09-52-3093        |
|      | 10                                  | 39.62                 | WM3507-ND            | 1.67      | 14.82 | 95.60  | 09-52-3103        |
|      | 11                                  | 43.43                 | WM3508-ND            | 1.84      | 16.28 | 105.00 | 09-52-3113        |
|      | 12                                  | 47.50                 | WM3509-ND            | 2.01      | 17.79 | 114.80 | 09-52-3123        |
|      | 3.96mm P.C. Board Connectors - Gold |                       |                      |           |       |        |                   |
|      | 4                                   | 3                     | 11.68                | WM3510-ND | .82   | 7.25   | 46.80             |
| 4    |                                     | 15.75                 | WM3511-ND            | 1.09      | 9.67  | 62.40  | 09-62-3041        |
| 5    |                                     | 19.81                 | WM3512-ND            | 1.37      | 12.15 | 78.40  | 09-62-3051        |
| 6    |                                     | 23.62                 | WM3513-ND            | 1.64      | 14.54 | 93.80  | 09-62-3061        |
| 7    |                                     | 27.69                 | WM3514-ND            | 1.60      | 14.20 | 91.62  | 09-62-3071        |
| 8    |                                     | 31.50                 | WM3515-ND            | 2.19      | 19.38 | 125.00 | 09-62-3081        |
| 9    |                                     | 35.56                 | WM3516-ND            | 2.46      | 21.79 | 140.60 | 09-62-3091        |
| 10   |                                     | 39.62                 | WM3517-ND            | 2.74      | 24.27 | 156.60 | 09-62-3101        |
| 5    | 11                                  | 43.43                 | WM3518-ND            | 2.53      | 22.39 | 144.48 | 09-62-3111        |
|      | 12                                  | 47.50                 | WM3519-ND            | 3.28      | 29.05 | 187.40 | 09-62-3121        |
|      | 3                                   | 11.68                 | WM3520-ND            | .73       | 6.42  | 41.44  | 09-62-3032        |
|      | 4                                   | 15.75                 | WM3521-ND            | .96       | 8.54  | 55.10  | 09-62-3042        |
|      | 5                                   | 19.81                 | WM3522-ND            | 1.21      | 10.69 | 68.99  | 09-62-3052        |
|      | 6                                   | 23.62                 | WM3523-ND            | 1.45      | 12.81 | 82.66  | 09-62-3062        |
|      | 7                                   | 27.69                 | WM3524-ND            | 1.69      | 14.96 | 96.54  | 09-62-3072        |
|      | 8                                   | 31.50                 | WM3525-ND            | 1.93      | 17.08 | 110.21 | 09-62-3082        |
| 6    | 9                                   | 35.56                 | WM3526-ND            | 2.17      | 19.23 | 124.10 | 09-62-3092        |
|      | 10                                  | 39.62                 | WM3527-ND            | 2.42      | 21.42 | 138.21 | 09-62-3102        |
|      | 11                                  | 43.43                 | WM3528-ND            | 2.65      | 23.51 | 151.65 | 09-62-3112        |
|      | 12                                  | 47.50                 | WM3529-ND            | 2.90      | 25.66 | 165.54 | 09-62-3122        |
|      | 3                                   | 11.68                 | WM3530-ND            | .69       | 6.08  | 39.20  | 09-62-3033        |
|      | 4                                   | 15.75                 | WM3531-ND            | .92       | 8.12  | 52.42  | 09-62-3043        |
|      | 5                                   | 19.81                 | WM3532-ND            | 1.15      | 10.21 | 65.86  | 09-62-3053        |
|      | 6                                   | 23.62                 | WM3533-ND            | 1.38      | 12.22 | 78.85  | 09-62-3063        |
| 7    | 7                                   | 27.69                 | WM3534-ND            | 1.60      | 14.20 | 91.62  | 09-62-3073        |
|      | 8                                   | 31.50                 | WM3535-ND            | 1.84      | 16.28 | 105.06 | 09-62-3083        |
|      | 9                                   | 35.56                 | WM3536-ND            | 2.07      | 18.33 | 118.27 | 09-62-3093        |
|      | 10                                  | 39.62                 | WM3537-ND            | 2.30      | 20.42 | 131.71 | 09-62-3103        |
|      | 11                                  | 43.43                 | WM3538-ND            | 2.53      | 22.39 | 144.48 | 09-62-3113        |
|      | 12                                  | 47.50                 | WM3539-ND            | 2.76      | 24.41 | 157.47 | 09-62-3123        |

## .100" (2.54mm) Center Headers

**.025" (.64mm) Dia. Pins** The Molex KK® Concept utilizes a double cantilever contact design in mating with P.C. board pins. UL Recognized (File #29179), CSA Recognized (File 19980). **Voltage Rating:** 250 VAC Max. **Current Rating:** Up to 2.5 Amps (w/22 AWG wire). **Resistance:** 20 milliohms max. **Dielectric Withstanding Voltage:** 1500 VAC for 60 seconds. **Storage Temp.:** -40°C to 105°C. **Material:** 94V-0.

Fig. 3 - Straight-Friction Lock Header

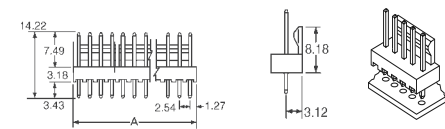


Fig. 1 - Straight Header

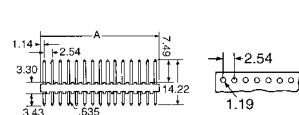


Fig. 2 - Right Angle Header

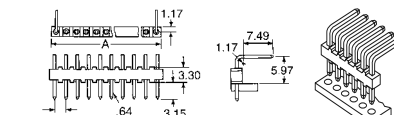


Fig. 4 - Right Angle-Friction Lock Header

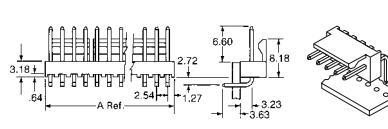
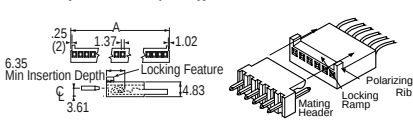


Fig. 5 - Center Crimp Terminal Housing (contacts sold separately)



| Fig.                                             | Circuits | Dim. A (mm) | Digi-Key Part No. | 1    | 10    | Pricing 100 | 500    | 1,000  | Molex Part No. |
|--------------------------------------------------|----------|-------------|-------------------|------|-------|-------------|--------|--------|----------------|
| <b>.100" (2.54mm) Center Headers Tin Plating</b> |          |             |                   |      |       |             |        |        |                |
| 1                                                | 2        | 4.83        | WM4000-ND         | .25  | 1.77  | 11.40       | 40.76  | 75.98  | 22-03-2021     |
|                                                  | 3        | 7.37        | WM4001-ND         | .31  | 2.73  | 17.60       | 62.92  | 117.30 | 22-03-2031     |
|                                                  | 4        | 9.91        | WM4002-ND         | .41  | 3.63  | 23.40       | 83.66  | 155.96 | 22-03-2041     |
|                                                  | 5        | 12.45       | WM4003-ND         | .51  | 4.53  | 29.20       | 104.39 | 194.62 | 22-03-2051     |
|                                                  | 6        | 14.99       | WM4004-ND         | .61  | 5.39  | 34.80       | 124.41 | 231.94 | 22-03-2061     |
|                                                  | 7        | 17.53       | WM4005-ND         | .72  | 6.36  | 41.00       | 146.58 | 273.27 | 22-03-2071     |
|                                                  | 8        | 20.07       | WM4006-ND         | .72  | 6.36  | 41.00       | 146.58 | 273.27 | 22-03-2081     |
|                                                  | 9        | 22.61       | WM4007-ND         | .81  | 7.13  | 46.00       | 164.45 | 306.59 | 22-03-2091     |
|                                                  | 10       | 25.15       | WM4008-ND         | .81  | 7.19  | 46.40       | 165.88 | 309.26 | 22-03-2101     |
|                                                  | 11       | 27.69       | WM4009-ND         | .90  | 7.94  | 51.20       | 183.04 | 341.25 | 22-03-2111     |
|                                                  | 12       | 30.23       | WM4010-ND         | .98  | 8.71  | 56.20       | 200.92 | 374.57 | 22-03-2121     |
| 2                                                | 2        | 4.83        | WM4100-ND         | .23  | 2.05  | 13.20       | 47.19  | 87.98  | 22-05-2021     |
|                                                  | 3        | 7.37        | WM4101-ND         | .34  | 2.98  | 19.20       | 68.64  | 127.97 | 22-05-2031     |
|                                                  | 4        | 9.91        | WM4102-ND         | .45  | 4.00  | 25.80       | 92.24  | 171.96 | 22-05-2041     |
|                                                  | 5        | 12.45       | WM4103-ND         | .57  | 5.02  | 32.40       | 115.83 | 215.95 | 22-05-2051     |
|                                                  | 6        | 14.99       | WM4104-ND         | .68  | 6.05  | 39.00       | 139.43 | 259.94 | 22-05-2061     |
|                                                  | 7        | 17.53       | WM4105-ND         | .79  | 7.01  | 45.20       | 161.59 | 301.26 | 22-05-2071     |
|                                                  | 8        | 20.07       | WM4106-ND         | .91  | 8.06  | 52.00       | 185.90 | 346.58 | 22-05-2081     |
|                                                  | 9        | 22.61       | WM4107-ND         | 1.03 | 9.08  | 58.60       | 209.50 | 390.57 | 22-05-2091     |
|                                                  | 10       | 25.15       | WM4108-ND         | 1.03 | 9.15  | 59.00       | 210.93 | 393.24 | 22-05-2101     |
|                                                  | 11       | 27.69       | WM4109-ND         | 1.14 | 10.11 | 65.20       | 233.09 | 434.56 | 22-05-2111     |
|                                                  | 12       | 30.23       | WM4110-ND         | 1.24 | 10.94 | 70.60       | 252.40 | 470.55 | 22-05-2121     |
| 3                                                | 2        | 5.08        | WM4200-ND         | .29  | 2.60  | 16.80       | 60.06  | 111.97 | 22-23-2021     |
|                                                  | 3        | 7.62        | WM4201-ND         | .44  | 3.88  | 25.00       | 89.38  | 166.63 | 22-23-2031     |
|                                                  | 4        | 10.16       | WM4202-ND         | .48  | 4.25  | 27.40       | 97.96  | 182.62 | 22-23-2041     |
|                                                  | 5        | 12.70       | WM4203-ND         | .60  | 5.33  | 34.40       | 122.98 | 229.28 | 22-23-2051     |
|                                                  | 6        | 15.24       | WM4204-ND         | .63  | 5.58  | 36.00       | 128.70 | 239.94 | 22-23-2061     |
|                                                  | 7        | 17.78       | WM4205-ND         | .66  | 5.86  | 37.80       | 135.14 | 251.94 | 22-23-2071     |
|                                                  | 8        | 20.32       | WM4206-ND         | .76  | 6.73  | 43.40       | 155.16 | 289.26 | 22-23-2081     |
|                                                  | 9        | 22.86       | WM4207-ND         | .85  | 7.56  | 48.80       | 174.46 | 325.25 | 22-23-2091     |
|                                                  | 10       | 25.40       | WM4208-ND         | .86  | 7.63  | 49.20       | 175.89 | 327.92 | 22-23-2101     |
|                                                  | 11       | 27.94       | WM4209-ND         | .95  | 8.40  | 54.20       | 193.77 | 361.24 | 22-23-2111     |
|                                                  | 12       | 30.48       | WM4210-ND         | 1.03 | 9.15  | 59.00       | 210.93 | 393.24 | 22-23-2121     |
| 4                                                | 2        | 5.08        | WM4300-ND         | .61  | 5.39  | 34.80       | 124.41 | 231.94 | 22-05-3021     |
|                                                  | 3        | 7.62        | WM4301-ND         | .70  | 6.17  | 39.80       | 142.29 | 265.27 | 22-05-3031     |
|                                                  | 4        | 10.16       | WM4302-ND         | .78  | 6.91  | 44.60       | 159.45 | 297.26 | 22-05-3041     |
|                                                  | 5        | 12.70       | WM4303-ND         | .85  | 7.56  | 48.80       | 174.46 | 325.25 | 22-05-3051     |
|                                                  | 6        | 15.24       | WM4304-ND         | .96  | 8.46  | 54.60       | 195.20 | 363.91 | 22-05-3061     |
|                                                  | 7        | 17.78       | WM4305-ND         | 1.11 | 9.86  | 63.60       | 227.37 | 423.89 | 22-05-3071     |
|                                                  | 8        | 20.32       | WM4306-ND         | 1.16 | 10.29 | 66.40       | 237.38 | 442.56 | 22-05-3081     |
|                                                  | 9        | 22.86       | WM4307-ND         | 1.20 | 10.66 | 68.80       | 245.96 | 458.55 | 22-05-3091     |
|                                                  | 10       | 25.40       | WM4308-ND         | 1.22 | 10.82 | 69.80       | 249.54 | 465.22 | 22-05-3101     |
|                                                  | 11       | 27.94       | WM4309-ND         | 1.34 | 11.87 | 76.60       | 273.85 | 510.54 | 22-05-3111     |
|                                                  | 12       | 30.48       | WM4310-ND         | 1.38 | 12.21 | 78.80       | 281.71 | 525.20 | 22-05-3121     |
| <b>.100" (2.54mm) Center Header Gold Plating</b> |          |             |                   |      |       |             |        |        |                |
| 1                                                | 2        | 4.83        | WM2722-ND         | .52  | 4.59  | 29.60       | 105.82 | 197.28 | 22-10-2021     |
|                                                  | 3        | 7.37        | WM2723-ND         | .64  | 5.62  | 36.29       | 129.73 | 241.86 | 22-10-2031     |
|                                                  | 4        | 9.91        | WM2724-ND         | 1.00 | 8.90  | 57.40       | 205.21 | 382.57 | 22-10-2041     |
|                                                  | 5        | 12.45       | WM2725-ND         | 1.05 | 9.34  | 60.26       | 215.42 | 401.61 | 22-10-2051     |
|                                                  | 6        | 14.99       | WM2726-ND         | 1.50 | 13.27 | 85.60       | 306.02 | 570.52 | 22-10-2061     |
|                                                  | 7        | 17.53       | WM2727-ND         | 1.41 | 12.46 | 80.42       | 287.49 | 535.97 | 22-10-2071     |
|                                                  | 8        | 20.07       | WM2728-ND         | 1.91 | 16.96 | 109.40      | 391.11 | 729.15 | 22-10-2081     |
|                                                  | 9        | 22.61       | WM2729-ND         | 1.81 | 16.04 | 103.49      | 369.97 | 689.75 | 22-10-2091     |
|                                                  | 10       | 25.15       | WM2730-ND         | 2.39 | 21.17 | 136.60      | 488.35 | 910.44 | 22-10-2101     |
|                                                  | 11       | 27.69       | WM2731-ND         | 2.21 | 19.55 | 126.11      | 450.85 | 840.54 | 22-10-2111     |
|                                                  | 12       | 30.23       | WM2732-ND         | 2.41 | 21.35 | 137.76      | 492.49 | 918.17 | 22-10-2121     |

| Fig.                                  | Circuits                                                                      | Dim. A (mm) | Digi-Key Part No. | 1         | 10     | Pricing 100 | 500       | 1,000      | Molex Part No. |
|---------------------------------------|-------------------------------------------------------------------------------|-------------|-------------------|-----------|--------|-------------|-----------|------------|----------------|
| 2                                     | 2                                                                             | 4.83        | WM2733-ND         | .47       | 4.13   | 26.66       | 95.30     | 177.66     | 22-12-2021     |
|                                       | 3                                                                             | 7.37        | WM2734-ND         | .67       | 5.97   | 38.53       | 137.74    | 256.79     | 22-12-2031     |
|                                       | 4                                                                             | 9.91        | WM2735-ND         | .87       | 7.71   | 49.73       | 177.78    | 331.44     | 22-12-2041     |
|                                       | 5                                                                             | 12.45       | WM2736-ND         | 1.09      | 9.62   | 62.05       | 221.82    | 413.55     | 22-12-2051     |
|                                       | 6                                                                             | 14.99       | WM2737-ND         | 1.31      | 11.60  | 74.82       | 267.47    | 498.65     | 22-12-2061     |
|                                       | 7                                                                             | 17.53       | WM2738-ND         | 1.52      | 13.51  | 87.14       | 311.51    | 580.76     | 22-12-2071     |
|                                       | 8                                                                             | 20.07       | WM2739-ND         | 1.74      | 15.45  | 99.68       | 356.36    | 664.37     | 22-12-2081     |
|                                       | 9                                                                             | 22.61       | WM2740-ND         | 1.97      | 17.43  | 112.45      | 402.00    | 749.47     | 22-12-2091     |
|                                       | 10                                                                            | 25.15       | WM2741-ND         | 2.18      | 19.27  | 124.32      | 444.44    | 828.59     | 22-12-2101     |
|                                       | 11                                                                            | 27.69       | WM2742-ND         | 2.40      | 21.21  | 136.86      | 489.29    | 912.20     | 22-12-2111     |
|                                       | 12                                                                            | 30.23       | WM2743-ND         | 2.61      | 23.12  | 149.18      | 533.33    | 994.31     | 22-12-2121     |
|                                       | 3                                                                             | 2           | 5.08              | WM2700-ND | .58    | 5.15        | 33.20     | 118.69     | 221.28         |
| 3                                     |                                                                               | 7.62        | WM2701-ND         | .94       | 8.34   | 53.80       | 192.34    | 358.58     | 22-11-2032     |
| 4                                     |                                                                               | 10.16       | WM2702-ND         | .98       | 8.65   | 55.80       | 199.49    | 371.91     | 22-11-2042     |
| 5                                     |                                                                               | 12.70       | WM2703-ND         | 1.39      | 12.28  | 79.20       | 283.14    | 527.87     | 22-11-2052     |
| 6                                     |                                                                               | 15.24       | WM2704-ND         | 1.53      | 13.55  | 87.40       | 312.46    | 582.52     | 22-11-2062     |
| 7                                     |                                                                               | 17.78       | WM2705-ND         | 1.78      | 15.75  | 101.60      | 363.22    | 677.16     | 22-11-2072     |
| 8                                     |                                                                               | 20.32       | WM2706-ND         | 1.86      | 16.46  | 106.20      | 379.67    | 707.82     | 22-11-2082     |
| 9                                     |                                                                               | 22.86       | WM2707-ND         | 2.10      | 18.57  | 119.80      | 428.29    | 798.47     | 22-11-2092     |
| 10                                    |                                                                               | 25.40       | WM2708-ND         | 2.32      | 20.58  | 132.80      | 474.76    | 885.11     | 22-11-2102     |
| 11                                    |                                                                               | 27.94       | WM2709-ND         | 2.56      | 22.69  | 146.40      | 523.38    | 975.76     | 22-11-2112     |
| 12                                    |                                                                               | 30.48       | WM2710-ND         | 2.56      | 22.69  | 146.40      | 523.38    | 975.76     | 22-11-2122     |
| 4                                     |                                                                               | 2           | 5.08              | WM2711-ND | 1.01   | 8.96        | 57.80     | 206.64     | 385.24         |
|                                       | 3                                                                             | 7.62        | WM2712-ND         | 1.37      | 12.09  | 78.00       | 278.85    | 519.87     | 22-12-2032     |
|                                       | 4                                                                             | 10.16       | WM2713-ND         | 1.37      | 12.09  | 78.00       | 278.85    | 519.87     | 22-12-2042     |
|                                       | 5                                                                             | 12.70       | WM2714-ND         | 1.61      | 14.29  | 92.20       | 329.62    | 614.51     | 22-12-2052     |
|                                       | 6                                                                             | 15.24       | WM2715-ND         | 1.78      | 15.75  | 101.60      | 363.22    | 677.16     | 22-12-2062     |
|                                       | 7                                                                             | 17.78       | WM2716-ND         | 1.94      | 17.17  | 110.80      | 396.11    | 738.48     | 22-12-2072     |
|                                       | 8                                                                             | 20.32       | WM2717-ND         | 2.11      | 18.69  | 120.60      | 431.15    | 803.80     | 22-12-2082     |
|                                       | 9                                                                             | 22.86       | WM2718-ND         | 2.20      | 19.50  | 125.80      | 449.74    | 838.46     | 22-12-2092     |
|                                       | 10                                                                            | 25.40       | WM2719-ND         | 2.47      | 21.92  | 141.40      | 505.51    | 942.43     | 22-12-2102     |
|                                       | 11                                                                            | 27.94       | WM2720-ND         | 2.75      | 24.40  | 157.40      | 562.71    | 1049.07    | 22-12-2112     |
|                                       | 12                                                                            | 30.48       | WM2721-ND         | 3.03      | 26.82  | 173.00      | 618.48    | 1153.05    | 22-12-2122     |
|                                       | .100" (2.54mm) Center Crimp Terminal Housing (Contacts Sold Separately Below) |             |                   |           |        |             |           |            |                |
| With Locking Ramp and Polarizing Ribs |                                                                               |             |                   |           |        |             |           |            |                |
| 5                                     | 2                                                                             | 5.59        | WM2000-ND         | .14       | 1.27   | 8.20        | 33.83     | 54.65      | 22-01-3027     |
|                                       | 3                                                                             | 8.13        | WM2001-ND         | .21       | 1.89   | 12.20       | 50.33     | 81.31      | 22-01-3037     |
|                                       | 4                                                                             | 10.67       | WM2002-ND         | .29       | 2.54   | 16.40       | 67.65     | 109.31     | 22-01-3047     |
|                                       | 5                                                                             | 13.21       | WM2003-ND         | .35       | 3.10   | 20.00       | 82.50     | 133.30     | 22-01-3057     |
|                                       | 6                                                                             | 15.75       | WM2004-ND         | .42       | 3.75   | 24.20       | 99.83     | 161.29     | 22-01-3067     |
|                                       | 7                                                                             | 18.29       | WM2005-ND         | .49       | 4.37   | 28.20       | 116.33    | 187.95     | 22-01-3077     |
|                                       | 8                                                                             | 20.83       | WM2006-ND         | .57       | 5.05   | 32.60       | 134.48    | 217.28     | 22-01-3087     |
|                                       | 9                                                                             | 23.37       | WM2007-ND         | .64       | 5.70   | 36.80       | 151.80    | 245.27     | 22-01-3097     |
|                                       | 10                                                                            | 25.91       | WM2008-ND         | .70       | 6.23   | 40.20       | 165.83    | 267.93     | 22-01-3107     |
|                                       | 11                                                                            | 28.45       | WM2009-ND         | .77       | 6.85   | 44.20       | 182.33    | 294.59     | 22-01-3117     |
|                                       | 12                                                                            | 30.99       | WM2010-ND         | .86       | 7.60   | 49.00       | 202.13    | 326.59     | 22-01-3127     |
|                                       | With Locking Ramp                                                             |             |                   |           |        |             |           |            |                |
| 5                                     | 2                                                                             | 5.59        | WM2011-ND         | .13       | 1.12   | 7.20        | 25.74     | 47.99      | 22-01-2027     |
|                                       | 3                                                                             | 8.13        | WM2012-ND         | .19       | 1.64   | 10.60       | 37.90     | 70.65      | 22-01-2037     |
|                                       | 4                                                                             | 10.67       | WM2013-ND         | .25       | 2.20   | 14.20       | 50.77     | 94.64      | 22-01-2047     |
|                                       | 5                                                                             | 13.21       | WM2014-ND         | .31       | 2.73   | 17.60       | 62.92     | 117.30     | 22-01-2057     |
|                                       | 6                                                                             | 15.75       | WM2015-ND         | .37       | 3.32   | 21.40       | 76.51     | 142.63     | 22-01-2067     |
|                                       | 7                                                                             | 18.29       | WM2016-ND         | .44       | 3.88   | 25.00       | 89.38     | 166.63     | 22-01-2077     |
|                                       | 8                                                                             | 20.83       | WM2017-ND         | .49       | 4.37   | 28.20       | 100.82    | 187.95     | 22-01-2087     |
|                                       | 9                                                                             | 23.37       | WM2018-ND         | .56       | 4.99   | 32.20       | 115.12    | 214.61     | 22-01-2097     |
|                                       | 10                                                                            | 25.91       | WM2019-ND         | .62       | 5.46   | 35.20       | 125.84    | 234.61     | 22-01-2107     |
|                                       | 11                                                                            | 28.45       | WM2020-ND         | .69       | 6.08   | 39.20       | 140.14    | 261.27     | 22-01-2117     |
|                                       | 12                                                                            | 30.99       | WM2021-ND         | .75       | 6.67   | 43.00       | 153.73    | 286.60     | 22-01-2127     |
|                                       | Polarizing key for 2.54mm Housings                                            |             |                   | WM2400-ND |        | 1.09/10     | 6.67/100  | 25.89/500  | 15-04-9219     |
| Polarizing peg for 2.54mm Housings    |                                                                               |             | WM2401-ND         |           | .96/10 | 6.20/100    | 25.58/500 | 15-04-9221 |                |

**.156" (3.96mm) Center Headers**  
**.045" (1.14mm) Diameter Pins**

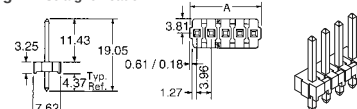
The Molex KK® Concept utilizes a double cantilever contact design in mating with P.C. board pins. UL Recognized (File #29179), CSA Recognized (File 19980).

**Voltage Rating:** 250 VAC Max.

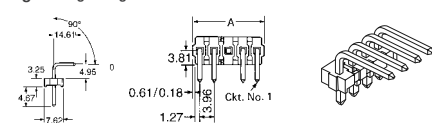
**Current Rating:** Up to 7 Amps (w/18 AWG wire).

**Resistance:** 20 milliohms max.  
**Dialectic Withstanding Voltage:** 1500 VAC for 60 seconds.  
**Storage Temperature:** -40°C to 105°C.  
**Material:** 94V-0.

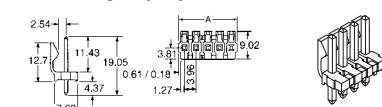
**Fig. 1 - Straight Header**



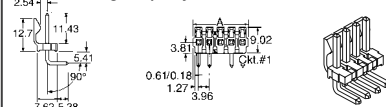
**Fig. 2 - Right Angle Header**



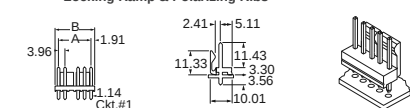
**Fig. 3 - Straight-Friction Lock Header for use with Locking Ramp only**



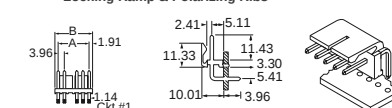
**Fig. 4 - Right Angle-Friction Lock Header for use with Locking Ramp only**



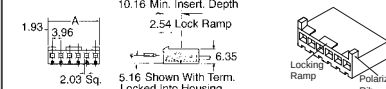
**Fig. 5 - Straight Friction Lock Header for use with Locking Ramp & Polarizing Ribs**



**Fig. 6 - Right Angle Friction Lock Header for use with Locking Ramp & Polarizing Ribs**



**Fig. 7 - Center Crimp Terminal Housing**  
(contacts sold separately)



| Cir-<br>Fig.cuts              | Dim (mm)<br>A B | Digi-Key<br>Part No. | Pricing |           |           | Molex<br>Part No. |       |            |
|-------------------------------|-----------------|----------------------|---------|-----------|-----------|-------------------|-------|------------|
|                               |                 |                      | 1       | 10        | 100       |                   |       |            |
| .156" (3.96mm) Center Headers |                 |                      |         |           |           |                   |       |            |
| 1                             | 2               | 6.78                 | —       | WM4400-ND | 25        | 1.26              | 7.56  | 26-48-1021 |
|                               | 3               | 10.74                | —       | WM4401-ND | 26        | 1.92              | 11.52 | 26-48-1031 |
|                               | 4               | 14.71                | —       | WM4402-ND | 29        | 2.58              | 15.48 | 26-48-1041 |
|                               | 5               | 18.67                | —       | WM4403-ND | 36        | 3.21              | 19.26 | 26-48-1051 |
|                               | 6               | 22.63                | —       | WM4404-ND | 44        | 3.87              | 23.22 | 26-48-1061 |
|                               | 7               | 26.59                | —       | WM4405-ND | 51        | 4.53              | 27.18 | 26-48-1071 |
|                               | 8               | 30.56                | —       | WM4406-ND | 58        | 5.13              | 30.78 | 26-48-1081 |
|                               | 9               | 34.52                | —       | WM4407-ND | 66        | 5.85              | 35.10 | 26-48-1091 |
|                               | 10              | 38.48                | —       | WM4408-ND | 74        | 6.51              | 39.06 | 26-48-1101 |
| 2                             | 11              | 42.44                | —       | WM4409-ND | 81        | 7.11              | 42.66 | 26-48-1111 |
|                               | 12              | 46.41                | —       | WM4410-ND | 88        | 7.77              | 46.62 | 26-48-1121 |
|                               | 2               | 6.78                 | —       | WM4500-ND | 25        | 1.47              | 8.82  | 26-48-1022 |
|                               | 3               | 10.74                | —       | WM4501-ND | 25        | 2.19              | 13.14 | 26-48-1032 |
|                               | 4               | 14.71                | —       | WM4502-ND | 33        | 2.94              | 17.64 | 26-48-1042 |
|                               | 5               | 18.67                | —       | WM4503-ND | 41        | 3.60              | 21.60 | 26-48-1052 |
|                               | 6               | 22.63                | —       | WM4504-ND | 50        | 4.38              | 26.28 | 26-48-1062 |
|                               | 7               | 26.59                | —       | WM4505-ND | 58        | 5.10              | 30.60 | 26-48-1072 |
|                               | 8               | 30.56                | —       | WM4506-ND | 66        | 5.85              | 35.10 | 26-48-1082 |
| 3                             | 9               | 34.52                | —       | WM4507-ND | 74        | 6.57              | 39.42 | 26-48-1092 |
|                               | 10              | 38.48                | —       | WM4508-ND | 83        | 7.32              | 43.92 | 26-48-1102 |
|                               | 11              | 42.44                | —       | WM4509-ND | 91        | 8.04              | 48.24 | 26-48-1112 |
|                               | 12              | 46.41                | —       | WM4510-ND | 1.00      | 8.79              | 52.74 | 26-48-1122 |
|                               | 2               | 7.87                 | —       | WM4600-ND | 25        | 1.62              | 9.72  | 26-48-1025 |
|                               | 3               | 11.84                | —       | WM4601-ND | 28        | 2.43              | 14.58 | 26-48-1035 |
|                               | 4               | 15.80                | —       | WM4602-ND | 37        | 3.24              | 19.44 | 26-48-1045 |
|                               | 5               | 19.76                | —       | WM4603-ND | 47        | 4.11              | 24.66 | 26-48-1055 |
|                               | 6               | 23.72                | —       | WM4604-ND | 56        | 4.92              | 29.52 | 26-48-1065 |
| 4                             | 7               | 27.69                | —       | WM4605-ND | 65        | 5.76              | 34.56 | 26-48-1075 |
|                               | 8               | 31.65                | —       | WM4606-ND | 75        | 6.60              | 39.60 | 26-48-1085 |
|                               | 9               | 35.61                | —       | WM4607-ND | 84        | 7.41              | 44.46 | 26-48-1095 |
|                               | 10              | 39.57                | —       | WM4608-ND | 94        | 8.25              | 49.50 | 26-48-1105 |
|                               | 11              | 43.54                | —       | WM4609-ND | 1.03      | 9.06              | 54.36 | 26-48-1115 |
|                               | 12              | 47.50                | —       | WM4610-ND | 1.12      | 9.87              | 59.22 | 26-48-1125 |
|                               | 2               | 7.87                 | —       | WM4700-ND | 25        | 1.13              | 6.77  | 26-48-1026 |
|                               | 3               | 11.84                | —       | WM4701-ND | 32        | 1.79              | 16.74 | 26-48-1036 |
|                               | 4               | 15.80                | —       | WM4702-ND | 43        | 3.75              | 22.50 | 26-48-1046 |
| 5                             | 5               | 19.76                | —       | WM4703-ND | 53        | 4.68              | 28.08 | 26-48-1056 |
|                               | 6               | 23.72                | —       | WM4704-ND | 63        | 5.58              | 33.48 | 26-48-1066 |
|                               | 7               | 27.69                | —       | WM4705-ND | 75        | 6.50              | 39.60 | 26-48-1076 |
|                               | 8               | 31.65                | —       | WM4706-ND | 85        | 7.53              | 45.18 | 26-48-1086 |
|                               | 9               | 35.61                | —       | WM4707-ND | 96        | 8.49              | 50.94 | 26-48-1096 |
|                               | 10              | 39.57                | —       | WM4708-ND | 1.07      | 9.42              | 56.52 | 26-48-1106 |
|                               | 11              | 43.54                | —       | WM4709-ND | 1.18      | 10.38             | 62.28 | 26-48-1116 |
|                               | 12              | 47.50                | —       | WM4710-ND | 1.28      | 11.28             | 67.68 | 26-48-1126 |
|                               | 6               | 2                    | 3.96    | 7.77      | WM4820-ND | 26                | 1.95  | 11.70      |
| 3                             |                 | 7.92                 | 11.73   | WM4821-ND | 37        | 3.27              | 19.62 | 26-60-4030 |
| 4                             |                 | 11.89                | 15.70   | WM4822-ND | 43        | 3.81              | 22.86 | 26-60-4040 |
| 5                             |                 | 15.85                | 19.66   | WM4823-ND | 54        | 4.74              | 28.44 | 26-60-4050 |
| 6                             |                 | 19.81                | 23.62   | WM4824-ND | 64        | 5.67              | 34.02 | 26-60-4060 |
| 7                             |                 | 23.77                | 27.58   | WM4825-ND | 68        | 6.03              | 36.18 | 26-60-4070 |
| 8                             |                 | 27.74                | 31.55   | WM4826-ND | 86        | 7.62              | 45.72 | 26-60-4080 |
| 9                             |                 | 31.70                | 35.51   | WM4827-ND | 88        | 7.80              | 46.80 | 26-60-4090 |
| 10                            |                 | 35.66                | 39.47   | WM4828-ND | 98        | 8.64              | 51.84 | 26-60-4100 |
| 7                             | 11              | 39.62                | 43.43   | WM4829-ND | 1.08      | 9.54              | 57.24 | 26-60-4110 |
|                               | 12              | 43.59                | 47.40   | WM4830-ND | 1.30      | 11.43             | 68.58 | 26-60-4120 |

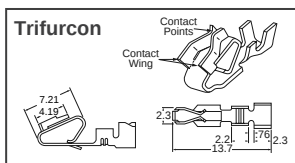
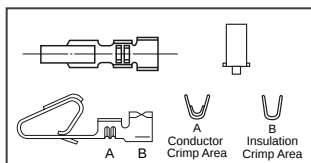
| Circ-<br>Fibers | Dim (mm)                            |       | Digi-Key<br>Part No. | Pricing   |           |       | Molex<br>Part No. |            |
|-----------------|-------------------------------------|-------|----------------------|-----------|-----------|-------|-------------------|------------|
|                 | A                                   | B     |                      | 1         | 10        | 100   |                   |            |
| 6               | 2                                   | 3.96  | 7.77                 | WM4640-ND | .25       | 21.3  | 12.78             | 26-60-5020 |
|                 | 3                                   | 7.92  | 11.73                | WM4641-ND | .36       | 3.18  | 19.08             | 26-60-5030 |
|                 | 4                                   | 11.89 | 15.70                | WM4642-ND | .47       | 4.11  | 24.66             | 26-60-5040 |
|                 | 5                                   | 15.85 | 19.66                | WM4643-ND | .53       | 4.68  | 28.08             | 26-60-5050 |
|                 | 6                                   | 19.81 | 23.62                | WM4644-ND | .70       | 6.21  | 37.26             | 26-60-5060 |
|                 | 7                                   | 23.77 | 27.58                | WM4645-ND | .78       | 6.63  | 39.78             | 26-60-5070 |
|                 | 8                                   | 27.74 | 31.45                | WM4646-ND | .85       | 7.53  | 45.18             | 26-60-5080 |
|                 | 9                                   | 31.70 | 35.51                | WM4647-ND | .96       | 8.49  | 50.94             | 26-60-5090 |
|                 | 10                                  | 35.66 | 39.47                | WM4648-ND | 1.18      | 10.38 | 62.28             | 26-60-5100 |
|                 | 11                                  | 39.62 | 43.43                | WM4649-ND | 1.30      | 10.43 | 68.58             | 26-60-5110 |
|                 | 12                                  | 43.59 | 47.50                | WM4650-ND | 1.29      | 11.34 | 68.04             | 26-60-5120 |
|                 | 156" (3.96mm) Center Headers - Gold |       |                      |           |           |       |                   |            |
| 1               | 2                                   | 6.78  |                      | WM5002-ND | .66       | 5.85  | 35.10             | 26-48-2021 |
|                 | 3                                   | 10.74 |                      | WM5003-ND | .99       | 8.70  | 52.20             | 26-48-2031 |
|                 | 4                                   | 14.71 |                      | WM5004-ND | 1.32      | 11.64 | 69.84             | 26-48-2041 |
|                 | 5                                   | 18.67 |                      | WM5005-ND | 1.65      | 14.55 | 87.30             | 26-48-2051 |
|                 | 6                                   | 22.63 |                      | WM5006-ND | 1.98      | 17.49 | 104.94            | 26-48-2061 |
|                 | 7                                   | 26.59 |                      | WM5007-ND | 2.31      | 20.40 | 122.40            | 26-48-2071 |
|                 | 8                                   | 30.56 |                      | WM5008-ND | 2.64      | 23.28 | 139.68            | 26-48-2081 |
|                 | 9                                   | 34.52 |                      | WM5009-ND | 2.97      | 26.19 | 157.14            | 26-48-2091 |
|                 | 10                                  | 38.48 |                      | WM5010-ND | 3.30      | 29.13 | 174.78            | 26-48-2101 |
|                 | 11                                  | 42.44 |                      | WM5011-ND | 3.63      | 32.04 | 192.24            | 26-48-2111 |
|                 | 12                                  | 46.41 |                      | WM5012-ND | 3.96      | 34.98 | 209.88            | 26-48-2121 |
|                 | 2                                   | 2     | 6.78                 |           | WM5102-ND | .79   | 6.96              | 41.76      |
| 3               |                                     | 10.74 |                      | WM5103-ND | 1.19      | 10.47 | 62.82             | 26-48-2032 |
| 4               |                                     | 14.71 |                      | WM5104-ND | 1.58      | 13.92 | 83.52             | 26-48-2042 |
| 5               |                                     | 18.67 |                      | WM5105-ND | 1.98      | 17.43 | 104.58            | 26-48-2052 |
| 6               |                                     | 22.63 |                      | WM5106-ND | 2.37      | 20.91 | 125.46            | 26-48-2062 |
| 7               |                                     | 26.59 |                      | WM5107-ND | 2.77      | 24.42 | 146.52            | 26-48-2072 |
| 8               |                                     | 30.56 |                      | WM5108-ND | 3.15      | 27.81 | 166.86            | 26-48-2082 |
| 9               |                                     | 34.52 |                      | WM5109-ND | 3.55      | 31.22 | 187.93            | 26-48-2092 |
| 10              |                                     | 38.48 |                      | WM5110-ND | 3.94      | 34.77 | 208.62            | 26-48-2102 |
| 11              |                                     | 42.44 |                      | WM5111-ND | 4.34      | 38.28 | 229.68            | 26-48-2112 |
| 12              |                                     | 46.41 |                      | WM5112-ND | 4.74      | 41.79 | 250.74            | 26-48-2122 |
| 3               |                                     | 2     | 7.87                 |           | WM5200-ND | .68   | 6.00              | 36.00      |
|                 | 3                                   | 11.84 |                      | WM5201-ND | 1.02      | 9.00  | 54.00             | 26-48-2035 |
|                 | 4                                   | 15.80 |                      | WM5202-ND | 1.37      | 12.06 | 72.36             | 26-48-2045 |
|                 | 5                                   | 19.76 |                      | WM5203-ND | 1.71      | 15.06 | 90.36             | 26-48-2055 |
|                 | 6                                   | 23.72 |                      | WM5204-ND | 2.04      | 18.08 | 108.00            | 26-48-2065 |
|                 | 7                                   | 27.69 |                      | WM5205-ND | 2.39      | 21.06 | 126.36            | 26-48-2075 |
|                 | 8                                   | 31.65 |                      | WM5206-ND | 2.73      | 24.06 | 144.36            | 26-48-2085 |
|                 | 9                                   | 35.61 |                      | WM5207-ND | 3.06      | 27.00 | 162.00            | 26-48-2095 |
|                 | 10                                  | 39.57 |                      | WM5208-ND | 3.41      | 30.00 | 180.36            | 26-48-2105 |
|                 | 11                                  | 43.54 |                      | WM5209-ND | 3.75      | 33.06 | 198.36            | 26-48-2115 |
|                 | 12                                  | 47.50 |                      | WM5210-ND | 4.09      | 36.09 | 216.54            | 26-48-2125 |
|                 | 4                                   | 2     | 7.87                 |           | WM5212-ND | .91   | 8.04              | 48.24      |
| 3               |                                     | 11.84 |                      | WM5213-ND | 1.36      | 12.00 | 72.00             | 26-48-2036 |
| 4               |                                     | 15.80 |                      | WM5214-ND | 1.82      | 16.02 | 96.12             | 26-48-2046 |
| 5               |                                     | 19.76 |                      | WM5215-ND | 2.26      | 19.98 | 119.88            | 26-48-2056 |
| 6               |                                     | 23.72 |                      | WM5216-ND | 2.73      | 24.06 | 144.36            | 26-48-2066 |
| 7               |                                     | 27.69 |                      | WM5217-ND | 3.18      | 28.02 | 168.12            | 26-48-2076 |
| 8               |                                     | 31.65 |                      | WM5218-ND | 3.63      | 31.98 | 191.88            | 26-48-2086 |
| 9               |                                     | 35.61 |                      | WM5219-ND | 4.08      | 35.90 | 215.08            | 26-48-2096 |
| 10              |                                     | 39.57 |                      | WM5220-ND | 4.54      | 40.02 | 240.12            | 26-48-2106 |
| 11              |                                     | 43.54 |                      | WM5221-ND | 4.98      | 43.98 | 263.88            | 26-48-2116 |
| 12              |                                     | 47.50 |                      | WM5222-ND | 5.44      | 48.00 | 288.00            | 26-48-2126 |
| 5               |                                     | 2     | 3.96                 | 7.77      | WM5224-ND | .69   | 6.12              | 36.69      |
|                 | 3                                   | 7.92  | 11.73                | WM5225-ND | .71       | 15.09 | 90.54             | 26-61-4030 |
|                 | 4                                   | 11.89 | 15.70                | WM5226-ND | .73       | 15.30 | 91.80             | 26-61-4040 |
|                 | 5                                   | 15.85 | 19.66                | WM5227-ND | 2.16      | 19.05 | 114.30            | 26-61-4040 |

| Cir-Fig/cuts                                                                                                  | Dim (mm)                                                | Digi-Key Part No. | Pricing   |       | Molex Part No. |        |            |
|---------------------------------------------------------------------------------------------------------------|---------------------------------------------------------|-------------------|-----------|-------|----------------|--------|------------|
|                                                                                                               |                                                         |                   | 1         | 100   |                |        |            |
| 5                                                                                                             | 6                                                       | 19 A81 23.62      | WM5228-ND | 3.14  | 27.69          | 166.14 | 26-61-4060 |
|                                                                                                               | 7                                                       | 23.77 27.58       | WM5229-ND | 3.03  | 26.70          | 160.20 | 26-61-4070 |
|                                                                                                               | 8                                                       | 27.74 31.55       | WM5230-ND | 3.45  | 30.42          | 182.52 | 26-61-4080 |
|                                                                                                               | 9                                                       | 31.70 35.51       | WM5231-ND | 3.88  | 34.23          | 205.38 | 26-61-4090 |
|                                                                                                               | 10                                                      | 35.66 39.47       | WM5232-ND | 4.31  | 38.07          | 228.42 | 26-61-4100 |
|                                                                                                               | 11                                                      | 39.62 43.43       | WM5233-ND | 4.75  | 41.88          | 251.28 | 26-61-4110 |
| 6                                                                                                             | 12                                                      | 43.59 47.40       | WM5234-ND | 5.19  | 45.75          | 274.50 | 26-61-4120 |
|                                                                                                               | 3                                                       | 7.92 7.77         | WM5235-ND | 1.67  | 14.48          | 45.95  | 26-61-5030 |
|                                                                                                               | 4                                                       | 7.92 11.73        | WM5236-ND | 1.67  | 11.48          | 68.95  | 26-61-5040 |
|                                                                                                               | 4                                                       | 11.89 15.70       | WM5237-ND | 1.89  | 14.88          | 89.31  | 26-61-5040 |
|                                                                                                               | 5                                                       | 15.85 19.66       | WM5238-ND | 1.99  | 17.54          | 105.26 | 26-61-5050 |
|                                                                                                               | 6                                                       | 19.81 23.62       | WM5239-ND | 2.53  | 22.34          | 134.04 | 26-61-5060 |
|                                                                                                               | 7                                                       | 23.77 27.58       | WM5240-ND | 2.95  | 26.01          | 156.04 | 26-61-5070 |
|                                                                                                               | 8                                                       | 27.74 31.55       | WM5241-ND | 3.36  | 29.67          | 178.01 | 26-61-5080 |
|                                                                                                               | 9                                                       | 31.70 35.51       | WM5242-ND | 3.79  | 33.43          | 200.59 | 26-61-5090 |
|                                                                                                               | 10                                                      | 35.66 39.47       | WM5243-ND | 4.23  | 37.30          | 223.78 | 26-61-5100 |
|                                                                                                               | 11                                                      | 39.62 43.43       | WM5244-ND | 4.65  | 40.99          | 245.95 | 26-61-5110 |
|                                                                                                               | 12                                                      | 43.59 47.40       | WM5245-ND | 5.06  | 44.69          | 268.13 | 26-61-5120 |
| .156" (3.96mm) Center Crimp Terminal Housing<br>(Contacts Sold Separately Below) w/Locking Ramp – 94V-2 Nylon |                                                         |                   |           |       |                |        |            |
| 7                                                                                                             | 2                                                       | 7.87 —            | WM2100-ND | .25   | 1.40           | 9.00   | 09-50-3021 |
|                                                                                                               | 3                                                       | 11.68 —           | WM2101-ND | .25   | 2.11           | 13.60  | 09-50-3031 |
|                                                                                                               | 4                                                       | 15.75 —           | WM2102-ND | .32   | 2.79           | 18.00  | 09-50-3041 |
|                                                                                                               | 5                                                       | 19.81 —           | WM2103-ND | .40   | 3.50           | 22.00  | 09-50-3051 |
|                                                                                                               | 6                                                       | 23.62 —           | WM2104-ND | .47   | 4.19           | 27.00  | 09-50-3061 |
|                                                                                                               | 7                                                       | 27.69 —           | WM2105-ND | .55   | 4.90           | 31.60  | 09-50-3071 |
|                                                                                                               | 8                                                       | 31.50 —           | WM2106-ND | .63   | 5.58           | 36.00  | 09-50-3081 |
|                                                                                                               | 9                                                       | 35.56 —           | WM2107-ND | .71   | 6.29           | 40.60  | 09-50-3091 |
|                                                                                                               | 10                                                      | 39.62 —           | WM2108-ND | .79   | 7.01           | 45.20  | 09-50-3101 |
|                                                                                                               | 11                                                      | 43.43 —           | WM2109-ND | .87   | 7.69           | 49.60  | 09-50-3111 |
|                                                                                                               | 12                                                      | 47.50 —           | WM2110-ND | .95   | 8.40           | 54.20  | 09-50-3121 |
|                                                                                                               | With Locking Ramp and Polarizing Ribs – 94V-0 Polyester |                   |           |       |                |        |            |
| 7                                                                                                             | 2                                                       | 8.64 —            | WM2111-ND | .25   | 1.46           | 9.40   | 09-50-8023 |
|                                                                                                               | 3                                                       | 12.70 —           | WM2112-ND | .25   | 2.23           | 14.40  | 09-50-8033 |
|                                                                                                               | 4                                                       | 16.51 —           | WM2113-ND | .33   | 2.91           | 18.80  | 09-50-8043 |
|                                                                                                               | 5                                                       | 20.57 —           | WM2114-ND | .42   | 3.69           | 23.80  | 09-50-8053 |
|                                                                                                               | 6                                                       | 24.64 —           | WM2115-ND | .49   | 4.37           | 28.80  | 09-50-8063 |
|                                                                                                               | 7                                                       | 28.45 —           | WM2116-ND | .50   | 4.46           | 28.75  | 09-50-8073 |
|                                                                                                               | 8                                                       | 32.51 —           | WM2117-ND | .65   | 5.80           | 37.40  | 09-50-8083 |
|                                                                                                               | 9                                                       | 36.32 —           | WM2118-ND | .64   | 5.67           | 36.57  | 09-50-8093 |
|                                                                                                               | 10                                                      | 40.64 —           | WM2119-ND | .82   | 7.25           | 46.80  | 09-50-8103 |
|                                                                                                               | 11                                                      | 44.45 —           | WM2120-ND | .78   | 6.92           | 44.62  | 09-50-8113 |
|                                                                                                               | 12                                                      | 48.26 —           | WM2121-ND | .85   | 7.56           | 48.76  | 09-50-8123 |
|                                                                                                               | With Locking Ramp – 94V-0 Polyester                     |                   |           |       |                |        |            |
| 7                                                                                                             | 2                                                       | 8.64 —            | WM2122-ND | .25   | 1.33           | 8.60   | 09-50-8021 |
|                                                                                                               | 3                                                       | 12.70 —           | WM2123-ND | .25   | 2.11           | 13.60  | 09-50-8031 |
|                                                                                                               | 4                                                       | 16.51 —           | WM2124-ND | .31   | 2.73           | 17.60  | 09-50-8041 |
|                                                                                                               | 5                                                       | 20.57 —           | WM2125-ND | .39   | 3.44           | 22.20  | 09-50-8051 |
|                                                                                                               | 6                                                       | 24.64 —           | WM2126-ND | .46   | 4.06           | 26.20  | 09-50-8061 |
|                                                                                                               | 7                                                       | 28.45 —           | WM2127-ND | .55   | 4.84           | 31.20  | 09-50-8071 |
|                                                                                                               | 8                                                       | 32.51 —           | WM2128-ND | .62   | 5.46           | 35.20  | 09-50-8081 |
|                                                                                                               | 9                                                       | 36.32 —           | WM2129-ND | .70   | 6.17           | 39.80  | 09-50-8091 |
|                                                                                                               | 10                                                      | 40.64 —           | WM2130-ND | .77   | 6.79           | 43.80  | 09-50-8101 |
|                                                                                                               | 11                                                      | 44.45 —           | WM2131-ND | .85   | 7.50           | 48.40  | 09-50-8111 |
|                                                                                                               | 12                                                      | 48.26 —           | WM2132-ND | .92   | 8.18           | 52.80  | 09-50-8121 |
|                                                                                                               | Polarizing key for 3.96mm Housings                      |                   | WM2402-ND | .16/1 | 14.40          | 15.04  | 02-09      |
| Polarizing peg for 3.96mm Housings                                                                            |                                                         | WM2403-ND         | .16/1     | 14.60 | 15.04          | 02-20  |            |
| Polarizing key for 3.96mm Friction Housings                                                                   |                                                         | WM2404-ND         | .13/1     | 11.70 | 15.04          | 02-29  |            |

|                                             |           |       |         |            |
|---------------------------------------------|-----------|-------|---------|------------|
| Polarizing key for 3.96mm Housings          | WM2402-ND | .16/1 | 1.46/10 | 15-04-0219 |
| Polarizing peg for 3.96mm Housings          | WM2403-ND | .16/1 | 1.46/10 | 15-04-0220 |
| Polarizing key for 3.96mm Friclock Housings | WM2404-ND | .13/1 | 1.17/10 | 15-04-0297 |

## Crimp Terminals For .156" (3.96mm) Center Housings

Plating: 200-300 $\mu$ ." Hot-Tin Dip tin plating or 15 $\mu$ " of Select Gold



| Description                  | Material  | Wire Size | Insulation Dia. (mm) | Finish | Digi-Key Part No. | Pricing |       |            | Molex Part No. |
|------------------------------|-----------|-----------|----------------------|--------|-------------------|---------|-------|------------|----------------|
|                              |           |           |                      |        |                   | 10      | 100   | 500        |                |
| For 3.96mm Housings          | Brass     | 18-24     | 2.79 Max.            | Tin    | WM2300-ND         | .78     | 6.50  | 26.00      | 08-50-0106     |
|                              | Brass     | 22-26     | 1.65 Max.            | Tin    | WM2301-ND         | .78     | 6.50  | 26.00      | 08-50-0108     |
|                              | Bronze    | 18-24     | 2.79                 | Tin    | WM2302-ND         | .87     | 7.25  | 29.00      | 08-52-0072     |
|                              | Bronze    | 22-26     | 1.65                 | Tin    | WM2303-ND         | 8.75    | 29.00 | 101.00     | 08-52-0134     |
|                              | Brass     | 18-24     | 2.79                 | Gold   | WM2305-ND         | 2.43    | 20.25 | 81.00      | 08-56-0106     |
|                              | Brass     | 22-26     | 1.65                 | Gold   | WM2306-ND         | 2.31    | 19.25 | 77.00      | 08-56-0108     |
|                              | Bronze    | 18-24     | 2.79                 | Gold   | WM2304-ND         | 8.67    | 72.25 | 289.00     | 08-58-0122     |
|                              | Bronze    | 22-26     | 1.65                 | Gold   | WM2307-ND         | 8.67    | 72.25 | 289.00     | 08-58-0126     |
|                              | Trifurcon | 18-24     | 2.79                 | Tin    | WM2313-ND         | 1.02    | 8.50  | 34.00      | 08-52-0113     |
|                              | Trifurcon | 22-26     | 1.65                 | Tin    | WM2314-ND         | 1.02    | 8.50  | 34.00      | 08-52-0125     |
| Hand Tool (Waldrom)          |           |           |                      |        | WM9903-ND         | 13.57   | each  | WH-HT-1919 |                |
| Universal Crimp Tool (Molex) |           |           |                      |        | WM9909-ND         | 32.59   | each  | 63811-1000 |                |
| Production Tool (Molex)      |           |           |                      |        | WM9916-ND         | 226.53  | each  | 11-01-0026 |                |
| Extraction Tool (Molex)      |           |           |                      |        | WM9928-ND         | 9.22    | each  | 11-03-0016 |                |



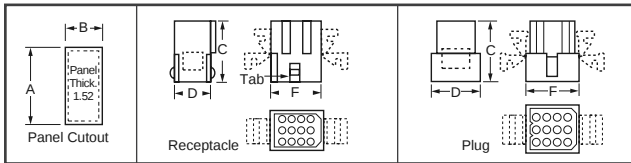
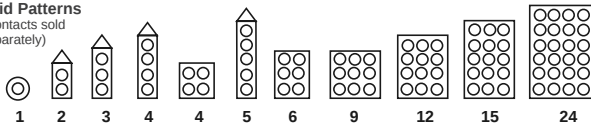
# Power Connectors

## .062" (1.57mm) Diameter Connectors

• UL File Number E-29179; CSA File Number LR-19980. • Up to 5 amperes per circuit. • 250 Volt rating. • Friction lock. • Standard color is natural. (\* Ratings based on fully loaded housings.)

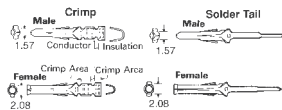
### Grid Patterns

(Contacts sold separately)



## .062" (1.57mm) Terminals

Use with .062" (1.57mm) housings. Temp. Range: -40°C to 105°C. • .008" (20mm) stock 70/30 brass. High Volt. Test: Withstands 1500 volts RMS for 60 seconds. Current Rating: Amperage rating 5 amps. Storage Temp. Range: -40°C to 125°C. Plating: 200-300µ Hot-Tin Dip tin plating.



| Description                  | Wire Size | Insulation Dia. (mm) | Digi-Key Part No. | 10   | Pricing 100 | 500    | Molex Part No. |
|------------------------------|-----------|----------------------|-------------------|------|-------------|--------|----------------|
| Male, Crimp Type             | 18-24     | 1.52/3.05            | WM1000-ND         | 1.26 | 10.50       | 42.00  | 02-06-2103     |
| Female, Crimp Type           | 18-24     | 1.52/3.05            | WM1001-ND         | 1.26 | 10.50       | 42.00  | 02-06-1103     |
| Male, Crimp Type             | 24-30     | 1.02/2.29            | WM1002-ND         | 1.26 | 10.50       | 42.00  | 02-06-2132     |
| Female, Crimp Type           | 24-30     | 1.02/2.29            | WM1003-ND         | 1.26 | 10.50       | 42.00  | 02-06-1132     |
| Male, PCB Solder-Tail        | —         | —                    | WM1004-ND         | 1.89 | 15.75       | 63.00  | 02-06-8103     |
| Female, PCB Solder-Tail      | —         | —                    | WM1005-ND         | 1.89 | 15.75       | 63.00  | 02-06-7103     |
| Male, Crimp Type             | 18-24     | 1.52/3.05            | WM1006-ND*        | 4.47 | 37.25       | 149.00 | 02-06-6103     |
| Female, Crimp Type           | 18-24     | 1.52/3.05            | WM1007-ND*        | 4.02 | 33.50       | 134.00 | 02-06-6135     |
| Male, Crimp Type             | 24-30     | 1.02/2.29            | WM1008-ND*        | 4.47 | 37.25       | 149.00 | 02-06-5103     |
| Female, Crimp Type           | 24-30     | 1.02/2.29            | WM1009-ND*        | 4.02 | 33.50       | 134.00 | 02-06-5135     |
| Male, PCB                    | —         | —                    | WM1010-ND*        | 6.65 | 55.44       | 221.76 | 02-06-6122     |
| Female, PCB                  | —         | —                    | WM1011-ND*        | 6.65 | 55.44       | 221.76 | 02-06-7104     |
| Hand Tool (Waldom)           | —         | —                    | WM9900-ND         | —    | 13.57 each  | —      | W-HT-1921      |
| Universal Crimp Tool (Molex) | —         | —                    | WM9999-ND         | —    | 32.59 each  | —      | 63811-1000     |
| Production Tool (Molex)      | —         | —                    | WM9922-ND         | —    | 223.17 each | —      | 11-01-0008     |
| Extraction Tool (Molex)      | —         | —                    | WM9929-ND         | —    | 18.42 each  | —      | 11-03-0002     |

\* 15µ Select Gold Finish

Plug



Receptacle



### Cable Connector Designer Kit

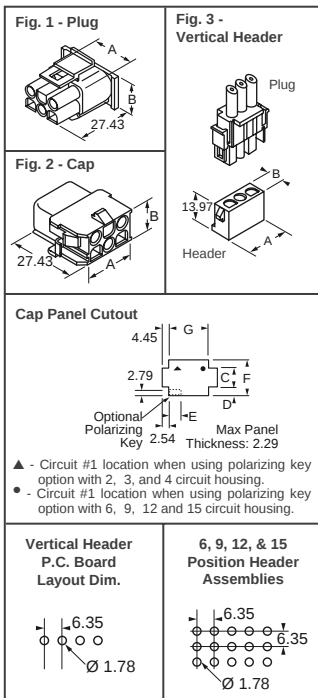
WM9800-ND — Contains all parts needed to assemble male and female connectors from single-circuit to 36-circuit designs (250V and up to 5A/circuit), totals 56 connectors. All have pin terminal size .062" (1.57mm) dia. with crimping tool, pin terminal ejector and case . . . . . \$54.30

| Grid, Space                                                                        | Circ. (a)                                                                                     | Type            | Max. Amp. V.    | Dimensions (mm) D B C |             |             | F           | Digi-Key Part No.   | Pricing 1 10 100          | Molex Part No.        |                       |                       |
|------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------|-----------------|-----------------|-----------------------|-------------|-------------|-------------|---------------------|---------------------------|-----------------------|-----------------------|-----------------------|
| <b>.062" (1.57mm) Diameter Connector Housings — With Detent Only, Free Hanging</b> |                                                                                               |                 |                 |                       |             |             |             |                     |                           |                       |                       |                       |
| .145" (3.68 mm)                                                                    | 1                                                                                             | Plug Receptacle | 5 250 5 250     | — —                   | 19.05 19.81 | — 4.65      | —           | WM1201-ND WM1200-ND | .25 1.79 10.97 10.97      | 03-06-2011 03-06-1011 |                       |                       |
|                                                                                    | 2                                                                                             | Plug Receptacle | 5 250 5 250     | 15.47 12.83           | 8.08 6.73   | 19.81 20.57 | 7.62 4.88   | 11.18 8.64          | — 3.30 3.29               | 18.92 20.21           | 03-06-2023 03-06-1023 |                       |
|                                                                                    | 3                                                                                             | Plug Receptacle | 5 250 5 250     | 19.15 16.51           | 8.08 6.73   | 19.05 19.81 | 7.62 4.88   | 14.99 12.29         | — 3.75 3.75               | 23.01 23.01           | 03-06-2032 03-06-1032 |                       |
|                                                                                    | 4                                                                                             | Plug Receptacle | 5 250 5 250     | 21.97 19.94           | 7.92 6.60   | 19.05 19.81 | 7.49 4.88   | 18.54 16.00         | — 5.32 5.32               | 32.68 32.68           | 03-06-2042 03-06-1042 |                       |
|                                                                                    | 4 (b)                                                                                         | Plug Receptacle | 5 250 5 250     | 15.62 12.85           | 11.81 10.16 | 19.05 19.05 | 11.23 8.61  | 11.23 8.61          | — 5.39 5.39               | 33.11 33.11           | 03-06-2044 03-06-1044 |                       |
|                                                                                    | 5                                                                                             | Plug Receptacle | 5 250 5 250     | 26.52 23.88           | 8.08 6.73   | 19.05 19.81 | 7.87 4.88   | 22.61 19.69         | — 5.53 6.97               | 33.97 42.79           | 03-06-2055 03-06-1056 |                       |
|                                                                                    | 6                                                                                             | Plug Receptacle | 5 250 5 250     | 15.62 14.02           | 15.42 12.83 | 19.05 19.81 | 15.24 12.55 | 11.43 8.74          | — 5.67 5.67               | 34.83 34.83           | 03-06-2061 03-06-1062 |                       |
|                                                                                    | 9                                                                                             | Plug Receptacle | 5 250 5 250     | 19.10 16.51           | 15.62 14.02 | 19.05 19.81 | 14.99 12.55 | 14.99 12.42         | — 6.1 6.1                 | 35.26 35.26           | 03-06-2092 03-06-1092 |                       |
|                                                                                    | 12                                                                                            | Plug Receptacle | 5 250 5 250     | 22.94 20.19           | 15.60 14.30 | 19.05 19.81 | 14.99 12.55 | 18.80 16.10         | — 6.4 6.6                 | 36.98 38.49           | 03-06-2122 03-06-1122 |                       |
|                                                                                    | 15                                                                                            | Plug Receptacle | 5 250 5 250     | 26.47 23.72           | 15.60 14.30 | 19.05 19.81 | 12.99 12.37 | 22.35 19.71         | — 8.6 8.1                 | 49.88 59.34           | 03-06-2152 03-06-1152 |                       |
|                                                                                    | 24                                                                                            | Plug            | 5 250 5 300     | 30.02 30.02           | 19.43 19.43 | 19.05 19.05 | 18.80 26.42 | — 2.09 2.09         | 19.74 121.26              | 03-06-2242 03-06-2241 |                       |                       |
|                                                                                    | <b>.062" (1.57mm) Diameter Connector Housings — W/Mounting Ears &amp; Detent, Panel Mount</b> |                 |                 |                       |             |             |             |                     |                           |                       |                       |                       |
|                                                                                    | .145" (3.68 mm)                                                                               | 2               | Plug Receptacle | 5 250 5 250           | 15.47 12.83 | 8.08 6.73   | 19.81 20.57 | 7.62 4.88           | 11.18 8.64                | — 3.30 3.29           | 18.92 20.21           | 03-06-2024 03-06-1022 |
|                                                                                    |                                                                                               | 3               | Plug Receptacle | 5 250 5 250           | 19.15 16.51 | 8.08 6.73   | 19.05 19.81 | 7.62 4.88           | 14.99 12.29               | — 3.75 3.75           | 23.01 23.01           | 03-06-2033 03-06-1033 |
|                                                                                    |                                                                                               | 4               | Plug Receptacle | 5 250 5 250           | 21.97 19.94 | 7.92 6.60   | 19.05 19.81 | 7.49 4.88           | 18.54 16.00               | — 5.32 5.32           | 32.68 32.68           | 03-06-2041 03-06-1041 |
|                                                                                    |                                                                                               | 4 (b)           | Plug Receptacle | 5 250 5 250           | 15.62 12.85 | 11.81 10.16 | 19.05 19.05 | 11.23 8.61          | 11.23 8.61                | — 5.39 5.39           | 33.11 33.11           | 03-06-2043 03-06-1043 |
| 5                                                                                  |                                                                                               | Plug Receptacle | 5 250 5 250     | 26.52 23.88           | 8.08 6.73   | 19.05 19.81 | 7.87 4.88   | 22.61 19.69         | — 5.53 6.97               | 33.97 42.79           | 03-06-2054 03-06-1055 |                       |
| 6                                                                                  |                                                                                               | Plug Receptacle | 5 250 5 250     | 15.62 14.02           | 15.42 12.83 | 19.05 19.81 | 15.24 12.55 | 11.43 8.74          | — 5.67 5.67               | 34.83 34.83           | 03-06-2062 03-06-1061 |                       |
| 9                                                                                  |                                                                                               | Plug Receptacle | 5 250 5 250     | 19.10 16.51           | 15.62 14.02 | 19.05 19.81 | 14.99 12.55 | 14.99 12.42         | — 6.1 6.1                 | 35.26 35.26           | 03-06-2091 03-06-1091 |                       |
| 12                                                                                 |                                                                                               | Plug Receptacle | 5 250 5 250     | 22.94 20.19           | 15.60 14.30 | 19.05 19.81 | 14.99 12.55 | 18.80 16.10         | — 6.4 6.6                 | 36.98 38.49           | 03-06-2121 03-06-1121 |                       |
| 15                                                                                 |                                                                                               | Plug Receptacle | 5 250 5 250     | 26.47 23.72           | 15.60 14.30 | 19.05 19.81 | 12.99 12.37 | 22.35 19.71         | — 8.6 8.1                 | 49.88 59.34           | 03-06-2151 03-06-1151 |                       |
| 24                                                                                 |                                                                                               | Plug Receptacle | 5 250 5 300     | 30.02 30.02           | 19.43 18.16 | 19.05 19.05 | 18.80 26.42 | — 2.09 2.09         | 19.74 121.26 19.74 121.26 | 03-06-2241 03-06-1241 |                       |                       |

(a) Electrical ratings are per circuit. (b) 4 circuits in square grid pattern.

## .084" (2.13mm) Power Connectors

Features: • Intermediate, intermountable, and interchangeable with industry standard versions. • Cross tested to assure industry compatibility. • UL recognized, CSA certified. • Up to 13.5 amperes per circuit (30°C rise). • 600 Volt rating\*. • Positive locks. • Fully isolated contacts. • Circuit I.D. grooves to reduce assembly errors. • Anti-stress positioning tabs to reduce breakage.



|                          |        | Ampress/<br>Circuit<br>(Max.) <sup>a</sup> | Voltage<br>Rating<br>(Max.) <sup>a</sup> | Panel Cutout Dimension (mm) |       |       |      |      |       |       | Digi-Key  | Pricing |       |        |        | Molex      |
|--------------------------|--------|--------------------------------------------|------------------------------------------|-----------------------------|-------|-------|------|------|-------|-------|-----------|---------|-------|--------|--------|------------|
| Pos.                     | Des.   |                                            |                                          | A                           | B     | C††   | D    | E    | F     | G     | Part No.  | 1       | 10    | 100    | 500    | Part No.   |
| Fig. 1 – Plug            |        |                                            |                                          |                             |       |       |      |      |       |       |           |         |       |        |        |            |
| 2                        | Plug   | 13.5                                       | 600                                      | 7.62                        | 13.97 | —     | —    | —    | —     | —     | WM1242-ND | .41     | 3.57  | 22.76  | 87.95  | 50-84-1020 |
| 3                        | Plug   | 13.5                                       | 600                                      | 7.62                        | 20.32 | —     | —    | —    | —     | —     | WM1244-ND | .48     | 4.18  | 26.64  | 102.96 | 50-84-1030 |
| 4                        | Plug   | 13.5                                       | 600                                      | 7.62                        | 26.67 | —     | —    | —    | —     | —     | WM1246-ND | .54     | 4.76  | 30.34  | 117.26 | 50-84-1040 |
| 6                        | Plug   | 11.0                                       | 600                                      | 20.32                       | 13.97 | —     | —    | —    | —     | —     | WM1248-ND | .61     | 5.37  | 34.23  | 132.28 | 50-84-1060 |
| 9                        | Plug   | 11.0                                       | 600                                      | 20.32                       | 20.32 | —     | —    | —    | —     | —     | WM1250-ND | .69     | 6.06  | 38.67  | 149.44 | 50-84-1090 |
| 12                       | Plug   | —                                          | 600                                      | 20.32                       | 20.32 | —     | —    | —    | —     | —     | WM1252-ND | .89     | 7.86  | 50.14  | 193.77 | 50-84-1120 |
| 15                       | Plug   | —                                          | 600                                      | 20.32                       | 26.67 | —     | —    | —    | —     | —     | WM1254-ND | 1.12    | 9.80  | 62.53  | 241.67 | 50-84-1150 |
| Fig. 2 – Cap             |        |                                            |                                          |                             |       |       |      |      |       |       |           |         |       |        |        |            |
| 2                        | Cap    | 13.5                                       | 600                                      | 7.62                        | 13.97 | 8.64  | 2.41 | 6.35 | 13.46 | 14.35 | WM1243-ND | .41     | 3.57  | 22.76  | 87.95  | 50-84-2020 |
| 3                        | Cap    | 13.5                                       | 600                                      | 7.62                        | 20.32 | 8.64  | 2.41 | 6.35 | 13.46 | 20.70 | WM1245-ND | .48     | 4.18  | 26.64  | 102.96 | 50-84-2030 |
| 9                        | Cap    | 11.0                                       | 600                                      | 20.32                       | 20.32 | 12.19 | 6.98 | 6.35 | 26.16 | 20.70 | WM1251-ND | .88     | 7.74  | 49.40  | 190.91 | 50-84-2090 |
| 12                       | Cap    | —                                          | 600                                      | 20.32                       | 26.67 | 12.19 | 6.98 | 8.89 | 26.16 | 27.05 | WM1253-ND | .89     | 7.86  | 50.14  | 193.77 | 50-84-2120 |
| 15                       | Cap    | —                                          | 600                                      | 20.32                       | 33.02 | 12.19 | 6.98 | 8.89 | 26.16 | 33.40 | WM1255-ND | 1.12    | 9.80  | 62.53  | 241.67 | 50-84-2150 |
| Fig. 3 – Vertical Header |        |                                            |                                          |                             |       |       |      |      |       |       |           |         |       |        |        |            |
| 2                        | Male   | —                                          | —                                        | 7.62                        | 13.97 | —     | —    | —    | —     | —     | WM1256-ND | 1.09    | 9.64  | 62.20  | 222.37 | 10-84-4020 |
| 3                        | Female | —                                          | —                                        | 7.62                        | 13.97 | —     | —    | —    | —     | —     | WM1263-ND | 1.02    | 9.05  | 58.40  | 208.78 | 10-84-4022 |
| 3                        | Male   | —                                          | —                                        | 7.62                        | 20.32 | —     | —    | —    | —     | —     | WM1257-ND | 1.26    | 11.13 | 71.80  | 256.69 | 10-84-4030 |
| 3                        | Female | —                                          | —                                        | 7.62                        | 20.32 | —     | —    | —    | —     | —     | WM1264-ND | 1.20    | 10.66 | 68.80  | 245.96 | 10-84-4032 |
| 4                        | Male   | —                                          | —                                        | 7.62                        | 26.67 | —     | —    | —    | —     | —     | WM1258-ND | 1.51    | 13.33 | 86.00  | 307.45 | 10-84-4040 |
| 4                        | Female | —                                          | —                                        | 7.62                        | 26.67 | —     | —    | —    | —     | —     | WM1265-ND | 1.46    | 12.90 | 83.20  | 297.44 | 10-84-4042 |
| 6                        | Male   | —                                          | —                                        | 20.32                       | 13.97 | —     | —    | —    | —     | —     | WM1259-ND | 2.01    | 17.79 | 114.80 | 410.41 | 10-84-4060 |
| 6                        | Female | —                                          | —                                        | 20.32                       | 13.97 | —     | —    | —    | —     | —     | WM1266-ND | 2.09    | 18.48 | 119.20 | 426.14 | 10-84-4062 |
| 9                        | Male   | —                                          | —                                        | 20.32                       | 20.32 | —     | —    | —    | —     | —     | WM1260-ND | 2.59    | 22.97 | 148.20 | 529.82 | 10-84-4090 |
| 9                        | Female | —                                          | —                                        | 20.32                       | 20.32 | —     | —    | —    | —     | —     | WM1267-ND | 3.01    | 26.66 | 172.00 | 614.90 | 10-84-4092 |
| 12                       | Male   | —                                          | —                                        | 20.32                       | 26.67 | —     | —    | —    | —     | —     | WM1261-ND | 3.09    | 27.40 | 176.80 | 632.06 | 10-84-4120 |
| 12                       | Female | —                                          | —                                        | 20.32                       | 26.67 | —     | —    | —    | —     | —     | WM1268-ND | 3.85    | 34.07 | 219.80 | 785.79 | 10-84-4122 |
| 15                       | Male   | —                                          | —                                        | 20.32                       | 33.02 | —     | —    | —    | —     | —     | WM1262-ND | 3.85    | 34.07 | 219.80 | 785.79 | 10-84-4150 |
| 15                       | Female | —                                          | —                                        | 20.32                       | 33.02 | —     | —    | —    | —     | —     | WM1269-ND | 4.35    | 38.53 | 240.60 | 888.75 | 10-84-4152 |



# Power Connectors

## .093" (2.36mm) Diameter Connectors

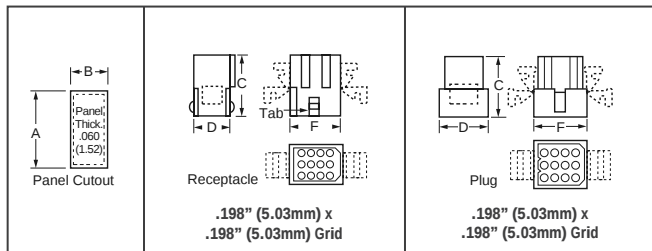
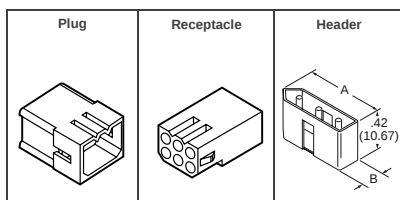
• UL File Number E-29179; CSA File Number LR-19980.

• Up to 12 amperes per circuit.\*

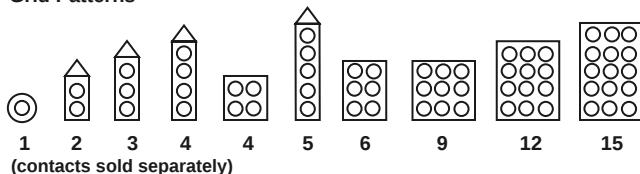
• 250 Volt rating for 03-09 series; 600 Volt rating for 19-09 series

• Friction lock for 03-09 series; Positive lock for 19-09 series

\* Ratings based on fully loaded housings.

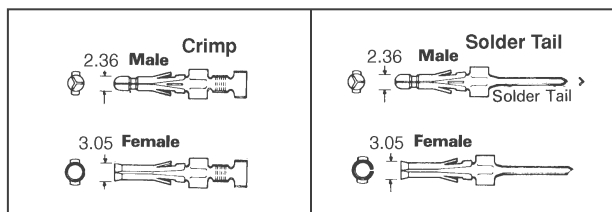


### Grid Patterns



### .093" (2.36mm) TERMINALS

- Use with .093" (2.36mm) housing
- **Temperature Range:** 40°C to 105°C • .010" (.25mm) stock 70/30 brass
- **High Voltage Test:** Withstands 1500 volts RMS for 60 seconds min. applied between adjacent terminals.
- **Current Rating:** Amperage rating up to 12 amps on some sizes.
- **Storage Temperature Range:** -40°C to 125°C.
- **Plating:** 200-300µ Inch Hot-Tin Dip tin plating.



| Description                            | Wire Size | Insulation Dia. (mm) | Digi-Key Part No. | 10     | Pricing 100 | 500    | Molex Part No. |
|----------------------------------------|-----------|----------------------|-------------------|--------|-------------|--------|----------------|
| Male, Crimp Type                       | 14-20     | 1.65/4.06            | WM1100-ND         | 1.32   | 11.00       | 44.00  | 02-09-2103     |
| Female, Crimp Type                     | 14-20     | 1.65/4.06            | WM1101-ND         | 1.32   | 11.00       | 44.00  | 02-09-1104     |
| Male, Crimp Type                       | 18-22     | 1.52/3.05            | WM1102-ND         | 1.29   | 10.75       | 43.00  | 02-09-2118     |
| Female, Crimp Type                     | 18-22     | 1.52/3.05            | WM1103-ND         | 1.32   | 11.00       | 44.00  | 02-09-1119     |
| Male, Solder-Tail                      | —         | —                    | WM1104-ND         | 1.98   | 16.50       | 66.00  | 02-09-2133     |
| Female, Solder-Tail                    | —         | —                    | WM1105-ND         | 1.98   | 16.50       | 66.00  | 02-09-1134     |
| Male, Crimp Type                       | 18-22     | 1.52/3.05            | WM1106-ND*        | 5.52   | 46.00       | 184.00 | 02-09-6123     |
| Female, Crimp Type                     | 18-22     | 1.52/3.05            | WM1107-ND*        | 14.04  | 117.00      | 468.00 | 02-09-5142     |
| Male, Crimp Type                       | 24-30     | 0.76/1.52            | WM1108-ND*        | 11.76  | 98.00       | 392.00 | 02-09-6145     |
| Female, Crimp Type                     | 24-30     | 0.76/1.52            | WM1109-ND*        | 11.76  | 98.00       | 392.00 | 02-09-5147     |
| Male, Solder-Tail                      | —         | —                    | WM1110-ND*        | 9.27   | 77.25       | 309.00 | 02-09-6132     |
| Female, Solder-Tail                    | —         | —                    | WM1111-ND*        | 18.63  | 155.25      | 621.00 | 02-09-5132     |
| Hand Tool (Waldom) (18-22 AWG) (Molex) | —         | —                    | WM9903-ND         | 13.57  | each        | —      | W-HT-1919      |
| Universal Crimp Tool (Molex)           | —         | —                    | WM9923-ND         | 223.17 | each        | —      | 11-01-0084     |
| Production Tool (24-30 AWG) (Molex)    | —         | —                    | WM9999-ND         | 32.59  | each        | —      | 63811-1000     |
| Extraction Tool (Molex)                | —         | —                    | WM9924-ND         | 179.55 | each        | —      | 11-01-0006     |
|                                        | —         | —                    | WM9930-ND         | 18.42  | each        | —      | 11-03-0006     |

\* 15µ Select Gold Finish

### Cable Connector Designer Kits

**WM9801-ND** — Contains same as WM9800-ND but covers from single to 15-circuit designs (250V and up to 12A/circuit. 45 complete connectors with .093" (2.36mm) dia. pin size. Crimping tool, pin terminal ejector and case included ..... **\$51.57**

| Grid Space                                                                  | Circ.                                                                                 | Type            | Max. Amps/Volts | Dimensions (mm) |       |       |       | Digi-Key Part No. | Pricing   |           |       | Molex Part No. |            |            |
|-----------------------------------------------------------------------------|---------------------------------------------------------------------------------------|-----------------|-----------------|-----------------|-------|-------|-------|-------------------|-----------|-----------|-------|----------------|------------|------------|
|                                                                             |                                                                                       |                 |                 | A               | B     | C     | D     |                   | F         | 1         | 10    |                | 100        |            |
| .093" (2.36mm) Diameter Connector Housings — With Detent Only, Free Hanging |                                                                                       |                 |                 |                 |       |       |       |                   |           |           |       |                |            |            |
| 5.03                                                                        | 1                                                                                     | Plug Receptacle | 12 5000         | —               | —     | 57.15 | 11.10 | —                 | WM1301-ND | .41       | 3.89  | 23.87          | 03-09-2014 |            |
|                                                                             | 1                                                                                     | Plug Receptacle | 12 5000         | —               | —     | 47.22 | 7.92  | —                 | WM1300-ND | .40       | 3.82  | 23.44          | 03-09-1014 |            |
|                                                                             |                                                                                       | Plug Receptacle | 12 250          | —               | —     | 25.40 | 9.09  | —                 | WM1303-ND | .20       | 1.93  | 11.83          | 03-09-2011 |            |
|                                                                             | 2                                                                                     | Plug Receptacle | 12 250          | —               | —     | 25.40 | 5.94  | —                 | WM1302-ND | .20       | 1.93  | 11.83          | 03-09-1011 |            |
|                                                                             |                                                                                       | Plug Receptacle | 12 250          | 20.32           | 9.53  | 25.40 | 8.94  | 16.23             | WM1324-ND | .38       | 3.61  | 22.15          | 03-09-2022 |            |
|                                                                             | 3                                                                                     | Plug Receptacle | 12 250          | 18.42           | 7.92  | 26.16 | 6.35  | 13.61             | WM1331-ND | .38       | 3.61  | 22.15          | 03-09-1022 |            |
|                                                                             |                                                                                       | Plug Receptacle | 12 250          | 23.70           | 9.53  | 24.64 | 8.64  | 19.56             | WM1325-ND | .48       | 4.52  | 27.74          | 03-09-2032 |            |
|                                                                             | 4                                                                                     | Plug Receptacle | 12 250          | 21.34           | 7.92  | 25.78 | 5.99  | 17.02             | WM1332-ND | .51       | 4.80  | 29.46          | 03-09-1032 |            |
|                                                                             |                                                                                       | Plug Receptacle | 12 250          | 28.73           | 9.53  | 25.40 | 8.59  | 24.66             | WM1326-ND | .49       | 4.66  | 28.60          | 03-09-2042 |            |
|                                                                             | 4(c)                                                                                  | Plug Receptacle | 12 250          | 26.37           | 7.92  | 25.40 | 5.99  | 22.05             | WM1333-ND | .49       | 4.66  | 28.60          | 03-09-1042 |            |
|                                                                             |                                                                                       | Plug Receptacle | 12 250          | 14.10           | 17.65 | 26.01 | 13.67 | 13.67             | WM1327-ND | .92       | 8.72  | 53.54          | 03-09-2049 |            |
|                                                                             | 6.30                                                                                  | 5(d)            | Plug Receptacle | 12 250          | 12.70 | 15.24 | 25.40 | 11.02             | 11.02     | WM1334-ND | .94   | 8.93           | 54.83      | 03-09-1049 |
| Plug Receptacle                                                             |                                                                                       |                 | 12 250          | —               | —     | 24.61 | 8.89  | 29.72             | WM1315-ND | .66       | 6.23  | 38.27          | 03-09-2057 |            |
| 6                                                                           |                                                                                       | Plug Receptacle | 12 250          | —               | —     | 25.40 | 6.10  | 27.18             | WM1314-ND | .66       | 6.23  | 38.27          | 03-09-1057 |            |
|                                                                             |                                                                                       | Plug Receptacle | 9 250           | 19.05           | 17.65 | 25.40 | 18.62 | 13.61             | WM1328-ND | .57       | 5.39  | 33.11          | 03-09-2062 |            |
| 9(e)                                                                        |                                                                                       | Plug Receptacle | 9 250           | 18.24           | 15.24 | 25.78 | 16.05 | 11.02             | WM1335-ND | .57       | 5.39  | 33.11          | 03-09-1064 |            |
|                                                                             |                                                                                       | Plug Receptacle | 9 250           | 23.80           | 16.76 | 24.64 | 18.54 | 19.56             | WM1329-ND | .71       | 6.69  | 41.07          | 03-09-2092 |            |
| 12                                                                          |                                                                                       | Plug Receptacle | 9 250           | 21.03           | 18.42 | 25.78 | 15.88 | 16.92             | WM1336-ND | .71       | 6.69  | 41.07          | 03-09-1094 |            |
|                                                                             |                                                                                       | Plug Receptacle | 7.5 250         | 29.34           | 19.30 | 25.40 | 18.72 | 19.56             | WM1330-ND | .79       | 7.46  | 45.80          | 03-09-2121 |            |
| 2(b)                                                                        |                                                                                       | Plug Receptacle | 7.5 250         | 26.67           | 16.64 | 25.78 | 16.08 | 22.12             | WM1337-ND | .77       | 7.32  | 44.94          | 03-09-1126 |            |
|                                                                             |                                                                                       | Plug Receptacle | 12 600          | —               | —     | 26.19 | 9.12  | 16.66             | WM1401-ND | .62       | 5.88  | 36.12          | 03-09-2028 |            |
| 4(b)                                                                        |                                                                                       | Plug Receptacle | 12 600          | —               | —     | 27.00 | 6.73  | 13.49             | WM1400-ND | .62       | 5.88  | 36.12          | 03-09-1028 |            |
|                                                                             |                                                                                       | Plug Receptacle | 9 600           | —               | —     | 26.19 | 9.12  | 29.36             | WM1405-ND | .77       | 7.25  | 44.51          | 03-09-2048 |            |
|                                                                             | Plug Receptacle                                                                       | 9 600           | —               | —               | 27.00 | 6.73  | 26.21 | WM1404-ND         | .77       | 7.25      | 44.51 | 03-09-1047     |            |            |
|                                                                             | .093" (2.36mm) Diameter Connector Housings — With Mounting Ears & Detent, Panel Mount |                 |                 |                 |       |       |       |                   |           |           |       |                |            |            |
| 5.03                                                                        | 3                                                                                     | Plug Receptacle | 12 250          | 23.70           | 9.53  | 24.64 | 8.64  | 19.56             | WM1307-ND | .48       | 4.52  | 27.74          | 03-09-2031 |            |
|                                                                             | 4                                                                                     | Plug Receptacle | 12 250          | 21.34           | 7.92  | 25.78 | 5.99  | 17.02             | WM1338-ND | .52       | 4.90  | 30.10          | 03-09-1081 |            |
|                                                                             |                                                                                       | Plug Receptacle | 12 250          | 28.73           | 9.53  | 24.61 | 8.59  | 24.66             | WM1309-ND | .49       | 4.66  | 28.60          | 03-09-2041 |            |
|                                                                             | 4(c)                                                                                  | Plug Receptacle | 12 250          | 26.37           | 7.92  | 25.40 | 5.99  | 22.05             | WM1308-ND | .49       | 4.66  | 28.60          | 03-09-1043 |            |
|                                                                             |                                                                                       | Plug Receptacle | 12 250          | 14.10           | 17.65 | 24.61 | 13.67 | 13.67             | WM1311-ND | .77       | 7.32  | 44.94          | 03-09-2040 |            |
|                                                                             | 6                                                                                     | Plug Receptacle | 12 250          | 12.70           | 15.24 | 25.40 | 11.02 | 11.02             | WM1310-ND | .77       | 7.32  | 44.94          | 03-09-1040 |            |
|                                                                             |                                                                                       | Plug Receptacle | 9 250           | 19.05           | 17.65 | 24.61 | 18.62 | 13.61             | WM1317-ND | .57       | 5.39  | 33.11          | 03-09-2061 |            |
|                                                                             | 9(e)                                                                                  | Plug Receptacle | 9 250           | 18.24           | 15.24 | 25.78 | 16.05 | 11.02             | WM1316-ND | .57       | 5.39  | 33.11          | 03-09-1061 |            |
|                                                                             |                                                                                       | Plug Receptacle | 9 250           | 23.80           | 16.76 | 24.64 | 18.54 | 19.56             | WM1319-ND | .72       | 6.79  | 41.71          | 03-09-2091 |            |
|                                                                             | 12                                                                                    | Plug Receptacle | 9 250           | 21.03           | 18.42 | 25.78 | 15.88 | 16.92             | WM1318-ND | .71       | 6.69  | 41.07          | 03-09-1091 |            |
|                                                                             |                                                                                       | Plug Receptacle | 7.5 250         | 29.34           | 19.30 | 24.61 | 18.72 | 24.77             | WM1321-ND | .79       | 7.46  | 45.80          | 03-09-2122 |            |
|                                                                             | 6.30                                                                                  | 15              | Plug Receptacle | 7.5 250         | 26.67 | 16.89 | 25.78 | 16.08             | 22.12     | WM1320-ND | .77   | 7.32           | 44.94      | 03-09-1125 |
| Plug Receptacle                                                             |                                                                                       |                 | 7.5 250         | 31.50           | 16.64 | 25.78 | 16.05 | 27.08             | WM1322-ND | 1.15      | 10.92 | 67.08          | 03-09-1154 |            |
| 2(b)                                                                        |                                                                                       | Plug Receptacle | 12 250          | 20.32           | 9.53  | 24.59 | 8.94  | 16.23             | WM1305-ND | .40       | 3.75  | 23.03          | 03-09-2021 |            |
|                                                                             |                                                                                       | Plug Receptacle | 12 250          | 18.42           | 7.92  | 25.40 | 6.35  | 13.61             | WM1304-ND | .38       | 3.61  | 22.15          | 03-09-1027 |            |
| 3                                                                           |                                                                                       | Plug Receptacle | 11 600          | 25.96           | 9.27  | 27.94 | 8.89  | 21.89             | WM1501-ND | .71       | 6.27  | 44.41          | 19-09-2031 |            |
|                                                                             |                                                                                       | Plug Receptacle | 11 600          | 23.37           | 7.87  | 28.96 | 6.35  | 19.30             | WM1776-ND | .75       | 7.00  | 44.94          | 19-09-1030 |            |
| 4                                                                           |                                                                                       | Plug Receptacle | 9 600           | 32.26           | 9.27  | 8.89  | 8.89  | 28.19             | WM1503-ND | .97       | 8.55  | 60.56          | 19-09-2041 |            |
|                                                                             |                                                                                       | Plug Receptacle | 9 600           | 29.67           | 7.90  | 28.96 | 6.35  | 19.30             | WM1502-ND | 1.00      | 8.85  | 62.69          | 19-09-1041 |            |
| 6                                                                           |                                                                                       | Plug Receptacle | 9 600           | 26.62           | 16.71 | 27.94 | 16.26 | 22.50             | WM1505-ND | 1.02      | 9.03  | 63.96          | 19-09-2061 |            |
|                                                                             |                                                                                       | Plug Receptacle | 9 600           | 24.03           | 15.44 | 28.96 | 13.72 | 20.07             | WM1504-ND | 1.02      | 9.03  | 63.96          | 19-09-1061 |            |
| 9                                                                           |                                                                                       | Plug Receptacle | 8 600           | 26.62           | 23.11 | 27.94 | 22.61 | 22.61             | WM1507-ND | 1.14      | 10.02 | 70.98          | 19-09-2091 |            |
|                                                                             |                                                                                       | Plug Receptacle | 8 600           | 24.08           | 21.59 | 28.96 | 20.07 | 20.07             | WM1506-ND | 1.14      | 10.02 | 70.98          | 19-09-1091 |            |
| 6.71                                                                        | 12                                                                                    | Plug Receptacle | 6 600           | 33.02           | 23.11 | 27.94 | 22.61 | 28.96             | WM1509-ND | 1.77      | 15.63 | 110.71         | 19-09-2122 |            |
|                                                                             |                                                                                       | Plug Receptacle | 6 600           | 27.79           | 21.59 | 28.96 | 20.07 | 26.26             | WM1508-ND | 1.77      | 15.63 | 110.71         | 19-09-1121 |            |
|                                                                             | 15                                                                                    | Plug Receptacle | 6 600           | 39.42           | 23.11 | 27.94 | 22.61 | 35.26             | WM1511-ND | 2.27      | 20.04 | 141.95         | 19-09-2153 |            |
|                                                                             |                                                                                       | Plug Receptacle | 6 600           | 36.12           | 21.59 | 28.96 | 20.07 | 32.56             | WM1510-ND | 2.27      | 20.04 | 141.95         | 19-09-1151 |            |
|                                                                             | 1                                                                                     | Plug Receptacle | 12 600          | 12.32           | 8.71  | 8.13  | 8.13  | 13.13             | WM1601-ND | .33       | 3.15  | 19.35          | 19-09-2018 |            |
|                                                                             |                                                                                       | Plug Receptacle | 12 600          | —               | —     | 7.62  | 10.16 | —                 | WM1600-ND | .33       | 3.15  | 19.35          | 19-09-1019 |            |
|                                                                             | 2                                                                                     | Plug Receptacle | 12 600          | 20.32           | 9.27  | 16.13 | 8.13  | 14.73             | WM1603-ND | .54       | 5.11  | 31.39          | 19-09-2028 |            |
|                                                                             |                                                                                       | Plug Receptacle | 12 600          | —               | —     | 7.62  | 14.22 | —                 | WM1602-ND | .54       | 5.11  | 31.39          | 19-09-1029 |            |
|                                                                             | 3                                                                                     | Plug Receptacle | 11 600          | 25.96           | 9.27  | 21.89 | 8.13  | 21.54             | WM1605-ND | .60       | 5.67  | 34.83          | 19-09-2038 |            |
|                                                                             |                                                                                       | Plug Receptacle | 11 600          | —               | —     | 7.62  | 21.08 | —                 | WM1604-ND | .60       | 5.67  | 34.83          | 19-09-1039 |            |
|                                                                             | 4                                                                                     | Plug Receptacle | 9 600           | 32.26           | 9.27  | 28.17 | 8.15  | 28.19             | WM1607-ND | .62       | 5.88  | 36.12          | 19-09-2048 |            |
|                                                                             |                                                                                       | Plug Receptacle | 9 600           | —               | —     | 7.62  | 27.69 | —                 | WM1606-ND | .62       | 5.88  | 36.12          | 19-09-1049 |            |
| 5.03                                                                        | 6                                                                                     | Plug Receptacle | 9 600           | 26.62           | 16.71 | 22.56 | 15.34 | 21.59             | WM1609-ND | .70       | 6.82  | 40.64          | 19-09-2068 |            |
|                                                                             |                                                                                       | Plug Receptacle | 9 600           | —               | —     | 14.22 | 21.08 | —                 | WM1608-ND | .73       | 6.90  | 42.36          | 19-09-1069 |            |
|                                                                             | 9                                                                                     | Plug Receptacle | 8 600           | 26.62           | 23.09 | 22.43 | 22.05 | 21.59             | WM1611-ND | .80       | 7.53  | 46.23          | 19-09-2098 |            |
|                                                                             |                                                                                       | Plug Receptacle | 8 600           | —               | —     | 14.22 | 21.08 | —                 | WM1610-ND | .81       | 7.67  | 47.09          | 19-09-1099 |            |
|                                                                             | 12                                                                                    | Plug Receptacle | 7 600           | 27.94           | 23.11 | 28.96 | 16.97 | 28.24             | WM1613-ND | .91       | 8.61  | 52.89          | 19-09-2128 |            |
|                                                                             |                                                                                       | Plug Receptacle | 7 600           | —               | —     | 21.08 | 22.86 | —                 | WM1612-ND | .95       | 8.96  | 55.04          | 19-09-1129 |            |
|                                                                             | 15                                                                                    | Plug Receptacle | 6 600           | 39.42           | 23.11 | 35.36 | 22.05 | 35.05             | WM1615-ND | 1.32      | 12.50 | 76.76          | 19-09-2158 |            |
|                                                                             |                                                                                       | Plug Receptacle | 6 600           | —               | —     | 22.05 | 35.05 | —                 | WM1614-ND | 1.40      | 13.27 | 81.49          | 19-09-1159 |            |
|                                                                             | .093" (2.36mm) Diameter Shrouded Mole Pin Header                                      |                 |                 |                 |       |       |       |                   |           |           |       |                |            |            |
|                                                                             | 5.03                                                                                  | 3               | Header          | 5 250           | 19.56 | 8.38  | —     | —                 | —         | WM1625-ND | 2.40  | 19.92          | 127.10     | 10-18-1032 |
|                                                                             |                                                                                       | 4               | Header          | 5 250           | 24.84 | 8.38  | —     | —                 | —         | WM1626-ND | 2.40  | 19.92          | 127.10     | 10-18-1041 |
|                                                                             |                                                                                       | 6               | Header          | 5 250           | 18.80 | 13.72 | —     | —                 | —         | WM1627-ND | 2.71  | 22.48          | 143.38     | 10-18-1061 |
| 9                                                                           |                                                                                       | Header          | 5 250           | 19.56           | 18.54 | —     | —     | —                 | WM1628-ND | 3.87      | 32.10 | 204.80         | 10-18-1090 |            |
| 12                                                                          |                                                                                       | Header          | 5 250           | 24.99           | 18.80 | —     | —     | —                 | WM1629-ND | 5.17      | 42.80 | 273.06         | 10-18-1120 |            |



Fig. 1 - Receptacle Housing

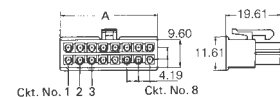
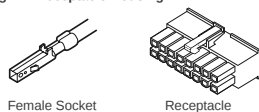


Fig. 3 - Vertical Header Assembly

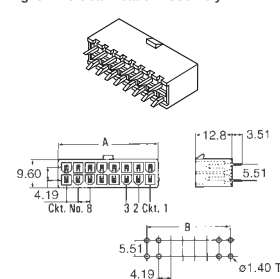


Fig. 2 - Plug Housing

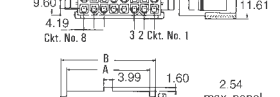
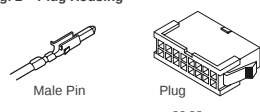
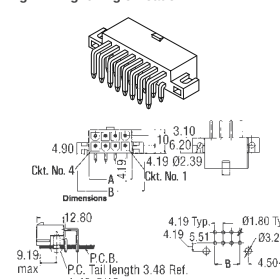


Fig. 4 - Right Angle Header



**Current Carrying Capabilities:** The Mini-Fit, Jr. can handle standard equipment I/O currents despite its small size. For example, the 2 circuit PCB connector can handle up to 9 amps at 250 volts.

**Features:** • UL recognized, CSA certified, and TUV licensed • Up to 9 amperes/circuit • 250 volt rating.

**Specifications:** • **Material:** Terminal-Brass; Plating-Tin; Housing-UL 94V-2 nylon 6/6. **Electrical:** Voltage Current-250V; Current Rating-9 amps for 2 circuits, 8 amps for 4 & 6 circuits, 7 amps for 8 & 10 circuits, 6 amps for 12,14,16 circuits. **Contact Resistance**-10mΩ max. **Insulation Resistance**-1,000MΩ min. **Dielectric Strength**-1,500V AC.

| Fig. | Cir-<br>cuits | Dim. (mm.)<br>A B | Digi-Key<br>Part No. | 1    | 10    | 100    | 500    | Molex<br>Part No. |
|------|---------------|-------------------|----------------------|------|-------|--------|--------|-------------------|
| 1    | 2             | 5.79 —            | WM3700-ND            | .44  | 4.12  | 26.45  | 102.09 | 39-01-2020        |
|      | 4             | 10.01 —           | WM3701-ND            | .52  | 4.82  | 30.96  | 119.52 | 39-01-2040        |
|      | 6             | 14.20 —           | WM3702-ND            | .62  | 5.76  | 36.98  | 142.76 | 39-01-2060        |
|      | 8             | 18.39 —           | WM3703-ND            | .71  | 6.60  | 42.36  | 163.51 | 39-01-2080        |
|      | 10            | 22.61 —           | WM3704-ND            | .79  | 7.34  | 47.09  | 181.77 | 39-01-2100        |
|      | 12            | 26.80 —           | WM3705-ND            | .84  | 7.84  | 50.31  | 194.22 | 39-01-2120        |
| 2    | 4             | 31.09 —           | WM3706-ND            | 1.08 | 10.08 | 64.72  | 249.83 | 39-01-2140        |
|      | 6             | 35.31 —           | WM3707-ND            | 1.32 | 12.29 | 78.91  | 304.61 | 39-01-2160        |
|      | 2             | 5.79 10.80        | WM3600-ND            | .46  | 4.25  | 27.31  | 105.41 | 39-01-2021        |
|      | 4             | 10.01 15.01       | WM3601-ND            | .51  | 4.72  | 30.32  | 117.03 | 39-01-2041        |
|      | 6             | 14.20 19.20       | WM3602-ND            | .59  | 5.49  | 35.26  | 136.12 | 39-01-2061        |
|      | 8             | 18.39 23.39       | WM3603-ND            | .64  | 5.96  | 38.27  | 147.74 | 39-01-2081        |
| 3    | 10            | 22.61 27.61       | WM3604-ND            | .71  | 6.60  | 42.36  | 163.51 | 39-01-2101        |
|      | 12            | 26.80 31.80       | WM3605-ND            | .75  | 6.93  | 44.51  | 171.81 | 39-01-2121        |
|      | 14            | 31.09 35.99       | WM3606-ND            | 1.01 | 9.41  | 60.42  | 233.23 | 39-01-2141        |
|      | 16            | 35.31 40.21       | WM3607-ND            | 1.31 | 12.23 | 78.48  | 302.95 | 39-01-2161        |
|      | 2             | 5.79 —            | WM3800-ND            | .89  | 8.24  | 52.89  | 204.18 | 39-28-1023        |
|      | 4             | 10.01 4.19        | WM3801-ND            | 1.22 | 11.39 | 73.10  | 282.20 | 39-28-1043        |
| 4    | 6             | 14.20 8.38        | WM3802-ND            | 1.56 | 14.51 | 93.10  | 359.39 | 39-28-1063        |
|      | 8             | 18.39 12.57       | WM3803-ND            | 1.89 | 17.59 | 112.88 | 435.75 | 39-28-1083        |
|      | 10            | 22.61 16.76       | WM3804-ND            | 2.21 | 20.60 | 132.23 | 510.45 | 39-28-1103        |
|      | 12            | 26.80 20.96       | WM3805-ND            | 2.54 | 23.62 | 151.58 | 585.15 | 39-28-1123        |
|      | 14            | 31.09 25.15       | WM3806-ND            | 2.88 | 26.80 | 172.00 | 664.00 | 39-28-1143        |
|      | 16            | 35.31 29.34       | WM3807-ND            | 3.20 | 29.82 | 191.35 | 738.70 | 39-28-1163        |
| 5    | 2             | 5.41 15.39        | WM3900-ND            | 1.08 | 10.02 | 64.29  | 248.17 | 39-29-1028        |
|      | 4             | 9.60 19.61        | WM3901-ND            | 1.48 | 13.80 | 88.58  | 341.96 | 39-29-1048        |
|      | 6             | 13.79 23.80       | WM3902-ND            | 1.88 | 17.45 | 112.02 | 432.43 | 39-29-1068        |
|      | 8             | 18.01 27.99       | WM3903-ND            | 2.29 | 21.31 | 136.74 | 527.88 | 39-29-1088        |
|      | 10            | 22.53 32.21       | WM3904-ND            | 2.68 | 24.92 | 159.96 | 617.52 | 39-29-1108        |
|      | 12            | 26.39 36.40       | WM3905-ND            | 3.08 | 28.64 | 183.83 | 709.65 | 39-29-1128        |
| 6    | 14            | 30.61 40.59       | WM3906-ND            | 3.48 | 32.36 | 207.69 | 801.78 | 39-29-1148        |
|      | 16            | 34.80 44.81       | WM3907-ND            | 3.87 | 36.05 | 231.34 | 893.08 | 39-29-1168        |

## Mini-Fit Jr. Terminals

Plating: Tin Plated Brass



| Description                        | Wire<br>Size | Insulation<br>Dia (mm) | Digi-Key<br>Part No. | 10   | Pricing<br>100 500 | Molex<br>Part No. |
|------------------------------------|--------------|------------------------|----------------------|------|--------------------|-------------------|
| Male                               | AWG # 18-24  | 1.30 - 3.00            | WM2500-ND            | 2.08 | 12.40 51.15        | 39-00-0041        |
| Female                             | AWG # 18-24  | 1.30 - 3.00            | WM2501-ND            | 2.08 | 12.40 51.15        | 39-00-0039        |
| Male                               | AWG # 22-28  | .89 - 1.80             | WM2502-ND            | 2.08 | 12.40 51.15        | 39-00-0049        |
| Female                             | AWG # 22-28  | .89 - 1.80             | WM2503-ND            | 2.08 | 12.40 51.15        | 39-00-0047        |
| Universal Crimp Tool (Molex)       |              |                        | WM9999-ND            |      | 32.59 each         | 63811-1000        |
| Mini-Fit Jr. Crimp Tool, 18-24 AWG |              |                        | WM9912-ND            |      | 234.93 each        | 11-01-0197        |
| Mini-Fit Jr. Crimp Tool, 22-28 AWG |              |                        | WM9913-ND            |      | 234.93 each        | 11-01-0198        |
| Extraction Tool                    |              |                        | WM9918-ND            |      | 30.40 each         | 11-03-0044        |

Fig. 1 - Receptacle w/Panel Mount Ears

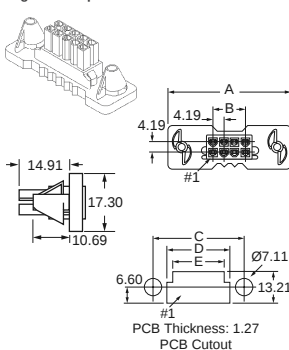


Fig. 2 - Plug w/Panel Mount Ears

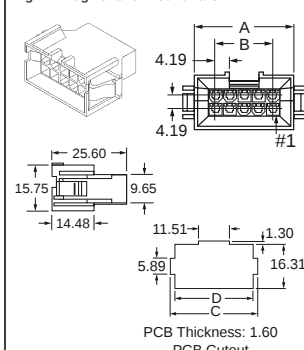


Fig. 3 - Vertical Receptacle Header

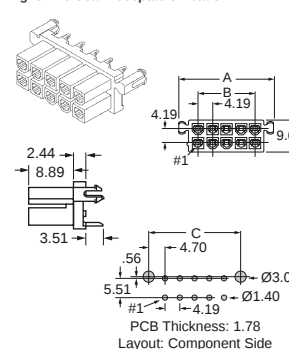


Fig. 4 - Vertical Header

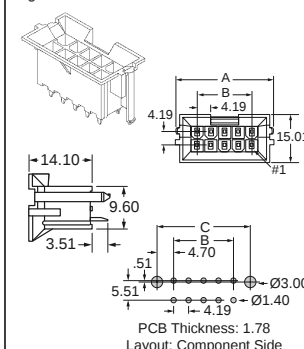
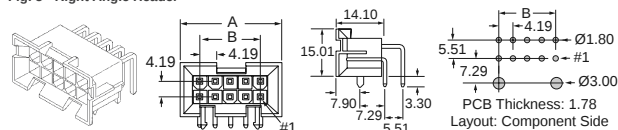


Fig. 5 - Right Angle Header



**Features and Benefits:** • Blind mating. • Will mate with Mini-Fit, Jr. • Fully isolated terminals to protect contacts from damage. • Uses standard Mini-Fit series terminals. • UL File No.: E29179. • CSA File No.: LR19980. • TUV License No.: R75142.

**Specifications:** • **Voltage:** 600V. • **Current:** 9.0A. • **Contact Resistance:** 10mΩ min. **Dielectric Withstanding Voltage:** 1500V. **Insulation Resistance:** 1000 mΩ min.

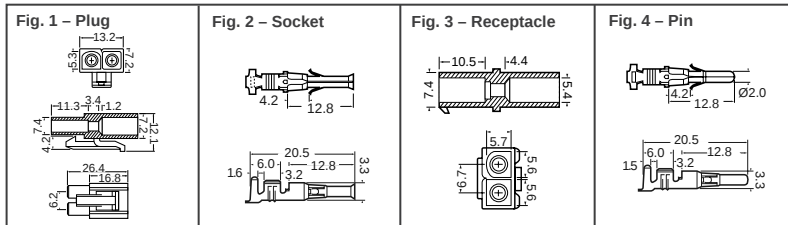
**Physical:** • **Housing:** 6/6 nylon, UL 94V-2. • **Temperature:** -40°C to +105°C.

| Fig.                          | Cir-<br>cuits | Dimensions (mm)<br>A B C D E  | Digi-Key<br>Part No. | 1    | Pricing<br>10 100 | Molex<br>Part No. |
|-------------------------------|---------------|-------------------------------|----------------------|------|-------------------|-------------------|
| Receptacle w/Panel Mount Ears |               |                               |                      |      |                   |                   |
| 1                             | 4             | 40.21 4.19 29.21 17.60 12.90  | WM17500-ND           | .95  | 8.84 56.76        | 15-06-0040        |
|                               | 6             | 44.40 8.41 33.40 21.79 17.09  | WM17501-ND           | 1.15 | 10.72 68.80       | 15-06-0060        |
|                               | 10            | 52.78 16.79 41.78 30.20 25.50 | WM17502-ND           | 1.46 | 13.60 87.29       | 15-06-0100        |
|                               | 14            | 61.19 25.20 50.19 38.61 33.91 | WM17503-ND           | 2.00 | 18.63 119.54      | 15-06-0140        |
| Plug w/Panel Mount Ears       |               |                               |                      |      |                   |                   |
| 2                             | 4             | 15.80 4.19 19.79 16.31 —      | WM17700-ND           | .72  | 6.67 42.79        | 15-06-0045        |
|                               | 6             | 19.99 8.41 24.00 20.50 —      | WM17701-ND           | .84  | 7.77 49.88        | 15-06-0065        |
|                               | 10            | 28.40 16.79 32.41 28.91 —     | WM17702-ND           | 1.00 | 9.28 59.56        | 15-06-0105        |
|                               | 14            | 36.80 25.20 40.79 37.31 —     | WM17703-ND           | 1.41 | 13.13 84.28       | 15-06-0145        |
| Vertical Receptacle Header    |               |                               |                      |      |                   |                   |
| 3                             | 4             | 15.62 4.19 13.59 — —          | WM17600-ND           | 2.21 | 20.54 131.80      | 15-24-7040        |
|                               | 6             | 19.81 8.41 17.81 — —          | WM17601-ND           | 2.51 | 23.35 149.86      | 15-24-7060        |
|                               | 10            | 28.22 16.79 26.19 — —         | WM17602-ND           | 3.56 | 33.17 212.85      | 15-24-7100        |
|                               | 14            | 36.63 25.20 34.59 — —         | WM17603-ND           | 4.63 | 43.05 276.28      | 15-24-7140        |
| Vertical Header               |               |                               |                      |      |                   |                   |
| 4                             | 4             | 17.40 4.32 13.59 — —          | WM17900-ND           | 5.52 | 51.36 329.60      | 15-24-6046        |
|                               | 10            | 30.00 16.76 26.19 — —         | WM17901-ND           | 3.10 | 28.84 185.12      | 15-24-6106        |
|                               | 14            | 38.40 25.15 34.59 — —         | WM17902-ND           | 4.02 | 37.42 240.16      | 15-24-6146        |
| Right Angle Header            |               |                               |                      |      |                   |                   |
| 5                             | 4             | 4.19 14.99 — — —              | WM17800-ND           | 2.07 | 19.30 123.84      | 15-24-6040        |
|                               | 6             | 19.30 8.41 — — —              | WM17801-ND           | 2.63 | 24.46 156.95      | 15-24-6060        |
|                               | 10            | 27.69 16.79 — — —             | WM17802-ND           | 3.75 | 34.87 223.82      | 15-24-6100        |
|                               | 14            | 36.07 25.20 — — —             | WM17803-ND           | 4.86 | 45.26 290.47      | 15-24-6140        |





## "Toy Car" Battery Connector



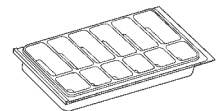
- 15 Amp current rating per circuit
- 300V voltage rating
- 14-20 AWG wire range
- Nylon 6/6 housing 94V-2
- Industry standard product for radio controlled toy cars

| Fig. | Digi-Key Part No. | 1   | 10   | 50    | 100   | Molex Part No. |
|------|-------------------|-----|------|-------|-------|----------------|
| 1    | WM2308-ND         | .34 | 3.17 | 13.68 | 19.20 | 351-43-0201    |
| 2    | WM2311-ND         | .22 | 2.05 | 8.84  | 12.40 | 357-28-0201    |
| 3    | WM2309-ND         | .32 | 3.04 | 13.11 | 18.40 | 351-41-0201    |
| 4    | WM2310-ND         | .22 | 2.05 | 8.84  | 12.40 | 357-27-0201    |

WM9999-ND Universal Crimp Tool (Waldom) .....\$32.59 each



## Crimp Terminal Connector Kits



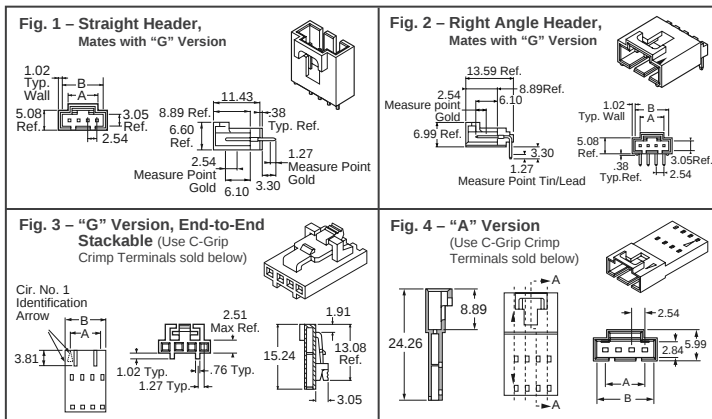
| WM9803 Kit Qty. | Item                    | WM9804 Kit Qty. |
|-----------------|-------------------------|-----------------|
| 36              | Crimp Terminal Housings | 48              |
| 18              | Straight Headers        | 24              |
| 18              | Right Angle Headers     | 24              |
| 10              | Shunts                  | —               |
| 100             | Crimp Term (22-30 AWG)  | —               |
| —               | Crimp Term (18-24 AWG)  | 100             |
| 1               | Crimping Tool HT-1919   | 1               |
| 1               | Crimping Tool HT-1921   | —               |
| 1               | Extractor Tool HT-1884  | 1               |

| Description          | Digi-Key Part No. | Price | Molex Part No. |
|----------------------|-------------------|-------|----------------|
| 2.54mm Connector Kit | WM9803-ND         | 52.14 | KK-100         |
| 3.96mm Connector Kit | WM9804-ND         | 52.58 | KK-156         |



## Single Row 3.05mm Pocket Headers

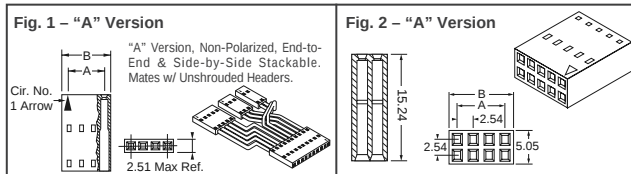
- **Plating:** 15 microinches min. gold. **MATERIAL:** • Pins: .64mm square, phosphor bronze. • **Insulator:** UL 94V-0 glass filled PCT, black; Vapor phase and infrared process compatible. **ELECTRICAL:** • **Current Rating:** 3 amps. • **Insulation Resistance:** 1,000 megaohms. • **Dielectric Strength:** 600 VAC r.m.s for 1 minute. **ENVIRONMENTAL:** • **Operating Temperature:** -40°C to +125°C. • UL Listed & CSA Certified.



| Fig. | Cir-<br>cuits | Dim. (mm) | Digi-Key<br>Part No. | Pricing   |      |       | Molex<br>Part No. |        |             |
|------|---------------|-----------|----------------------|-----------|------|-------|-------------------|--------|-------------|
|      |               | A         | B                    | 1         | 100  | 500   |                   |        |             |
| 1    | 2             | 2.54      | 5.33                 | WM4800-ND | 1.02 | 8.50  | 61.20             | 246.50 | 705-43-0001 |
|      | 3             | 5.08      | 8.13                 | WM4801-ND | 1.13 | 9.38  | 67.50             | 271.88 | 705-43-0002 |
|      | 4             | 7.62      | 10.67                | WM4802-ND | 1.25 | 10.45 | 75.24             | 303.05 | 705-43-0003 |
|      | 5             | 10.16     | 13.21                | WM4803-ND | 1.35 | 11.28 | 81.18             | 326.98 | 705-43-0004 |
|      | 6             | 12.70     | 15.75                | WM4804-ND | 1.46 | 12.20 | 87.84             | 353.80 | 705-43-0005 |
|      | 7             | 15.24     | 18.29                | WM4805-ND | 1.57 | 13.08 | 94.14             | 379.18 | 705-43-0006 |
|      | 8             | 17.78     | 20.83                | WM4806-ND | 1.68 | 14.00 | 100.80            | 406.00 | 705-43-0007 |
|      | 9             | 20.32     | 23.37                | WM4807-ND | 1.79 | 14.93 | 107.46            | 432.83 | 705-43-0008 |
|      | 10            | 22.86     | 25.91                | WM4808-ND | 1.90 | 15.83 | 113.94            | 458.93 | 705-43-0009 |
|      |               |           |                      |           |      |       |                   |        |             |
| 2    | 2             | 2.54      | 5.33                 | WM4900-ND | 1.02 | 8.50  | 61.20             | 246.50 | 705-53-0001 |
|      | 3             | 5.08      | 8.13                 | WM4901-ND | 1.13 | 9.38  | 67.50             | 271.88 | 705-53-0002 |
|      | 4             | 7.62      | 10.67                | WM4902-ND | 1.25 | 10.45 | 75.24             | 303.05 | 705-53-0003 |
|      | 5             | 10.16     | 13.21                | WM4903-ND | 1.35 | 11.28 | 81.18             | 326.98 | 705-53-0004 |
|      | 6             | 12.70     | 15.75                | WM4904-ND | 1.46 | 12.20 | 87.84             | 353.80 | 705-53-0005 |
|      | 7             | 15.24     | 18.29                | WM4905-ND | 1.57 | 13.08 | 94.14             | 379.18 | 705-53-0006 |
|      | 8             | 17.78     | 20.83                | WM4906-ND | 1.74 | 14.50 | 104.40            | 420.50 | 705-53-0007 |
|      | 9             | 20.32     | 23.37                | WM4907-ND | 1.76 | 14.68 | 105.66            | 425.58 | 705-53-0008 |
|      | 10            | 22.86     | 25.91                | WM4908-ND | 1.90 | 15.83 | 113.94            | 458.93 | 705-53-0009 |
|      |               |           |                      |           |      |       |                   |        |             |
| 3    | 2             | 2.54      | 5.05                 | WM2900-ND | .50  | 4.41  | 28.12             | 108.68 | 50-57-9402  |
|      | 3             | 5.08      | 7.59                 | WM2901-ND | .76  | 6.64  | 42.37             | 163.74 | 50-57-9403  |
|      | 4             | 7.62      | 10.13                | WM2902-ND | .79  | 6.93  | 44.22             | 170.89 | 50-57-9404  |
|      | 5             | 10.16     | 12.67                | WM2903-ND | .82  | 7.22  | 46.07             | 178.04 | 50-57-9405  |
|      | 6             | 12.70     | 15.21                | WM2904-ND | .87  | 7.69  | 49.03             | 189.48 | 50-57-9406  |
|      | 7             | 15.24     | 17.75                | WM2905-ND | .93  | 8.18  | 52.17             | 201.63 | 50-57-9407  |
|      | 8             | 17.78     | 20.29                | WM2906-ND | .99  | 8.67  | 55.32             | 213.79 | 50-57-9408  |
|      | 9             | 20.32     | 22.83                | WM2907-ND | 1.06 | 9.28  | 59.20             | 228.80 | 50-57-9409  |
|      | 10            | 22.86     | 25.37                | WM2908-ND | 1.11 | 9.77  | 62.35             | 240.96 | 50-57-9410  |
|      |               |           |                      |           |      |       |                   |        |             |
| 4    | 2             | 2.54      | 5.59                 | WM2533-ND | .95  | 8.38  | 53.47             | 206.64 | 70107-0001  |
|      | 3             | 5.08      | 8.13                 | WM2534-ND | .97  | 8.50  | 54.21             | 209.50 | 70107-0002  |
|      | 4             | 7.62      | 10.67                | WM2535-ND | .99  | 8.73  | 55.69             | 215.22 | 70107-0003  |
|      | 5             | 10.16     | 13.21                | WM2536-ND | 1.24 | 10.91 | 69.62             | 269.07 | 70107-0004  |
|      | 6             | 12.70     | 15.75                | WM2537-ND | 1.28 | 11.24 | 71.69             | 277.08 | 70107-0005  |
|      | 7             | 15.24     | 18.29                | WM2538-ND | 1.30 | 11.40 | 72.73             | 281.08 | 70107-0006  |
|      | 8             | 17.78     | 20.83                | WM2539-ND | 1.33 | 11.69 | 74.59             | 288.29 | 70107-0007  |
|      | 9             | 20.32     | 23.37                | WM2540-ND | 1.36 | 11.95 | 76.25             | 294.69 | 70107-0008  |
|      | 10            | 22.86     | 25.91                | WM2541-ND | 1.42 | 12.44 | 79.36             | 306.71 | 70107-0009  |
|      |               |           |                      |           |      |       |                   |        |             |



## C-Grid™ Crimp Connector Housings

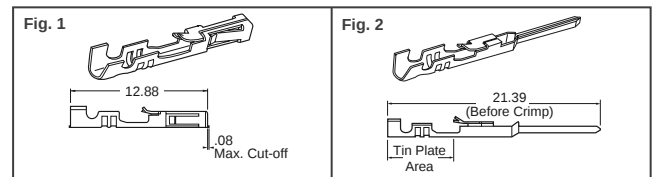


| Fig. | Cir-<br>cuits | Dim. (mm)<br>A | B     | Digi-Key<br>Part No. | 1    | 10    | Pricing<br>100 | 500     | Molex<br>Part No. |
|------|---------------|----------------|-------|----------------------|------|-------|----------------|---------|-------------------|
| 1    | 2             | 2.54           | 5.05  | WM2800-ND            | .58  | 5.13  | 32.75          | 126.56  | 50-57-9002        |
|      | 3             | 5.08           | 7.59  | WM2801-ND            | .76  | 6.64  | 42.37          | 163.74  | 50-57-9003        |
|      | 4             | 7.62           | 10.13 | WM2802-ND            | .79  | 6.93  | 44.22          | 170.89  | 50-57-9004        |
|      | 5             | 10.16          | 12.67 | WM2803-ND            | .82  | 7.22  | 46.07          | 178.04  | 50-57-9005        |
|      | 6             | 12.70          | 15.21 | WM2804-ND            | .87  | 7.69  | 49.03          | 189.48  | 50-57-9006        |
|      | 7             | 15.24          | 17.75 | WM2805-ND            | .91  | 7.08  | 45.14          | 174.46  | 50-57-9007        |
|      | 8             | 17.78          | 20.29 | WM2806-ND            | .94  | 7.42  | 47.36          | 183.04  | 50-57-9008        |
|      | 9             | 20.32          | 22.83 | WM2807-ND            | 1.06 | 9.28  | 59.20          | 228.80  | 50-57-9009        |
|      | 10            | 22.86          | 25.37 | WM2808-ND            | .95  | 8.38  | 53.47          | 206.64  | 50-57-9010        |
|      | 11            | 25.40          | 27.91 | WM2809-ND            | .97  | 8.50  | 54.21          | 209.50  | 50-57-9011        |
| 2    | 2             | 2.54           | 5.05  | WM2519-ND            | 2.75 | 24.13 | 153.92         | 594.88  | 22-55-2041        |
|      | 3             | 5.08           | 7.59  | WM2520-ND            | 2.89 | 25.38 | 161.88         | 625.63  | 22-55-2061        |
|      | 4             | 7.62           | 10.13 | WM2521-ND            | 3.02 | 26.54 | 169.28         | 654.23  | 22-55-2081        |
|      | 5             | 10.16          | 12.67 | WM2522-ND            | 3.16 | 27.78 | 177.23         | 684.97  | 22-55-2101        |
|      | 6             | 12.70          | 15.21 | WM2523-ND            | 3.29 | 28.94 | 184.63         | 713.57  | 22-55-2121        |
|      | 7             | 15.24          | 17.75 | WM2524-ND            | 3.44 | 30.19 | 192.59         | 744.32  | 22-55-2141        |
|      | 8             | 17.78          | 20.29 | WM2525-ND            | 3.56 | 31.26 | 199.43         | 770.77  | 22-55-2161        |
|      | 9             | 20.32          | 22.83 | WM2526-ND            | 2.65 | 23.26 | 148.37         | 573.43  | 22-55-2181        |
|      | 10            | 22.86          | 25.37 | WM2527-ND            | 3.83 | 33.67 | 214.79         | 830.12  | 22-55-2201        |
|      | 11            | 25.40          | 27.91 | WM2528-ND            | 3.96 | 34.83 | 222.19         | 858.72  | 22-55-2221        |
| 3    | 2             | 2.54           | 5.05  | WM2529-ND            | 2.94 | 25.87 | 165.02         | 637.78  | 22-55-2241        |
|      | 3             | 5.08           | 7.59  | WM2530-ND            | 3.23 | 28.42 | 181.30         | 700.70  | 22-55-2301        |
|      | 4             | 7.62           | 10.13 | WM2531-ND            | 3.44 | 30.19 | 192.59         | 744.32  | 22-55-2361        |
|      | 5             | 10.16          | 12.67 | WM2532-ND            | 3.65 | 31.26 | 199.43         | 770.77  | 22-55-2421        |
|      | 6             | 12.70          | 15.21 | WM2533-ND            | 3.83 | 33.67 | 214.79         | 830.12  | 22-55-2481        |
|      | 7             | 15.24          | 17.75 | WM2534-ND            | 4.01 | 35.18 | 222.19         | 858.72  | 22-55-2541        |
|      | 8             | 17.78          | 20.29 | WM2535-ND            | 4.19 | 36.86 | 235.14         | 902.57  | 22-55-2601        |
|      | 9             | 20.32          | 22.83 | WM2536-ND            | 4.37 | 38.37 | 247.65         | 951.55  | 22-55-2661        |
|      | 10            | 22.86          | 25.37 | WM2537-ND            | 4.55 | 40.13 | 260.45         | 1000.55 | 22-55-2721        |
|      | 11            | 25.40          | 27.91 | WM2538-ND            | 4.73 | 41.91 | 273.35         | 1049.55 | 22-55-2781        |



## C-Grid™ Box Crimp Terminals

- **Terminal Material:** Phosphor Bronze. • **Current Rating:** 3.0 Amps (24AWG) 30°C Rise Over Ambient, UL Listed & CSA Certified.



| Fig.                                  | Wire Range                   | Insul. Dia. (mm) | Plating | Digi-Key Part No. | 10   | 100         | 500   | 1,000  | Molex Part No. |
|---------------------------------------|------------------------------|------------------|---------|-------------------|------|-------------|-------|--------|----------------|
| 1                                     | 22-24                        | 1.63             | Tin†    | WM2510-ND         | .98  | 7.80        | 32.18 | 51.99  | 16-02-0102     |
|                                       | 24-30                        | 1.52             | Tin†    | WM2511-ND         | .98  | 7.80        | 32.18 | 51.99  | 16-02-0096     |
|                                       | 22-24                        | 1.63             | Gold†   | WM2512-ND         | 1.53 | 12.20       | 50.33 | 81.31  | 16-02-0103     |
|                                       | 24-30                        | 1.52             | Gold†   | WM2513-ND         | 1.53 | 12.20       | 50.33 | 81.31  | 16-02-0097     |
|                                       | 22-24                        | 1.63             | Tin†    | WM2556-ND*        | 1.35 | 10.80       | 44.55 | 71.98  | 16-02-1114     |
|                                       | 24-30                        | 1.52             | Tin†    | WM2557-ND*        | 1.35 | 10.80       | 44.55 | 71.98  | 16-02-1116     |
|                                       | 22-24                        | 1.63             | Gold†   | WM2554-ND*        | 2.20 | 17.60       | 72.60 | 117.30 | 16-02-1125     |
|                                       | 24-30                        | 1.52             | Gold†   | WM2555-ND*        | 2.20 | 17.60       | 72.60 | 117.30 | 16-02-1109     |
|                                       | 22-24                        | 1.63             | Tin†    | WM2517-ND         | .98  | 7.80        | 32.18 | 51.99  | 16-02-0114     |
|                                       | 24-30                        | 1.52             | Tin†    | WM2518-ND         | .98  | 7.80        | 32.18 | 51.99  | 16-02-0108     |
| 2                                     | 22-24                        | 1.63             | Gold†   | WM2515-ND         | 1.65 | 13.20       | 54.45 | 87.98  | 16-02-0115     |
|                                       | 24-30                        | 1.52             | Gold†   | WM2516-ND         | 1.65 | 13.20       | 54.45 | 87.98  | 16-02-0109     |
|                                       | Universal Crimp Tool (Molex) |                  |         | WM9999-ND         |      | 32.59 each  |       |        | 63811-1000     |
| C-Grid Hand Crimper 22-24 & 32-36 AWG |                              |                  |         | WM9917-ND         |      | 218.15 each |       |        | 11-01-0208     |
| C-Grid Hand Crimper 24 - 30 AWG       |                              |                  |         | WM9919-ND         |      | 218.15 each |       |        | 11-01-0209     |
| Insertion Tool                        |                              |                  |         | WM9911-ND         |      | 15.26 each  |       |        | 11-02-0022     |

- † 150 µ in. tin/lead over 50 µ in. nickel overall.
- † 15 µ in. min. gold in select area over 50 µ in. min. nickel overall with 75 µ in. min. tin/lead in select area.
- \* High pressure type for low pin count.

1-800-344-4539

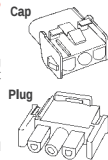
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# AMP Soft Shell Connectors

## Universal MATE-N-LOK® Connectors

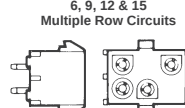
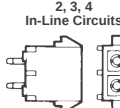
- Pins and sockets can be intermixed in the same housing.
- Positive polarization. • Pin or socket contact can be hot.
- Positive locking housings. • Removable, crimp snap-in contacts. • Low contact mating force. • Dual locking lances provide optimum contact stability. • Panel-mount or free-hanging. • Harness to PC board capability using pin or socket header assemblies.

**Features:** • Rated to 600 volts. • Insulation capacity to .200" (5.08 mm) diameter. • Contacts are on .250" (6.35 mm) centerline spacing. • Housing Material: UL rated 94V-2, natural nylon.

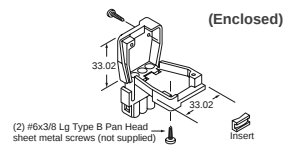


## Printed Circuit Board Pin Header Assemblies

**Housing Material:** 94V-2 rating, natural color. **Contact Material:** Phosphor bronze pre-tin plated or .000030 (0.0008 mm) min. gold over .000150 (0.0013 mm) min. nickel.



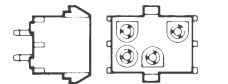
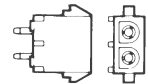
## Plug Housing Strain Relief



## Printed Circuit Board Socket Header Assemblies

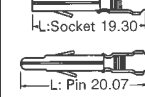
2, 3, 4 In-Line Circuits

6, 9, 12, & 15 Multiple Row Circuits



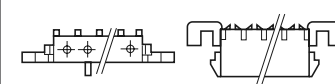
## Contacts

(Pins & Sockets)

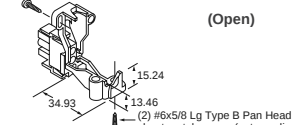


## Right-Angle Pin Header Assemblies

**Contact Material:** Phosphor bronze. **Housing Material:** 94V-2 rated, natural nylon.



## Plug Housing Strain Relief



| No. of Circuits                                                             | Description  | Mates With | Digi-Key Part No. | 1    | Pricing 100 1,000 | AMP Part No. |
|-----------------------------------------------------------------------------|--------------|------------|-------------------|------|-------------------|--------------|
| <b>Universal MATE-N-LOK® UL 94V-2 Connectors (Contacts Sold Separately)</b> |              |            |                   |      |                   |              |
| 1                                                                           | Plug In-Line | A14271-ND  | A14270-ND         | .13  | 10.68 91.12       | 1-350867-0   |
| 1                                                                           | Cap In-Line  | A14270-ND  | A14271-ND         | .10  | 7.83 66.79        | 770421-1     |
| 2                                                                           | Plug In-Line | A1449-ND   | A1448-ND          | .16  | 13.28 113.26      | 1-480698-0   |
| 2                                                                           | Cap In-Line  | A1448-ND   | A1449-ND          | .15  | 12.12 103.39      | 1-480699-0   |
| 3                                                                           | Plug In-Line | A1451-ND   | A1450-ND          | .16  | 12.68 108.14      | 1-480700-0   |
| 3                                                                           | Cap In-Line  | A1450-ND   | A1451-ND          | .16  | 13.29 113.36      | 1-480701-0   |
| 4                                                                           | Plug In-Line | A1453-ND   | A1452-ND          | .17  | 13.63 116.26      | 1-480702-0   |
| 4                                                                           | Cap In-Line  | A1452-ND   | A1453-ND          | .17  | 13.49 115.06      | 1-480703-0   |
| 5                                                                           | Plug In-Line | A1455-ND   | A1454-ND          | .21  | 16.93 144.42      | 1-480763-0   |
| 5                                                                           | Cap In-Line  | A1454-ND   | A1455-ND          | .24  | 19.11 162.98      | 1-480764-0   |
| 6                                                                           | Plug Matrix  | A1457-ND   | A1456-ND          | .20  | 16.51 140.78      | 1-480704-0   |
| 6                                                                           | Cap Matrix   | A1456-ND   | A1457-ND          | .19  | 15.74 134.24      | 1-480705-0   |
| 6                                                                           | Plug In-Line | A14273-ND  | A14272-ND         | .42  | 33.61 286.68      | 640586-1     |
| 6                                                                           | Cap In-Line  | A14272-ND  | A14273-ND         | 1.55 | 125.53 1070.69    | 926307-1     |
| 6                                                                           | Plug In-Line | A14275-ND  | A14274-ND         | .62  | 50.54 431.09      | 640586-1     |
| 6                                                                           | Cap In-Line  | A14274-ND  | A14275-ND         | 1.22 | 98.98 844.26      | 926308-1     |
| 9                                                                           | Plug Matrix  | A1458-ND   | A1458-ND          | .23  | 18.74 159.80      | 1-480706-0   |
| 9                                                                           | Cap Matrix   | A1458-ND   | A1459-ND          | .21  | 16.86 143.81      | 1-480707-0   |
| 12                                                                          | Plug Matrix  | A1461-ND   | A1460-ND          | .27  | 21.66 184.79      | 1-480708-0   |
| 12                                                                          | Cap Matrix   | A1460-ND   | A1461-ND          | .24  | 19.10 162.95      | 1-480709-0   |
| 15                                                                          | Plug Matrix  | A1463-ND   | A1462-ND          | .39  | 31.45 268.22      | 1-480710-0   |
| 15                                                                          | Cap Matrix   | A1462-ND   | A1463-ND          | .35  | 28.06 239.32      | 1-480711-0   |
| <b>Universal MATE-N-LOK® UL 94V-0 Connectors (Contacts Sold Separately)</b> |              |            |                   |      |                   |              |
| 1                                                                           | Plug In-Line | A14277-ND  | A14276-ND         | .23  | 18.84 160.73      | 350865-1     |
| 1                                                                           | Cap In-Line  | A14276-ND  | A14277-ND         | .23  | 18.84 160.73      | 350866-1     |
| 2                                                                           | Plug In-Line | A14279-ND  | A14278-ND         | .28  | 22.52 192.08      | 350777-1     |
| 2                                                                           | Cap In-Line  | A14278-ND  | A14279-ND         | .32  | 25.98 221.60      | 350778-1     |
| 3                                                                           | Plug In-Line | A14281-ND  | A14280-ND         | .27  | 21.99 187.60      | 350786-1     |
| 3                                                                           | Cap In-Line  | A14280-ND  | A14281-ND         | .33  | 26.51 226.10      | 350787-1     |
| 4                                                                           | Plug In-Line | A14283-ND  | A14282-ND         | .28  | 22.95 195.72      | 350779-1     |
| 4                                                                           | Cap In-Line  | A14282-ND  | A14283-ND         | .36  | 29.05 247.75      | 350780-1     |
| 5                                                                           | Plug In-Line | A14285-ND  | A14284-ND         | .30  | 24.51 209.06      | 350809-1     |
| 5                                                                           | Cap In-Line  | A14284-ND  | A14285-ND         | .37  | 29.62 252.62      | 350810-1     |
| 6                                                                           | Plug In-Line | A14287-ND  | A14286-ND         | .64  | 52.08 444.25      | 640581-1     |
| 6                                                                           | Cap In-Line  | A14286-ND  | A14287-ND         | 1.71 | 138.08 1177.76    | 926307-1     |
| 6                                                                           | Plug Matrix  | A14289-ND  | A14288-ND         | .41  | 32.91 280.73      | 350715-1     |
| 6                                                                           | Cap Matrix   | A14288-ND  | A14289-ND         | .36  | 29.00 247.38      | 350781-1     |
| 8                                                                           | Plug In-Line | A14291-ND  | A14290-ND         | .55  | 44.51 379.62      | 640582-1     |
| 8                                                                           | Cap In-Line  | A14290-ND  | A14291-ND         | 1.74 | 141.03 1202.93    | 926308-1     |
| 9                                                                           | Plug Matrix  | A14293-ND  | A14292-ND         | .35  | 28.55 243.48      | 350720-1     |
| 9                                                                           | Cap Matrix   | A14292-ND  | A14293-ND         | .44  | 35.23 300.45      | 350782-1     |
| 12                                                                          | Plug Matrix  | A14295-ND  | A14294-ND         | .45  | 36.45 310.88      | 350735-1     |
| 12                                                                          | Cap Matrix   | A14294-ND  | A14295-ND         | .53  | 43.15 368.05      | 350783-1     |
| 15                                                                          | Plug Matrix  | A14297-ND  | A14296-ND         | .58  | 46.83 399.43      | 350736-1     |
| 15                                                                          | Cap Matrix   | A14296-ND  | A14297-ND         | .89  | 71.72 611.71      | 350784-1     |
| Keying Plug 94V-2                                                           |              |            | A14304-ND         | .19  | 15.05 128.37      | 1-640415-1   |
| Keying Plug 94V-0                                                           |              |            | A14305-ND         | .19  | 15.67 133.69      | 1-640415-0   |

| No. of Circuits                                    | Description    | Insert Supplied | Digi-Key Part No. | 1     | Pricing 100 1,000 | AMP Part No. |
|----------------------------------------------------|----------------|-----------------|-------------------|-------|-------------------|--------------|
| <b>Enclosed Plug Housing Strain Relief UL94V-2</b> |                |                 |                   |       |                   |              |
| 2                                                  | Nylon, Natural | Yes             | A14348-ND         | .80   | 64.57 550.72      | 1-640719-0   |
| 3                                                  | Nylon, Natural | Yes             | A14349-ND         | .81   | 65.34 557.23      | 1-640720-0   |
| 3                                                  | Nylon, Natural | No              | A14350-ND         | .80   | 64.51 550.23      | 641763-1     |
| 4                                                  | Nylon, Natural | No              | A14351-ND         | .86   | 69.40 591.90      | 641775-2     |
| 5                                                  | Nylon, Natural | No              | A14352-ND         | 1.06  | 85.62 730.28      | 643030-2     |
| 6                                                  | Nylon, Natural | Yes             | A14353-ND         | .84   | 67.63 576.82      | 1-640721-0   |
| 9                                                  | Nylon, Natural | Yes             | A14354-ND         | .86   | 70.00 597.07      | 1-640722-0   |
| 12                                                 | Nylon, Natural | Yes             | A14355-ND         | .90   | 72.76 620.60      | 1-640723-0   |
| 15                                                 | Nylon, Natural | Yes             | A14356-ND         | .92   | 74.67 636.87      | 1-640724-0   |
| <b>Enclosed Plug Housing Strain Relief UL94V-0</b> |                |                 |                   |       |                   |              |
| 2                                                  | Nylon          | Yes             | A14338-ND         | .89   | 71.67 611.26      | 640713-1     |
| 3                                                  | Nylon          | Yes             | A14339-ND         | .82   | 66.78 569.57      | 640714-1     |
| 4                                                  | Nylon          | Yes             | A14340-ND         | 1.16  | 93.93 801.18      | 641776-1     |
| 5                                                  | Nylon          | Yes             | A14341-ND         | .92   | 74.26 633.39      | 643030-1     |
| 6                                                  | Nylon          | Yes             | A14342-ND         | .93   | 75.11 640.68      | 643313-1     |
| 8                                                  | Nylon          | Yes             | A14343-ND         | .95   | 76.73 654.44      | 643314-1     |
| 6                                                  | Nylon          | Yes             | A14344-ND         | .85   | 68.82 586.99      | 640715-1     |
| 9                                                  | Nylon          | Yes             | A14345-ND         | .89   | 72.26 616.37      | 640716-1     |
| 12                                                 | Nylon          | Yes             | A14346-ND         | .99   | 80.29 684.82      | 640717-1     |
| 15                                                 | Nylon          | Yes             | A14347-ND         | .98   | 79.52 678.28      | 640718-1     |
| <b>Open Plug Housing Strain Reliefs</b>            |                |                 |                   |       |                   |              |
| 2, 3, 4, 5, 6 and 8 Circuit, In-Line               |                |                 | A14336-ND         | .49   | 39.64 338.14      | 350811-1     |
| 6, 9, 12 and 15 Circuit, Matrix                    |                |                 | A14337-ND         | .56   | 45.59 388.88      | 350812-1     |
| Contact Insertion Tool                             |                |                 | A1444-ND          | 22.43 | —                 | 455830-2     |
| Contact Extraction Tool                            |                |                 | A1445-ND          | 40.67 | —                 | 455894-2     |

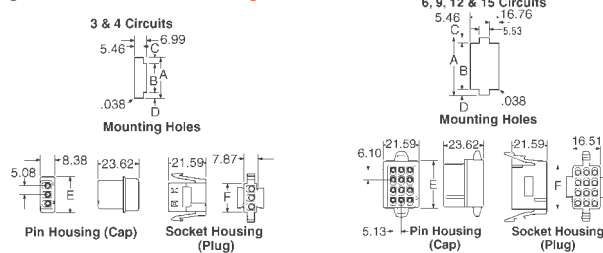
• Note: Two strain reliefs required per housing.

† Socket Contact - .25mm stock thickness.

| No. of Circuits                                                           | Description        | Material | Digi-Key Part No. | 1       | Pricing 100 | 1,000   | AMP Part No. |
|---------------------------------------------------------------------------|--------------------|----------|-------------------|---------|-------------|---------|--------------|
| Pin Header Assemblies — PCB Mount                                         |                    |          |                   |         |             |         |              |
| 2                                                                         | Pre-Tin Pin Finish | UL94V-2  | A1466-ND          | .25     | 19.88       | 169.58  | 350428-1     |
| 2                                                                         | Gold Pin Finish    | UL94V-2  | A1467-ND          | 1.12    | 90.35       | 770.65  | 350428-2     |
| 2                                                                         | Pre-Tin Pin Finish | UL94V-0  | A14314-ND         | .40     | 32.68       | 278.75  | 350786-1     |
| 3                                                                         | Pre-Tin Pin Finish | UL94V-2  | A1468-ND          | .31     | 25.40       | 216.67  | 350429-1     |
| 3                                                                         | Pre-Tin Pin Finish | UL94V-0  | A14315-ND         | .49     | 39.83       | 339.72  | 350789-1     |
| 4                                                                         | Pre-Tin Pin Finish | UL94V-2  | A1470-ND          | .41     | 33.13       | 282.62  | 350430-1     |
| 4                                                                         | Gold Pin Finish    | UL94V-2  | A1471-ND          | 1.95    | 157.94      | 1347.15 | 350430-2     |
| 4                                                                         | Pre-Tin Pin Finish | UL94V-0  | A14316-ND         | .58     | 46.98       | 400.71  | 350792-1     |
| 5                                                                         | Pre-Tin Pin Finish | UL94V-2  | A14317-ND         | .63     | 50.98       | 434.86  | 640466-1     |
| 5                                                                         | Pre-Tin Pin Finish | UL94V-0  | A14318-ND         | .93     | 75.27       | 642.02  | 640900-1     |
| 6                                                                         | Pre-Tin Pin Finish | UL94V-2  | A1472-ND          | .50     | 40.85       | 348.44  | 350431-1     |
| 6                                                                         | Gold Pin Finish    | UL94V-2  | A1473-ND          | 2.76    | 223.18      | 1903.63 | 350431-2     |
| 6                                                                         | Pre-Tin Pin Finish | UL94V-2  | A14319-ND         | 1.46    | 118.13      | 1007.56 | 641832-1     |
| 6                                                                         | Pre-Tin Pin Finish | UL94V-0  | A14322-ND         | .96     | 77.31       | 659.45  | 350711-1     |
| 6                                                                         | Gold Pin Finish    | UL94V-0  | A14323-ND         | 2.73    | 220.90      | 1884.13 | 350711-2     |
| 8                                                                         | Pre-Tin Pin Finish | UL94V-2  | A14320-ND         | 1.44    | 116.43      | 993.05  | 641825-1     |
| 8                                                                         | Pre-Tin Pin Finish | UL94V-0  | A14321-ND         | 2.17    | 175.46      | 1496.53 | 641828-1     |
| 9                                                                         | Pre-Tin Pin Finish | UL94V-2  | A1474-ND          | .74     | 59.64       | 508.72  | 350432-1     |
| 9                                                                         | Gold Pin Finish    | UL94V-2  | A1475-ND          | 4.46    | 360.67      | 3076.32 | 350432-2     |
| 9                                                                         | Pre-Tin Pin Finish | UL94V-0  | A14324-ND         | .89     | 72.23       | 610.08  | 350712-1     |
| 12                                                                        | Pre-Tin Pin Finish | UL94V-2  | A1476-ND          | .89     | 71.79       | 612.35  | 350433-1     |
| 12                                                                        | Gold Pin Finish    | UL94V-2  | A1477-ND          | 5.01    | 405.42      | 3458.03 | 350433-2     |
| 12                                                                        | Pre-Tin Pin Finish | UL94V-0  | A14325-ND         | 1.08    | 87.16       | 743.40  | 350713-1     |
| 12                                                                        | Gold Pin Finish    | UL94V-0  | A14326-ND         | 3.68    | 298.20      | 2543.50 | 350713-2     |
| 15                                                                        | Pre-Tin Pin Finish | UL94V-2  | A1478-ND          | .97     | 78.42       | 668.87  | 350434-1     |
| 15                                                                        | Gold Pin Finish    | UL94V-2  | A1479-ND          | 8.09    | 654.88      | 5585.73 | 350434-2     |
| 15                                                                        | Pre-Tin Pin Finish | UL94V-0  | A14327-ND         | 1.35    | 109.34      | 932.64  | 350714-1     |
| Socket Header Assemblies — PCB Mount                                      |                    |          |                   |         |             |         |              |
| 2                                                                         | Pre-Tin Pin Finish | UL94V-2  | A1490-ND          | .34     | 27.81       | 237.23  | 350759-4     |
| 2                                                                         | Gold Pin Finish    | UL94V-2  | A1491-ND          | .96     | 77.34       | 659.65  | 350759-3     |
| 3                                                                         | Pre-Tin Pin Finish | UL94V-2  | A1492-ND          | .43     | 35.09       | 299.32  | 350760-4     |
| 3                                                                         | Gold Pin Finish    | UL94V-2  | A1493-ND          | 1.75    | 141.80      | 1209.46 | 350760-3     |
| 3                                                                         | Pre-Tin Pin Finish | UL94V-0  | A14328-ND         | .46     | 37.58       | 320.57  | 350825-1     |
| 4                                                                         | Pre-Tin Pin Finish | UL94V-2  | A1494-ND          | .37     | 29.60       | 252.47  | 350761-4     |
| 4                                                                         | Gold Pin Finish    | UL94V-2  | A1495-ND          | 2.24    | 181.46      | 1547.73 | 350761-3     |
| 4                                                                         | Pre-Tin Pin Finish | UL94V-0  | A14329-ND         | .63     | 50.86       | 433.80  | 350826-1     |
| 6                                                                         | Pre-Tin Pin Finish | UL94V-2  | A1496-ND          | .60     | 48.38       | 412.63  | 350762-4     |
| 6                                                                         | Gold Pin Finish    | UL94V-2  | A1497-ND          | 3.34    | 270.04      | 2303.31 | 350762-3     |
| 6                                                                         | Pre-Tin Pin Finish | UL94V-0  | A14330-ND         | .85     | 68.86       | 587.29  | 350827-1     |
| 9                                                                         | Pre-Tin Pin Finish | UL94V-2  | A1498-ND          | .69     | 55.73       | 475.37  | 350763-4     |
| 9                                                                         | Pre-Tin Pin Finish | UL94V-0  | A14331-ND         | .95     | 76.60       | 653.31  | 350828-1     |
| 12                                                                        | Pre-Tin Pin Finish | UL94V-2  | A1200-ND          | 1.00    | 80.71       | 688.42  | 350764-4     |
| 12                                                                        | Gold Pin Finish    | UL94V-2  | A1201-ND          | 6.21    | 502.72      | 4287.94 | 350764-3     |
| 12                                                                        | Pre-Tin Pin Finish | UL94V-0  | A14332-ND         | 1.26    | 102.13      | 871.09  | 350829-1     |
| 12                                                                        | Gold Pin Finish    | UL94V-0  | A14333-ND         | 4.99    | 404.27      | 3448.20 | 350829-2     |
| 15                                                                        | Pre-Tin Pin Finish | UL94V-2  | A1202-ND          | 1.55    | 125.83      | 1073.26 | 350765-4     |
| 15                                                                        | Pre-Tin Pin Finish | UL94V-0  | A14334-ND         | 1.54    | 124.29      | 1060.15 | 350830-1     |
| 15                                                                        | Gold Pin Finish    | UL94V-0  | A14335-ND         | 8.06    | 652.37      | 5564.36 | 350830-2     |
| Pin Header Assemblies, Right-Angle — PCB Mount                            |                    |          |                   |         |             |         |              |
| 2                                                                         | Pre-Tin Pin Finish | UL94V-0  | A14306-ND         | 1.01    | 81.70       | 696.87  | 1-350942-0   |
| 2                                                                         | Gold Pin Finish    | UL94V-0  | A1481-ND          | 1.77    | 143.06      | 1220.18 | 2-350942-0   |
| 3                                                                         | Pre-Tin Pin Finish | UL94V-0  | A14307-ND         | 1.13    | 91.71       | 782.23  | 1-350943-0   |
| 3                                                                         | Gold Pin Finish    | UL94V-0  | A14308-ND         | 2.70    | 218.68      | 1865.24 | 2-350943-0   |
| 4                                                                         | Pre-Tin Pin Finish | UL94V-0  | A1484-ND          | 1.05    | 85.07       | 725.61  | 1-350944-0   |
| 4                                                                         | Gold Pin Finish    | UL94V-0  | A14309-ND         | 2.67    | 216.51      | 1846.71 | 2-350944-0   |
| 5                                                                         | Pre-Tin Pin Finish | UL94V-0  | A1486-ND          | 1.26    | 102.13      | 871.09  | 1-350945-0   |
| 5                                                                         | Gold Pin Finish    | UL94V-0  | A14310-ND         | 3.38    | 273.24      | 2330.57 | 2-350945-0   |
| 6                                                                         | Pre-Tin Pin Finish | UL94V-0  | A14311-ND         | 1.93    | 155.95      | 1330.16 | 640583-1     |
| 8                                                                         | Pre-Tin Pin Finish | UL94V-0  | A14312-ND         | 2.06    | 166.82      | 1422.84 | 640584-1     |
| 8                                                                         | Gold Pin Finish    | UL94V-0  | A14313-ND         | 5.15    | 417.03      | 3557.00 | 640584-2     |
| Contacts (Pins & Sockets) — For Use With Universal MATE-N-LOK® Connectors |                    |          |                   |         |             |         |              |
| Pin, 24-18AWG, Brass - Pre-Tin                                            |                    |          | A1436-ND          | 1.00/10 | 6.72        | 58.14   | 350706-1     |
| Socket, 24-18AWG, Brass - Pre-Tin                                         |                    |          | A1437-ND†         | 93/10   | 6.25        | 54.10   | 350689-1     |
| Pin, 24-18AWG, Brass - Gold                                               |                    |          | A1438-ND          | 6.98/10 | 46.94       | 405.97  | 350706-2     |
| Socket, 24-18AWG, Brass - Gold                                            |                    |          | A1439-ND†         | 750/10  | 50.45       | 436.35  | 350689-2     |
| Pin, 20-14AWG, Brass - Pre-Tin                                            |                    |          | A1440-ND          | 9.50/10 | 6.25        | 54.10   | 350705-1     |
| Socket, 20-14AWG, Brass - Pre-Tin                                         |                    |          | A1441-ND          | 82/10   | 5.53        | 47.82   | 350550-1     |
| Pin, 20-14AWG, Brass - Gold                                               |                    |          | A1442-ND          | 6.98/10 | 46.94       | 405.97  | 350705-2     |
| Socket, 20-14AWG, Brass - Gold                                            |                    |          | A1443-ND          | 7.93/10 | 53.35       | 461.44  | 350550-2     |
| Pin, 24-18AWG, Brass - Pre-Tin 0.07mm                                     |                    |          | A14298-ND         | 88/10   | 5.90        | 51.02   | 350680-1     |
| Pin, 24-18AWG, Brass - Gold 0.07mm                                        |                    |          | A14299-ND         | 732/10  | 49.25       | 425.95  | 350690-2     |
| Pin, 20-14AWG, Brass - Pre-Tin 0.07mm                                     |                    |          | A14300-ND         | 86/10   | 5.71        | 48.23   | 350680-1     |
| Pin, 20-14AWG, Brass - Gold 0.07mm                                        |                    |          | A14301-ND         | 7.79/10 | 52.40       | 453.15  | 350547-2     |
| Pin, 20-14AWG, Brass - Pre-Tin 0.57mm                                     |                    |          | A14303-ND         | 1.08/10 | 7.25        | 62.67   | 350552-1     |
| Socket, 20-14AWG, Brass - Pre-Tin 19.81mm                                 |                    |          | A14302-ND         | 1.22/10 | 8.19        | 70.86   | 350551-1     |
| Universal MATE-N-LOK® Crimp Tool for 24-18AWG                             |                    |          | A9985-ND          | 403.66  | —           | —       | 90300-2      |
| Universal MATE-N-LOK® Crimp Tool for 20-14AWG                             |                    |          | A9984-ND          | 403.66  | —           | —       | 90296-2      |
| PRO-CRIMPER II Hand Tool w/o Dies                                         |                    |          | A9996-ND          | 63.75   | —           | —       | 354940-1     |
| Die Set 14-20 AWG                                                         |                    |          | A9943-ND          | 99.00   | —           | —       | 90546-2      |
| Die Set 18-24 AWG                                                         |                    |          | A9944-ND          | 99.00   | —           | —       | 90548-2      |
| Universal Crimp Tool                                                      |                    |          | A9942-ND          | 18.38   | —           | —       | 90287-1      |

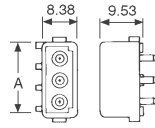
# AMP Commercial MATE-N-LOK® Connectors

**Fig. 1 — Panel Mount Rectangular Connectors**

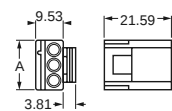


**Fig. 3 — Printed Circuit Board Pin Header Assemblies**

(Mate with Free Hanging Socket Connectors)  
Housing Material: Natural nylon  
Pin Material: Copper alloy.  
Note: Use standard pin for .062" (1.57 mm) thick PC board.

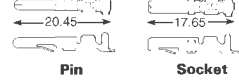


**Fig. 4 — Positive Lock Socket Housing**

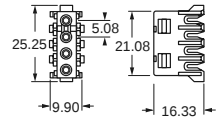


**Fig. 6 — Contacts**

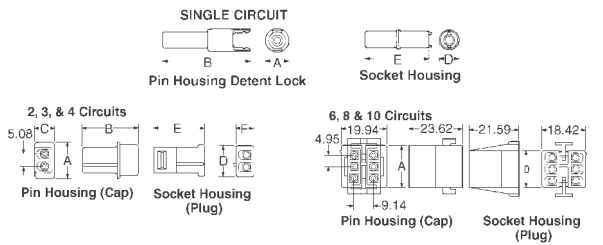
• Carries up to 15 amps maximum (based on 30°C temperature rise) • Low insertion/extraction forces • UL recognized for 250 volts, AC/DC • CSA certified



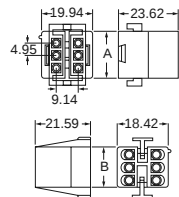
**Fig. 7 — Insulation Displacement Connector, 4 Circuit**



**Fig. 2 — Free Hanging Rectangular Connectors**



**Fig. 5 — Motor Mount Pin/Socket Housing - 6, 16 Circuit Positive Lock**



| No. of Cir.                                                                                | Description    | A     | B     | C    | D     | E     | F     | Digi-Key Part No. | 1    | Pricing 100 | 1,000  | AMP Part No. |
|--------------------------------------------------------------------------------------------|----------------|-------|-------|------|-------|-------|-------|-------------------|------|-------------|--------|--------------|
| <b>Fig. 1 — MATE-N-LOK® Panel-Mount Rectangular Connectors (Contacts Sold Separately)</b>  |                |       |       |      |       |       |       |                   |      |             |        |              |
| 3                                                                                          | Pin Housing    | 22.61 | 16.38 | 3.12 | 3.12  | 20.57 | —     | A1400-ND          | .17  | 14.10       | 120.31 | 1-480305-0   |
| 3                                                                                          | Socket Housing | 22.61 | 16.38 | 3.12 | 3.12  | —     | 16.00 | A1401-ND          | .20  | 16.37       | 139.65 | 1-480304-0   |
| 4                                                                                          | Pin Housing    | 27.69 | 21.46 | 3.12 | 3.12  | 25.65 | —     | A1402-ND          | .21  | 17.13       | 146.10 | 1-480426-0   |
| 4                                                                                          | Socket Housing | 27.69 | 21.46 | 3.12 | 3.12  | —     | 21.08 | A1403-ND          | .45  | 36.50       | 311.33 | 1-480425-0   |
| 6                                                                                          | Pin Housing    | 21.59 | 14.60 | 3.51 | 3.51  | 16.64 | —     | A1404-ND          | .35  | 28.27       | 241.16 | 1-480276-0   |
| 6                                                                                          | Socket Housing | 21.59 | 14.60 | 3.51 | 3.51  | —     | 14.35 | A1405-ND          | .57  | 46.28       | 394.70 | 1-480273-0   |
| 9                                                                                          | Pin Housing    | 27.56 | 20.70 | 3.43 | 3.43  | 22.99 | —     | A1406-ND          | .61  | 49.11       | 418.89 | 1-480277-0   |
| 9                                                                                          | Socket Housing | 27.56 | 20.70 | 3.43 | 3.43  | —     | 20.45 | A1407-ND          | .68  | 55.08       | 469.77 | 1-480274-0   |
| 12                                                                                         | Pin Housing    | 33.53 | 26.67 | 3.43 | 3.43  | 29.08 | —     | A1424-ND          | .72  | 58.68       | 500.54 | 1-480278-0   |
| 12                                                                                         | Socket Housing | 33.53 | 26.67 | 3.43 | 3.43  | —     | 26.54 | A1425-ND          | .79  | 63.56       | 542.10 | 1-480275-0   |
| 15                                                                                         | Pin Housing    | 39.50 | 32.77 | 3.38 | 3.38  | 35.10 | —     | A1426-ND          | 1.02 | 82.85       | 706.66 | 1-480324-0   |
| 15                                                                                         | Socket Housing | 39.50 | 32.77 | 3.38 | 3.38  | —     | 32.51 | A1427-ND          | 1.15 | 93.17       | 794.70 | 1-480323-0   |
| <b>Fig. 2 — MATE-N-LOK® Free-Hanging Rectangular Connectors (Contacts Sold Separately)</b> |                |       |       |      |       |       |       |                   |      |             |        |              |
| 1                                                                                          | Pin Housing    | 7.62  | 31.50 | —    | —     | —     | —     | A1204-ND          | .09  | 7.51        | 64.06  | 1-480350-0   |
| 1                                                                                          | Pin Housing    | 7.62  | 31.50 | —    | —     | —     | —     | A1408-ND          | .08  | 6.18        | 52.75  | 1-480351-0   |
| 1                                                                                          | Socket Housing | —     | —     | —    | 6.60  | 22.10 | —     | A1409-ND          | .08  | 6.18        | 52.75  | 1-480349-0   |
| 2                                                                                          | Pin Housing    | 15.49 | 23.62 | 8.38 | —     | —     | —     | A1410-ND          | .10  | 7.86        | 67.08  | 1-480319-0   |
| 2                                                                                          | Socket Housing | —     | —     | —    | 13.46 | 21.84 | 7.49  | A1411-ND          | .10  | 7.83        | 66.79  | 1-480318-0   |
| 3                                                                                          | Pin Housing    | 20.57 | 23.62 | 8.25 | —     | —     | —     | A1400-ND          | .17  | 14.10       | 120.31 | 1-480305-0   |
| 3                                                                                          | Socket Housing | —     | —     | —    | 20.96 | 21.59 | 7.87  | A1429-ND          | .18  | 14.80       | 126.24 | 1-480303-0   |
| 4                                                                                          | Pin Housing    | 27.69 | 21.46 | 3.12 | 3.12  | 25.65 | —     | A1402-ND          | .21  | 17.13       | 146.10 | 1-480426-0   |
| 4                                                                                          | Socket Housing | —     | —     | —    | —     | —     | —     | A1431-ND          | .18  | 14.42       | 122.99 | 1-480424-0   |
| 6                                                                                          | Pin Housing    | 17.91 | —     | —    | —     | —     | —     | A1412-ND          | .50  | 40.87       | 348.62 | 1-480340-0   |
| 6                                                                                          | Socket Housing | —     | —     | —    | 15.49 | —     | —     | A1413-ND          | .36  | 28.87       | 246.25 | 1-480270-0   |
| 8                                                                                          | Pin Housing    | 22.86 | —     | —    | —     | —     | —     | A1206-ND          | .55  | 44.83       | 382.38 | 1-480345-0   |
| 8                                                                                          | Socket Housing | —     | —     | —    | 20.45 | —     | —     | A1207-ND          | .37  | 30.26       | 258.13 | 1-480283-0   |
| 10                                                                                         | Pin Housing    | 27.81 | —     | —    | —     | —     | —     | A1414-ND          | .63  | 51.40       | 438.38 | 1-480339-0   |
| 10                                                                                         | Socket Housing | —     | —     | —    | 25.4  | —     | —     | A1415-ND          | .71  | 57.84       | 493.36 | 1-480285-0   |

| No. of Cir. | Description                                            | Dim. (mm) |   | Digi-Key Part No. | Pricing |        |         | AMP Part No. |
|-------------|--------------------------------------------------------|-----------|---|-------------------|---------|--------|---------|--------------|
|             |                                                        | A         | B |                   | 1       | 100    | 1,000   |              |
| 4           | Pre-Tin Pin Finish<br>Positive Lock Long Tail          | 23.24     | — | A14373-ND         | 1.59    | 128.48 | 1095.82 | 350544-1     |
|             | Pre-Tin Pin Finish<br>Detent Lock Long Tail            | 23.24     | — | A14374-ND         | .83     | 66.84  | 570.07  | 350424-1     |
|             | Gold Pin Finish Detent<br>Lock Long Tail               | 23.24     | — | A14375-ND         | 4.22    | 341.67 | 2914.21 | 350424-2     |
| 6           | Tin Plated Contacts<br>Positive Lock Dual Row          | 17.91     | — | A1214-ND          | .63     | 51.38  | 438.25  | 1-380999-0   |
|             | Gold Plated Contacts<br>Positive Lock Dual Row         | 17.91     | — | A1215-ND          | 2.69    | 217.67 | 1856.57 | 2-380999-0   |
|             | Pre-Tin Pin Finish Positive<br>Lock Long Tail Dual Row | 17.91     | — | A14376-ND         | .99     | 80.18  | 683.91  | 350425-1     |
| 8           | Tin Plated Contacts<br>Positive Lock Dual Row          | 22.86     | — | A1216-ND          | .74     | 59.64  | 508.72  | 350212-1     |
|             | Pre-Tin Pin Finish Positive<br>Lock Long Tail          | 22.86     | — | A14377-ND         | 1.12    | 90.71  | 773.73  | 350426-1     |
|             | Gold Plated Contacts<br>Positive Lock Dual Row         | 22.86     | — | A1217-ND          | 3.09    | 250.37 | 2135.47 | 350212-2     |
| 10          | Tin Plated Contacts<br>Positive Lock Dual Row          | 27.81     | — | A1218-ND          | .87     | 70.36  | 600.10  | 1-380991-0   |
|             | Gold Plated Contacts<br>Positive Lock Dual Row         | 27.81     | — | A1219-ND          | 4.08    | 330.48 | 2818.80 | 2-380991-0   |
|             | Pre-Tin Pin Finish<br>Positive Lock Long Tail          | 27.81     | — | A14378-ND         | 1.61    | 130.26 | 1111.06 | 350219-1     |
| 12          | Pre-Tin Pin Finish<br>Positive Lock                    | 32.77     | — | A14379-ND         | 1.63    | 131.85 | 1124.61 | 350213-1     |
|             | Pre-Tin Pin Finish<br>Positive Lock Long Tail          | 32.77     | — | A14380-ND         | 1.70    | 137.56 | 1173.33 | 350220-1     |
| 16          | Pre-Tin Pin Finish<br>Positive Lock                    | 42.67     | — | A14381-ND         | 2.31    | 186.89 | 1594.04 | 350214-1     |
|             | Pre-Tin Pin Finish<br>Positive Lock Long Tail          | 42.67     | — | A14382-ND         | 2.62    | 212.40 | 1811.63 | 350427-1     |

\* Detent Lock. # Tin: Brass - Tin Plated; † Gold: Brass - Gold over Nickel Plated.

| No. of Cir.                                                                                         | Description                                | Dim. (mm) A B | Digi-Key Part No. | 1    | Pricing 100 | 1,000   | AMP Part No. |
|-----------------------------------------------------------------------------------------------------|--------------------------------------------|---------------|-------------------|------|-------------|---------|--------------|
| <b>Fig. 3 — Printed Circuit Board Pin Header Assemblies - Mate w/Free Hanging Socket Connectors</b> |                                            |               |                   |      |             |         |              |
| 2                                                                                                   | Tin Plated Contacts with Detent Lock       | 13.08         | A1208-ND          | .31  | 25.15       | 214.51  | 350209-1     |
|                                                                                                     | Gold Plated Contacts with Detent Lock      | 13.08         | A1209-ND          | 1.05 | 85.02       | 725.17  | 350209-2     |
|                                                                                                     | Pre-Tin Pin Finish Positive Lock           | 13.08         | A14364-ND         | .41  | 33.13       | 282.62  | 350539-1     |
|                                                                                                     | Gold Pin Finish Positive Lock              | 13.08         | A14365-ND         | 1.26 | 101.78      | 868.13  | 350539-2     |
|                                                                                                     | Pre-Tin Pin Finish Positive Lock Long Tail | 13.08         | A14366-ND         | .89  | 71.77       | 612.19  | 350540-1     |
|                                                                                                     | Pre-Tin Pin Finish Detent Lock Long Tail   | 13.08         | A14367-ND         | .54  | 43.64       | 372.22  | 350422-1     |
| 3                                                                                                   | Tin Plated Contacts with Detent Lock       | 18.16         | A1210-ND          | .49  | 40.02       | 341.32  | 350210-1     |
|                                                                                                     | Gold Plated Contacts with Detent Lock      | 18.16         | A1211-ND          | 1.60 | 129.48      | 1104.35 | 350210-2     |
|                                                                                                     | Pre-Tin Pin Finish Positive Lock           | 18.16         | A14368-ND         | .94  | 75.93       | 647.60  | 350541-1     |
|                                                                                                     | Gold Pin Finish Positive Lock              | 18.16         | A14369-ND         | 1.81 | 146.24      | 1247.32 | 350541-2     |
|                                                                                                     | Pre-Tin Pin Finish Detent Lock Long Tail   | 18.16         | A14370-ND         | .71  | 57.14       | 487.35  | 350423-1     |
|                                                                                                     | Tin Plated Contacts with Detent Lock       | 23.24         | A1212-ND          | .46  | 37.47       | 319.64  | 350211-1     |
| 4                                                                                                   | Gold Plated Contacts with Detent Lock      | 23.24         | A1213-ND          | 2.27 | 184.11      | 1570.34 | 350211-2     |
|                                                                                                     | Pre-Tin Pin Finish Positive Lock           | 23.24         | A14371-ND         | .90  | 72.56       | 618.86  | 350543-1     |
|                                                                                                     | Gold Pin Finish Positive Lock              | 23.24         | A14372-ND         | 2.48 | 200.87      | 1713.31 | 350543-2     |

**1-800-344-4539**

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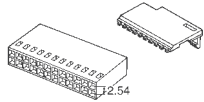
# AMP MT Connectors

DOUBLE ROW MT RECEPTACLE CONNECTORS .100" (2.54mm) CENTERS. Housings Prewired with Standard Pressure Contacts. Insulation Diameter .050" (1.27mm) **Mating Post Length:** .222-.273" (5.64-6.94mm) max. Housing and Cover: Black thermoplastic, flame retardant **Contacts:** Copper alloy **Housing Features:** • Capable of connecting up to 100 wires simultaneously. • Available in single and double row configurations in .100" (2.54mm) centerline spacing.

## Connectors



## Cover



## AMPMODU® HOUSINGS

| No. of Positions                                                                        | Digi-Key Part No. | 1     | Pricing 25 | 100     | AMP Part No. |
|-----------------------------------------------------------------------------------------|-------------------|-------|------------|---------|--------------|
| <b>AMPMODU® MT Connectors - IDC Crimp Type</b>                                          |                   |       |            |         |              |
| 6                                                                                       | A3047-ND          | 1.83  | 41.40      | 117.30  | 102398-1     |
| 8                                                                                       | A3048-ND          | 2.15  | 48.50      | 137.70  | 102398-2     |
| 10                                                                                      | A3049-ND          | 2.49  | 56.40      | 159.80  | 102398-3     |
| 12                                                                                      | A3050-ND          | 2.97  | 67.20      | 190.40  | 102398-4     |
| 14                                                                                      | A3051-ND          | 3.47  | 78.20      | 222.70  | 102398-5     |
| 16                                                                                      | A3052-ND          | 3.98  | 90.00      | 255.00  | 102398-6     |
| 18                                                                                      | A3053-ND          | 4.45  | 100.80     | 285.60  | 102398-7     |
| 20                                                                                      | A3054-ND          | 4.96  | 112.20     | 317.90  | 102398-8     |
| 24                                                                                      | A3055-ND          | 5.96  | 135.00     | 382.50  | 1-102398-0   |
| 34                                                                                      | A3057-ND          | 8.43  | 190.80     | 540.60  | 1-102398-5   |
| 40                                                                                      | A3058-ND          | 7.37  | 166.80     | 472.60  | 1-102398-8   |
| 50                                                                                      | A3059-ND          | 8.98  | 203.40     | 576.30  | 2-102398-3   |
| 60                                                                                      | A3060-ND          | 10.57 | 239.40     | 678.30  | 2-102398-8   |
| 64                                                                                      | A3061-ND          | 15.87 | 359.40     | 1018.30 | 3-102398-0   |
| <b>A2031-ND</b> Man. Pistol Grip Tool for use with Head Assembly... <b>\$55.50 each</b> |                   |       |            |         |              |
| <b>A2040-ND</b> Head Assembly Tool for AMP MT Conn. .... <b>\$162.26 each</b>           |                   |       |            |         |              |

| No. of Positions                                            | Digi-Key Part No. | 1                            | Pricing 25 | 100    | AMP Part No. |
|-------------------------------------------------------------|-------------------|------------------------------|------------|--------|--------------|
| <b>AMPMODU® MT Covers - 2 Required for each Connector</b>   |                   |                              |            |        |              |
| 6                                                           | A3062-ND          | 1.70/2                       | 38.59/50   | 54.67  | 102396-1     |
| 8                                                           | A3063-ND          | 2.00/2                       | 45.36/50   | 64.25  | 102396-2     |
| 10                                                          | A3064-ND          | 2.80/2                       | 18.07/50   | 25.60  | 102396-3     |
| 12                                                          | A3065-ND          | 1.52/2                       | 34.46/50   | 48.82  | 102396-4     |
| 14                                                          | A3066-ND          | 2.03/2                       | 45.99/50   | 65.15  | 102396-5     |
| 16                                                          | A3067-ND          | 1.52/2                       | 34.43/50   | 48.78  | 102396-6     |
| 20                                                          | A3069-ND          | 1.65/2                       | 37.44/50   | 53.04  | 102396-8     |
| 24                                                          | A3070-ND          | 1.40/2                       | 31.68/50   | 44.88  | 1-102396-0   |
| 34                                                          | A3072-ND          | 1.98/2                       | 44.93/50   | 63.65  | 1-102396-5   |
| 40                                                          | A3073-ND          | 2.33/2                       | 52.80/50   | 74.80  | 1-102396-8   |
| 50                                                          | A3074-ND          | 4.13/2                       | 93.60/50   | 132.60 | 2-102396-3   |
| 64                                                          | A3076-ND          | 2.65/2                       | 59.90/50   | 84.86  | 3-102396-0   |
| Keying Plug                                                 | A3077-ND          | 2.37/10; 10.74/50; 15.22/100 |            |        | 86286-1      |
| <b>AMPMODU® Housings - Single Row (Order Contacts Sep.)</b> |                   |                              |            |        |              |
| 2                                                           | A3011-ND          | .83                          | 18.71      | 53.02  | 87499-3      |
| 3                                                           | A3012-ND          | .59                          | 13.25      | 37.55  | 87499-5      |
| 4                                                           | A3013-ND          | .52                          | 11.69      | 33.13  | 87499-7      |
| 5                                                           | A3014-ND          | .41                          | 9.36       | 26.51  | 87499-9      |
| 6                                                           | A3015-ND          | .52                          | 11.69      | 33.13  | 1-87499-1    |
| 7                                                           | A3016-ND          | .69                          | 15.59      | 44.18  | 87499-1      |
| 8                                                           | A3017-ND          | .55                          | 12.47      | 35.34  | 1-87499-3    |
| 9                                                           | A3018-ND          | .72                          | 16.37      | 46.39  | 1-87499-5    |
| 10                                                          | A3019-ND          | .92                          | 20.81      | 58.97  | 1-87499-7    |
| 11                                                          | A3020-ND          | 1.55                         | 35.08      | 99.40  | 1-87499-9    |
| 12                                                          | A3021-ND          | .69                          | 15.59      | 44.18  | 2-87499-1    |
| 13                                                          | A3022-ND          | .93                          | 21.05      | 59.64  | 2-87499-3    |
| 14                                                          | A3023-ND          | .83                          | 18.71      | 53.02  | 2-87499-5    |
| 15                                                          | A3024-ND          | .86                          | 19.49      | 55.22  | 2-87499-7    |
| 16                                                          | A3025-ND          | .90                          | 20.27      | 57.43  | 2-87499-9    |
| 18                                                          | A3027-ND          | .93                          | 21.05      | 59.64  | 3-87499-4    |
| 20                                                          | A3029-ND          | 1.07                         | 24.17      | 68.48  | 3-87499-7    |

| No. of Positions                                            | Digi-Key Part No. | 1    | Pricing 25 | 100    | AMP Part No. |
|-------------------------------------------------------------|-------------------|------|------------|--------|--------------|
| <b>AMPMODU® Housings - Double Row (Order Contacts Sep.)</b> |                   |      |            |        |              |
| 4                                                           | A3031-ND          | .86  | 19.49      | 55.22  | 4-87456-9    |
| 6                                                           | A3032-ND          | .93  | 21.05      | 59.64  | 87456-1      |
| 8                                                           | A3033-ND          | 1.00 | 22.61      | 64.06  | 87456-3      |
| 10                                                          | A3034-ND          | 1.10 | 24.95      | 70.69  | 87456-6      |
| 12                                                          | A3035-ND          | 1.17 | 26.51      | 75.11  | 87456-8      |
| 14                                                          | A3036-ND          | 1.21 | 27.29      | 77.31  | 1-87456-0    |
| 16                                                          | A3037-ND          | 1.27 | 28.85      | 81.73  | 1-87456-2    |
| 18                                                          | A3038-ND          | 1.83 | 41.32      | 117.08 | 1-87456-4    |
| 20                                                          | A3039-ND          | 1.52 | 34.30      | 97.20  | 1-87456-6    |
| 24                                                          | A3040-ND          | 1.96 | 44.44      | 125.91 | 2-87456-0    |
| 26                                                          | A3041-ND          | 1.79 | 40.54      | 114.87 | 2-87456-2    |
| 28                                                          | A3042-ND          | 1.96 | 44.44      | 125.91 | 2-87456-4    |
| 34                                                          | A3043-ND          | 2.38 | 53.80      | 152.42 | 3-87456-0    |
| 40                                                          | A3044-ND          | 2.69 | 60.81      | 172.30 | 3-87456-6    |
| 50                                                          | A3045-ND          | 3.24 | 73.29      | 207.64 | 4-87456-0    |
| 60                                                          | A3046-ND          | 3.58 | 81.00      | 229.50 | 5-87456-2    |

## CONTACTS



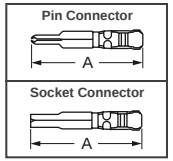
**SPECIFICATIONS:** Contact Current Rating: 3 amperes. Terminal Resistance: 12 milliohms maximum adjacent contacts. Be-Cu. **CONTACT FEATURES:** Available in a variety of platings and contact pressures; Dual cantilever contact beam with built-in overstress assures reliable connection.

| Wire Size (AWG)               | Insul. Dia. (Max.) | Plating | Con. Pres. Type | Digi-Key Part No. | Pricing 10  | 100   | AMP Part No. |
|-------------------------------|--------------------|---------|-----------------|-------------------|-------------|-------|--------------|
| 26-22                         | 1.55 mm            | Nickel  | Stand.          | A3000-ND          | 1.83        | 15.52 | 87667-3      |
|                               |                    | Gold    | Stand.          | A3001-ND          | 2.87        | 24.38 | 87667-2      |
| 24-20                         | 1.75 mm            | Nickel  | High            | A3003-ND          | 1.41        | 11.94 | 102128-2     |
|                               |                    | Gold    | High            | A3004-ND          | 2.64        | 22.41 | 102128-1     |
| Crimp Tool MT Conn. 26-22 AWG | 1.75 mm            | Gold    | Intermed.       | A3006-ND          | 2.93        | 24.88 | 87046-3      |
|                               |                    | Nickel  | High            | A3007-ND          | 1.41        | 11.94 | 1-87309-3    |
| Crimp Tool MT Conn. 24-20 AWG | 1.75 mm            | Gold    | High            | A3008-ND          | 2.74        | 23.31 | 1-87309-4    |
|                               |                    | Nickel  | High            | A9983-ND          | 464.17 each |       | 90418-1      |
| Keying Plug                   |                    |         |                 | A9978-ND          | 464.17 each |       | 90202-2      |
|                               |                    |         |                 | A3077-ND          | 2.37        | 15.22 | 86286-1      |

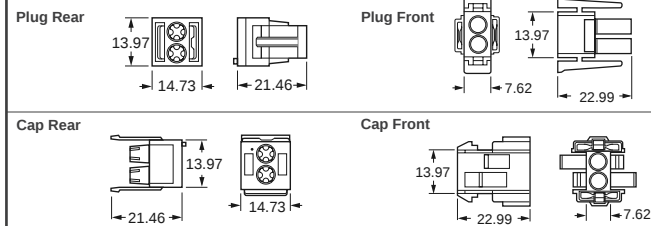
# AMP Soft Shell Connectors Universal MATE-N-LOK II® Connectors

**Product Facts:** • Ultimate reliability • Pins and sockets can be intermixed in the same housing • Available in 2 thru 15 Circuit sizes for free hanging or panel mount wire-to-wire connection • Polarized housings available in UL94V-0 flammability rated material • Crimp terminals accept 24-10 AWG wire sizes, 10 Amps • Tin or duplex gold plated contacts • Contacts are on .250 (6.35) centerline spacing • Recognized under the Component Program of Underwriters Laboratories, Inc. File No. E28476 • Certified by Canadian Standards Association File No. LR 16455-113 • Passed test by VDE under their Test Report No. 4751-1431-4016/A8E

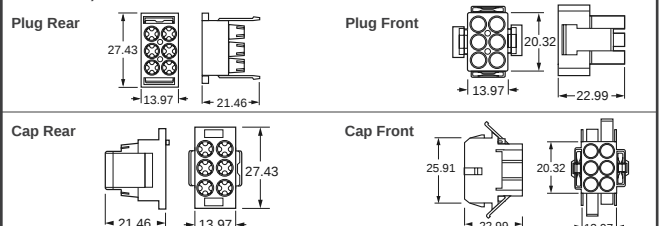
**Performance Characteristics:** • Dielectric Withstanding Voltage: 5.0 KVAC or 10 KVDC between adjacent circuits • Insulation Resistance: 1000 megohms minimum between adjacent circuits • Voltage Rating: 600V AC or DC • Connector Mating: Split Pin — 1.5 lb. max. per circuit • Connector Unmating: Split Pin — .5 lb. min. per circuit • Contact Insertion Force: 3.0 lb max. per contact unassembled • Contact Retention: 35 lb min. per contact • Durability: 50 cycles, mating and unmating



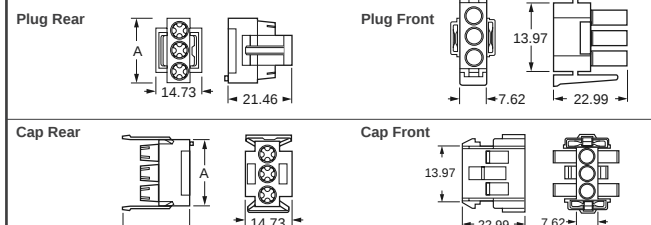
## 2 Circuit, In-Line



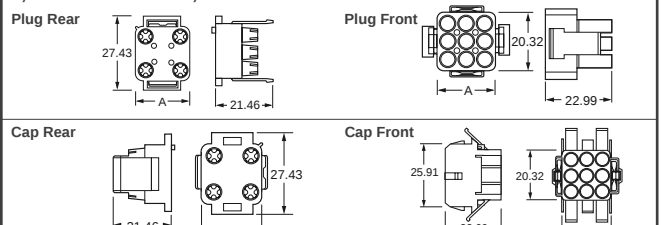
## 6 Circuit, In-Line



## 3, 4 Circuit, In-Line



## 9, 12 and 15 Circuit, Matrix



| No. of Circuits                | Description | Dim. A | Digi-Key Part No. | 1     | 100   | Pricing 1,000 | 5,000    | AMP Part No. |
|--------------------------------|-------------|--------|-------------------|-------|-------|---------------|----------|--------------|
| <b>Connector Housing Kits</b>  |             |        |                   |       |       |               |          |              |
| 2                              | Plug        | —      | A14240-ND         | .44   | 35.84 | 305.66        | 280.37/M | 770017-1     |
| 2                              | Cap         | —      | A14247-ND         | .45   | 36.56 | 311.85        | 286.05/M | 770024-1     |
| 3                              | Plug        | 20.32  | A14241-ND         | .48   | 39.16 | 333.98        | 306.34/M | 770018-1     |
| 3                              | Cap         | 20.32  | A14248-ND         | .54   | 43.46 | 370.65        | 339.98/M | 770025-1     |
| 4                              | Plug        | 26.67  | A14242-ND         | .49   | 39.89 | 340.24        | 312.09/M | 770019-1     |
| 4                              | Cap         | 26.67  | A14249-ND         | .56   | 44.94 | 383.28        | 351.56/M | 770026-1     |
| 6                              | Plug        | —      | A14243-ND         | .61   | 49.02 | 418.12        | 383.52/M | 770020-1     |
| 6                              | Cap         | —      | A14250-ND         | .61   | 49.63 | 423.34        | 388.31/M | 770027-1     |
| 9                              | Plug        | 20.32  | A14244-ND         | .65   | 52.90 | 451.23        | 413.89/M | 770021-1     |
| 9                              | Cap         | 20.32  | A14251-ND         | .66   | 53.11 | 452.97        | 415.48/M | 770028-1     |
| 12                             | Plug        | 26.67  | A14245-ND         | 1.18  | 95.64 | 815.73        | 748.22/M | 770022-1     |
| 12                             | Cap         | 26.67  | A14252-ND         | 1.14  | 92.16 | 786.05        | 721.00/M | 770029-1     |
| 15                             | Plug        | 33.02  | A14246-ND         | .97   | 78.36 | 668.39        | 613.08/M | 770023-1     |
| 15                             | Cap         | 33.02  | A14253-ND         | .92   | 74.66 | 636.77        | 584.07/M | 770030-1     |
| <b>Contact Insertion Tool</b>  |             |        |                   |       |       |               |          |              |
|                                |             |        | A1444-ND          | 22.43 | —     | —             | —        | 455830-1     |
| <b>Contact Extraction Tool</b> |             |        |                   |       |       |               |          |              |
|                                |             |        | A1445-ND          | 40.67 | —     | —             | —        | 458994-2     |

| Description                                  | Ins. Dia. Range | Dim. A | Digi-Key Part No. | 10    | 100   | Pricing 1,000 | 5,000    | AMP Part No. |
|----------------------------------------------|-----------------|--------|-------------------|-------|-------|---------------|----------|--------------|
| <b>Pin Contacts</b>                          |                 |        |                   |       |       |               |          |              |
| 24-18AWG — Brass, Pre-Tin                    | 1.02-2.54       | 25.53  | A14254-ND         | 1.40  | 9.39  | 81.23         | 73.62/M  | 770252-1     |
| 24-18AWG — Brass, Gold                       | 1.02-2.54       | 25.53  | A14255-ND         | 6.40  | 43.07 | 372.46        | 337.55/M | 770252-2     |
| 20-14AWG — Brass, Pre-Tin                    | 1.52-3.30       | 25.53  | A14256-ND         | 1.40  | 9.39  | 81.23         | 73.62/M  | 770250-1     |
| 20-14AWG — Brass, Gold                       | 1.52-3.30       | 25.53  | A14257-ND         | 6.40  | 43.07 | 372.46        | 337.55/M | 770250-2     |
| 20-14AWG — Brass, Pre-Tin                    | 3.30-5.08       | 25.27  | A14258-ND         | 1.84  | 12.37 | 106.96        | 96.94/M  | 770248-1     |
| 20-14AWG — Brass, Gold                       | 3.30-5.08       | 25.27  | A14259-ND         | 7.76  | 52.21 | 451.54        | 409.24/M | 770248-2     |
| 12-10AWG — Brass, Pre-Tin                    | 5.08 max.       | 25.53  | A14260-ND         | 2.94  | 17.66 | 171.20        | 155.15/M | 770246-3     |
| 12-10AWG — Brass, Gold                       | 5.08 max.       | 25.53  | A14261-ND         | 13.96 | 93.92 | 812.30        | 736.15/M | 770246-4     |
| <b>Socket Contacts</b>                       |                 |        |                   |       |       |               |          |              |
| 24-18AWG — Brass, Pre-Tin                    | 1.02-2.54       | 24.89  | A14262-ND         | 1.62  | 10.88 | 94.06         | 85.25/M  | 770253-3     |
| 24-18AWG — Brass, Gold                       | 1.02-2.54       | 24.89  | A14263-ND         | 9.99  | 67.19 | 581.14        | 526.66/M | 770253-4     |
| 20-14AWG — Brass, Pre-Tin                    | 1.52-3.30       | 24.89  | A14264-ND         | 1.70  | 11.44 | 98.91         | 89.64/M  | 770251-3     |
| 20-14AWG — Brass, Gold                       | 1.52-3.30       | 24.89  | A14265-ND         | 10.51 | 70.73 | 611.71        | 554.37/M | 770251-4     |
| 20-14AWG — Brass, Pre-Tin                    | 3.30-5.08       | 24.64  | A14266-ND         | 2.22  | 14.96 | 129.38        | 117.25/M | 770249-3     |
| 20-14AWG — Brass, Gold                       | 3.30-5.08       | 24.64  | A14267-ND         | 12.78 | 85.98 | 743.63        | 673.92/M | 770249-4     |
| 12-10AWG — Brass, Pre-Tin                    | 5.08 max.       | 24.89  | A14268-ND         | 2.94  | 19.80 | 171.20        | 155.15/M | 770247-3     |
| 12-10AWG — Brass, Gold                       | 5.08 max.       | 24.89  | A14269-ND         | 14.15 | 95.22 | 823.49        | 746.29/M | 770247-4     |
| <b>PRO-CRIMPER II Hand Tool without Dies</b> |                 |        |                   |       |       |               |          |              |
| Die Set AWG 24-18                            |                 |        | A9996-ND          |       |       | 63.75 each    |          | 354940-1     |
| Die Set AWG 20-14, 1.52mm-3.30mm             |                 |        | A9944-ND          |       |       | 99.00 each    |          | 90548-2      |
| Die Set AWG 20-14, 3.30mm-5.08mm             |                 |        | A9924-ND          |       |       | 99.00 each    |          | 90546-2      |
| Die Set AWG 12-10                            |                 |        | A9923-ND          |       |       | 141.75 each   |          | 90547-2      |
| Universal Crimp Tool                         |                 |        | A9942-ND          |       |       | 18.38 each    |          | 58530-2      |
|                                              |                 |        |                   |       |       |               |          | 90287-1      |

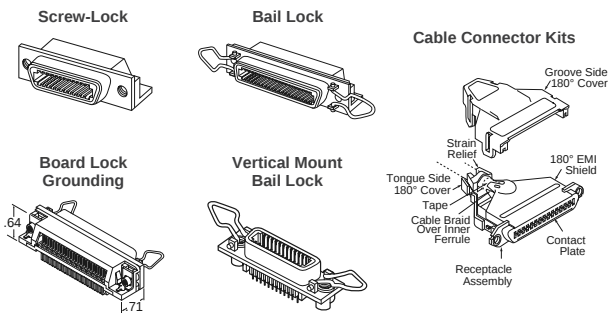
1-800-344-4539

218-681-6674 • FAX: 218-681-3380 • www.digikey.com



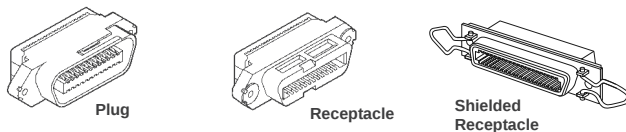


## AMP CHAMP® Shielded Connectors



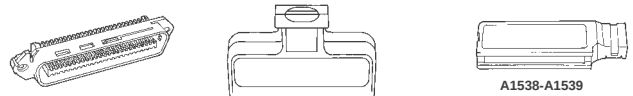
| No. of Pos.                                         | Description         | Digi-Key Part No. | 1    | Pricing 25 | 100    | AMP Part No. |
|-----------------------------------------------------|---------------------|-------------------|------|------------|--------|--------------|
| <b>Shielded Right Angle, Screw-Lock Connector</b>   |                     |                   |      |            |        |              |
| 24                                                  | Receptacle          | A15016-ND         | 6.33 | 126.50     | 404.80 | 553811-1     |
| 50                                                  | Receptacle          | A15001-ND         | 6.98 | 139.50     | 446.40 | 553813-3     |
| <b>Shielded Right Angle, Bail Lock Connector</b>    |                     |                   |      |            |        |              |
| 50                                                  | Receptacle          | A15002-ND         | 8.50 | 170.00     | 544.00 | 554901-1     |
| <b>Shielded Right Angle, Board Lock Grounding</b>   |                     |                   |      |            |        |              |
| 36                                                  | Standard Receptacle | A15004-ND         | 5.60 | 112.00     | 358.40 | 555520-2     |
| 50                                                  | Standard Receptacle | A15003-ND         | 9.30 | 186.00     | 595.20 | 555057-1     |
| 50                                                  | IBM Compatible      | A15005-ND         | 8.33 | 166.50     | 532.80 | 555149-1     |
| <b>Shielded Vertical Mount, Bail Lock Connector</b> |                     |                   |      |            |        |              |
| 50                                                  | Receptacle          | A15008-ND         | 9.90 | 198.00     | 633.60 | 554216-3     |
| <b>Shielded Cable Connector</b>                     |                     |                   |      |            |        |              |
| 24                                                  | Plug, Screw-lock    | A15009-ND         | 7.00 | 140.00     | 448.00 | 554948-3     |
| 36                                                  | Plug, Bail Lock     | A15010-ND         | 4.93 | 98.50      | 315.20 | 554950-1     |
| 50                                                  | Plug, Bail Lock     | A15011-ND         | 4.55 | 91.00      | 291.20 | 554953-1     |
| 50                                                  | Plug, Screw-lock    | A15012-ND         | 6.23 | 124.50     | 398.40 | 554954-1     |
| <b>Shielded Cover Kits</b>                          |                     |                   |      |            |        |              |
| 24                                                  | 180° Cover          | A15013-ND         | 4.88 | 97.50      | 312.00 | 554944-1     |
| 36                                                  | 180° Cover          | A15014-ND         | 2.65 | 53.00      | 169.60 | 554945-1     |
| 50                                                  | 180° Cover          | A15015-ND         | 2.50 | 50.03      | 160.09 | 554946-1     |

## AMP CHAMP® Latch Parallel Interface and Ribbon Cable Connectors



| No. of Contacts                                                    | Description       | Digi-Key Part No. | 1    | Pricing 25 | 50     | AMP Part No. |
|--------------------------------------------------------------------|-------------------|-------------------|------|------------|--------|--------------|
| <b>CHAMP® Latch Connectors — Screw Lock — Plastic</b>              |                   |                   |      |            |        |              |
| 24                                                                 | Plug              | A1559-ND          | 4.68 | 106.28     | 173.55 | 553598-1     |
| 24                                                                 | Receptacle        | A1561-ND          | 4.68 | 106.28     | 173.55 | 553599-1     |
| 36                                                                 | Plug              | A1563-ND          | 5.80 | 131.62     | 214.94 | 553600-1     |
| 36                                                                 | Receptacle        | A1565-ND          | 5.80 | 131.62     | 214.94 | 553601-1     |
| 50                                                                 | Plug              | A1567-ND          | 4.91 | 111.59     | 182.23 | 553602-1     |
| 50                                                                 | Receptacle        | A1569-ND          | 4.91 | 111.59     | 182.23 | 553603-1     |
| <b>Shielded CHAMP® Latch Connectors — Screw Lock, Preassembled</b> |                   |                   |      |            |        |              |
| 24                                                                 | Receptacle        | A1556-ND          | 6.66 | 151.24     | 246.67 | 554434-1     |
| 50                                                                 | Receptacle        | A1557-ND          | 7.96 | 180.67     | 294.67 | 554436-2     |
| <b>CHAMP® Latch Connectors — Bail Lock — Plastic</b>               |                   |                   |      |            |        |              |
| 24                                                                 | Receptacle        | A1561-ND          | 4.68 | 106.28     | 173.55 | 553599-1     |
| 36                                                                 | Plug              | A1564-ND          | 5.26 | 119.36     | 194.91 | 554084-1     |
| 36                                                                 | Receptacle        | A1565-ND          | 5.80 | 131.62     | 214.94 | 553601-1     |
| 50                                                                 | Plug              | A1568-ND          | 6.19 | 140.61     | 229.62 | 554085-1     |
| 50                                                                 | Receptacle        | A1569-ND          | 4.91 | 111.59     | 182.23 | 553603-1     |
| <b>Shielded CHAMP® Latch Connectors — Bail Lock</b>                |                   |                   |      |            |        |              |
| 36                                                                 | Receptacle        | A1575-ND          | 7.25 | 164.73     | 268.67 | 554346-2     |
| <b>CHAMP® Latch Connectors — Panel Mount — Plastic</b>             |                   |                   |      |            |        |              |
| 36                                                                 | Receptacle        | A1566-ND          | 5.40 | 122.63     | 200.25 | 554089-1     |
| 50                                                                 | Receptacle        | A1570-ND          | 4.09 | 92.79      | 151.52 | 554090-1     |
| <b>Shielded CHAMP® Latch Connectors — Screw Lock, Loose Pieces</b> |                   |                   |      |            |        |              |
| 24                                                                 | Receptacle        | A1558-ND          | 5.44 | 123.44     | 201.34 | 554349-1     |
| 50                                                                 | Receptacle        | A1574-ND          | 8.24 | 187.21     | 305.34 | 554350-1     |
| <b>Bail Lock Hardware Kit</b>                                      |                   |                   |      |            |        |              |
| —                                                                  | Hardware          | A1517-ND          | 1.84 | 38.25      | 71.40  | 552561-3     |
| <b>Shielded Screw Lock Hardware Kit</b>                            |                   |                   |      |            |        |              |
| —                                                                  | Rear Mount 4-40   | A1578-ND          | 1.67 | 38.01      | 62.00  | 554272-1     |
| —                                                                  | Rear Mount Metric | A1579-ND          | 1.61 | 36.65      | 59.77  | 554808-1     |

## AMP CHAMP® Parallel Interface Connectors (For Discrete Wire Termination)



| No. of Pos.                | Description                              | Digi-Key Part No. | 1      | Pricing 25 | 100    | AMP Part No. |
|----------------------------|------------------------------------------|-------------------|--------|------------|--------|--------------|
| <b>24-26 AWG, Solid</b>    |                                          |                   |        |            |        |              |
| 24                         | Plug, Bail Lock                          | A1502-ND          | 2.46   | 49.80      | 152.03 | 552272-1     |
| 24                         | Receptacle, Panel Mt. Screw or Bail Lock | A1508-ND          | 2.44   | 49.40      | 150.80 | 2-552273-1   |
| 36                         | Plug, Bail Lock                          | A1503-ND          | 2.90   | 58.64      | 178.99 | 552274-1     |
| 36                         | Receptacle, Panel Mt. Screw or Bail Lock | A1509-ND          | 2.63   | 53.20      | 162.40 | 2-552275-1   |
| 50                         | Plug, Screw Lock, Thick Flange           | A1540-ND          | 2.11   | 42.23      | 135.14 | 229974-1     |
| 50                         | Receptacle, Screw Lock Thick Flange      | A1541-ND          | 2.05   | 40.93      | 130.98 | 229975-1     |
| 50                         | Plug, Bail Lock                          | A1542-ND          | 2.05   | 40.93      | 130.98 | 552032-1     |
| 50                         | Receptacle, Panel Mt. Screw or Bail Lock | A1543-ND          | 2.40   | 48.08      | 153.85 | 2-552001-1   |
| <b>26-28 AWG, 7 Strand</b> |                                          |                   |        |            |        |              |
| 24                         | Plug, Screw Lock                         | A1530-ND          | 2.34   | 44.85      | 150.80 | 552443-1     |
| 24                         | Plug, Bail Lock                          | A1531-ND          | 3.20   | 61.24      | 205.90 | 552469-1     |
| 24                         | Receptacle, Panel Mt. Screw or Bail Lock | A1533-ND          | 2.95   | 56.49      | 189.95 | 2-552474-1   |
| 36                         | Plug, Screw Lock                         | A1534-ND          | 2.52   | 48.30      | 162.40 | 552444-1     |
| 36                         | Plug, Bail Lock                          | A1535-ND          | 2.52   | 48.30      | 162.40 | 552470-1     |
| 36                         | Receptacle, Panel Mt. Screw or Bail Lock | A1537-ND          | 4.07   | 78.06      | 262.45 | 2-552475-1   |
| 50                         | Plug, Screw Lock, Thick Flange           | A1544-ND          | 2.59   | 51.74      | 165.58 | 552390-1     |
| 50                         | Receptacle, Screw Lock, Thick Flange     | A1545-ND          | 2.58   | 51.50      | 164.80 | 552391-1     |
| 50                         | Plug, Bail Lock                          | A1546-ND          | 2.60   | 52.00      | 166.40 | 552471-1     |
| 50                         | Receptacle, Panel Mt. Screw or Bail Lock | A1547-ND          | 2.58   | 51.50      | 164.80 | 2-552476-1   |
| 24                         | 180° Snap-On Strain Relief Cover         | A1506-ND          | 1.71   | 32.79      | 110.25 | 1-552076-1   |
| 36                         | 180° Snap-On Strain Relief Cover         | A1507-ND          | 1.27   | 24.40      | 82.05  | 552075-3     |
| 50                         | 180° Snap-On Strain Relief Cover         | A1549-ND          | 1.40   | 27.94      | 89.40  | 552008-1     |
| 24                         | 90° Snap-On Strain Relief Cover          | A1538-ND          | .75    | 14.45      | 48.57  | 552413-1     |
| 36                         | 90° Snap-On Strain Relief Cover          | A1539-ND          | .85    | 16.29      | 54.78  | 552414-1     |
| 50                         | 90° Snap-On Strain Relief Cover          | A1549-ND          | 50     | 10.03      | 32.09  | 552011-1     |
| —                          | Screw Lock Hardware Kit                  | A1525-ND          | 2.03   | 38.81      | 130.50 | 552568-1     |
| —                          | Bail Lock Hardware Kit                   | A1526-ND          | 1.91   | 36.66      | 123.25 | 552567-1     |
| —                          | Insertion Tool for CHAMP® IDC Connector  | A1528-ND          | 174.90 | —          | —      | 229764-2     |
| —                          | T-Handle Wire Insertion Tool             | A1529-ND          | 8.00   | —          | —      | 229384-1     |

### Vertical Mount

### Edge Mount

### Right Angle



| No. of Pos. | Description                             | Digi-Key Part No. | 1     | Pricing 25 | 100    | AMP Part No. |
|-------------|-----------------------------------------|-------------------|-------|------------|--------|--------------|
| 24          | Receptacle, Vertical Mount              | A1510-ND          | 5.00  | 100.00     | 320.00 | 552224-1     |
| 36          | Receptacle, Vertical Mount              | A1511-ND          | 7.33  | 146.50     | 468.80 | 552235-1     |
| 50          | Plug, Vertical Mount                    | A1550-ND          | 4.38  | 87.50      | 280.00 | 552116-1     |
| 50          | Receptacle, Vertical Mount              | A1552-ND          | 4.38  | 87.50      | 280.00 | 552118-1     |
| 24          | Receptacle, Edge Mount                  | A1512-ND          | 5.83  | 116.50     | 372.80 | 552230-1     |
| 36          | Receptacle, Edge Mount                  | A1513-ND          | 6.83  | 136.50     | 436.80 | 552241-1     |
| 50          | Receptacle, Edge Mount                  | A1553-ND          | 7.80  | 156.00     | 499.20 | 552130-1     |
| 24          | Receptacle, Right-Angle Mount           | A1514-ND          | 6.05  | 121.00     | 387.20 | 552740-1     |
| 36          | Receptacle, Right-Angle Mount           | A1515-ND          | 6.48  | 129.50     | 414.40 | 552742-1     |
| 50          | Plug, Right-Angle Mount                 | A1555-ND          | 6.78  | 135.50     | 433.60 | 552726-1     |
| 50          | Receptacle, Right-Angle Mount           | A1554-ND          | 6.78  | 135.50     | 433.60 | 552725-1     |
| —           | Screw Lock Hardware Kit, Vertical Mount | A1523-ND          | 3.45  | 69.00      | 220.80 | 552563-1     |
| —           | Bail Lock Hardware Kit, Vertical Mount  | A1520-ND          | 1.70  | 34.00      | 108.80 | 552562-1     |
| —           | Screw Lock Hardware Kit, Edge Mount     | A1521-ND          | 3.15  | 63.00      | 201.60 | 552675-1     |
| —           | Bail Lock Hardware Kit, Edge Mount      | A1522-ND          | 5.33  | 106.50     | 340.80 | 552676-1     |
| —           | Screw Lock Hardware Kit, Rt-Angle Mt    | A1524-ND          | 1.60  | 32.00      | 102.40 | 552631-1     |
| —           | 4-40 Mounting Screw                     | A1516-ND          | 90/10 | —          | 2.86   | 229911-1     |

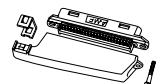
## AMP CHAMP® Connector Kits

### A1571-ND:

• 50-Position Plug with Tapered Cover • Wire Size of 24 AWG, Solid

### A1572-ND:

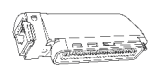
• 50-Position Receptacle with Tapered Cover • Wire Size of 24 AWG, Solid



| Cable Dia. Range (mm) | Digi-Key Part No. | 1    | Pricing 25 | 100    | AMP Part No. |
|-----------------------|-------------------|------|------------|--------|--------------|
| 8.89-10.80            | A1571-ND          | 3.31 | 69.05      | 200.21 | 229912-1     |
| 8.89-10.80            | A1572-ND          | 3.31 | 69.05      | 200.21 | 229913-1     |

For discrete wire termination, kit includes connector, 90° cover and hardware.

| Description                                | Digi-Key Part No. | Pricing 1 | 25     | AMP Part No. |
|--------------------------------------------|-------------------|-----------|--------|--------------|
| Modular Champ Adaptor (Prewired Assembly*) | A1573-ND          | 10.88     | 219.93 | 552789-1     |

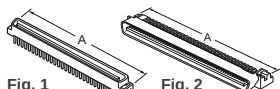


\* Wiring is as follows: Pin 1 – Green; Pin 2 – Black; Pin 26 – Red; and Pin 27 – Yellow.

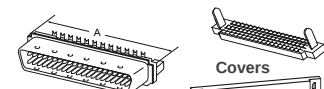
# 1-800-344-4539

218-681-6674 • FAX: 218-681-3380 • [www.digikey.com](http://www.digikey.com)

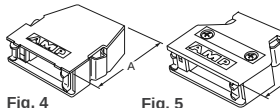
# AMP .050" (1.27mm) Connectors



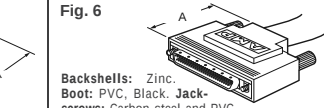
**Fig. 1**  
**Housing & Tine Plate:** Glass-filled nylon, rated 94V-0, black for standard; LCP, rated 94V-0, black for High Temp. **Contacts:** Phosphor bronze selectively plated with min. of .000030 gold in mating area and tin-lead in solder tail area. **Retention Leg (Board Lock):** Brass, tin-lead plated.



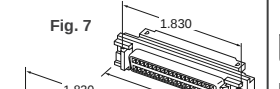
**Fig. 3**  
**Covers:** Thermoplastic, 94V-0 rated, black. **Backshells:** Thermoplastic, 94V-0 rated, black. **Contacts:** Phosphor bronze, duplex plated .000050 min. tin-lead on mating end; .000050 min. tin-lead on termination end; all underplated .000050 min. nickel. **Shell:** Steel, plated .000200 min. bright tin-lead over .000050 min. copper.



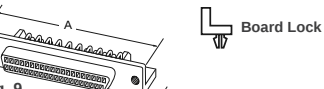
**Fig. 4**  
**Backshell:** Zinc, plated nickel over copper. **Spring Latch:** Stainless steel. **Strain Relief Staple:** Steel, plated tin-lead over nickel.



**Fig. 6**  
**Boots:** PVC, Black. **Jackscrews:** Carbon steel and PVC, black plated .000200 min. zinc, black chromate. **Staple:** Carbon steel, plated .000050 min. tin-lead over .000050 min. nickel. **Screws:** Stainless steel.



**Fig. 7**  
**Board Lock:** Steel, plated .000200 min. bright tin over .000050 min. copper. **Bracket:** Zinc, plated nickel over copper. **Contacts:** Phosphor bronze, duplex plated .000030 min. gold on mating end; .000050 min. tin-lead in termination area, all underplated .000050 min. nickel.



**Fig. 9**  
**Housing:** Thermoplastic, 94V-0 rated, black. **SMT compatible.** **Shell:** Steel, plated .000200 min. bright tin over .000050 min. copper. **Bracket:** Zinc, plated nickel over copper. **Contacts:** Phosphor bronze, duplex plated .000030 min. gold on mating end; .000120 min. tin-lead on solder end; all underplated .000050 min. nickel.



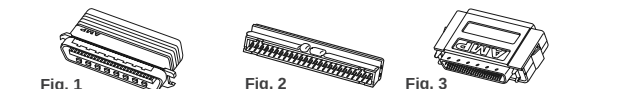
**Fig. 10**  
**Covers:** Thermoplastic, 94V-0 rated, black. **Shell:** Steel, plated .000200 min. bright tin over .000050 min. copper. **Bracket:** Zinc, plated nickel over copper. **Contacts:** Phosphor bronze, duplex plated .000030 min. gold on mating end; .000120 min. tin-lead on solder end; all underplated .000050 min. nickel.



**Fig. 11**  
**Housing:** Thermoplastic, 94V-0 rated, black. **SMT compatible.** **Shell:** Steel, plated .000200 min. bright tin over .000050 min. copper. **Bracket:** Zinc, plated nickel over copper. **Contacts:** Phosphor bronze, duplex plated .000030 min. gold on mating end; .000120 min. tin-lead on solder end; all underplated .000050 min. nickel.

| Fig.                                                                   | No. of Pos. | Description                       | Dim. A Inch (mm) | Digi-Key Part No. | Pricing 1 25 100    | AMP Part No. |
|------------------------------------------------------------------------|-------------|-----------------------------------|------------------|-------------------|---------------------|--------------|
| <b>CHAMP® .050" (1.27mm) Series (VESA Media Bus Standard)</b>          |             |                                   |                  |                   |                     |              |
| 1                                                                      | 80          | Vertical Plug                     | 2.447 (62.15)    | A15020-ND         | 4.89 98.80 301.60   | 2-557102-1   |
| 2                                                                      | 80          | Right Angle Plug                  | 2.391 (60.73)    | A15021-ND         | 6.25 126.35 385.70  | 2-557100-1   |
| 1                                                                      | 68          | Vertical Plug                     | 2.147 (54.53)    | A15022-ND         | 5.43 109.73 334.95  | 1-557102-7   |
| 2                                                                      | 68          | Right Angle Plug                  | 2.091 (53.11)    | A15023-ND         | 5.64 114.00 348.00  | 1-557100-7   |
| <b>AMPLIMITE® .050" (1.27mm) Series (SCSI-2, SCSI-3, IPI-2, HIPPI)</b> |             |                                   |                  |                   |                     |              |
| <b>Cable Plug Connectors</b>                                           |             |                                   |                  |                   |                     |              |
| 3                                                                      | 50          | w/ Assembled Termination Covers   | 1.579 (40.11)    | A15029-ND         | 4.21 85.03 259.55   | 749111-4     |
| 3                                                                      | 50          | w/o Assembled Termination Covers  | 1.579 (40.11)    | A15030-ND         | 4.15 83.00 265.60   | 749621-5     |
| 3                                                                      | 50          | w/ Wire Lacing Termination Covers | 1.579 (40.11)    | A15032-ND         | 5.35 107.00 342.40  | 1-750913-5   |
| 3                                                                      | 68          | w/ Assembled Termination Covers   | 2.029 (51.54)    | A15033-ND         | 6.25 125.00 400.00  | 749111-6     |
| 3                                                                      | 68          | w/o Assembled Termination Covers  | 2.029 (51.54)    | A15034-ND         | 4.50 90.00 288.00   | 749621-7     |
| 3                                                                      | 68          | w/ Wire Lacing Termination Covers | 2.029 (51.54)    | A15035-ND         | 5.58 111.50 356.00  | 1-750913-7   |
| <b>Shielded Backshell Kits</b>                                         |             |                                   |                  |                   |                     |              |
| 4                                                                      | 50          | w/ Latches                        | 1.395 (35.43)    | A15036-ND         | 4.58 91.50 292.80   | 749193-2     |
| 5                                                                      | 50          | w/ Latches                        | 1.800 (45.72)    | A15037-ND         | 6.00 120.00 384.00  | 749899-3     |
| 4                                                                      | 68          | w/ Latches                        | 1.405 (35.69)    | A15038-ND         | 8.13 162.50 520.00  | 749195-2     |
| 6                                                                      | 68          | w/ Male Jackscrews                | 1.887 (47.93)    | A15039-ND         | 11.98 239.50 766.40 | 750752-1     |
| <b>Panel Mount Receptacle Assemblies</b>                               |             |                                   |                  |                   |                     |              |
| 7                                                                      | 50          | w/ Rails, 2/56 threaded holes     | 2.065 (52.45)    | A15031-ND         | 11.10 222.00 710.40 | 749611-5     |
| 7                                                                      | 50          | w/ Rails, 4/40 threaded holes     | 2.065 (52.45)    | A15031-ND         | 7.50 150.00 480.00  | 750450-1     |
| 8                                                                      | 50          | w/o Rails, 2/56 threaded holes    | 2.065 (52.45)    | A15032-ND         | 6.90 138.00 441.60  | 749656-5     |
| 8                                                                      | 50          | w/o Rails, 4/40 threaded holes    | 2.065 (52.45)    | A15033-ND         | 7.33 146.50 468.80  | 750640-1     |
| <b>Right Angle Receptacle Headers</b>                                  |             |                                   |                  |                   |                     |              |
| 9                                                                      | 50          | w/o Rails, without Boardlocks     | 2.065 (52.45)    | A15030-ND         | 5.45 109.00 348.80  | 787169-5     |
| 9                                                                      | 68          | w/o Rails, with Boardlocks        | 2.515 (63.88)    | A15032-ND         | 5.10 102.00 326.40  | 787170-2     |
| 9                                                                      | 100         | w/o Rails, without Boardlocks     | 3.315 (84.20)    | A15035-ND         | 11.20 224.00 716.80 | 787169-9     |
| 10                                                                     | 26          | w/o Rails, with Boardlocks        | 1.465 (37.21)    | A15034-ND         | 4.95 99.00 316.80   | 787082-2     |
| 10                                                                     | 50          | w/o Rails, with Boardlocks        | 2.065 (52.45)    | A15036-ND         | 3.15 63.00 201.60   | 787082-2     |
| 10                                                                     | 50          | w/o Rails, without Boardlocks     | 2.065 (52.45)    | A15037-ND         | 5.40 108.00 345.60  | 787394-5     |
| 10                                                                     | 68          | w/o Rails, with Boardlocks        | 2.515 (63.88)    | A15032-ND         | 5.05 101.00 323.20  | 787082-7     |
| 10                                                                     | 68          | w/o Rails, without Boardlocks     | 2.515 (63.88)    | A15033-ND         | 6.98 139.50 446.40  | 787394-7     |
| 11                                                                     | 26          | w/ Rails, without Boardlocks      | 1.465 (37.21)    | A15034-ND         | 4.70 94.00 300.80   | 787190-2     |
| 11                                                                     | 50          | w/ Rails, with Boardlocks         | 2.065 (52.45)    | A15036-ND         | 5.70 114.00 364.80  | 787171-5     |
| 11                                                                     | 50          | w/ Rails, without Boardlocks      | 2.065 (52.45)    | A15039-ND         | 5.53 110.50 353.60  | 787190-5     |
| 11                                                                     | 68          | w/ Rails, with Boardlocks         | 2.515 (63.88)    | A15033-ND         | 6.30 126.00 403.20  | 787171-7     |

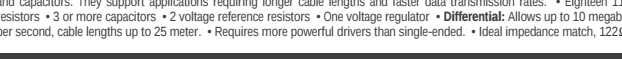
# AMP SCSI Terminators



**Fig. 1**  
**Types:** SCSI • Single-Ended: Allows up to 5 megabytes per second. A. Passive: 220/330Ω; for lower data transmission rates • Termination of each signal consists of 220Ω to Term Power Line and 330Ω to ground • 36 resistors • Ideal impedance match, 132Ω. B. Active: Also referred to as "Regulated" or "Boulay." These terminators include a voltage regulator along with resistors and capacitors. They support applications requiring longer cable lengths and faster data transmission rates. • Eighteen 110Ω resistors • 3 or more capacitors • 2 voltage reference resistors • One voltage regulator • Differential: Allows up to 10 megabytes per second, cable lengths up to 25 meter. • Requires more powerful drivers than single-ended. • Ideal impedance match, 122Ω.



**Fig. 2**  
**Types:** SCSI • Single-Ended: Allows up to 5 megabytes per second. A. Passive: 220/330Ω; for lower data transmission rates • Termination of each signal consists of 220Ω to Term Power Line and 330Ω to ground • 36 resistors • Ideal impedance match, 132Ω. B. Active: Also referred to as "Regulated" or "Boulay." These terminators include a voltage regulator along with resistors and capacitors. They support applications requiring longer cable lengths and faster data transmission rates. • Eighteen 110Ω resistors • 3 or more capacitors • 2 voltage reference resistors • One voltage regulator • Differential: Allows up to 10 megabytes per second, cable lengths up to 25 meter. • Requires more powerful drivers than single-ended. • Ideal impedance match, 122Ω.



**Fig. 3**  
**Types:** SCSI • Single-Ended: Allows up to 5 megabytes per second. A. Passive: 220/330Ω; for lower data transmission rates • Termination of each signal consists of 220Ω to Term Power Line and 330Ω to ground • 36 resistors • Ideal impedance match, 132Ω. B. Active: Also referred to as "Regulated" or "Boulay." These terminators include a voltage regulator along with resistors and capacitors. They support applications requiring longer cable lengths and faster data transmission rates. • Eighteen 110Ω resistors • 3 or more capacitors • 2 voltage reference resistors • One voltage regulator • Differential: Allows up to 10 megabytes per second, cable lengths up to 25 meter. • Requires more powerful drivers than single-ended. • Ideal impedance match, 122Ω.

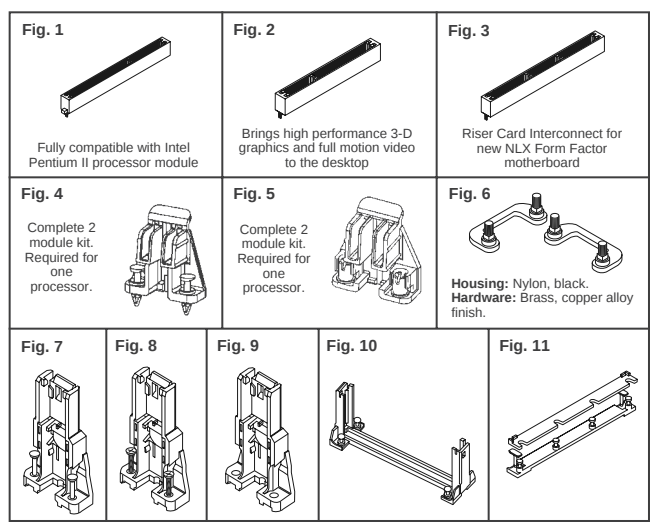
# AMP

## NEW! 1mm Card Edge Connectors Slot 1 / AGP / NLX

AMP 1mm Standard Edge Connectors have been developed specifically to meet the interconnection requirements for the latest technological advances in personal computers. These include Intel's Pentium II™ processor (Slot 1), Accelerated Graphics Port (AGP), and the new NLX Form Factor motherboard.

**FEATURES:** • 1mm contact spacing compatible with latest interconnection technology for Slot 1, AGP and NLX • High temperature housings suitable for surface mount reflow processes • Pivoting board lock feature offering connector centering before contacts enter pc board holes • Certified by Canadian Standards Association to Canadian and United States Requirements • Produced under a Quality Management System certification to ISO 9001.

**PERFORMANCE CHARACTERISTICS:** • Operating Temp.: 0°C to 85°C • Voltage: 250 VAC • Characteristic Impedance: 35<20<80 ohms • Termination Resistance: 20mΩ max. (initial) • Insulation Resistance: 1000MΩ min. • Dielectric Withstanding Voltage: 400VAC @ sea level • Durability: 50 cycles min. • Engaging Force: 3.3 oz. (.917 N) max. average per contact pair. • Separating Force: 1.98 to .35 oz. (.550 to .097N) per contact pair.



| Fig.                                     | Description                                                                                      | Solder Tail Length         | Digi-Key Part No.      | Price 1 25 100                         | AMP Part No.         |
|------------------------------------------|--------------------------------------------------------------------------------------------------|----------------------------|------------------------|----------------------------------------|----------------------|
| <b>1mm Standard Edge Connector</b>       |                                                                                                  |                            |                        |                                        |                      |
| 1                                        | 242 Pos. Slot 1 Connector for Pentium II and Celeron processors                                  | .085 (2.16)<br>.100 (2.54) | A15101-ND<br>A15102-ND | 2.45 52.79 139.36<br>2.45 52.79 139.36 | 145251-1<br>145251-2 |
| 2                                        | 124 Pos. AGP (Accelerated Graphics Port) Connector for AGP card.                                 | .085 (2.16)<br>.100 (2.54) | A15103-ND<br>A15104-ND | .61 15.07 58.21<br>1.21 25.99 68.61    | 145263-1<br>145263-2 |
| 3                                        | 340 Pos. NLX Riser Card Interconnect                                                             | .085 (2.16)<br>.100 (2.54) | A15105-ND<br>A15106-ND | 2.49 61.26 236.60<br>2.49 61.26 236.60 | 145275-1<br>145275-2 |
| <b>Celeron Retention Modules</b>         |                                                                                                  |                            |                        |                                        |                      |
| 4                                        | Module Kit w/Fastex plastic fasteners, 2 pieces                                                  |                            | A15107-ND              | 1.78 43.86 169.40                      | 145333-1             |
| 5                                        | Module Kit w/Captive brass Fasteners, 2 pieces (Use with 145312-1 Bridge/Stud Assembly)          |                            | A15108-ND              | 2.69 66.34 256.20                      | 145342-1             |
| 6                                        | Bridge/Stud Assembly for #145342-1. One bridge/stud assembly required for each retention module  |                            | A15109-ND              | 1.71 37.63 141.90                      | 145312-1             |
| <b>Universal Retention Modules (URM)</b> |                                                                                                  |                            |                        |                                        |                      |
| 7                                        | URM w/Straight pin plastic fasteners. Compatible with .159" (4.04mm) holes. 2 pieces             |                            | A15110-ND              | 1.14 26.96 100.65                      | 145380-2             |
| 8                                        | URM w/Screw down fasteners. Compatible with .140" (3.56mm) or .159" (4.04mm) holes. 2 pieces     |                            | A15111-ND              | 1.50 35.63 133.00                      | 145381-2             |
| 9                                        | URM w/Clearance hole for #6 Screw. Customer supplies fastener hardware. 2 pieces.                |                            | A15112-ND              | .71 16.88 63.00                        | 145382-2             |
| <b>Integrated Retention Modules</b>      |                                                                                                  |                            |                        |                                        |                      |
| 10                                       | Pentium II Retention Module w/Fastex plastic fasteners                                           |                            | A15113-ND              | 2.61 64.16 247.80                      | 145327-1             |
| <b>Heat Sink Support Kit</b>             |                                                                                                  |                            |                        |                                        |                      |
| 11                                       | Heat Sink Support Base with plastic fasteners for use with Integrated Retention Module #145327-1 |                            | A15114-ND              | 3.27 80.48 310.80                      | 145308-1             |

| No. of Fig. Pos.                  | Description                                             | Digi-Key Part No. | Pricing 1 25 100      | AMP Part No. |
|-----------------------------------|---------------------------------------------------------|-------------------|-----------------------|--------------|
| <b>Single Ended Passive</b>       |                                                         |                   |                       |              |
| 1                                 | 50 CHAMP® style plug, mate w/ 2.16mm center-line SCSI-1 | A15032-ND         | 34.19 691.13 2109.75  | 556578-1     |
| 2                                 | 50 Plug, mate w/ ribbon cable socket connectors         | A15034-ND         | 23.92 483.55 1476.10  | 869587-1     |
| 3                                 | 50 AMPLIMITE® 1.27mm series plug, "A" cable SCSI-2      | A15036-ND         | 22.44 453.63 1384.75  | 750881-1     |
| <b>Single Ended Active</b>        |                                                         |                   |                       |              |
| 3                                 | 50 AMPLIMITE® 1.27mm series plug, "A" cable SCSI-2      | A15037-ND         | 35.81 723.90 2209.80  | 869546-1     |
| 4                                 | 68 AMPLIMITE® 1.27mm series plug, "P&Q" cable SCSI-3    | A15039-ND         | 33.89 684.95 2090.90  | 869516-1     |
| 6                                 | 68 Plug feed-thru to 68 position receptacle             | A15043-ND         | 81.80 1653.48 5047.45 | 869684-1     |
| 7                                 | 68 Receptacle feed-thru to 50 position plug             | A15045-ND         | 87.49 1768.43 5398.35 | 869680-1     |
| <b>Differential</b>               |                                                         |                   |                       |              |
| 1                                 | 50 CHAMP® style plug, mate w/ 2.16mm center-line SCSI-1 | A15033-ND         | 35.53 718.20 2192.40  | 555867-1     |
| 3                                 | 50 AMPLIMITE® 1.27mm series plug, "A" cable SCSI-2      | A15038-ND         | 51.72 1045.48 3191.45 | 869545-1     |
| 4                                 | 68 AMPLIMITE® 1.27mm series plug, "P&Q" cable SCSI-3    | A15040-ND         | 27.52 556.23 1697.95  | 869515-1     |
| 6                                 | 68 Plug feed-thru to 68 position receptacle             | A15044-ND         | 55.91 1130.03 3449.55 | 869682-1     |
| 7                                 | 68 Receptacle feed-thru to 50 position plug             | A15046-ND         | 79.22 1601.23 4887.95 | 869681-1     |
| <b>Active Negation Compatible</b> |                                                         |                   |                       |              |
| 5                                 | 68 .64mm center-line ribbon cable SCSI-3                | A15041-ND         | 24.44 494.00 1508.00  | 869705-1     |
| <b>Unterminated</b>               |                                                         |                   |                       |              |
| 7                                 | 68 Receptacle feed-thru to 50 position plug             | A15047-ND         | 65.68 1327.63 4052.75 | 869686-1     |

**AMP****AMPLIMITE® D-Sub Connectors  
Solder Cup Type-Tin Plated**Connector comes  
complete with pins  
& sockets.

| No. of Pos. | Sex    | Digi-Key Part No. | 1    | Pricing 25 100 | AMP Part No. |
|-------------|--------|-------------------|------|----------------|--------------|
| 9           | Male   | A2043-ND          | 1.51 | 32.49          | 747904-2     |
| 9           | Female | A2047-ND          | 2.03 | 43.86          | 747905-2     |
| 15          | Male   | A2044-ND          | 2.45 | 52.79          | 747908-2     |
| 15          | Female | A2048-ND          | 3.36 | 72.50          | 747909-2     |
| 25          | Male   | A2045-ND          | 2.86 | 61.72          | 747912-2     |
| 25          | Female | A2049-ND          | 3.58 | 77.15          | 747913-2     |
| 37          | Male   | A2046-ND          | 5.25 | 113.13         | 747916-2     |
| 37          | Female | A2050-ND          | 6.47 | 139.38         | 747917-2     |

**AMPLIMITE® D-Sub Connectors  
Zinc and Tin Plated Metal Shell****Crimp Type**  
Pins and Sockets  
Sold Separately

| No. of Pos.                                                | Sex    | Digi-Key Part No. | 1    | Pricing 25 100 | AMP Part No. |
|------------------------------------------------------------|--------|-------------------|------|----------------|--------------|
| <b>Zinc Plated Shell, Crimp Type - Uses Crimp Contacts</b> |        |                   |      |                |              |
| 9                                                          | Male   | A1000-ND          | .90  | 19.49          | 205204-1     |
| 9                                                          | Female | A1001-ND          | 1.06 | 22.74          | 205203-1     |
| 15                                                         | Male   | A1002-ND          | 1.32 | 28.42          | 205206-1     |
| 15                                                         | Female | A1003-ND          | 1.17 | 25.18          | 205205-1     |
| 25                                                         | Male   | A1004-ND          | 1.17 | 25.18          | 205208-1     |
| 25                                                         | Female | A1005-ND          | .94  | 20.30          | 205207-1     |
| 37                                                         | Male   | A1006-ND          | 1.83 | 39.38          | 205210-1     |
| 37                                                         | Female | A1007-ND          | 1.83 | 39.38          | 205209-1     |
| 50                                                         | Male   | A2037-ND          | 2.23 | 48.13          | 205211-1     |
| 50                                                         | Female | A2041-ND          | 2.23 | 48.13          | 205211-1     |

|                                                           |        |          |      |       |          |
|-----------------------------------------------------------|--------|----------|------|-------|----------|
| <b>Tin Plated Shell, Crimp Type - Uses Crimp Contacts</b> |        |          |      |       |          |
| 9                                                         | Male   | A1030-ND | 1.21 | 25.99 | 205204-3 |
| 9                                                         | Female | A1031-ND | .75  | 16.24 | 205203-3 |
| 15                                                        | Male   | A1032-ND | 1.57 | 33.75 | 205206-2 |
| 15                                                        | Female | A1033-ND | .83  | 17.87 | 205205-2 |
| 25                                                        | Male   | A1034-ND | .99  | 21.28 | 207464-1 |
| 25                                                        | Female | A1035-ND | .94  | 20.30 | 207463-1 |
| 37                                                        | Male   | A1036-ND | 1.83 | 39.38 | 205210-2 |
| 37                                                        | Female | A1037-ND | 1.13 | 24.36 | 205209-2 |
| 50                                                        | Male   | A2038-ND | 2.64 | 56.88 | 205212-2 |
| 50                                                        | Female | A2042-ND | 2.23 | 48.13 | 205211-2 |

|                                                                                  |      |          |      |       |          |
|----------------------------------------------------------------------------------|------|----------|------|-------|----------|
| <b>Tin Plated Shell With Grounding Indents, Crimp Type - Uses Crimp Contacts</b> |      |          |      |       |          |
| 9                                                                                | Male | A1038-ND | .79  | 17.05 | 205204-4 |
| 15                                                                               | Male | A1039-ND | .94  | 20.30 | 205206-3 |
| 25                                                                               | Male | A1040-ND | .83  | 17.87 | 207464-2 |
| 37                                                                               | Male | A1041-ND | 1.58 | 34.11 | 205210-3 |

**Pins & Sockets****Crimp Type**

Pin Dia.: .040" (1.02mm)

Material: Pin - Brass per MIL-C-50 Socket - Phosphor bronze per QQ-B-750  
Finish: Gold flash over .000030 nickel Wire Size Range: 24-20 AWG

| Description                                        | Digi-Key Part No. | 10   | Pricing 100 500 | AMP Part No. |
|----------------------------------------------------|-------------------|------|-----------------|--------------|
| Pin, 24-20 AWG                                     | A1008-ND          | 1.79 | 11.04           | 49.70        |
| Socket, 24-20 AWG                                  | A1009-ND          | 1.90 | 11.69           | 52.62        |
| Crimp Tool for D-Sub Contacts w/Die                | A9990-ND          |      | 132.00 each     | 58448-2      |
| Die Set for D-Sub Contacts, use w/A9996            | A9814-ND          |      | 84.00 each      | 58448-3      |
| Pro-Crimper II Hand Tool w/o Die                   | A9996-ND          |      | 63.75 each      | 354940-1     |
| Universal Crimp Tool for Pins and Sockets          | A9999-ND          |      | 16.54 each      | 601884-1     |
| Pin Insertion/Extraction Tool for Snap-In Contacts | A1010-ND          |      | 5.02 each       | 91067-2      |

**Solder Cup Type**

Pin Diameter: .040" (1.02mm)

Material: Pin - Brass per MIL-C-50; Socket - Phosphor bronze per QQ-B-750  
Finish: Gold flash over .000050 (0.00127) nickel on entire contact, with additional .000030 (0.00076) gold on mating end for length of .150" (3.81mm) min. (pin); .100" (2.54mm) min. (socket).

| Description                                        | Digi-Key Part No. | 10   | Pricing 100 500 | AMP Part No. |
|----------------------------------------------------|-------------------|------|-----------------|--------------|
| Pin 24-20 AWG                                      | A1028-ND          | 2.42 | 14.91           | 67.08        |
| Socket 24-20 AWG                                   | A1029-ND          | 2.91 | 17.93           | 80.69        |
| Pin Insertion/Extraction Tool for Snap-In Contacts | A1010-ND          |      | 5.02 each       | 91067-2      |

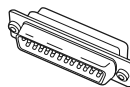
**Series 109 Connectors for  
Crimp, Snap-In Contacts**

(Per MIL-C-24308 Qualified Connectors)

Class G steel shell has cadmium  
plating per ASTM-B633.

Pins and Sockets Sold Separately

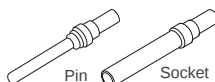
Only use sockets for Series 109 Connectors



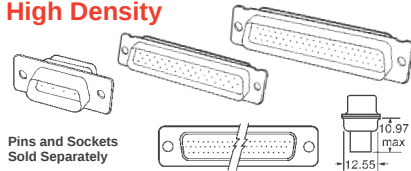
| No. of Pos.       | Sex    | Digi-Key Part No. | 1     | Pricing 25 100 | AMP Part No. |
|-------------------|--------|-------------------|-------|----------------|--------------|
| <b>Crimp Type</b> |        |                   |       |                |              |
| 9                 | Male   | A2150-ND          | 4.99  | 107.50         | 205162-1     |
| 9                 | Female | A2151-ND          | 4.58  | 98.75          | 205161-1     |
| 15                | Male   | A2151-ND          | 5.39  | 116.25         | 205164-1     |
| 15                | Female | A2152-ND          | 5.39  | 116.25         | 205163-1     |
| 25                | Male   | A2152-ND          | 6.00  | 129.38         | 205166-1     |
| 25                | Female | A2157-ND          | 6.00  | 129.38         | 205165-1     |
| 37                | Male   | A2153-ND          | 7.77  | 167.50         | 205168-1     |
| 37                | Female | A2158-ND          | 7.77  | 167.50         | 205167-1     |
| 50                | Male   | A2154-ND          | 10.01 | 215.63         | 205170-1     |
| 50                | Female | A2159-ND          | 12.96 | 279.38         | 205169-1     |

**Screw-Machined Pins & Sockets  
for Series 109  
Connectors****CRIMP TYPE**

Pin Diameter: .040" (1.02mm)

MATERIAL: • Pin Body - Copper Alloy • Socket Body - Beryllium Copper  
• Finish: 50µ Gold • Contact Size: 20 DM. • Pin Diameter: .040" (1.02mm)  
• Test Current: 7.5 amperes.

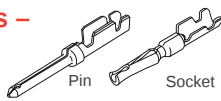
| Description                                                   | Digi-Key Part No. | 10    | Pricing 100 500 | AMP Part No. |
|---------------------------------------------------------------|-------------------|-------|-----------------|--------------|
| <b>50µ Gold</b>                                               |                   |       |                 |              |
| Pin (24-20 AWG)                                               | A2160-ND          | 7.74  | 47.60           | 214.20       |
| Socket (24-20 AWG)                                            | A2161-ND          | 11.38 | 70.00           | 315.00       |
| Insertion/Extraction Tool for Series 109 D-Sub Crimp Contacts | A9979-ND          |       | 9.84 each       | 91285-1      |
| Hand Crimping Tool for Screw-Machined Contacts (20DM)         | A9977-ND          |       | 355.78 each     | 601966-1     |

**AMPLIMITE® D-Sub Connectors -  
High Density**Pins and Sockets  
Sold SeparatelyELECTRICAL CHARACTERISTICS: • Contact Rating: 5.0 amperes.  
• Dielectric Strength: 1000 VAC min. • Insulation Resistance: 5000 megohms min.MECHANICAL CHARACTERISTICS: • Contact Insertion Force: 3 lb. max.  
• Durability: 000030 gold - 500 cycles; Gold Flash - 100 cycles.

| No. of Pos.                                        | Sex    | Digi-Key Part No. | 1    | Pricing 25 100 | AMP Part No. |
|----------------------------------------------------|--------|-------------------|------|----------------|--------------|
| <b>Crimp Type - Tin Plated Shell, High Density</b> |        |                   |      |                |              |
| 15                                                 | Male   | A2076-ND          | 2.26 | 48.73          | 144.23       |
| 15                                                 | Female | A2081-ND          | 2.45 | 52.79          | 156.25       |
| 26                                                 | Male   | A2077-ND          | 4.52 | 97.50          | 288.60       |
| 26                                                 | Female | A2082-ND          | 5.08 | 109.38         | 323.75       |
| 44                                                 | Male   | A2078-ND          | 5.08 | 109.38         | 323.75       |
| 44                                                 | Female | A2083-ND          | 6.41 | 138.13         | 408.85       |
| 62                                                 | Male   | A2079-ND          | 4.90 | 105.63         | 312.65       |
| 62                                                 | Female | A2084-ND          | 7.51 | 161.88         | 479.15       |
| 78                                                 | Male   | A2080-ND          | 5.66 | 121.88         | 360.75       |
| 78                                                 | Female | A2085-ND          | 7.80 | 168.13         | 497.65       |

**Pins & Sockets -  
High Density****CRIMP TYPE**

Pin Diameter: .030" (.76mm)



Material: Pin - Brass. Socket - Phosphor bronze. Finish: 30µ Gold - Duplex plated .000030 gold on mating end, tin-lead on crimp barrel, with entire contact nickel underplated. Gold Flash - Duplex plated gold flash on mating end, tin-lead on crimp barrel, with entire contact nickel underplated.

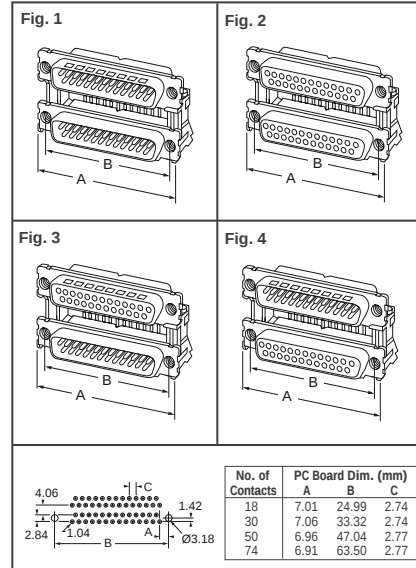
| Description                                                     | Digi-Key Part No. | 10   | Pricing 100 500 | AMP Part No. |
|-----------------------------------------------------------------|-------------------|------|-----------------|--------------|
| Pin (22-28 AWG), 30µ Gold                                       | A2086-ND          | 1.43 | 8.81            | 39.65        |
| Socket (22-28 AWG), 30µ Gold                                    | A2089-ND          | 2.37 | 14.58           | 65.63        |
| Pin (22-28 AWG), Gold Flash                                     | A2086-ND          | 1.80 | 11.09           | 49.92        |
| Socket (22-28 AWG), Gold Flash                                  | A2090-ND          | 2.68 | 16.49           | 74.19        |
| Insertion/Extraction Tool for High Density D-Sub Crimp Contacts | A9979-ND          |      | 9.84 each       | 91285-1      |
| Crimp Tool for High Density D-Sub w/Die                         | A9815-ND          |      | 135.00 each     | 90800-1      |
| Die Set for High Density D-Sub Crimp Contact, use w/A9996       | A9816-ND          |      | 99.75 each      | 90800-2      |
| Pro-Crimper II Hand Tool w/o Die                                | A9996-ND          |      | 63.75 each      | 354940-1     |
| Crimp Tool for High Density D-Sub Pins & Sockets                | A2112-ND          |      | 416.00 each     | 90430-1      |

**AMPLIMITE® D-Sub Connectors  
Discrete Wire Type -  
Metal/Plastic Shell**

| No. of Pos.                                                        | Sex    | Digi-Key Part No. | 1     | Pricing 25 100 | AMP Part No.                 |
|--------------------------------------------------------------------|--------|-------------------|-------|----------------|------------------------------|
| <b>Discrete Wire Type - Metal Shell</b>                            |        |                   |       |                |                              |
| 9                                                                  | Male   | A1042-ND          | 2.75  | 59.29          | 175.48                       |
| 9                                                                  | Female | A1043-ND          | 2.75  | 59.22          | 175.30                       |
| 15                                                                 | Male   | A1044-ND          | 3.77  | 81.25          | 240.50                       |
| 15                                                                 | Female | A1045-ND          | 3.77  | 81.25          | 240.50                       |
| 25                                                                 | Male   | A1046-ND          | 3.89  | 83.75          | 247.90                       |
| 25                                                                 | Female | A1047-ND          | 6.03  | 130.00         | 384.80                       |
| 37                                                                 | Male   | A1048-ND          | 6.03  | 130.00         | 384.80                       |
| 37                                                                 | Female | A1049-ND          | 8.67  | 186.88         | 553.15                       |
| <b>Discrete Wire Type - Plastic Shell</b>                          |        |                   |       |                |                              |
| 9                                                                  | Male   | A2000-ND          | 2.56  | 55.22          | 163.45                       |
| 9                                                                  | Female | A2001-ND          | 2.90  | 62.50          | 185.00                       |
| 15                                                                 | Male   | A2002-ND          | 3.45  | 74.38          | 220.15                       |
| 15                                                                 | Female | A2003-ND          | 6.58  | 141.88         | 419.95                       |
| 25                                                                 | Male   | A2004-ND          | 4.79  | 103.13         | 305.25                       |
| 25                                                                 | Female | A2005-ND          | 7.16  | 154.38         | 456.95                       |
| 37                                                                 | Male   | A2006-ND          | 11.37 | 245.00         | 725.20                       |
| 37                                                                 | Female | A2007-ND          | 12.93 | 278.75         | 825.10                       |
| T-Handle Tool for IDC D-Subs                                       |        |                   |       |                | A9980-ND 3.87 each 91287-1   |
| Manual Pistol Grip Tool for Metal & All-Plastic Shell Connectors   |        |                   |       |                | A2031-ND 55.50 each 58074-1  |
| Head Assembly Tool for D-Sub IDC Connectors                        |        |                   |       |                | A2032-ND 175.56 each 58063-2 |
| Contact Extraction Tool for Metal and All-Plastic Shell Connectors |        |                   |       |                | A2033-ND 10.38 each 91232-1  |

**D-Sub Connectors -  
Right-Angle Stacked**

- Front Shells and Brackets: Steel, tin plated
- Housings: 94V-0 rated thermoplastic, black
- PC Board: 94V-0 flame retardant glass/epoxy



| Fig. | No. of Contact Positions | Dimensions (mm) A B | Digi-Key Part No. | 1     | Pricing 25 100 | AMP Part No. |
|------|--------------------------|---------------------|-------------------|-------|----------------|--------------|
| 1    | 9-9 M-M                  | 31.04 24.99         | A1584-ND          | 10.90 | 235.00         | 695.60       |
| 2    | 9-9 F-F                  | 31.04 24.99         | A1580-ND          | 10.90 | 235.00         | 695.60       |
| 2    | 15-15 F-F                | 39.37 33.32         | A1581-ND          | 14.33 | 308.75         | 913.90       |
| 2    | 25-25 F-F                | 53.09 47.04         | A1582-ND          | 15.46 | 333.13         | 986.05       |
| 2    | 37-37 F-F                | 69.55 63.50         | A1583-ND          | 16.82 | 362.50         | 1073.00      |
| 3    | 25-25 F-M                | 53.09 47.04         | A1590-ND          | 15.69 | 338.13         | 1000.85      |
| 4    | 25-25 M-F                | 53.09 47.04         | A1594-ND          | 13.20 | 284.38         | 841.75       |

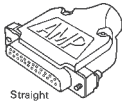
**1-800-344-4539**

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# AMP Hoods

Fig. 1

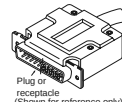
**Die Cast Shield:** Zinc alloy, plated nickel over copper.  
**Metal-Plated Plastic Shield:** Thermoplastic, plated nickel over copper.  
**Plastic Shield:** Thermoplastic, black.



Straight

Fig. 2

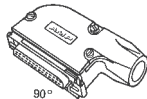
**Cable Clamp Housing:** Thermoplastic, black with textured finish. **Gates:** Thermoplastic, black. **Flat Head Screws:** Steel, black, zinc plated.



Plug or receptacle (Shown for reference only)

Fig. 3

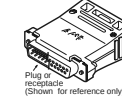
90° exit RFI/EMI die cast shields. **Shield:** Zinc alloy, plated nickel over copper.



90°

Fig. 4

**Cable Clamp Housing:** Thermoplastic, gray. **4-40 Mounting Screws:** Steel, zinc plated. **Flat 4-40 Housing Screws & Hex Nuts:** Steel, zinc plated.



Plug or receptacle (Shown for reference only)

Fig. 5

AMP Qwik-Snap Backshell Kit is a one-piece, all-plastic cable clamp kit. **Cover:** Polypropylene, black. **Strain Relief & Retainer Clip:** Stainless steel. **Screws:** Carbon steel, zinc plated.



| Fig.                                               | No. of Pos. | Max. Cable Dia. (mm) | Description (Type) | Digi-Key Part No. | 1     | 25     | 100    | 500     | AMP Part No. |
|----------------------------------------------------|-------------|----------------------|--------------------|-------------------|-------|--------|--------|---------|--------------|
| <b>Die Cast Shell (Hardware Included)</b>          |             |                      |                    |                   |       |        |        |         |              |
| 1                                                  | 9           | 8.13                 | Die Cast           | A2061-ND#1        | 5.25  | 113.13 | 334.85 | 1267.00 | 748676-1     |
|                                                    | 15          | 8.13                 | Die Cast           | A2062-ND#1        | 5.25  | 113.13 | 334.85 | 1267.00 | 748676-2     |
|                                                    | 25          | 11.94                | Die Cast           | A2063-ND#1        | 5.45  | 117.50 | 347.80 | 1316.00 | 748676-3     |
|                                                    | 37          | 11.94                | Die Cast           | A2064-ND#1        | 7.86  | 169.38 | 501.35 | 1897.00 | 748676-4     |
|                                                    | 50          | 11.94                | Die Cast           | A2065-ND#1        | 8.35  | 180.00 | 532.80 | 2016.00 | 748676-5     |
| <b>Metal Shell (Must Order Ferrule Separately)</b> |             |                      |                    |                   |       |        |        |         |              |
| 1                                                  | 9           | 5.08                 | Straight           | A2008-ND          | 4.07  | 90.95  | 299.60 | 1391.00 | 745171-2     |
|                                                    | 9           | 6.10                 | Straight           | A2009-ND          | 3.57  | 79.90  | 263.20 | 1222.00 | 745171-1     |
|                                                    | 15          | 5.71                 | Straight           | A2012-ND          | 4.16  | 93.08  | 306.60 | 1423.50 | 745172-3     |
|                                                    | 15          | 7.62                 | Straight           | A2013-ND          | 4.64  | 103.70 | 341.60 | 1586.00 | 745172-4     |
|                                                    | 15          | 9.52                 | Straight           | A2014-ND          | 3.95  | 88.40  | 291.20 | 1352.00 | 745172-1     |
| 1                                                  | 25          | 7.11                 | Straight           | A2020-ND          | 4.88  | 109.23 | 359.80 | 1670.50 | 745173-5     |
|                                                    | 25          | 8.89                 | Straight           | A2021-ND          | 3.78  | 84.58  | 278.60 | 1293.50 | 745173-3     |
|                                                    | 25          | 10.92                | Straight           | A2022-ND          | 3.78  | 84.58  | 278.60 | 1293.50 | 745173-3     |
|                                                    | 37          | 8.89                 | Straight           | A2028-ND          | 6.50  | 145.35 | 478.80 | 2223.00 | 745174-5     |
|                                                    | 37          | 10.92                | Straight           | A2029-ND          | 5.15  | 115.18 | 379.40 | 1761.50 | 745174-4     |
| 3                                                  | 37          | 12.70                | Straight           | A2030-ND          | 5.07  | 113.48 | 373.80 | 1735.50 | 745174-3     |
|                                                    | 15          | 5.71                 | 90°                | A2015-ND#         | 8.00  | 178.93 | 589.40 | 2736.50 | 745652-4     |
|                                                    | 15          | 7.62                 | 90°                | A2016-ND#         | 8.00  | 178.93 | 589.40 | 2736.50 | 745652-3     |
|                                                    | 15          | 9.52                 | 90°                | A2017-ND#         | 10.24 | 229.08 | 754.60 | 3503.50 | 745652-2     |
|                                                    | 15          | 10.92                | 90°                | A2036-ND#         | 7.77  | 173.83 | 572.60 | 2658.50 | 745652-1     |
| —                                                  | 25          | 7.11                 | 90°                | A2023-ND#         | 9.50  | 212.50 | 700.00 | 3250.00 | 745653-5     |
|                                                    | 25          | 8.89                 | 90°                | A2024-ND#         | 9.50  | 212.50 | 700.00 | 3250.00 | 745653-4     |
|                                                    | 25          | 10.92                | 90°                | A2025-ND#         | 9.44  | 211.23 | 695.80 | 3230.50 | 745653-3     |
|                                                    | —           | 5.08                 | Ferrule            | A2011-ND          | 22    | 4.91   | 16.18  | 75.13   | 745508-2     |
|                                                    | —           | 7.11-7.62            | Ferrule            | A2026-ND          | 22    | 4.91   | 16.18  | 75.13   | 745508-4     |
| —                                                  | —           | 8.89                 | Ferrule            | A2027-ND          | 22    | 4.91   | 16.18  | 75.13   | 745508-5     |
|                                                    | —           | 9.40-9.52            | Ferrule            | A2019-ND          | 22    | 4.91   | 16.18  | 75.13   | 745508-6     |
|                                                    | —           | 10.92                | Ferrule            | A2034-ND          | 22    | 4.91   | 16.18  | 75.13   | 745508-1     |
|                                                    | —           | 12.19-12.70          | Ferrule            | A2035-ND          | 22    | 4.91   | 16.18  | 75.13   | 745508-8     |
| <b>Plastic Shell (Hardware Included)</b>           |             |                      |                    |                   |       |        |        |         |              |
| 1                                                  | 9           | 8.13                 | Metal Plated       | A2066-ND#1        | 3.39  | 73.09  | 216.35 | 818.62  | 748677-1     |
|                                                    | 15          | 8.13                 | Metal Plated       | A2067-ND#1        | 4.35  | 93.75  | 277.50 | 1050.00 | 748677-2     |
|                                                    | 25          | 11.94                | Metal Plated       | A2068-ND#1        | 3.58  | 77.15  | 228.37 | 864.10  | 748677-3     |
|                                                    | 37          | 11.94                | Metal Plated       | A2069-ND#1        | 6.18  | 133.13 | 394.05 | 1491.00 | 748677-4     |
|                                                    | 50          | 11.94                | Metal Plated       | A2070-ND#1        | 9.72  | 209.38 | 619.75 | 2345.00 | 748677-5     |
| 1                                                  | 9           | 8.13                 | Straight, Black    | A2071-ND#1        | 2.83  | 60.91  | 180.29 | 682.19  | 748678-1     |
|                                                    | 15          | 8.13                 | Straight, Black    | A2072-ND#1        | 4.32  | 93.13  | 275.65 | 1043.03 | 748678-2     |
|                                                    | 25          | 11.94                | Straight, Black    | A2073-ND#1        | 3.01  | 64.97  | 192.31 | 727.66  | 748678-3     |
|                                                    | 37          | 11.94                | Straight, Black    | A2074-ND#1        | 3.60  | 77.50  | 229.40 | 868.00  | 748678-4     |
|                                                    | 50          | 11.94                | Straight, Black    | A2075-ND#1        | 3.51  | 75.63  | 223.85 | 847.00  | 748678-5     |
| 2                                                  | 9           | 4.06                 | Straight, Black    | A9001-ND          | 1.60  | 36.42  | 124.58 | 570.11  | 207467-1     |
|                                                    | 15          | 8.13                 | Straight, Black    | A9002-ND          | 1.98  | 44.83  | 153.33 | 701.68  | 207470-1     |
|                                                    | 25          | 9.91                 | Straight, Black    | A9003-ND          | 2.02  | 45.95  | 157.16 | 719.22  | 207345-1     |
|                                                    | 37          | 16.26                | Straight, Black    | A9004-ND          | 2.07  | 47.01  | 160.78 | 735.75  | 207473-1     |
|                                                    | 50          | 12.45                | Straight, Black    | A2060-ND          | 3.13  | 67.50  | 199.80 | 756.00  | 207476-1     |
| 4                                                  | 15          | 8.89                 | Straight, Gray     | A2055-ND          | 3.25  | 70.00  | 207.20 | 784.00  | 206471-1     |
|                                                    | 25          | 8.51                 | Straight, Gray     | A2056-ND          | 3.28  | 70.63  | 209.05 | 791.00  | 206472-1     |
|                                                    | 25          | 11.68                | Straight, Gray     | A2057-ND          | 3.28  | 70.63  | 209.05 | 791.00  | 745134-1     |
|                                                    | 37          | 17.15                | Straight, Gray     | A2058-ND          | 3.34  | 71.88  | 212.75 | 805.00  | 745081-1     |
|                                                    | 50          | 19.69                | Straight, Gray     | A2059-ND          | 3.60  | 77.50  | 229.40 | 868.00  | 745082-1     |
| 5                                                  | 9           | —                    | Quick-Snap         | A2051-ND          | 1.68  | 36.25  | 107.30 | 406.00  | 749914-2     |
|                                                    | 15          | —                    | Quick-Snap         | A2052-ND          | 1.68  | 36.25  | 107.30 | 406.00  | 749915-2     |
|                                                    | 25          | —                    | Quick-Snap         | A2053-ND          | 1.71  | 36.88  | 109.15 | 413.00  | 749626-2     |
|                                                    | 37          | —                    | Quick-Snap         | A2054-ND          | 1.86  | 40.00  | 118.40 | 448.00  | 749916-2     |

# ETHERNET Slide-locking hood.

† Sold as a kit, complete with Ferrule and Grommets.

## Accessories (Sold In Packages of 2)

Fig. 1

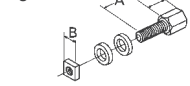
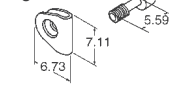


Fig. 2



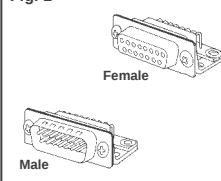
Fig. 3



| Fig. | Description         | Dimensions (mm)   | Digi-Key Part No. | 1   | 25    | 100   | AMP Part No. |
|------|---------------------|-------------------|-------------------|-----|-------|-------|--------------|
| 1    | Female Screw Locks  | 6.35 6.35         | A9005-ND          | .91 | 20.73 | 70.92 | 207952-1     |
| 2    | Male Screw Retainer | 7.92 14.22        | A9006-ND          | .81 | 18.49 | 63.25 | 205817-1     |
|      |                     |                   | A9007-ND          | .99 | 22.41 | 76.66 | 207719-1     |
| 3    | Male Screw Retainer | For Metal Shell   | A9008-ND          | .35 | 7.85  | 26.83 | 205980-1     |
|      |                     | For Plastic Shell | A1236-ND          | .65 | 14.76 | 50.48 | 745647-1     |

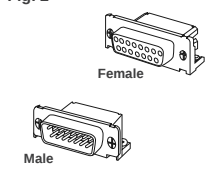
# AMP AMPLIMITE® D-Sub Connectors

Fig. 1

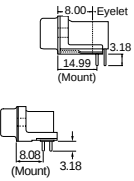


Female

Fig. 2



Male

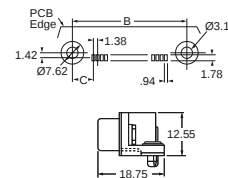
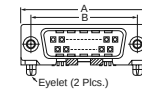


L-8.00 x Eyelet (Mount)

| Fig.                                                   | No. of Pos. | Sex    | Digi-Key Part No. | 1     | 25     | Pricing 100 | 500     | AMP Part No. |
|--------------------------------------------------------|-------------|--------|-------------------|-------|--------|-------------|---------|--------------|
| <b>Right Angle - Zinc Plated Shell</b>                 |             |        |                   |       |        |             |         |              |
| 1                                                      | 9           | Male   | A1020-ND          | 11.03 | 220.50 | 732.06      | 1543.50 | 205865-1     |
|                                                        | 9           | Female | A1021-ND          | 11.90 | 238.00 | 790.16      | 1666.00 | 205866-1     |
|                                                        | 15          | Male   | A1022-ND          | 13.75 | 275.00 | 913.00      | 1925.00 | 745352-4     |
|                                                        | 25          | Male   | A1023-ND          | 13.48 | 269.50 | 894.74      | 1886.50 | 3503.50      |
|                                                        | 25          | Female | A1024-ND          | 14.95 | 297.00 | 986.04      | 2079.00 | 205857-1     |
| 1                                                      | 25          | Female | A1025-ND          | 16.05 | 321.00 | 1065.72     | 2247.00 | 205858-1     |
|                                                        | 37          | Male   | A1026-ND          | 17.68 | 353.50 | 1173.62     | 2474.50 | 205859-1     |
|                                                        | 37          | Female | A1027-ND          | 19.05 | 381.00 | 1264.92     | 2667.00 | 205860-1     |
| <b>Right Angle - Tin Plated, .318" (8.08mm) mount</b>  |             |        |                   |       |        |             |         |              |
| 2                                                      | 9           | Male   | A2096-ND          | 1.95  | 38.98  | 129.42      | 272.87  | 747250-4     |
|                                                        | 9           | Female | A2100-ND          | 1.69  | 33.84  | 112.36      | 236.90  | 439.95       |
|                                                        | 15          | Male   | A2097-ND          | 2.80  | 56.00  | 185.92      | 392.00  | 728.00       |
|                                                        | 15          | Female | A2101-ND          | 2.07  | 41.36  | 137.33      | 289.54  | 537.72       |
|                                                        | 25          | Male   | A2098-ND          | 3.47  | 69.31  | 230.12      | 485.19  | 901.07       |
| 2                                                      | 25          | Female | A2102-ND          | 2.52  | 48.88  | 162.29      | 342.18  | 635.49       |
|                                                        | 37          | Male   | A2099-ND          | 5.78  | 115.50 | 383.46      | 808.50  | 1501.50      |
|                                                        | 37          | Female | A2103-ND          | 5.10  | 102.00 | 338.64      | 714.00  | 1326.00      |
| <b>Right Angle - Tin Plated, .590" (14.99mm) mount</b> |             |        |                   |       |        |             |         |              |
| 2                                                      | 9           | Male   | A2104-ND          | 8.00  | 160.00 | 531.20      | 1120.00 | 2080.00      |
|                                                        | 9           | Female | A2108-ND          | 11.83 | 236.50 | 785.18      | 1655.50 | 3074.50      |
|                                                        | 15          | Male   | A2105-ND          | 6.33  | 126.50 | 419.98      | 885.50  | 1644.50      |
|                                                        | 15          | Female | A2109-ND          | 13.55 | 271.00 | 899.72      | 1897.00 | 3523.00      |
|                                                        | 25          | Male   | A2106-ND          | 14.35 | 287.00 | 952.84      | 2009.00 | 3731.00      |
| 2                                                      | 25          | Female | A2110-ND          | 15.65 | 313.00 | 1039.16     | 2191.00 | 4069.00      |
|                                                        | 37          | Male   | A2107-ND          | 6.20  | 124.00 | 411.68      | 869.00  | 1612.00      |
|                                                        | 37          | Female | A2111-ND          | 18.28 | 365.50 | 1213.46     | 2558.50 | 4751.50      |

## D-Sub Surface Mount Connectors

**General Specifications:** • Right-angle pc board mount connectors with butt-joint board contacts available in 9 position • Right-angle pc board mount connectors with gull-wing type board contacts available in 9 position • Housings made of U.L. 94V-0 rated, high temperature thermoplastic material for vapor-phase and infrared reflow soldering • Recognized under the Component Program of Underwriters Laboratories, Inc. File No. E28476 • Certified by Canadian Standards Association File No. LR8179 • **Front Shell:** Steel, tin plated • **Housing:** 94V-0 rated, high temperature thermoplastic, black

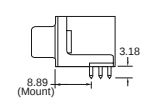
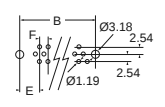
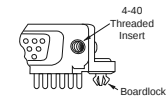
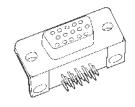


**Right-Angle, Surface-Mount Connectors with Butt-Joint Contacts:** • **Contacts:** Phosphor Bronze, duplex plated .000030 min. gold on mating end, .000100 min. tin-lead on solder end; all underplated .000050 min. nickel

| Type       | No. of Pos. | Dimensions (mm)  | Digi-Key Part No. | 1    | 25     | 100    | AMP Part No. |
|------------|-------------|------------------|-------------------|------|--------|--------|--------------|
| Plug       | 15          | 39.37 33.32 7.00 | A15057-ND         | 8.24 | 177.50 | 525.40 | 787119-1     |
| Receptacle | 15          | 39.37 33.32 7.00 | A15060-ND         | 7.86 | 169.38 | 501.35 | 786919-1     |

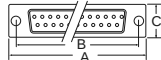
## High Density Right Angle D-Sub Connectors

**Connector Type:** HD-22 • **ELECTRICAL CHARACTERISTICS:** • **Single Contact Current Rating:** 2.0 amperes • **Dielectric Withstanding Voltage:** 1000 VAC min. • **MATERIAL AND FINISH:** • **Front Shell** - Steel, tin plated • **Housing** - 94 V-0 rated • **Socket Contacts** - Phosphor bronze • **Contact Finish** - Duplex Plated: .000030 gold mating end, tin-lead on termination end, with entire contact nickel underplated.



| No. of Pos. | Sex | Dimensions (mm) | Digi-Key Part No. | 1 | 25 | 100 | AMP Part No. |
|-------------|-----|-----------------|-------------------|---|----|-----|--------------|
|-------------|-----|-----------------|-------------------|---|----|-----|--------------|

## D-Sub Connectors

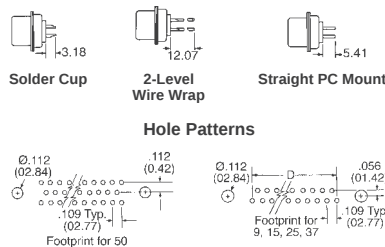


| Connector Size | MALE and FEMALE |       |       |       | MALE |      | FEMALE |      |  |
|----------------|-----------------|-------|-------|-------|------|------|--------|------|--|
|                | A               | B     | C     | D     | E    | F    | E      | F    |  |
| 9              | 30.81           | 24.99 | 12.55 | 11.07 | .76  | 5.97 | .76    | 6.17 |  |
| 15             | 39.14           | 33.32 | 12.55 | 19.38 | .76  | 5.97 | .76    | 6.17 |  |
| 25             | 53.04           | 47.04 | 12.55 | 33.22 | .99  | 5.59 | .76    | 5.92 |  |
| 37             | 69.32           | 63.50 | 12.55 | 49.83 | .99  | 5.84 | .76    | 6.17 |  |
| 50             | 66.93           | 61.11 | 15.37 | 44.30 | .99  | 5.84 | .76    | 6.17 |  |

• Non-removable contacts • Contact current rating: 5 amps. **Materials:** Shells — Steel cadmium with yellow chromate; Glass filled polyester U/L rated 94V-0. Male Contacts — Machined brass. Female Contacts — Machined phosphor bronze on dip solder and wire wrap, stamped phosphor bronze on solder pot. Contact Plating — .000010" gold over .00050" nickel.

| No. of Pins                                   | Type   | Digi-Key Part No. | 1    | Pricing 10 100 | NorComp Part No. |
|-----------------------------------------------|--------|-------------------|------|----------------|------------------|
| <b>Solder Cup Type — W/ Machined Contacts</b> |        |                   |      |                |                  |
| 9                                             | Male   | 109M-ND           | 1.75 | 15.10 102.68   | 09P              |
| 9                                             | Female | 109F-ND           | 2.13 | 18.35 124.78   | 09S              |
| 15                                            | Male   | 115M-ND           | 2.26 | 19.53 132.77   | 15P              |
| 15                                            | Female | 115F-ND           | 2.99 | 25.78 175.27   | 15S              |
| 25                                            | Male   | 125M-ND           | 3.05 | 26.25 178.50   | 25P              |
| 25                                            | Female | 125F-ND           | 4.42 | 38.10 259.08   | 25S              |
| 37                                            | Male   | 137M-ND           | 4.42 | 38.10 259.08   | 37P              |
| 37                                            | Female | 137F-ND           | 6.14 | 52.93 359.89   | 37S              |
| 50                                            | Male   | 150M-ND           | 4.87 | 42.00 285.60   | 50P              |
| 50                                            | Female | 150F-ND           | 7.41 | 63.85 434.18   | 50S              |
| <b>Solder Cup Type — W/ Stamped Contacts</b>  |        |                   |      |                |                  |
| 9                                             | Male   | 209M-ND           | .63  | 5.45 37.06     | ET09P            |
| 9                                             | Female | 209F-ND           | .67  | 5.80 39.44     | ET09S            |
| 15                                            | Male   | 215M-ND           | .92  | 7.90 53.72     | ET15P            |
| 15                                            | Female | 215F-ND           | 1.13 | 9.75 66.30     | ET15S            |
| 25                                            | Male   | 225M-ND           | 1.08 | 9.28 63.07     | ET25P            |
| 25                                            | Female | 225F-ND           | 1.26 | 10.90 74.12    | ET25S            |
| 37                                            | Male   | 237M-ND           | 1.94 | 16.73 113.73   | ET37P            |
| 37                                            | Female | 237F-ND           | 2.29 | 19.75 134.30   | ET37S            |
| 50                                            | Male   | 250M-ND           | 4.07 | 35.08 238.51   | ET50P            |
| 50                                            | Female | 250F-ND           | 4.42 | 38.10 259.08   | ET50S            |

## Original D-Subminiature



| No. of Pins                    | Type   | Digi-Key Part No. | 1     | Pricing 10 100 | NorComp Part No. |
|--------------------------------|--------|-------------------|-------|----------------|------------------|
| <b>Straight PCB Mount Type</b> |        |                   |       |                |                  |
| 9                              | Male   | 509M-ND           | 1.73  | 14.88 101.15   | 09P1             |
| 9                              | Female | 509F-ND           | 2.51  | 21.60 146.88   | 09S1             |
| 15                             | Male   | 515M-ND           | 2.21  | 19.03 129.37   | 15P1             |
| 15                             | Female | 515F-ND           | 3.50  | 30.20 205.36   | 15S1             |
| 25                             | Male   | 525M-ND           | 3.07  | 26.50 180.20   | 25P1             |
| 25                             | Female | 525F-ND           | 4.81  | 41.50 282.20   | 25S1             |
| 37                             | Male   | 537M-ND           | 4.55  | 39.23 266.73   | 37P1             |
| 37                             | Female | 537F-ND           | 6.96  | 60.00 408.00   | 37S1             |
| 50                             | Male   | 550M-ND           | 5.39  | 46.50 316.50   | 50P1             |
| 50                             | Female | 550F-ND           | 9.43  | 81.25 552.50   | 50S1             |
| <b>Wire Wrap Type</b>          |        |                   |       |                |                  |
| 9                              | Male   | 609M-ND           | 2.58  | 22.25 151.30   | 09P4             |
| 9                              | Female | 609F-ND           | 3.15  | 27.18 184.79   | 09S4             |
| 15                             | Male   | 615M-ND           | 3.83  | 33.00 224.40   | 15P4             |
| 15                             | Female | 615F-ND           | 4.71  | 40.63 276.25   | 15S4             |
| 25                             | Male   | 625M-ND           | 6.55  | 56.50 384.20   | 25P4             |
| 25                             | Female | 625F-ND           | 7.27  | 62.70 426.36   | 25S4             |
| 37                             | Male   | 637M-ND           | 8.38  | 72.25 491.30   | 37P4             |
| 37                             | Female | 637F-ND           | 10.88 | 93.75 637.50   | 37S4             |
| 50                             | Male   | 650M-ND           | 10.32 | 88.93 604.69   | 50P4             |
| 50                             | Female | 650F-ND           | 13.87 | 119.58 813.11  | 50S4             |

## Crimp D-Subminiature

• Reliable crimp snap-in contacts feature insulation grip for increased holding power • Nylon insulator has minimum contact retention of 10 lbs. • Connector shells available with bright tin finish for EMI/RFI shielding • Contacts compatible with industry standard crimp tools • Contact current rating: 5 amps.

**Materials:** Shell — Steel cadmium with bright tin plating Insulator — Glass filled thermoplastic. U/L Rated 94V-0 Male Contact — Brass Female Contact — Phosphor Bronze.

## Snap-In Connectors For Crimp Type Connectors

• Contacts — Stamped For 20-26 AWG dia. • Pin Diameter: .040 • Finish: .000100" gold over .00050" nickel pin



| No. of Pins                                                    | Type   | Digi-Key Part No. | 1     | Pricing 10 100 | NorComp Part No. |
|----------------------------------------------------------------|--------|-------------------|-------|----------------|------------------|
| <b>Crimp D-Sub Standard Type — Uses Snap-In Crimp Contacts</b> |        |                   |       |                |                  |
| 9                                                              | Male   | 709M-ND           | .67   | 5.80 39.44     | T09P7            |
| 9                                                              | Female | 709F-ND           | .67   | 5.80 39.44     | T09S7            |
| 15                                                             | Male   | 715M-ND           | .78   | 6.73 45.73     | T15P7            |
| 15                                                             | Female | 715F-ND           | .86   | 7.43 50.49     | T15S7            |
| 25                                                             | Male   | 725M-ND           | .78   | 6.73 45.73     | T25P7            |
| 25                                                             | Female | 725F-ND           | .84   | 7.20 48.96     | T25S7            |
| 37                                                             | Male   | 737M-ND           | 1.54  | 13.25 95.10    | T37P7            |
| 37                                                             | Female | 737F-ND           | 1.62  | 14.00 95.10    | T37S7            |
| 50                                                             | Male   | 750M-ND           | 2.08  | 17.90 121.72   | T50P7            |
| 50                                                             | Female | 750F-ND           | 2.12  | 18.25 124.10   | T50S7            |
| —                                                              | Pin    | 82P-ND            | —     | .60 4.08       | C20P             |
| —                                                              | Socket | 82S-ND            | —     | .65 4.42       | C20S             |
| —                                                              | Pin    | 82PSF-ND*         | —     | .48 3.23       | C20S-SF          |
| —                                                              | Socket | 82SSF-ND*         | —     | .48 3.23       | C20S-SF          |
| Crimp Tool                                                     |        | A9999-ND          | 16.54 | —              | 601884-1         |
| Insertion/Removal Tool                                         |        | T1010-ND          | 3.56  | —              | EXT-01           |

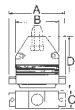
\*Pins and Sockets are selectively gold plated

## D-Sub Backshells

### MSH Series — Die-Cast Zinc Hood:

- Conductive rubber grommet/ strain relief for complete EMI/RFI shielding (over 70db).
- Solid die-cast zinc construction.
- Supplied complete with rubber grommet kit and male screw locks.

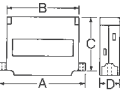
| Connector Size | A     | B     | C     | D     | Max. Cable Dia. |
|----------------|-------|-------|-------|-------|-----------------|
| 9              | 30.99 | 20.07 | 16.00 | 48.26 | 10.67           |
| 15             | 39.37 | 28.19 | 16.00 | 48.26 | 10.67           |
| 25             | 53.34 | 41.66 | 16.00 | 48.26 | 10.67           |
| 37             | 69.34 | 57.66 | 16.00 | 48.26 | 10.92           |



### TT Series — Plain Plastic or Fiber Plastic Hoods:

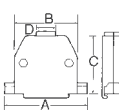
- May be used as a "Gender Changer", pin-out changer, or standard backshell
- Snap-together assembly
- Half-clamp with self-tapping screws provides positive strain-relief
- Available in plain plastic or metalized for EMI/RFI shielding

| Connector Size | A     | B     | C     | D     | Max. Cable Dia. |
|----------------|-------|-------|-------|-------|-----------------|
| 9              | 32.51 | 20.32 | 44.96 | 16.51 | 6.86            |
| 15             | 41.40 | 28.70 | 44.96 | 16.51 | 11.94           |
| 25             | 53.34 | 42.42 | 44.96 | 16.51 | 11.94           |
| 37             | 70.87 | 58.93 | 44.96 | 13.72 | 11.94           |
| 50             | 67.06 | 56.39 | 44.96 | 19.05 | 19.05           |



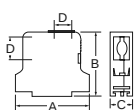
**GPH Series — Plastic or Metalized Hoods:** • Available in both plain plastic and metalized for EMI/RFI suppression • Over 60 dB shielding • Materials: Shell — Thermoplastic polyester; U/L rated 94V-0; Screw locks — brass; EMI/RFI plating — Electroplated with nickel over copper

| Connector Size | A     | B     | C     | D     | Max. Cable Dia. |
|----------------|-------|-------|-------|-------|-----------------|
| 9              | 30.73 | 20.57 | 38.10 | 15.49 | 6.98            |
| 15             | 41.91 | 27.69 | 34.04 | 11.68 | 10.16           |
| 25             | 54.86 | 41.91 | 40.89 | 12.95 | 11.05           |
| 37             | 69.60 | 57.91 | 50.80 | 16.76 | 13.97           |
| 50             | 69.34 | 54.36 | 44.70 | 17.78 | 15.49           |



**UHD Series — Plastic or Metalized Hoods:** • Cable Exit Top or Side • Available in both plain plastic and metalized for EMI/RFI suppression • Over 60 dB shielding • Materials: Shell: Thermoplastic polyester; U/L rated 94V-0; Screw locks — brass; EMI/RFI plating — Electroplated with nickel over copper. Electroplated parts not U/L rated; • Operating Temperature: -35°C to +95°C \*UHD9 Does not have a side cable exit.

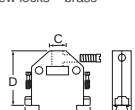
| Connector Size | A     | B     | C     | D     |
|----------------|-------|-------|-------|-------|
| 9*             | 31.24 | 35.05 | 16.00 | 8.89  |
| 15             | 39.62 | 40.89 | 16.00 | 9.50  |
| 25             | 53.34 | 45.97 | 16.00 | 11.28 |
| 37             | 69.60 | 45.97 | 16.00 | 11.28 |
| 50             | 67.31 | 45.97 | 18.67 | 13.79 |



### TCH Series — Plastic or Metalized Hoods:

- Available in both plain plastic and metalized for EMI/RFI suppression • Over 60 dB shielding • EMI/RFI Plating — Electroplated with nickel over copper • Materials: Shell — Thermoplastic polyester; U/L rated 94V-0; Screw locks — brass

| Connector Size | A     | B     | C     | D     |
|----------------|-------|-------|-------|-------|
| 9              | 30.73 | 15.75 | 6.35  | 40.26 |
| 15             | 39.37 | 15.75 | 8.51  | 40.26 |
| 25             | 53.09 | 15.75 | 9.52  | 44.45 |
| 37             | 69.60 | 15.75 | 9.52  | 44.45 |
| 50             | 67.06 | 18.57 | 11.43 | 44.45 |



### Conductive Rubber Grommet Sets:

For better EMI/RFI Shielding and/or strain relief. For use with D-Sub Backshells. • Note: Grom-9/25 & Grom-50 have four grommets per set & Grom-37 has three per set.

| Digi-Key Part No. | Outside Dia. A | Inside Dia. B |       |       |       |
|-------------------|----------------|---------------|-------|-------|-------|
| 901G-ND           | 10.16          | 5.08          | 6.60  | 7.87  | 9.14  |
| 902G-ND*          | 15.24          | 8.38          | 10.67 | 12.45 | —     |
| 903G-ND           | 18.54          | 8.64          | 10.80 | 12.57 | 16.51 |



| Description                                                        | Digi-Key Part No. | 1    | Pricing 10 100 | NorComp Part No. |
|--------------------------------------------------------------------|-------------------|------|----------------|------------------|
| <b>MSH Series — Die-Cast Zinc Hoods</b>                            |                   |      |                |                  |
| 9-Pin Hood                                                         | 9092-ND           | 2.64 | 22.75 154.70   | MSH09            |
| 15-Pin Hood                                                        | 9152-ND           | 3.10 | 26.75 181.90   | MSH15            |
| 25-Pin Hood                                                        | 9252-ND           | 3.91 | 33.68 228.99   | MSH25            |
| 37-Pin Hood                                                        | 9372-ND           | 5.28 | 45.50 309.40   | MSH37            |
| <b>TT Series — Shielded Fiber Plastic Hoods (for EMI/RFI)</b>      |                   |      |                |                  |
| 9-Pin Hood                                                         | 909M-ND           | 1.80 | 15.50 105.40   | TT09NA           |
| 15-Pin Hood                                                        | 915M-ND           | 2.41 | 20.80 141.44   | TT15NA           |
| 25-Pin Hood                                                        | 925M-ND           | 2.32 | 19.98 135.83   | TT25NA           |
| 37-Pin Hood                                                        | 937M-ND           | 4.61 | 39.75 270.30   | TT37NA           |
| 50-Pin Hood                                                        | 950M-ND           | 4.21 | 36.25 246.50   | TT50NA           |
| <b>TT Series — Plain Plastic Hoods</b>                             |                   |      |                |                  |
| 9-Pin Hood                                                         | 909P-ND           | 1.13 | 9.75 66.30     | TT09G            |
| 15-Pin Hood                                                        | 915P-ND           | 1.37 | 11.85 80.58    | TT15G            |
| 25-Pin Hood                                                        | 925P-ND           | 1.71 | 14.75 100.30   | TT25G            |
| 37-Pin Hood                                                        | 937P-ND           | 2.78 | 24.00 163.20   | TT37G            |
| 50-Pin Hood                                                        | 950P-ND           | 2.93 | 25.25 171.70   | TT50G            |
| <b>GPH Series — Shielded Metalized Plastic Hoods (for EMI/RFI)</b> |                   |      |                |                  |
| 9-Pin Hood                                                         | 909GM-ND          | .75  | 6.48 44.03     | GPH-09A          |
| 15-Pin Hood                                                        | 915GM-ND          | .89  | 7.68 52.19     | GPH-15A          |

| Description                             | Digi-Key Part No. | 1    | Pricing 10 100 | NorComp Part No. |
|-----------------------------------------|-------------------|------|----------------|------------------|
| 25-Pin Hood                             | 925GM-ND          | .89  | 7.68 52.19     | GPH-25A          |
| 37-Pin Hood                             | 937GM-ND          | 2.23 | 19.25 130.90   | GPH-37A          |
| 50-Pin Hood                             | 950GM-ND          | 1.75 | 15.10 102.68   | GPH-50A          |
| <b>GPH Series — Plain Plastic Hoods</b> |                   |      |                |                  |
| 9-Pin Hood                              | 909GP-ND          | .54  | 4.65 31.62     | GPH-09           |
| 15-Pin Hood                             | 915GP-ND          | .67  | 5.80 39.44     | GPH-15           |
| 25-Pin Hood                             | 925GP-ND          | .73  | 6.25 42.50     | GPH-25           |
| 37-Pin Hood                             | 937GP-ND          | 1.00 | 8.60 58.48     | GPH-37           |
| 50-Pin Hood                             | 950GP-ND          | 1.51 | 13.00 88.40    | GPH-50           |
| <b>UHD Series — Unshielded Hoods</b>    |                   |      |                |                  |
| 9-Pin Hood                              | 909U-ND*          | 3.39 | 29.25 198.90   | UHD-09           |
| 15-Pin Hood                             | 915U-ND           | 3.39 | 29.25 198.90   | UHD-15           |
| 25-Pin Hood                             | 925U-ND           | 3.66 | 31.58 214.71   | UHD-25           |
| 37-Pin Hood                             | 937U-ND           | 4.28 | 36.93 251.09   | UHD-37           |
| 50-Pin Hood                             | 950U-ND           | 5.12 | 44.13 300.05   | UHD-50           |
| <b>UHD Series — Shielded Hoods</b>      |                   |      |                |                  |
| 9-Pin Hood                              | 909UA-ND*         | 6.39 | 55.05 374.34   | UHD-09A          |
| 15-Pin Hood                             | 915UA-ND          | 6.44 | 55.50 377.40   | UHD-15A          |
| 25-Pin Hood                             | 925UA-ND          | 6.92 | 59.68 405.79   | UHD-25A          |
| 37-Pin Hood                             | 937UA-ND          | 8.05 | 69.43 472.09   | UHD-37A          |
| 50-Pin Hood                             | 950UA-ND          | 8.83 | 76.15 517.82   | UHD-50A          |

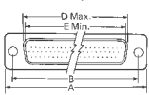
| Description                                | Digi-Key Part No. | 1        | Pricing 10100 | NorComp Part No. |
|--------------------------------------------|-------------------|----------|---------------|------------------|
| TCH Series — Unshielded Hoods              |                   |          |               |                  |
| 9-Pin Hood                                 | 909C-ND           | 1.10     | 9.5364.77     | TCH-09           |
| 15-Pin Hood                                | 915C-ND           | 1.19     | 10.2369.53    | TCH-15           |
| 25-Pin Hood                                | 925C-ND           | 1.24     | 10.6872.59    | TCH-25           |
| 37-Pin Hood                                | 937C-ND           | 1.73     | 14.88101.15   | TCH-37           |
| 50-Pin Hood                                | 950C-ND           | 1.75     | 15.10102.68   | TCH-50           |
| TCH Series — Shielded Hoods                |                   |          |               |                  |
| 9-Pin Hood                                 | 909CA-ND          | 1.37     | 11.8580.58    | TCH-09A          |
| 15-Pin Hood                                | 915CA-ND          | 1.54     | 13.2590.10    | TCH-15A          |
| 25-Pin Hood                                | 925CA-ND          | 1.67     | 14.4097.92    | TCH-25A          |
| ENH Series — Ethernet Hoods — 15-Pin Hoods |                   |          |               |                  |
| Rt. Angle Straight                         | 915ER-ND          | 4.364.01 | 37.6034.58    | ENH-15R ENH-15S  |

| Description                    | Digi-Key Part No. | 5    | Pricing 25100 | NorComp Part No. |
|--------------------------------|-------------------|------|---------------|------------------|
| Conductive Rubber Grommet Sets |                   |      |               |                  |
| DB 9/25 Grom. Set              | 901G-ND           | 1.97 | 8.5023.12     | MSH-GROMMETS     |
| DB 37 Grom. Set                | 902G-ND           | 5.29 | 22.8162.05    | MSH-GROM-37      |
| DB 50 Grom. Set                | 903G-ND           | 7.25 | 31.2585.00    | MSH-GROM-50      |

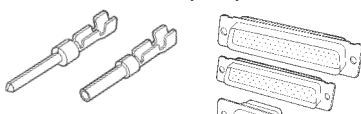
## High Density D-Sub Connectors

- Compatible with new generation systems from several computer manufacturers.
- Shells have bright tin finish for EMI/RFI shielding.
- Male connector shells have grounding insulation.
- Reliable crimp snap-in contacts feature insulation grip for increased holding power.
- Contacts compatible with industry standard crimp tools.

**Materials:** Shell - Steel, with bright tin over nickel. Insulator: Glass-filled thermoplastic, U/L rated 94V-0. Male Pin - Brass. Female Contact - Phosphor bronze.



Stamped Contacts For High Density D-Sub Connectors  
Pin Dia: .030" (.76mm)



Contact Plating Gold Over Nickel;  
For Wire Size: 22-26 AWG.

| No. of Pins | Shell Size | Dimensions (mm) |       |       |                 |               |
|-------------|------------|-----------------|-------|-------|-----------------|---------------|
|             |            | A               | B     | C     | D Max. (female) | E Min. (male) |
| 15          | DB-9       | 30.81           | 24.99 | 12.55 | 16.33           | 16.92         |
| 26          | DB-15      | 39.14           | 33.32 | 12.55 | 24.66           | 25.25         |
| 44          | DB-25      | 53.04           | 47.04 | 12.55 | 38.38           | 38.96         |
| 62          | DB-37      | 69.32           | 63.50 | 12.55 | 54.84           | 55.42         |
| 78          | DB-50      | 86.93           | 81.11 | 15.37 | 72.43           | 72.81         |

Contacts Sold Separately Below

| No. of Pins       | Type   | Digi-Key Part No. | 1     | 10     | Pricing 100 | 500     | 1,000   | NorComp Part No. |
|-------------------|--------|-------------------|-------|--------|-------------|---------|---------|------------------|
| <b>Crimp</b>      |        |                   |       |        |             |         |         |                  |
| 15                | Male   | 815M-ND           | 1.91  | 16.50  | 112.20      | 478.50  | 825.00  | HDT15P7          |
| 15                | Female | 815F-ND           | 1.91  | 16.50  | 112.20      | 478.50  | 825.00  | HDT15S7          |
| 26                | Male   | 826M-ND           | 5.90  | 50.85  | 345.78      | 1474.65 | 2542.50 | HDT26P7          |
| 26                | Female | 826F-ND           | 6.39  | 55.10  | 374.68      | 1597.90 | 2755.00 | HDT26S7          |
| 44                | Male   | 844M-ND           | 6.87  | 59.25  | 402.90      | 1718.25 | 2962.50 | HDT44P7          |
| 44                | Female | 844F-ND           | 6.99  | 60.25  | 409.70      | 1747.25 | 3012.50 | HDT44S7          |
| 62                | Male   | 862M-ND           | 8.76  | 75.50  | 513.40      | 2189.50 | 3775.00 | HDT62P7          |
| 62                | Female | 862F-ND           | 8.35  | 72.00  | 489.60      | 2088.00 | 3600.00 | HDT62S7          |
| 78                | Male   | 878M-ND           | 15.65 | 134.90 | 917.32      | 3912.10 | 6745.00 | HDT78P7          |
| 78                | Female | 878F-ND           | 10.72 | 92.43  | 628.49      | 2680.33 | 4621.25 | HDT78S7          |
| —                 | Pin    | 85P-ND            | —     | 1.25   | 8.50        | 36.25   | 62.50   | HDC22P           |
| —                 | Socket | 85S-ND            | —     | 1.25   | 8.50        | 36.25   | 62.50   | HDC22S           |
| <b>Solder Cup</b> |        |                   |       |        |             |         |         |                  |
| 15                | Male   | T815M-ND          | 2.13  | 18.35  | 124.78      | 532.15  | 917.50  | HDT15P7          |
| 15                | Female | T815F-ND          | 2.45  | 21.13  | 143.65      | 612.63  | 1056.25 | HDT15S7          |
| 26                | Male   | T826M-ND          | 6.92  | 59.68  | 405.79      | 1730.58 | 2983.75 | HDT26P7          |
| 26                | Female | T826F-ND          | 7.35  | 63.38  | 430.95      | 1837.88 | 3168.75 | HDT26S7          |
| 44                | Male   | T844M-ND          | 8.35  | 72.00  | 489.60      | 2088.00 | 3600.00 | HDT44P7          |
| 44                | Female | T844F-ND          | 9.67  | 83.35  | 568.78      | 2417.15 | 4167.50 | HDT44S7          |
| 62                | Male   | T862M-ND          | 10.40 | 89.63  | 609.45      | 2599.13 | 4481.25 | HDT62P7          |
| 62                | Female | T862F-ND          | 11.74 | 101.23 | 688.33      | 2935.53 | 5061.25 | HDT62S7          |

A9999-ND Crimp Tool ..... \$16.54 each  
T2020-ND Insertion/Removal Tool ..... \$3.72 each

## Parallel Interface Connectors (Centronics Type)

**Material:** Insulator — Glass filled thermoplastic, U/L rated 94V-0. Shell — Nickel plated steel. Contacts — Copper alloy, .00010" gold over .00030" nickel.

**Male Cable Plug (Fig. 1):** • Compatible with industry standard • Solder eyelets accept 24 AWG wire • Complete with cable boot, shell & hardware

**Female Cable Receptacle (Fig. 2):** • Compatible with industry standard • Complete with spring latches and cable boot • Solder eyelets accept 24 AWG wire • Can be used as panel mount

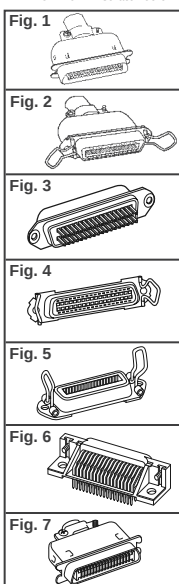
**Panel Mount Male Plug (Fig. 3):** • 0.103" (2.62mm) Mounting hole accepts #3 screw (not included) • Compatible with industry standard • Solder eyelets accept 24 AWG wire • Insulator color: Blue

**Panel Mount Female Receptacle (Fig. 4):** • Compatible with industry standard • Complete with spring latches • Solder eyelets accept 24 AWG wire • Insulator color: Blue

**Straight DIP Solder (Fig. 5):** • For standard .062" (1.57mm) PC mount • Latch locks standard • Insulator color: Blue

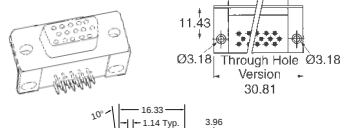
**Right Angle PCB Mount (Fig. 6):** • Compatible with industry standard • Metal shell for EMI/RFI shielding • Insulator color: Blue

**Discrete Wire IDC Solderless (Fig. 7):** • Compatible with standard terminating tools • Quick solderless termination for #24 or 26 AWG • Insulator color: Gray



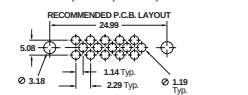
| Fig. | No. of Contacts | Type   | Digi-Key Part No. | 1     | Pricing 10 | 100    | NorComp Part No. |
|------|-----------------|--------|-------------------|-------|------------|--------|------------------|
| 1    | 14              | Male   | T1501-ND          | 3.48  | 30.00      | 204.00 | TT57-30140       |
|      | 24              | Male   | T1502-ND          | 6.66  | 48.75      | 331.50 | TT57-30240       |
|      | 36              | Male   | T1503-ND          | 3.56  | 30.65      | 208.42 | TT57-30360       |
|      | 50              | Male   | T1504-ND          | 6.30  | 54.33      | 369.41 | TT57-30500       |
| 2    | 14              | Female | T1507-ND          | 4.00  | 34.50      | 234.60 | TT57-60140       |
|      | 24              | Female | T1508-ND          | 4.45  | 38.33      | 260.61 | TT57-60240       |
|      | 36              | Female | T1509-ND          | 4.66  | 40.18      | 273.19 | TT57-60360       |
|      | 50              | Female | T1510-ND          | 7.00  | 60.38      | 410.55 | TT57-60500       |
| 3    | 14              | Male   | 1014M-ND          | 2.51  | 21.60      | 146.88 | TT57-10140       |
|      | 24              | Male   | 1024M-ND          | 2.69  | 23.23      | 157.93 | TT57-10240       |
|      | 36              | Male   | 1036M-ND          | 2.61  | 22.53      | 153.17 | TT57-10360       |
|      | 50              | Male   | 1050M-ND          | 3.96  | 34.13      | 232.05 | TT57-10500       |
| 4    | 14              | Female | 1014F-ND          | 2.64  | 22.75      | 154.70 | TT57-40140       |
|      | 24              | Female | 1024F-ND          | 4.26  | 36.75      | 249.90 | TT57-40240       |
|      | 36              | Female | 1036F-ND          | 3.05  | 26.25      | 178.50 | TT57-40360       |
|      | 50              | Female | 1050F-ND          | 4.93  | 42.50      | 289.00 | TT57-40500       |
| 5    | 14              | Male   | 1014PM-ND         | 2.97  | 25.63      | 174.25 | TT57-10140-8     |
|      | 24              | Male   | 1024PM-ND         | 4.52  | 39.00      | 265.20 | TT57-10240-9     |
|      | 36              | Male   | 1036PM-ND         | 4.88  | 42.05      | 285.94 | TT57-10360-12    |
|      | 50              | Male   | 1050PM-ND         | 5.39  | 46.50      | 316.20 | TT57-10500-9     |
| 6    | 14              | Female | 1014PF-ND         | 2.75  | 23.68      | 160.99 | TT57-40140-8     |
|      | 24              | Female | 1024PF-ND         | 2.97  | 25.63      | 174.25 | TT57-40240-9     |
|      | 36              | Female | 1036PF-ND         | 4.38  | 37.73      | 256.53 | TT57-40360-12    |
|      | 50              | Female | 1050PF-ND         | 6.78  | 58.48      | 397.63 | TT57-40500-9     |
| 7    | 14              | Male   | 1014RM-ND         | 3.18  | 27.40      | 186.32 | TT57-LE30140     |
|      | 24              | Male   | 1024RM-ND         | 3.58  | 30.88      | 209.95 | TT57-LE30240     |
|      | 36              | Male   | 1036RM-ND         | 5.31  | 45.75      | 311.10 | TT57-LE30360     |
|      | 50              | Male   | 1050RM-ND         | 6.39  | 55.05      | 374.34 | TT57-LE30500     |
| 8    | 14              | Female | 1014RF-ND         | 3.69  | 31.83      | 216.41 | TT57-LE40140     |
|      | 24              | Female | 1024RF-ND         | 3.66  | 31.58      | 214.71 | TT57-LE40240     |
|      | 36              | Female | 1036RF-ND         | 4.66  | 40.18      | 273.19 | TT57-LE40360     |
|      | 50              | Female | 1050RF-ND         | 6.68  | 57.58      | 391.51 | TT57-LE40500     |
| 9    | 36              | Male   | 1036CM-ND         | 10.18 | 87.75      | 596.70 | TT157-30360      |
|      | 50              | Male   | 1050CM-ND         | 12.33 | 106.25     | 722.50 | TT157-30500      |
|      | 36              | Female | 1036CF-ND         | 8.53  | 73.50      | 499.80 | TT157-60360      |
|      | 50              | Female | 1050CF-ND         | 9.83  | 84.75      | 576.30 | TT157-60500      |

## High Density 90° PC Mount D-Sub Connector



### SPECIFICATIONS:

- Contact Rating: 5 Amps
- Dielectric Strength: 1000V AC RMS
- Insulation Resistance: 1000 meg ohms
- Contact Material: Phosphor Bronze
- Contact Finish: Gold over Nickel
- Operating Temperature: -55°C to 150°C
- Shell Material: Steel, Tin Plated
- Insulations Material: Glass-Filled Polyester (UL 94V-0)
- Gender: Receptacle (female)

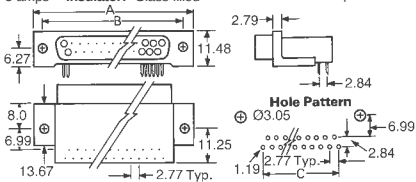


| No. of Pins | Type   | Digi-Key Part No. | 1     | 10     | Pricing 100 | 500     | 1,000   | NorComp Part No. |
|-------------|--------|-------------------|-------|--------|-------------|---------|---------|------------------|
| 15          | Female | 815RF-ND          | 2.91  | 25.08  | 170.51      | 727.18  | 1253.75 | 4740-15-42-P1    |
| 26          | Female | 826RF-ND          | 8.45  | 72.83  | 495.21      | 2111.93 | 3641.25 | 4740-26-42-P1    |
| 44          | Female | 844RF-ND          | 9.13  | 78.73  | 535.33      | 2283.03 | 3936.25 | 4740-44-42-P1    |
| 62          | Female | 862RF-ND          | 12.17 | 104.95 | 713.66      | 3043.55 | 5247.50 | 4740-62-42-P1    |

### Right Angle Type

- Metal front shell has grounding strap for terminating ground to PCB
- Contact current rating: 5 amps
- Insulator: Glass filled

polyester • U/L rated 94V-0 • Color: Black • Contacts: Alloy CA 725 cupronickel • Contact plating: .000015" gold on mating end; .000050" nickel underplate.



### Dual-Port D-Sub Connector

T2325-ND ..... \$12.71/1;  
\$109.60/10; \$745.28/100

| Conn. Size | Dimensions (mm) | A     | B     | C |
|------------|-----------------|-------|-------|---|
| 9          | 31.19           | 24.99 | 11.07 |   |
| 15         | 39.52           | 33.32 | 19.38 |   |
| 25         | 53.34           | 47.04 | 33.23 |   |
| 37         | 69.65           | 63.50 | 49.82 |   |

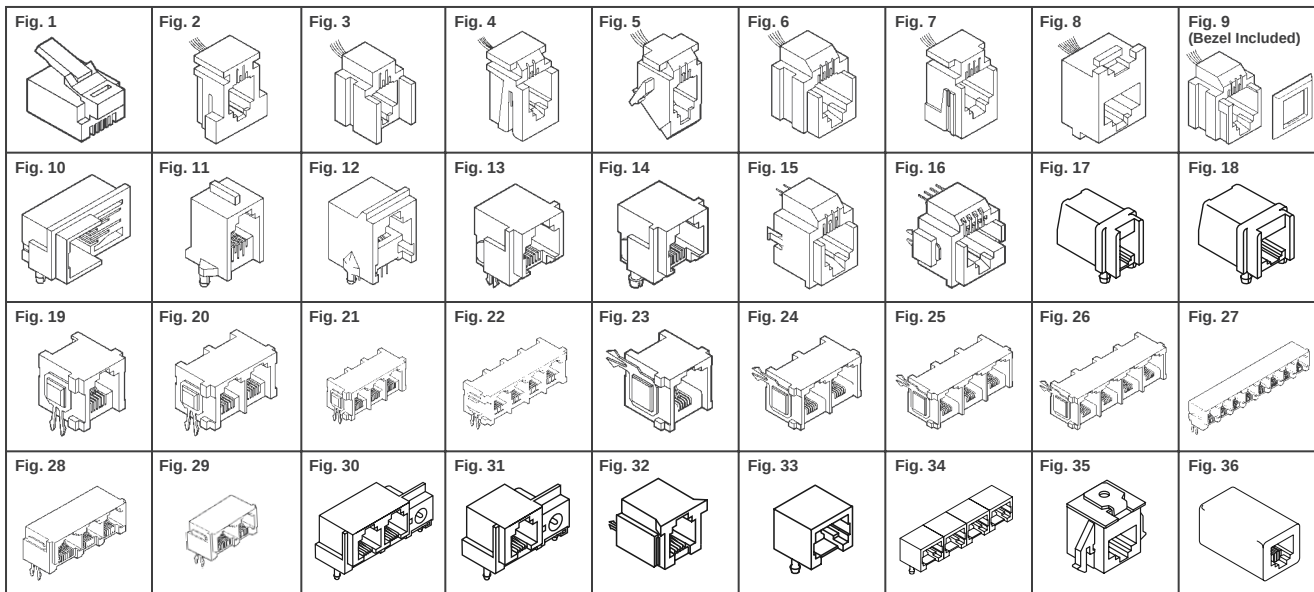
| No. of Pins                                                                  | Type   | Digi-Key Part No. | 1    | 10    | Pricing 100 | 500     | 1,000   | NorComp Part No. |
|------------------------------------------------------------------------------|--------|-------------------|------|-------|-------------|---------|---------|------------------|
| <b>Plastic Right Angle Type — Shielded (Metal Face on plastic connector)</b> |        |                   |      |       |             |         |         |                  |
| 9                                                                            | Male   | 309M-ND           | 3.83 | 33.00 | 224.40      | 957.00  | 1650.00 | P09P-21          |
| 9                                                                            | Female | 309F-ND           | 3.36 | 29.00 | 197.20      | 841.00  | 1450.00 | P09S-21          |
| 15                                                                           | Male   | 315M-ND           | 4.26 | 36.75 | 249.90      | 1065.75 | 1837.50 | P15P-21          |
| 15                                                                           | Female | 315F-ND           | 4.21 | 36.25 | 246.50      | 1051.25 | 1812.50 | P15S-21          |
| 25                                                                           | Male   | 325M-ND           | 5.34 | 46.00 | 312.80      | 1334.00 | 2300.00 | P25P-21          |
| 25                                                                           | Female | 325F-ND           | 4.58 | 39.50 | 268.60      | 1145.50 | 1975.00 | P25S-21          |
| 37                                                                           | Male   | 337M-ND           | 6.99 | 60.25 | 409.70      | 1747.25 | 3012.50 | P37P-21          |
| 37                                                                           | Female | 337F-ND           | 5.77 | 49.75 | 338.30      | 1442.75 | 2487.50 | P37S-21          |
| <b>Plastic Right Angle Type — Unshielded</b>                                 |        |                   |      |       |             |         |         |                  |
| 9                                                                            | Male   | 409M-ND           | 3.10 | 26.75 | 181.90      | 775.75  | 1337.50 | P09P-02          |
| 9                                                                            | Female | 409F-ND           | 3.51 | 30.25 | 205.70      | 877.25  | 1512.50 | P09S-02          |
| 15                                                                           | Male   | 415M-ND           | 3.83 | 33.00 | 224.40      | 957.00  | 1650.00 | P15P-02          |
| 15                                                                           | Female | 415F-ND           | 3.63 | 31.25 | 212.50      | 906.25  | 1562.50 | P15S-02          |
| 25                                                                           | Male   | 425M-ND           | 4.87 | 42.00 | 285.60      | 1218.00 | 2100.00 | P25P-02          |
| 25                                                                           | Female | 425F-ND           | 3.86 | 33.25 | 226.10      | 964.25  | 1662.50 | P25S-02          |
| 37                                                                           | Male   | 437M-ND           | 6.06 | 52.25 | 355.30      | 1515.25 | 2612.50 | P37P-02          |
| 37                                                                           | Female | 437F-ND           | 5.19 | 44.75 | 304.30      | 1297.75 | 2237.50 | P37S-02          |

## KEYSTONE Connector Hardware

**Material:** Steel, Zinc Plate and Gold Iridite.  
2 Pieces Required Per Connector.

| Fig.                            | Dim. "L" (mm)      | Digi-Key Part No. | 2    | 10    | Pricing 100 | 500    |
|---------------------------------|--------------------|-------------------|------|-------|-------------|--------|
| <b>Jack Screws</b>              |                    |                   |      |       |             |        |
| 1                               | —                  | 2073K-ND          | 5.53 | 24.89 | 154.75      | 657.50 |
| 2                               | 31.75              | 2069K-ND          | 4.28 | 19.24 | 119.70      | 508.50 |
| 3                               | 44.45              | 2071K-ND          | 4.50 | 20.24 | 125.85      | 534.50 |
| 4                               | 6.35               | 7229K-ND          | .84  | 3.77  | 22.25       | 97.50  |
| 5                               | 7.92               | 7231K-ND          | .68  | 3.07  | 18.10       | 79.50  |
| 6                               | 15.88              | 7233K-ND          | 1.50 | 6.75  | 39.85       | 174.75 |
| <b>U-Clip</b>                   |                    |                   |      |       |             |        |
| 4                               | —                  | 2062K-ND          | .82  | 3.69  | 22.95       | 97.00  |
| <b>Saddle Washer</b>            |                    |                   |      |       |             |        |
| 5                               | —                  | 2063K-ND          | .92  | 4.14  | 25.80       | 109.50 |
| <b>"Bow Tie" Retaining Clip</b> |                    |                   |      |       |             |        |
| 6                               | 4-40x1/4 (6.35mm)  | 2060K-ND          | 1.02 | 4.61  | 28.60       | 121.75 |
| 7                               | 4-40x9/32 (7.14mm) | 2061K-ND          | 1.13 | 5.07  | 31.50       | 133.75 |

|                                                                                     | Description                                   | Digi-Key Part No. | 1      | Pricing 10 | 100   |
|-------------------------------------------------------------------------------------|-----------------------------------------------|-------------------|--------|------------|-------|
|  | Slide Lock Posts<br>15Pin, D-Sub, or Ethernet | T2040-ND          | 1.29   | 11.15      | 75.82 |
|  | Slide Lock Posts<br>(2 connectors required)   | T2042-ND          | 1.34/2 | 5.80       | 39.44 |
|  | 9 Pos D-Sub Dust Cover                        | 909DC-ND          | .52    | 4.50       | 30.60 |
|                                                                                     | 15 Pos D-Sub Dust Cover                       | 915DC-ND          | .52    | 4.50       | 30.60 |
|                                                                                     | 25 Pos D-Sub Dust Cover                       | 925DC-ND          | .52    | 4.50       | 30.60 |

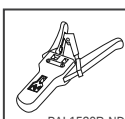


| Fig.                                                                                       | Positions-Contacts | Description        | Dimensions (mm)<br>W H D | Digi-Key Part No. | Pricing<br>1 10 100 | Hirose Part No.      |
|--------------------------------------------------------------------------------------------|--------------------|--------------------|--------------------------|-------------------|---------------------|----------------------|
| <b>Plugs (for IDC Termination with Flat Line Cord)</b>                                     |                    |                    |                          |                   |                     |                      |
| 1                                                                                          | 4-4                | Plugs              | 7.7 6.6 13.4             | H9091-ND          | .64 6.00 55.00      | TM3P-44P             |
| 1                                                                                          | 6-4                | Plugs              | 9.7 6.6 13.4             | H9092-ND          | .64 6.00 55.00      | TM3P-64P             |
| 1                                                                                          | 6-6                | Plugs              | 9.7 6.6 13.4             | H9093-ND          | .80 7.50 68.75      | TM3P-66P             |
| 1                                                                                          | 8-8                | Plugs              | 11.7 6.6 22.5            | H9094-ND          | 1.34 12.60 115.50   | TM8P-88P             |
| <b>Receptacles — Jack with 6" (152.4mm) Wire Leads; Color: Gray</b>                        |                    |                    |                          |                   |                     |                      |
| 2                                                                                          | 4-4                | Jack               | 17.5 20.5 10.2           | H9001-ND          | 1.98 18.60 170.50   | TM1R-616M44-35S-150  |
| 3                                                                                          | 4-4                | Jack               | 12.4 17.4 14.3           | H9002-ND          | 1.98 18.60 170.50   | TM1R-616M44-35S-150  |
| 4                                                                                          | 4-4                | Jack               | 12.4 21.3 12.5           | H9003-ND          | 1.98 18.60 170.50   | TM1R-616M44-35S-150  |
| 5                                                                                          | 4-4                | Jack               | 12.4 21.3 12.5           | H9004-ND          | 2.30 21.60 198.00   | TM1R-616M44-4S-150   |
| 5                                                                                          | 4-4                | Jack               | 15.3 20.5 10.2           | H9018-ND          | 2.53 23.70 217.25   | TM1R-616M44-4S-150   |
| 6                                                                                          | 6-4                | Jack               | 14.9 18.3 13.7           | H9009-ND*         | 2.08 19.50 178.75   | TM1RV-623P64-35S-150 |
| 7                                                                                          | 6-4                | Jack               | 12.4 21.4 12.5           | H9010-ND*         | 2.14 20.10 184.25   | TM1RV-623P64-35S-150 |
| 6                                                                                          | 6-6                | Jack               | 14.9 18.3 13.7           | H9015-ND*         | 3.10 29.10 266.75   | TM1RV-623P66-35S-150 |
| 7                                                                                          | 6-6                | Jack               | 12.4 21.4 12.5           | H9016-ND*         | 2.72 25.50 233.75   | TM1RV-623P66-35S-150 |
| 8                                                                                          | 8-8                | Jack               | 16.0 18.4 12.5           | H9021-ND*         | 5.50 51.60 473.00   | TM1RV-647AF88-35S150 |
| <b>Receptacles — Panel Mount w/ 6" (152.4mm) Wire Leads (Bezel Included); Color: Brown</b> |                    |                    |                          |                   |                     |                      |
| 9                                                                                          | 6-2                | Jack - Panel Mount | 14.9 18.3 13.7           | H9061-ND          | 2.27 21.30 195.25   | TM2RG-L62-5S-150     |
| 9                                                                                          | 6-4                | Jack - Panel Mount | 14.9 18.3 13.7           | H9062-ND          | 2.91 27.30 250.25   | TM2RG-L64-5S-150     |
| 9                                                                                          | 6-6                | Jack - Panel Mount | 14.9 18.3 13.7           | H9063-ND          | 3.36 31.50 288.75   | TM2RG-L66-5S-150     |
| <b>Receptacles — Jack P.C. Board Mount; Color: Gray</b>                                    |                    |                    |                          |                   |                     |                      |
| 10                                                                                         | 4-4                | Jack - PC Mount    | 20.0 11.0 10.5           | H9031-ND          | 1.82 17.10 156.75   | TM5RF-44             |
| 10                                                                                         | 4-4                | Jack - PC Mount    | 24.6 13.0 14.0           | H9032-ND          | 2.37 22.20 203.50   | TM5RF-64             |
| 10                                                                                         | 6-6                | Jack - PC Mount    | 24.6 13.0 14.0           | H9033-ND          | 2.30 21.60 198.00   | TM5RF-66             |
| 11                                                                                         | 4-4                | Jack - PC Mount    | 18.0 18.6 14.3           | H9041-ND          | 1.79 16.80 154.00   | TM5RC-44             |
| 11                                                                                         | 4-4                | Jack - PC Mount    | 18.0 21.1 14.3           | H9042-ND          | 1.89 17.70 162.25   | TM5RC-64             |
| 11                                                                                         | 6-6                | Jack - PC Mount    | 18.0 21.1 14.3           | H9043-ND          | 2.46 23.10 211.75   | TM5RC-66(01)         |
| 12                                                                                         | 8-8                | Jack - PC Mount    | 18.1 21.2 17.5           | H9044-ND          | 3.78 35.40 324.50   | TM5RC-88             |
| 13                                                                                         | 4-4                | Jack - PC Mount    | 12.8 14.0 14.0           | H9081-ND          | 1.66 15.60 143.00   | TM5RJ3-44            |
| 13                                                                                         | 6-4                | Jack - PC Mount    | 14.8 14.0 14.0           | H9082-ND          | 1.92 18.00 165.00   | TM5RJ1-64            |
| 13                                                                                         | 6-6                | Jack - PC Mount    | 14.8 14.0 14.0           | H9083-ND          | 2.21 20.70 189.75   | TM5RJ1-66            |
| 13                                                                                         | 8-8                | Jack (Keyed)       | 19.2 14.0 16.0           | H9084-ND          | 3.04 28.50 261.25   | TM5RJ1-88            |
| 14                                                                                         | 8-8                | Receptacle (Keyed) | 19.2 14.0 16.0           | H9085-ND          | 2.85 26.70 244.75   | TM5RJ3-88            |
| 14                                                                                         | 6-4                | Jack - PC Mount    | 14.8 14.0 14.0           | H9126-ND          | 1.95 18.30 167.75   | TM5RJ2-64            |
| 14                                                                                         | 6-6                | Jack - PC Mount    | 14.8 14.0 14.0           | H9127-ND          | 2.30 21.60 198.00   | TM5RJ2-66            |
| 14                                                                                         | 8-8                | Jack (Keyed)       | 18.6 14.0 14.0           | H9128-ND          | 3.71 34.80 319.00   | TM5RJ2-88            |
| 17                                                                                         | 6-2                | Jack - PC Mount    | 13.0 14.5 18.0           | H9122-ND          | 1.70 15.90 145.75   | TM5RE1-62(50)        |
| 17                                                                                         | 4-4                | Jack - PC Mount    | 13.0 14.5 18.0           | H9123-ND          | 2.05 19.20 176.00   | TM5RE1-44            |
| 17                                                                                         | 6-4                | Jack - PC Mount    | 15.0 14.5 18.0           | H9124-ND          | 2.08 19.50 178.75   | TM5RE1-64            |
| 18                                                                                         | 6-6                | Jack - PC Mount    | 15.0 14.5 18.0           | H9125-ND          | 2.43 22.80 209.00   | TM5RE1-66            |
| <b>Receptacles — Top Entry P.C. Board Mount; Color: White</b>                              |                    |                    |                          |                   |                     |                      |
| 15                                                                                         | 4-4                | Jack - Low Profile | 12.9 18.3 15.0           | H9071-ND          | 2.08 19.50 178.75   | TM3RA-44             |
| 15                                                                                         | 6-4                | Jack - Low Profile | 14.9 18.3 15.0           | H9072-ND          | 2.08 19.50 178.75   | TM3RA-64             |
| 15                                                                                         | 6-6                | Jack - Low Profile | 14.9 18.3 15.0           | H9073-ND          | 2.30 21.60 198.00   | TM3RA-66             |
| 16                                                                                         | 8-8                | Jack - Low Profile | 16.9 18.3 15.0           | H9074-ND          | 3.26 30.60 280.50   | TM3RA-88             |

\* 50µ Gold Plating

| Fig.                                                                       | Positions-Contacts | Description          | Dimensions (mm)<br>W H D | Digi-Key Part No. | Pricing<br>1 10 100  | Hirose Part No.  |
|----------------------------------------------------------------------------|--------------------|----------------------|--------------------------|-------------------|----------------------|------------------|
| <b>Receptacles — P.C. Board Mount With Tin Hold-Down Tabs; Color: Gray</b> |                    |                      |                          |                   |                      |                  |
| 10                                                                         | 4-4                | PC Mount             | 20.0 11.0 10.5           | H9034-ND          | 2.05 19.20 176.00    | TM5RF1-44        |
| 19                                                                         | 6-4                | PC Mount             | 18.0 15.4 16.0           | H9064-ND          | 2.72 25.50 233.75    | TM2REA-0602      |
| 19                                                                         | 6-4                | PC Mount             | 18.0 15.4 16.0           | H9057-ND          | 3.07 28.80 264.00    | TM2REA-0604      |
| 19                                                                         | 6-6                | PC Mount             | 18.0 15.4 16.0           | H9058-ND          | 3.39 31.80 291.50    | TM2REA-0606      |
| 20                                                                         | 2 x 6-2            | PC Mount             | 28.2 15.4 16.0           | H9051-ND          | 3.58 33.60 308.00    | TM2REA-1204      |
| 20                                                                         | 2 x 6-4            | PC Mount             | 28.2 15.4 16.0           | H9052-ND          | 4.29 40.20 368.50    | TM2REA-1208      |
| 20                                                                         | 2 x 6-6            | PC Mount             | 28.2 15.4 16.0           | H9065-ND          | 5.22 48.90 448.25    | TM2REA-1212      |
| 21                                                                         | 3 x 6-2            | PC Mount             | 39.2 15.4 16.0           | H9053-ND          | 4.38 41.10 376.75    | TM2REA-1806      |
| 21                                                                         | 3 x 6-4            | PC Mount             | 39.2 15.4 16.0           | H9054-ND          | 5.47 51.30 470.25    | TM2REA-1812      |
| 21                                                                         | 3 x 6-6            | PC Mount             | 39.2 15.4 16.0           | H9066-ND          | 6.88 64.50 591.25    | TM2REA-1818      |
| 22                                                                         | 4 x 6-2            | PC Mount             | 50.2 15.4 16.0           | H9055-ND          | 5.09 47.70 437.25    | TM2REA-2408      |
| 22                                                                         | 4 x 6-4            | PC Mount             | 50.2 15.4 16.0           | H9056-ND          | 7.14 66.90 613.25    | TM2REA-2416      |
| 22                                                                         | 4 x 6-6            | PC Mount             | 50.2 15.4 16.0           | H9059-ND          | 9.38 87.90 805.75    | TM2REA-2424      |
| 23                                                                         | 6-2                | PC Top Entry         | 17.2 16.0 15.4           | H9110-ND          | 2.75 25.80 236.50    | TM2RE-0602       |
| 23                                                                         | 6-4                | PC Top Entry         | 17.2 16.0 15.4           | H9111-ND          | 2.98 27.90 255.75    | TM2RE-0604       |
| 23                                                                         | 6-6                | PC Top Entry         | 17.2 16.0 15.4           | H9112-ND          | 3.17 29.70 272.25    | TM2RE-0606       |
| 24                                                                         | 2 x 6-2            | PC Top Entry         | 28.2 16.0 15.4           | H9113-ND          | 3.49 32.70 299.75    | TM2RE-1204       |
| 24                                                                         | 2 x 6-4            | PC Top Entry         | 28.2 16.0 15.4           | H9114-ND          | 4.45 41.70 382.25    | TM2RE-1208       |
| 24                                                                         | 2 x 6-6            | PC Top Entry         | 28.2 16.0 15.4           | H9115-ND          | 5.47 51.30 470.25    | TM2RE-1212       |
| 25                                                                         | 3 x 6-2            | PC Top Entry         | 39.2 16.0 15.4           | H9116-ND          | 4.19 39.30 360.25    | TM2RE-1806       |
| 25                                                                         | 3 x 6-4            | PC Top Entry         | 39.2 16.0 15.4           | H9117-ND          | 5.57 52.20 478.50    | TM2RE-1812       |
| 25                                                                         | 3 x 6-6            | PC Top Entry         | 39.2 16.0 15.4           | H9118-ND          | 7.07 66.30 607.75    | TM2RE-1818       |
| 26                                                                         | 4 x 6-2            | PC Top Entry         | 50.2 16.0 15.4           | H9119-ND          | 5.47 51.30 470.25    | TM2RE-2408       |
| 26                                                                         | 4 x 6-4            | PC Top Entry         | 50.2 16.0 15.4           | H9120-ND          | 7.49 70.20 643.50    | TM2RE-2416       |
| 26                                                                         | 4 x 6-6            | PC Top Entry         | 50.2 16.0 15.4           | H9121-ND          | 8.42 78.90 723.25    | TM2RE-2424       |
| 27                                                                         | 8 x 6-6            | Side Entry 8 x 6-6   | 93.0 14.0 14.0           | H9086-ND          | 15.68 147.00 1347.50 | TM5RJ1-4848      |
| 28                                                                         | 3 x 8-8            | 3 x 8-8              | 43.3 14.0 14.7           | H9075-ND          | 9.95 93.30 855.25    | TM5RSA-2424      |
| 28                                                                         | —                  | 3 x (1) 8-8, (2) 6-6 | 30.0 14.0 13.5           | H9076-ND          | 8.99 84.30 772.75    | TM5RSQ-2020      |
| 29                                                                         | —                  | 2 x (1) 8-8, (1) 6-6 | 28.0 14.0 13.5           | H9077-ND          | 7.10 66.60 610.50    | TM5RSQ-1414      |
| 30                                                                         | 2 x 6-2            | Jack w/ Power Plug   | 35 15 13.7               | H9129-ND          | 3.23 30.30 277.75    | TM5RT-1204PWJ    |
| 30                                                                         | 2 x 6-2            | Jack w/ Power Plug   | 35 15 13.7               | H9130-ND          | 3.23 30.30 277.75    | TM5RT1-1204PWJ   |
| 31                                                                         | 6-2                | Jack w/ Power Plug   | 24 15 13.7               | H9131-ND          | 2.72 25.50 233.75    | TM5RT-62PWJ      |
| 31                                                                         | 6-2                | Jack w/ Power Plug   | 24 15 13.7               | H9132-ND          | 2.72 25.50 233.75    | TM5RT1-62PWJ     |
| 31                                                                         | 6-4                | Jack w/ Power Plug   | 24 15 13.7               | H9133-ND          | 3.52 33.00 302.50    | TM5RT1-64PWJ     |
| 31                                                                         | 6-6                | Jack w/ Power Plug   | 24 15 13.7               | H9134-ND          | 3.68 34.50 316.25    | TM5RT1-66PWJ     |
| 32                                                                         | 4-4                | Jack Top Entry SMT   | 13 17 12.5               | H9135-ND          | 2.27 21.30 195.25    | TM15R-44(30)     |
| 32                                                                         | 6-4                | Jack Top Entry SMT   | 14 17 12.5               | H9136-ND          | 2.40 22.50 206.25    | TM15R-64(30)     |
| 32                                                                         | 6-6                | Jack Top Entry SMT   | 14 17 12.5               | H9137-ND          | 3.62 33.90 310.75    | TM15R-66         |
| 33                                                                         | 8-8                | Receptacle           | 14 11.7 17               | H9138-ND          | 3.14 29.40 269.50    | TM5RL-88         |
| 34                                                                         | 4 x 8-8            | Receptacle           | 56 11.7 17               | H9139-ND          | 10.02 93.90 860.75   | TM5RL-3232       |
| 35                                                                         | 8-8                | Wire Lead Jack       | 24 20 15                 | H9140-ND          | 8.45 79.20 726.00    | TM11R-88-35S-300 |
| 36                                                                         | 8-8                | Adapter Plug to Plug | 18.6 17 37.5             | H9141-ND          | 15.58 146.10 1339.25 | TM5RL-88-JJ      |

**Weidmüller**  
**Paladin Tools**  
**Crimp Tools**



- Fully Ratcheting Cycle
- Adjustable Crimp Tension
- Hardened Dies for Long Life
- Crimp 4, 6, & 8 Position
- Cuts and Strips Cable
- RJ45, RJ11



- Fully Ratcheting Cycle
- Dies Fully Interchangeable
- Manual Ratchet Release
- Adjustable Crimp Tension
- EZI-CHANGE™ Die Set Screws
- Hardened Dies for Long Life

| Description                                       | Digi-Key Part No. | Price Each |
|---------------------------------------------------|-------------------|------------|
| Modular Crimp Tool                                | PAL1530R-ND       | 126.30     |
| Replacement Blade Set (for 1530R)                 | PAL2530-ND        | 9.49       |
| Crimp Tool — Frame Only                           | PAL1302-ND        | 41.17      |
| RJ45 Hirose Connectors Die Set (for 1302 Crimper) | PAL2061-ND        | 20.51      |
| RJ45 AMP Modular Plug Die Set (for 1302)          | PA2064-ND         | 19.48      |
| RJ11 AMP/Hirose Modular Plug Die Set (for 1302)   | PA2065-ND         | 19.48      |

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## PRODUCT FACTS:

• Meets or exceeds FCC Part 68 rules and regulations; REA PE-76; and UL 1863, Communication Circuit Accessories • Meets 1000 volt dielectric requirement • Designed for direct mounting on pc boards • Designed for ease of soldering and board cleaning • Selectively gold plated contacts for lower cost • Surface mount jacks compatible with vapor phase environment • All jacks are flame retardant polyester, standard color black, unless specified otherwise • Listed by Underwriters Laboratories Inc., File No. E81956 • Certified by Canadian Standards Association File No. LR82669

**Electrical Specifications:** • **Current Rating** – 1.5 amp max. @ 25°C, derated to 0.2 amp max. @ 70°C ambient • **Voltage Rating** – 150 volts ac max. • **Dielectric Withstanding Voltage** – 1000 VAC, RMS, 60 Hz, 1 min. • **Insulation Resistance** – 500 megohms min. • **Surge Test** – to 1000 volts.

**Mechanical Specifications:** • **PC Board Retention** – will not dislodge from pc board when subjected to 1 lb. (4.4 N) pull before soldering and 10 lbs. (44 N) pull after soldering • **Durability** – 750 mating cycles

**Material and Finish:** • **Housing** – Thru-hole: Polyester, UL 94V-0 rated surface mount: Polyphenylene Sulfide, UL 94V-0 rated • **Contact** – .014 (0.36) thick phosphor bronze; plated .000050 (0.00127) gold in contact area and .000150 (0.00381) tin-lead on solder tails, over .000050 (0.00127) nickel underplate

## FIG. 2 PRODUCT FACTS:

• True mass displacement terminal of jacketed cable with tinsel, solid or stranded conductors • Available for round or flat-oval cable • One piece construction with preloaded contacts • FCC and EIA/ITIA industry standard size and performance • Selectively gold plated terminals • Recognized by Underwriters Laboratories Inc., File No. E81956 • Certified by Canadian Standards Association Certificate No. LR 7189A

**Material and Finish:** • **Housing:** Polycarbonate, UL 94V-2 flammability rating. • **Terminal:** .014 (.36) thick, phosphor bronze; underplated with 100 µin nickel and plated with 50 µin gold in contact region and gold flash on remainder of terminal

**Electrical Specifications:** • **Applications:** 150 VAC max. at 1.5 A @ 25°C, derated to .2 A @ 70°C • **Dielectric Withstanding Voltage:** 1000 Volts AC • **Insulation Resistance:** 500 Megaohms

**Mechanical Specifications:** • **Cable-to-Plug Tensile Strength:** 17 lbs (76N) min. • **Durability:** 750 mating cycles

## EXTERNAL STRAIN RELIEF:

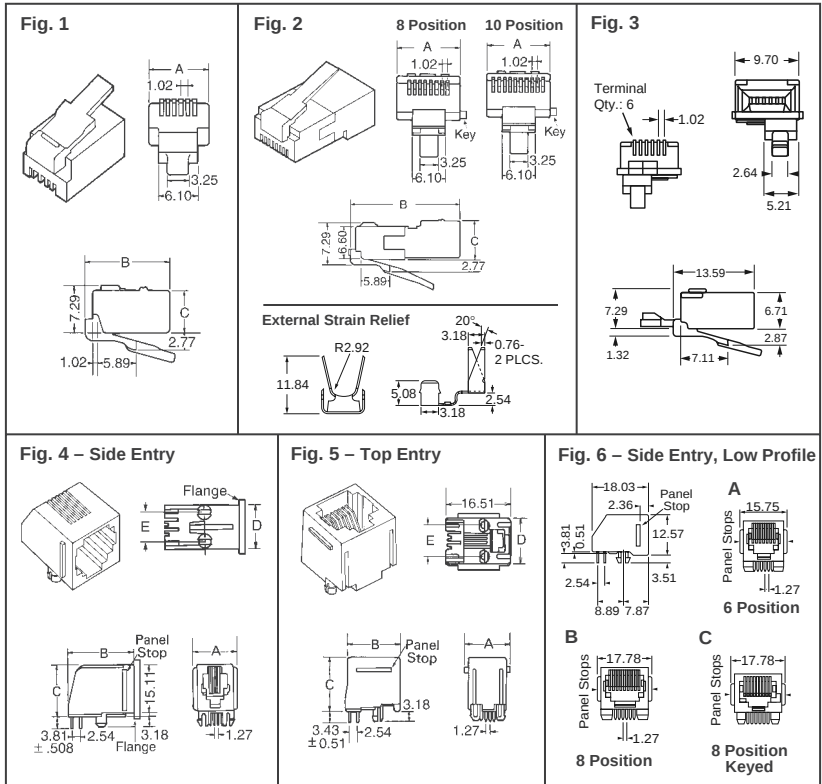
• Positively engaged to the plug housing • Improved shield contact path redundant contact points • 360° wrap on cable jacket and shield foil, extraordinary strain relief • Improved shield coverage at housing

## FIG. 9 PRODUCT FACTS:

• Performance exceeds Near End Crosstalk (NEXT) requirements of -40dB at 100 MHz per EIA/ITIA 568A • Available in single port or multiple port configurations, shielded or unshielded • Eliminate need for customized printed circuit board compensation to achieve high performance

**Material and Finish:** • **Housing:** Polyester, black UL 94V-0 rated • **Contact:** Phosphor bronze, gold over nickel plated in contact area, tin-lead over nickel in solder area • **Shield:** Brass, bright tin-lead plated

**Specifications:** • **Current:** 1.5 amp max. @ 25°C • **Voltage:** 150 VAC maximum • **Operating Temperature:** -40°C to 70°C • **Mating/Unmating Forces:** 5 pounds maximum



| Fig. | Description                                     | Positions<br>Contacts | A     | B     | C     | D     | E     | Digi-Key<br>Part No. | 1      | 10   | 25    | 100    | AMP<br>Part No. |
|------|-------------------------------------------------|-----------------------|-------|-------|-------|-------|-------|----------------------|--------|------|-------|--------|-----------------|
| 1    | Plug, Handset, Stranded, Flat Oval              | 4-4                   | 7.62  | 13.33 | 6.60  | —     | —     | A9091-ND             | .30    | 2.77 | —     | 25.41  | 5-641334-3      |
|      | Plug, Stranded, Flat Oval                       | 6-4                   | 9.65  | 13.33 | 6.60  | —     | —     | A9092-ND             | .30    | 2.77 | —     | 25.41  | 5-641335-3      |
|      | Plug, Solid Flat Oval                           | 6-4                   | 9.65  | 13.33 | 6.60  | —     | —     | A9116-ND             | .34    | —    | 6.74  | 21.57  | 5-556384-3      |
|      | Plug, Stranded, Flat Oval                       | 6-6                   | 9.65  | 13.33 | 6.60  | —     | —     | A9093-ND             | .25    | 2.38 | —     | 21.81  | 5-641337-3      |
|      | Plug, Solid Flat Oval                           | 6-6                   | 9.65  | 22.86 | 8.25  | —     | —     | A9118-ND             | .33    | —    | 6.58  | 21.06  | 5-555042-3      |
|      | Plug, Strand Round                              | 6-6                   | 9.65  | 22.86 | 8.25  | —     | —     | A9117-ND             | .31    | —    | 6.15  | 19.66  | 5-554710-3      |
|      | Plug, Small Solid Flat Oval                     | 6-6                   | 9.65  | 22.86 | 8.25  | —     | —     | A9119-ND             | .32    | —    | 6.40  | 20.48  | 5-557970-3      |
|      | Plug, Long Body, Solid Flat Oval                | 6-6                   | 9.65  | 22.86 | 8.25  | —     | —     | A9120-ND             | .67    | —    | 13.32 | 42.61  | 5-555426-3      |
|      | Plug, Stranded, Flat Oval Long                  | 6-6                   | 9.65  | 22.86 | 8.25  | —     | —     | A9121-ND             | .62    | —    | 12.43 | 39.78  | 5-555176-3      |
|      | Plug, Stranded Round Long                       | 6-6                   | 9.65  | 22.86 | 8.25  | —     | —     | A9122-ND             | .62    | —    | 12.43 | 39.78  | 5-555177-3      |
| 2    | Plug, Stranded Shield Round Long                | 6-6                   | 9.65  | 22.86 | 8.25  | —     | —     | A9128-ND             | 1.81   | —    | 36.18 | 115.76 | 5-555175-3      |
|      | Plug, Shielded Long Body Oval                   | 6-6                   | 9.65  | 22.86 | 8.25  | —     | —     | A9027-ND             | 1.81   | —    | 42.35 | 155.30 | 5-555174-2      |
|      | Plug, Stranded Flat Oval                        | 8-8                   | 11.68 | 21.46 | 7.92  | —     | —     | A9094-ND             | .68    | 6.40 | —     | 58.71  | 5-554739-3      |
|      | Plug, Keyed, Stranded Flat Oval                 | 8-8                   | 11.79 | 22.73 | 7.98  | —     | —     | A9058-ND             | .53    | —    | 10.67 | 34.16  | 5-554743-3      |
|      | Plug, Solid Flat Oval                           | 8-8                   | 11.79 | 22.73 | 7.98  | —     | —     | A9126-ND             | .57    | —    | 11.43 | 36.56  | 5-554720-3      |
|      | Plug, Solid Round                               | 8-8                   | 11.79 | 22.73 | 7.98  | —     | —     | A9123-ND             | .57    | —    | 11.43 | 36.56  | 5-557315-3      |
|      | Plug, Stranded Round                            | 8-8                   | 11.79 | 22.73 | 7.98  | —     | —     | A9125-ND             | .53    | —    | 10.67 | 34.16  | 5-554169-3      |
|      | Plug, Solid Round Keyed                         | 8-8                   | 11.79 | 22.73 | 7.98  | —     | —     | A9127-ND             | .53    | —    | 10.67 | 34.16  | 5-554170-3      |
|      | Plug, High Performance, Stranded Round          | 8-8                   | 11.79 | 22.73 | 7.98  | —     | —     | A9059-ND             | .78    | —    | 15.69 | 50.21  | 5-558530-3      |
|      | Plug, Stranded, Shield, High Performance, Round | 8-8                   | 11.79 | 22.73 | 7.98  | —     | —     | A9111-ND             | 1.89   | —    | 37.87 | 121.18 | 5-569552-3      |
| 3    | Plug, Solid, Shield, High Performance, Round    | 8-8                   | 11.79 | 22.73 | 7.98  | —     | —     | A9112-ND             | 2.03   | —    | 40.52 | 129.67 | 5-569550-3      |
|      | Plug, Stranded, Shield, Flat Oval               | 8-8                   | 11.79 | 23.24 | 8.38  | —     | —     | A9113-ND             | 1.80   | —    | 36.05 | 115.35 | 5-569542-3      |
|      | Plug, Stranded, Shield, Round Long              | 8-8                   | 11.79 | 23.24 | 8.38  | —     | —     | A9114-ND             | 1.80   | —    | 36.05 | 115.35 | 5-569532-3      |
|      | Plug, Solid, Shield, Round                      | 8-8                   | 11.79 | 23.24 | 8.38  | —     | —     | A9115-ND             | 1.80   | —    | 36.05 | 115.35 | 5-569530-3      |
|      | Plug, Stranded Round                            | 10-10                 | 11.79 | 22.73 | 7.98  | —     | —     | A9129-ND             | 1.53   | —    | 30.55 | 97.76  | 5-557963-3      |
|      | External Strain Relief Modular Conn.            | —                     | —     | —     | —     | —     | —     | A9130-ND             | —      | 5.68 | —     | 51.09  | 558527-1        |
|      | Crimp Tool Assembly, External Strain Relief     | —                     | —     | —     | —     | —     | —     | A9800-ND             | 170.25 | —    | —     | —      | 224928-1        |
|      | Die Set, Strain Relief Modular, use w/A9996     | —                     | —     | —     | —     | —     | —     | A9901-ND             | 125.25 | —    | —     | —      | 224928-2        |
|      | Pro-Crimper II Hand Tool w/o Die                | —                     | —     | —     | —     | —     | —     | A9996-ND             | 63.75  | —    | —     | —      | 354940-1        |
|      | Plug, with Offset Latch                         | 6-6                   | 9.70  | 13.59 | 6.71  | —     | —     | A9057-ND             | .69    | —    | 13.79 | 44.14  | 5-555237-2      |
| 4    | Jack, Side Entry, With Panel Stops              | 4-4                   | 13.72 | 20.57 | 16.00 | 11.18 | 7.62  | A9041-ND             | .79    | 7.40 | —     | 67.82  | 520249-2        |
|      | Jack, Side Entry, With Panel Stops              | 6-2                   | 15.75 | 20.70 | 16.00 | 13.21 | 10.16 | A9082-ND             | .64    | —    | 12.73 | 40.75  | 520250-1        |
|      | Jack, Side Entry, With Panel Stops              | 6-4                   | 15.75 | 20.70 | 16.00 | 13.21 | 10.16 | A9042-ND             | .77    | 7.21 | —     | 66.07  | 520250-2        |
|      | Jack, Side Entry, With Panel Stops              | 6-6                   | 15.75 | 20.70 | 16.00 | 13.21 | 10.16 | A9043-ND             | .67    | 6.31 | —     | 57.82  | 520250-3        |
|      | Jack, Side Entry, With Panel Stops              | 8-8                   | 17.78 | 20.57 | 16.00 | 15.24 | 11.43 | A9044-ND             | .69    | 6.49 | —     | 59.47  | 520251-4        |
|      | Jack, Side Entry, With Panel Stops, Keyed       | 8-8                   | 17.78 | 20.57 | 16.00 | 15.24 | 11.43 | A9046-ND             | .69    | —    | 13.85 | 44.33  | 520252-4        |
|      | Jack, Side Entry, With Flange                   | 4-4                   | 14.48 | 20.57 | 17.27 | 11.18 | 7.62  | A9077-ND             | .62    | —    | 12.33 | 39.46  | 520241-2        |
|      | Jack, Side Entry, With Flange                   | 6-4                   | 16.51 | 20.57 | 17.27 | 13.21 | 10.16 | A9078-ND             | .65    | —    | 12.91 | 41.31  | 520242-2        |
|      | Jack, Side Entry, With Flange                   | 6-6                   | 16.51 | 20.57 | 17.27 | 13.21 | 10.16 | A9079-ND             | .65    | —    | 13.08 | 41.86  | 520242-3        |
|      | Jack, Side Entry, With Flange                   | 8-8                   | 18.54 | 20.57 | 17.27 | 15.24 | 11.43 | A9080-ND             | .69    | —    | 13.85 | 44.33  | 520243-4        |
| 5    | Jack, Side Entry, With Flange Keyed             | 8-8                   | 18.54 | 20.57 | 17.27 | 15.24 | 11.43 | A9081-ND             | .83    | —    | 16.63 | 53.20  | 520244-4        |
|      | Jack, Without Panel Stops and Flange            | 4-4                   | 11.18 | 20.57 | 16.00 | —     | 7.62  | A9047-ND             | .65    | —    | 12.95 | 41.43  | 555980-1        |
|      | Jack, Without Panel Stops and Flange            | 6-4                   | 13.21 | 20.57 | 16.00 | —     | 10.16 | A9048-ND             | .51    | —    | 10.21 | 32.68  | 555979-1        |
|      | Jack, Without Panel Stops and Flange            | 6-6                   | 13.21 | 20.70 | 16.00 | —     | 10.16 | A9049-ND             | .70    | —    | 14.04 | 44.91  | 520470-3        |
|      | Jack, Without Panel Stops and Flange            | 8-8                   | 15.24 | 20.57 | 16.00 | —     | 11.43 | A9050-ND             | .74    | —    | 14.81 | 47.38  | 520426-4        |
|      | Jack, Without Panel Stops and Flange, Keyed     | 8-8                   | 15.24 | 20.57 | 16.00 | —     | 11.43 | A9051-ND             | .74    | —    | 14.81 | 47.38  | 554517-1        |
|      | Jack, With Stops                                | 4-4                   | 13.97 | 15.88 | 16.38 | 11.43 | —     | A9071-ND             | .62    | 5.77 | —     | 52.87  | 520257-2        |
|      | Jack, With Stops                                | 6-4                   | 16.00 | 15.88 | 16.38 | 13.46 | —     | A9072-ND             | .65    | 6.13 | —     | 56.17  | 520258-2        |
|      | Jack, With Panel Stops                          | 6-6                   | 16.00 | 15.88 | 16.38 | 13.46 | —     | A9073-ND             | .67    | 6.31 | —     | 57.82  | 520258-3        |
|      | Jack, With Stops                                | 8-8                   | 18.03 | 15.88 | 16.38 | 15.49 | —     | A9074-ND             | .69    | 6.49 | —     | 59.47  | 520259-4        |
| 5    | Jack, With Stops, Keyed                         | 8-8                   | 18.03 | 15.88 | 16.38 | 15.49 | —     | A9052-ND             | .69    | —    | 13.85 | 44.33  | 520260-4        |
|      | Jack, Top Entry Without Stops                   | 6-4                   | 13.46 | 15.88 | 16.38 | —     | 10.16 | A9083-ND             | .69    | —    | 13.86 | 44.36  | 520425-2        |
|      | Jack, Top Entry Without Stops                   | 6-6                   | 13.46 | 15.88 | 16.38 | —     | 10.16 | A9084-ND             | .53    | —    | 10.51 | 33.64  | 520425-3        |
|      | Jack, Top Entry Without Stops                   | 8-8                   | 15.62 | 16.00 | 16.38 | —     | 11.43 | A9085-ND             | .54    | —    | 10.81 | 34.60  | 556416-1        |
|      | Jack, Top Entry Without Stops                   | 8-8                   | 15.62 | 16.00 | 16.38 | —     | 11.43 | A9086-ND             | .94    | —    | 18.89 | 60.45  | 555799-1        |
|      | Jack, Top Entry Without Stops, Shielded         | 8-8                   | 18.03 | 15.88 | 16.38 | 15.49 | 11.43 | A9087-ND             | 1.06   | —    | 21.18 | 67.79  | 557969-1        |

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Fig. 7

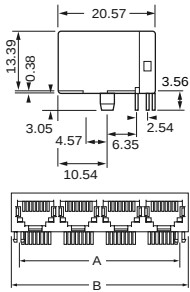


Fig. 8

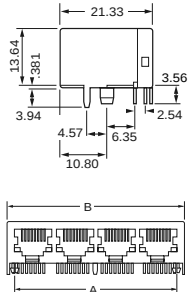


Fig. 9 - Side Entry with Panel Stops

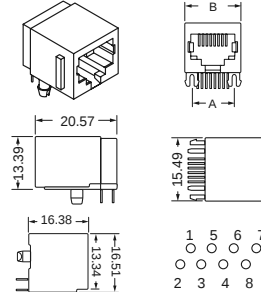


Fig. 10 - Modular Jack

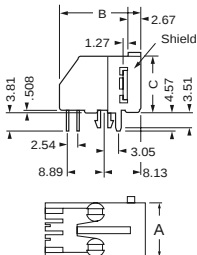


Fig. 11 - Surface Mount

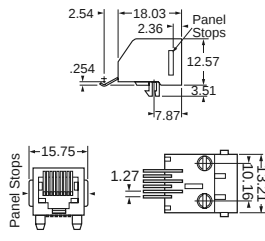
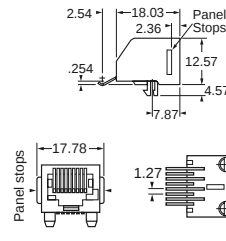


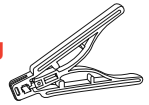
Fig. 12 - Surface Mount



| Fig. | Description                             | Positions<br>Contacts | Dimensions (mm) |        |       | Digi-Key<br>Part No. | Pricing |       |        |        | AMP<br>Part No. |
|------|-----------------------------------------|-----------------------|-----------------|--------|-------|----------------------|---------|-------|--------|--------|-----------------|
|      |                                         |                       | A               | B      | C     |                      | 1       | 10    | 25     | 100    |                 |
| 6A   | Jack, With Stops                        | 6-6                   | —               | —      | —     | A9010-ND             | .89     | 8.34  | —      | 76.48  | 555163-1        |
| 6A   | Jack, With Stops                        | 6-4                   | —               | —      | —     | A9011-ND             | .88     | 8.26  | —      | 75.71  | 555163-2        |
| 6B   | Jack, With Stops                        | 8-8                   | —               | —      | —     | A9012-ND             | .94     | 8.84  | —      | 80.99  | 555162-1        |
| 6C   | Jack, With Stops, Keyed                 | 8-8                   | —               | —      | —     | A9034-ND             | .60     | —     | 12.02  | 38.45  | 555166-1        |
| 6A   | Jack, Without Stops                     | 6-6                   | —               | —      | —     | A9031-ND             | .56     | —     | 11.11  | 35.56  | 555165-1        |
| 6A   | Jack, Without Stops                     | 6-4                   | —               | —      | —     | A9032-ND             | .54     | —     | 10.81  | 34.60  | 555165-2        |
| 6B   | Jack, Without Stops                     | 8-8                   | —               | —      | —     | A9033-ND             | .60     | —     | 12.02  | 38.45  | 555164-1        |
| 6C   | Jack, Without Stops, Keyed              | 8-8                   | —               | —      | —     | A9035-ND             | .60     | —     | 12.02  | 38.45  | 555167-1        |
| 7    | Jack, 2 Pos, Unshielded                 | 8-8                   | 25.40           | 30.48  | —     | A9013-ND             | 1.63    | —     | 28.40  | 102.95 | 557560-1        |
|      | Jack, 3 Pos, Unshielded                 | 8-8                   | 39.37           | 44.45  | —     | A9014-ND             | 2.46    | —     | 42.80  | 155.15 | 557561-1        |
|      | Jack, 4 Pos, Unshielded                 | 8-8                   | 53.34           | 58.42  | —     | A9015-ND             | 3.29    | —     | 57.20  | 207.35 | 557562-1        |
|      | Jack, 5 Pos, Unshielded                 | 8-8                   | 67.31           | 72.39  | —     | A9016-ND             | 4.12    | —     | 71.60  | 259.55 | 557563-1        |
|      | Jack, 6 Pos, Unshielded                 | 8-8                   | 81.28           | 86.36  | —     | A9017-ND             | 4.95    | —     | 86.00  | 311.75 | 557564-1        |
|      | Jack, 8 Pos, Unshielded                 | 8-8                   | 109.22          | 114.30 | —     | A9019-ND             | 6.58    | —     | 114.40 | 414.70 | 557566-1        |
| 8    | Jack, 2 Pos, Shielded, PCB GRD          | 8-8                   | 25.40           | 31.24  | —     | A9020-ND             | 2.38    | —     | 41.33  | 149.83 | 557570-1        |
|      | Jack, 4 Pos, Shielded, PCB GRD          | 8-8                   | 53.34           | 59.18  | —     | A9021-ND             | 3.31    | —     | 57.60  | 208.80 | 557571-1        |
|      | Jack, 6 Pos, Shielded, PCB GRD          | 8-8                   | 81.28           | 87.12  | —     | A9022-ND             | 6.39    | —     | 111.20 | 403.10 | 557572-1        |
|      | Jack, 8 Pos, Shielded, PCB GRD          | 8-8                   | 109.22          | 115.06 | —     | A9023-ND             | 7.08    | —     | 123.20 | 446.60 | 557573-1        |
|      | Jack, 10 Pos, Shielded, Keyed, PCB GRD  | 8-8                   | 11.43           | 15.88  | —     | A9132-ND             | 3.91    | —     | 78.28  | 250.50 | 558068-1        |
| 9    | Jack, 1 Pos, Unshielded                 | 8-8                   | 11.43           | 15.11  | —     | A9063-ND             | 1.15    | —     | 23.00  | 73.60  | 557785-1        |
|      | Jack, 1 Pos, Unshielded                 | 10-10                 | 11.43           | 15.11  | —     | A9064-ND             | 1.97    | —     | 39.33  | 125.87 | 558065-1        |
|      | Jack, 1 Pos, Unshielded, Keyed          | 10-10                 | 11.43           | 15.11  | —     | A9065-ND             | 2.46    | —     | 49.17  | 157.33 | 558066-1        |
| 9    | Jack, 1 Pos, Shielded, PCB GRD          | 10-10                 | 11.43           | 15.88  | —     | A9067-ND             | 3.13    | —     | 62.63  | 200.40 | 558067-1        |
|      | Jack, 1 Pos, Shielded, PNL GRD          | 8-8                   | 11.43           | 15.88  | —     | A9066-ND             | 1.78    | —     | 35.50  | 113.60 | 557787-1        |
|      | Jack, 1 Pos, Shielded, PNL GRD          | 10-10                 | 11.43           | 15.88  | —     | A9068-ND             | 3.91    | —     | 78.28  | 250.50 | 558070-1        |
|      | Jack, 2 Pos, Shielded, PNL GRD          | 8-8                   | 25.40           | 31.24  | —     | A9069-ND             | 2.93    | —     | 58.55  | 187.37 | 557570-2        |
|      | Jack, 4 Pos, Shielded, PNL GRD          | 8-8                   | 53.34           | 59.18  | —     | A9070-ND             | 3.60    | —     | 72.00  | 230.40 | 557571-2        |
|      | Jack, 6 Pos, Shielded, PNL GRD          | 8-8                   | 81.28           | 87.12  | —     | A9075-ND             | 6.13    | —     | 122.50 | 392.00 | 557572-3        |
|      | Jack, 8 Pos, Shielded, PNL GRD          | 8-8                   | 109.22          | 115.06 | —     | A9076-ND             | 7.80    | —     | 156.00 | 499.20 | 557573-2        |
|      | Jack, 1 Pos, Unshielded w/Panel Stops   | 8-8                   | 15.88           | 21.34  | 13.64 | A9088-ND             | 1.80    | —     | 36.00  | 115.20 | 558343-1        |
| 10   | Jack, 1 Pos, Unshielded w/o Panel Stops | 8-8                   | 15.88           | 21.34  | 13.64 | A9089-ND             | 1.63    | —     | 32.50  | 104.00 | 558341-1        |
|      | Jack, 4 Pos, Unshielded w/o Panel Stops | 8-8                   | 58.42           | 20.57  | 13.39 | A9096-ND             | 7.83    | —     | 156.50 | 500.80 | 558500-1        |
|      | Jack, 6 Pos, Unshielded w/o Panel Stops | 8-8                   | 86.36           | 20.57  | 13.39 | A9099-ND             | 9.03    | —     | 180.50 | 577.60 | 558501-1        |
|      | Jack, 8 Pos, Unshielded w/o Panel Stops | 8-8                   | 114.30          | 20.57  | 13.39 | A9102-ND             | 12.08   | —     | 241.50 | 772.80 | 558502-1        |
|      | Jack, 1 Pos, Shielded, Pc GRD           | 8-8                   | 158.75          | 21.34  | 13.64 | A9090-ND             | 1.97    | —     | 39.49  | 126.37 | 558342-1        |
|      | Jack, 1 Pos, Shielded, PNL GRD          | 8-8                   | 158.75          | 21.34  | 13.64 | A9095-ND             | 2.53    | —     | 50.50  | 161.60 | 558344-1        |
|      | Jack, 4 Pos, Shielded, Pc GRD           | 8-8                   | 59.18           | 21.34  | 13.64 | A9097-ND             | 9.73    | —     | 194.50 | 622.40 | 558503-1        |
|      | Jack, 4 Pos, Shielded, PNL GRD          | 8-8                   | 59.18           | 21.34  | 13.64 | A9098-ND             | 9.73    | —     | 194.50 | 622.40 | 558524-1        |
| 10   | Jack, 6 Pos, Shielded, Pc GRD           | 8-8                   | 87.12           | 21.34  | 13.64 | A9100-ND             | 9.20    | —     | 184.00 | 588.80 | 558504-1        |
|      | Jack, 6 Pos, Shielded, PNL GRD          | 8-8                   | 86.36           | 20.57  | 13.39 | A9101-ND             | 11.20   | —     | 224.00 | 716.80 | 558525-1        |
|      | Jack, 8 Pos, Shielded, Pc GRD           | 8-8                   | 115.06          | 21.34  | 13.64 | A9103-ND             | 11.70   | —     | 234.00 | 748.80 | 558505-1        |
|      | Jack, 8 Pos, Shielded, PNL GRD          | 8-8                   | 115.06          | 21.34  | 13.64 | A9104-ND             | 14.93   | —     | 298.50 | 955.20 | 558526-1        |
|      | Jack, PC Ground                         | 6-6                   | 13.84           | 18.29  | 12.57 | A9024-ND             | 1.04    | 9.73  | —      | 89.21  | 555154-1        |
|      | Jack, PC Ground                         | 6-4                   | 13.84           | 18.29  | 12.57 | A9025-ND             | .85     | —     | 14.80  | 53.65  | 555154-2        |
|      | Jack, PC Ground                         | 8-8                   | 15.88           | 18.29  | 12.57 | A9026-ND             | 1.12    | 10.45 | —      | 95.82  | 555153-1        |
|      | Jack, PC Ground, Keyed                  | 8-8                   | 15.88           | 18.29  | 12.57 | A9056-ND             | 1.09    | —     | 21.71  | 69.46  | 556591-1        |
| 10   | Jack, Panel Ground                      | 6-6                   | 13.84           | 18.29  | 12.57 | A9053-ND             | .95     | —     | 19.00  | 60.80  | 555140-1        |
|      | Jack, Panel Ground                      | 6-4                   | 13.84           | 18.29  | 12.57 | A9054-ND             | .93     | —     | 18.50  | 59.20  | 555140-2        |
|      | Jack, Panel Ground                      | 8-8                   | 15.88           | 18.29  | 12.57 | A9055-ND             | .87     | —     | 17.42  | 55.75  | 555141-1        |
| 11   | Jack, 6 Pos, With Stops                 | 6-6                   | —               | —      | —     | A9036-ND             | 1.30    | —     | 25.94  | 83.02  | 555077-1        |
|      | Jack, 6 Pos, With Stops                 | 6-4                   | —               | —      | —     | A9037-ND             | 1.28    | —     | 25.69  | 82.20  | 555077-2        |
| 12   | Jack, 8 Pos, With Stops                 | 8-8                   | —               | —      | —     | A9039-ND             | 1.37    | —     | 27.48  | 87.92  | 555248-1        |
|      | Jack, 8 Pos, With Stops, Keyed          | 8-8                   | —               | —      | —     | A9038-ND             | 1.72    | —     | 34.34  | 109.90 | 555078-1        |
|      | Jack, 8 Pos, Without Stops              | 8-8                   | —               | —      | —     | A9045-ND             | 1.37    | —     | 27.48  | 87.92  | 555764-1        |
|      | Jack, 8 Pos, With Stops, Keyed, Shields | 8-8                   | —               | —      | —     | A9131-ND             | 1.85    | —     | 37.10  | 118.71 | 558178-1        |

**AMP****Modular Plugs Tooling**

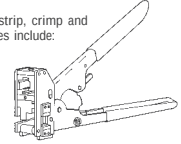
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- Light Weight • Low Cost



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| A9988-ND | Crimp Tool for 4-Position Handset Plugs.....                 | \$24.00 |
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Carry Case with Frame; 4-Position Handset, RJ-11 (4-&-6) RJ-45 (8)-Position Die Sets, Blade Replacements Kit & Small Screwdriver.

|          |                           |          |
|----------|---------------------------|----------|
| A9967-ND | Production Tool Kit ..... | \$206.82 |
|----------|---------------------------|----------|

| Description                                               | Digi-Key Part No. | Price Each | AMP Part No. |
|-----------------------------------------------------------|-------------------|------------|--------------|
| 8-Pos Crimper w/die                                       | A9900-ND          | 111.75     | 2-231652-1   |
| 6-Pos Crimper w/die                                       | A9901-ND          | 111.75     | 2-231652-8   |
| 4-Pos Crimper w/die                                       | A9902-ND          | 111.75     | 1-231652-3   |
| 6-Pos Hand Tool Long Body                                 | A9902-ND          | 111.75     | 2-9231652-7  |
| 6-Pos Crimp Offset                                        | A9930-ND          | 111.75     | 2-231652-6   |
| 8-Pos High Performance Crimp Tool, External Strain Relief | A9929-ND          | 111.75     | 3-231652-0   |
|                                                           | A9800-ND          | 170.25     | 224928-1     |
| 8-Pos Die Set Only                                        | A9904-ND          | 37.50      | 853400-1     |
| 6-Pos Die Set Only                                        | A9905-ND          | 37.50      | 853400-8     |
| 4-Pos Die Set Only                                        | A9906-ND          | 37.50      | 853400-3     |
| 6-Pos Die Set Long Body                                   | A9903-ND          | 37.50      | 853400-7     |
| 6-Pos Die Set Only, Offset                                | A9927-ND          | 37.50      | 853400-6     |
| 8-Pos Die Set Only, High Perform.                         | A9926-ND          | 37.50      | 1-853400-0   |
| Die Set, External Strain Relief                           | A9801-ND          | 125.25     | 224928-2     |
| Crimp Tool Mod. Plugs w/o Dies                            | A9931-ND          | 81.75      | 2-231652-0   |
| Replace, Wire Strip, Blade                                | A9976-ND          | 33.75      | 231662-4     |
| Wire Strip, Blade Set                                     | A9928-ND          | 4.55       | 231662-5     |

**AMP****Four Position Data Connector for the IEEE 802.5 Local Area Network**

**Kit Description:** Connector (top and bottom cover assemblies), Stuffer Bux, Ferrule, Dust Cover, Latch Lock and Strain Relief Bushings for 45, 90 and 180 degree cable exit.

**Cableless Balun Kit:** A four position cableless balun kit is available which allows the customer to assemble his own electronic components which are required to convert the balanced twisted-pair cable to unbalanced coaxial cables. This kit contains a single BNC jack receptacle, but will accept a second BNC receptacle which can be ordered separately to provide the dual port version.

**Material for A9105 & A9106:** Stuffer Cap: Clear polycarbonate. **AMP-BARREL Terminal:** Tin plated phosphor bronze. **Label:** Adhesive backed polyester.

**Contacts:** Nickel plated high strength copper alloy having selective gold plating in contact area and selective tin plating in AMP-BARREL terminal area.

**Housing:** Black thermoplastic, 94V-0 rated. **Conductor Type:** Solid or stranded having .048 max. insulation O.D.

Fig. 1 A4001



Fig. 2 A4004



Three Pair Modular Jack (6 Position) IBM Equivalent P/N: 831575

Fig. 3 A4005



Four Pair Modular Jack (8 Position) IBM Equivalent P/N: 6091030

Fig. 4

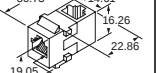
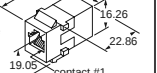


Fig. 5



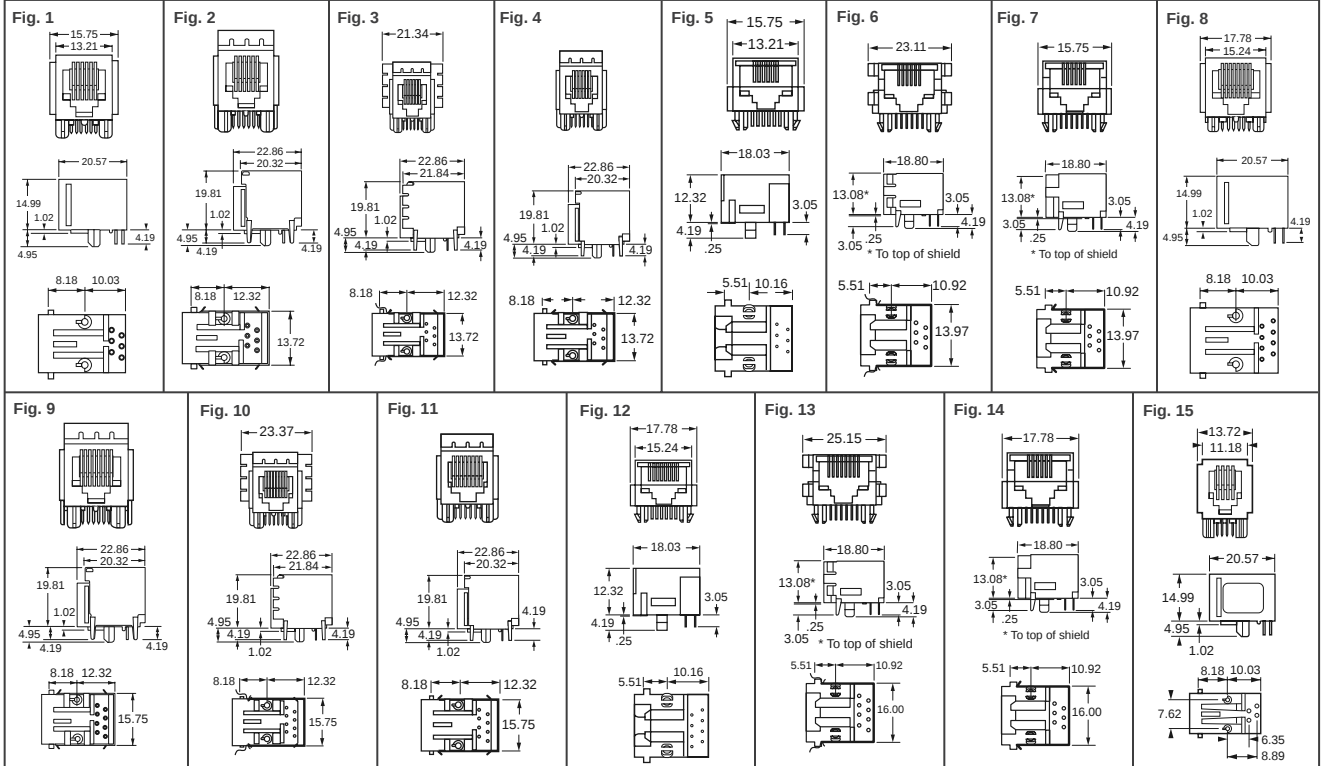
A9107-A9110

Compact couplers for two modular plugs; couplers snap into 0.585" x 0.765" (14.86mm x 19.43mm) rectangular wallplate cutouts. Wired one-to-one.

| Fig.                          | # of Pos. | Description        | Digi-Key Part No. | Pricing 1 25 | AMP Part No. |
|-------------------------------|-----------|--------------------|-------------------|--------------|--------------|
| <b>Kits</b>                   |           |                    |                   |              |              |
| 1                             | 4         | LAN Data Connector | A4001-ND          | 5.84 116.80  | 554000-1     |
| <b>Modular Telephone Jack</b> |           |                    |                   |              |              |
| 2                             | 6         | IBM                | A4004-ND          | 4.42 76.80   | 553983-1     |
| 3                             | 8         | IBM                | A4005-ND          | 4.78 83.20   | 554546-1     |
| 2                             | 6         | Commercial         | A9105-ND          | 4.90 98.00   | 554171-1     |
| 3                             | 8         | Commercial         | A9106-ND          | 5.13 102.50  | 554578-1     |
| <b>Panel Mount Coupler</b>    |           |                    |                   |              |              |
| 4                             | 6         | Right Angle        | A9107-ND          | 3.80 76.00   | 555049-1     |
| 4                             | 8         | Right Angle        | A9108-ND          | 4.05 81.00   | 555051-1     |
| 5                             | 6         | In-Line            | A9109-ND          | 3.75 75.00   | 555050-1     |
| 5                             | 8         | In-Line            | A9110-ND          | 3.45 69.00   | 555052-1     |

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Jack design and component selection compatible with equipment registered under FCC Part 68, UL Recognized, CSA Certified, U.S. Patent No. 4,695,115 and U.S. Patent No. 4,772,224 and a variety of international patents. **RJ11 / RJ45 SERIES, Shielded:** The metal shield provides additional protection, and is available with RFI gasket style spring fingers to provide a low impedance ground path across the interface.



| Fig.        | Description | Postion<br>Con-<br>tacts | Ferrites | Digi-Key<br>Part No. | Price Each |      |      | Corcom<br>Part No. |
|-------------|-------------|--------------------------|----------|----------------------|------------|------|------|--------------------|
|             |             |                          |          |                      | 1          | 25   | 100  |                    |
| RJ11 Series |             |                          |          |                      |            |      |      |                    |
| 1           | Unshielded  | 6-2                      | Sleeves  | CCM9000-ND           | 2.49       | 1.74 | 1.45 | RJ11-2L-S          |
|             | Unshielded  | 6-4                      | Sleeves  | CCM9001-ND           | 2.77       | 1.94 | 1.62 | RJ11-4L-S          |
|             | Unshielded  | 6-6                      | Sleeves  | CCM9002-ND           | 3.06       | 2.14 | 1.78 | RJ11-6L-S          |
|             | Unshielded  | 6-2                      | Block    | CCM9003-ND           | 2.63       | 1.84 | 1.53 | RJ11-2L-B          |
|             | Unshielded  | 6-4                      | Block    | CCM9004-ND           | 2.77       | 1.94 | 1.62 | RJ11-4L-B          |
| 2           | Unshielded  | 6-6                      | Block    | CCM9005-ND           | 2.91       | 2.04 | 1.70 | RJ11-6L-B          |
|             | Shielded    | 6-4                      | Sleeves* | CCM9010-ND           | 3.69       | 2.58 | 2.15 | RJ11-4L-2-S        |
|             | Shielded    | 6-6                      | Sleeves* | CCM9011-ND           | 3.97       | 2.78 | 2.31 | RJ11-6L-2-S        |
|             | Shielded    | 6-4                      | Block*   | CCM9012-ND           | 3.69       | 2.58 | 2.15 | RJ11-4L-2-B        |
|             | Shielded    | 6-6                      | Block*   | CCM9013-ND           | 3.83       | 2.68 | 2.23 | RJ11-6L-2-B        |
| 3           | Shielded    | 6-6                      | Sleeves  | CCM1386-ND           | 7.29       | 5.10 | 4.24 | RJ11-6LCT1-S       |
|             | Shielded    | 6-6                      | Block    | CCM1387-ND           | 7.14       | 5.00 | 4.15 | RJ11-6LCT1-B       |
| 4           | Shielded    | 6-6                      | Sleeves  | CCM1388-ND           | 7.29       | 5.10 | 4.24 | RJ11-6LCT2-S       |
|             | Shielded    | 6-6                      | Block    | CCM1389-ND           | 7.14       | 5.00 | 4.15 | RJ11-6LCT2-B       |
| 5           | Unshielded  | 6-6                      | Block    | CCM1394-ND           | 2.54       | 1.78 | 1.48 | RJ11-6N-B          |
|             | Unshielded  | 6-6                      | Sleeves  | CCM1395-ND           | 2.71       | 1.90 | 1.58 | RJ11-6N-S          |
| 6           | Shielded    | 6-6                      | Block    | CCM1396-ND           | 3.00       | 2.10 | 1.75 | RJ11-6N3-B         |
|             | Shielded    | 6-6                      | Sleeves  | CCM1397-ND           | 3.14       | 2.20 | 1.83 | RJ11-6N3-S         |
| 7           | Shielded    | 6-6                      | Block    | CCM1398-ND           | 3.00       | 2.10 | 1.75 | RJ11-6N4-B         |
|             | Shielded    | 6-6                      | Sleeves  | CCM1399-ND           | 3.14       | 2.20 | 1.83 | RJ11-6N4-S         |

|             |             | Position<br>Contacts |          | Digi-Key<br>Part No. | Price Each |      |      | Corcom<br>Part No. |
|-------------|-------------|----------------------|----------|----------------------|------------|------|------|--------------------|
| Fig.        | Description |                      | Ferrites |                      | 1          | 25   | 100  |                    |
| RJ45 Series |             |                      |          |                      |            |      |      |                    |
| 8           | Unshielded  | 8-8                  | Sleeves  | CCM9050-ND           | 3.54       | 2.48 | 2.06 | RJ45-8L-S          |
|             | Unshielded  | 8-8                  | Block    | CCM9052-ND           | 3.23       | 2.26 | 1.88 | RJ45-8L-B          |
| 9           | Shielded    | 8-8                  | Sleeves* | CCM9051-ND           | 4.66       | 3.26 | 2.71 | RJ45-8L2-S         |
|             | Shielded    | 8-8                  | Block*   | CCM9053-ND           | 4.34       | 3.04 | 2.53 | RJ45-8L2-B         |
| 10          | Shielded    | 6-8                  | Sleeves  | CCM1390-ND           | 9.06       | 6.34 | 5.27 | RJ45-8LCT1-S       |
|             | Shielded    | 6-8                  | Block    | CCM1391-ND           | 8.77       | 6.14 | 5.10 | RJ45-8LCT1-B       |
| 11          | Shielded    | 6-8                  | Sleeves  | CCM1392-ND           | 9.06       | 6.34 | 5.27 | RJ45-8LCT2-S       |
|             | Shielded    | 6-8                  | Block    | CCM1393-ND           | 8.77       | 6.14 | 5.10 | RJ45-8LCT2-B       |
| 12          | Unshielded  | 6-8                  | Block    | CCM1500-ND           | 2.54       | 1.78 | 1.48 | RJ45-8N-B          |
|             | Unshielded  | 6-8                  | Sleeves  | CCM1501-ND           | 2.91       | 2.04 | 1.70 | RJ45-8N-S          |
| 13          | Shielded    | 6-8                  | Block    | CCM1502-ND           | 3.00       | 2.10 | 1.75 | RJ45-8N3-B         |
|             | Shielded    | 6-8                  | Sleeves  | CCM1503-ND           | 3.43       | 2.40 | 2.00 | RJ45-8N3-S         |
| 14          | Shielded    | 6-8                  | Block    | CCM1504-ND           | 3.00       | 2.10 | 1.75 | RJ45-8N4-B         |
|             | Shielded    | 6-8                  | Sleeves  | CCM1505-ND           | 3.43       | 2.40 | 2.00 | RJ45-8N4-S         |
| RJH Series  |             |                      |          |                      |            |      |      |                    |
| 15          | Filtered    | 4-4                  | Block    | CCM9060-ND           | 2.83       | 1.98 | 1.65 | RJH-4L-B           |

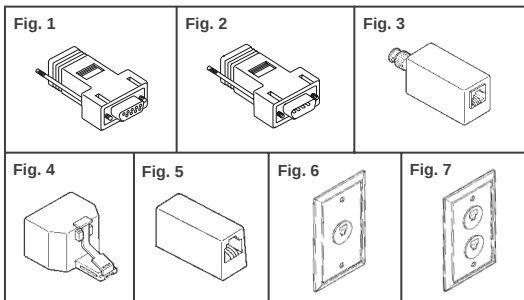
\* Board Ground (pins only).

Note: LCT Version incorporates 82PF capacitors.



**CUI STACK**

## Modular Components

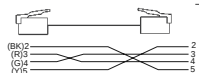


| Fig. | Description                              | Digi-Key<br>Part No. | 1     | 10     | Pricing<br>50 | 100     | 1,000   |
|------|------------------------------------------|----------------------|-------|--------|---------------|---------|---------|
| 2    | DB9P to RJ45 Jack (8-8)                  | 046-0000-ND*         | 4.13  | 37.13  | 165.00        | 288.75  | 2062.50 |
| 1    | DB9S to RJ45 Jack (8-8)                  | 046-0001-ND*         | 4.13  | 37.13  | 165.00        | 288.75  | 2062.50 |
| 2    | DB9P to RJ11 Jack (6-6)                  | 046-0002-ND*         | 4.13  | 37.13  | 165.00        | 288.75  | 2062.50 |
| 1    | DB9S to RJ11 Jack (6-6)                  | 046-0003-ND*         | 4.13  | 37.13  | 165.00        | 288.75  | 2062.50 |
| 2    | DB15P to RJ45 (8-8)                      | 046-0004-ND*         | 4.63  | 41.63  | 185.00        | 323.75  | 2312.50 |
| 1    | DB15S to RJ45 (8-8)                      | 046-0005-ND*         | 4.63  | 41.63  | 185.00        | 323.75  | 2312.50 |
| 2    | DB25P to RJ11 (6-6)                      | 046-0008-ND*         | 4.38  | 39.38  | 175.00        | 306.25  | 2187.50 |
| 1    | DB25S to RJ11 (6-6)                      | 046-0009-ND*         | 4.38  | 39.38  | 175.00        | 306.25  | 2187.50 |
| 2    | DB25P to RJ45 (8-8)                      | 046-0010-ND*         | 4.38  | 39.38  | 175.00        | 306.25  | 2187.50 |
| 1    | DB25S to RJ45 (8-8)                      | 046-0011-ND*         | 4.38  | 39.38  | 175.00        | 306.25  | 2187.50 |
| 2    | DB15P to RJ11 (6-6)                      | 046-0016-ND*         | 4.63  | 41.63  | 185.00        | 323.75  | 2312.50 |
| 1    | DB15S to RJ11 (6-6)                      | 046-0017-ND*         | 4.63  | 41.63  | 185.00        | 323.75  | 2312.50 |
| 3    | BNC RG62 to RJ11 Converter (6-6)         | 048-0000-ND          | 16.58 | 149.18 | 663.00        | 1160.25 | 8287.50 |
| 4    | 4 Wire TEE Adaptor 1M-2F                 | 048-0050-ND          | 2.00  | 18.00  | 80.00         | 140.00  | 1000.00 |
| 4    | 6 Wire TEE Adaptor 1M-2F                 | 048-0051-ND          | 2.98  | 26.78  | 119.00        | 208.25  | 1487.50 |
| 5    | 6-6 Modular Coupling (crossed) #1 to #6  | 048-0056-ND          | 1.50  | 13.50  | 60.00         | 105.00  | 750.00  |
| 5    | 6-6 Modular Coupling (straight) #1 to #1 | 048-0103-ND          | 1.50  | 13.50  | 60.00         | 105.00  | 750.00  |
| 6    | 4 Wire Wall Plate                        | 048-0059-ND          | 1.73  | 15.53  | 69.00         | 120.75  | 862.50  |
| 7    | 6 Wire Dual Wall Plate                   | 048-0060-ND          | 2.53  | 22.73  | 101.00        | 176.75  | 1262.50 |
| 6    | 6 Wire Wall Plate                        | 048-0061-ND          | 2.70  | 24.30  | 108.00        | 189.00  | 1350.00 |
| 6    | 8 Wire Wall Plate                        | 048-0062-ND          | 3.35  | 30.15  | 134.00        | 234.50  | 1675.00 |

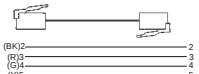
\* User Configurable

# IDC Modular Cable Assemblies

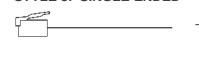
## STYLE 1: STANDARD



## STYLE 2: REVERSE



## STYLE 3: SINGLE-ENDED



## CONNECTOR(S):

- 44 = 4-Position, 4-Contact (Black on Pin 1)
- 64 = 6-Position, 4-Contact (Black on Pin 1)
- 66 = 6-Position, 6-Contact (White on Pin 1)
- 88 = 8-Position, 8-Contact (Gray on Pin 1)

Wire Type:  
(Color)  
1 = White  
2 = Black  
3 = Silver Satin

## LENGTH\* (Use "Feet" Only)

- 07 = 7 Feet (2.13 Meters)
- 14 = 14 Feet (4.27 Meters) Straight
- 25 = 25 Feet (7.62 Meters)
- 05 = 5 Feet (1.52 Meters)
- 07 = 7 Feet (2.13 Meters) Coiled
- 10 = 10 Feet (3.05 Meters)
- 14 = 14 Feet (4.27 Meters)
- \*All cable lengths are  $\pm 1\%$

## Straight Cable Assembly

Example: H 1 4 4 1 - 0 7 - ND  
Style 1  
4-Position  
4-Contact  
White Wire  
7 Feet Long (2.13 Meters)

## Coil Cord Assembly

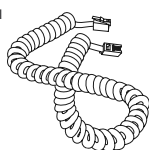
Example: H 1 4 4 1 - 0 5 C - ND  
Style 1  
4-Position  
4-Contact  
White Wire  
10 Feet Long (3.05 M)  
Optimum Extended Length

**HOW TO ORDER:** 1) You choose your part number simply by substituting the corresponding code to indicate the following: Style, Connector(s), Wire Type, and Length (in feet - not meters).

## Straight



## Coiled



## Straight Cable Assemblies

| Style                                   | Digi-Key* Part No. | 1    | 10    | 100    | 250     |
|-----------------------------------------|--------------------|------|-------|--------|---------|
| <b>4-Position, 4-Contact Assemblies</b> |                    |      |       |        |         |
| 1                                       | H144□-07-ND        | 2.78 | 23.77 | 170.45 | 364.45  |
|                                         | H144□-14-ND        | 3.24 | 27.67 | 198.38 | 424.17  |
|                                         | H144□-25-ND        | 3.95 | 33.79 | 242.27 | 518.01  |
| 2                                       | H244□-07-ND        | 2.78 | 23.77 | 170.45 | 364.45  |
|                                         | H244□-14-ND        | 3.24 | 27.67 | 198.38 | 424.17  |
|                                         | H244□-25-ND        | 3.95 | 33.79 | 242.27 | 518.01  |
| 3                                       | H344□-07-ND        | 1.62 | 13.83 | 99.18  | 212.06  |
|                                         | H344□-14-ND        | 2.07 | 17.73 | 127.11 | 271.78  |
|                                         | H344□-25-ND        | 2.79 | 23.85 | 171.00 | 365.63  |
| <b>6-Position, 4-Contact Assemblies</b> |                    |      |       |        |         |
| 1                                       | H164□-07-ND        | 2.78 | 23.77 | 170.45 | 364.45  |
|                                         | H164□-14-ND        | 3.24 | 27.67 | 198.38 | 424.17  |
|                                         | H164□-25-ND        | 3.95 | 33.79 | 242.27 | 518.01  |
| 2                                       | H264□-07-ND        | 2.78 | 23.77 | 170.45 | 364.45  |
|                                         | H264□-14-ND        | 3.24 | 27.67 | 198.38 | 424.17  |
|                                         | H264□-25-ND        | 3.95 | 33.79 | 242.27 | 518.01  |
| 3                                       | H364□-07-ND        | 1.62 | 13.83 | 99.18  | 212.06  |
|                                         | H364□-14-ND        | 2.07 | 17.73 | 127.11 | 271.78  |
|                                         | H364□-25-ND        | 2.79 | 23.85 | 171.00 | 365.63  |
| <b>6-Position, 6-Contact Assemblies</b> |                    |      |       |        |         |
| 1                                       | H166□-07-ND        | 3.33 | 28.43 | 203.85 | 435.87  |
|                                         | H166□-14-ND        | 4.03 | 34.46 | 247.08 | 528.29  |
|                                         | H166□-25-ND        | 5.14 | 43.93 | 315.00 | 673.52  |
| 2                                       | H266□-07-ND        | 3.33 | 28.43 | 203.85 | 435.87  |
|                                         | H266□-14-ND        | 4.03 | 34.46 | 247.08 | 528.29  |
|                                         | H266□-25-ND        | 5.14 | 43.93 | 315.00 | 673.52  |
| 3                                       | H366□-07-ND        | 2.02 | 17.23 | 123.54 | 264.14  |
|                                         | H366□-14-ND        | 2.72 | 23.26 | 166.76 | 356.57  |
|                                         | H366□-25-ND        | 3.83 | 32.73 | 234.69 | 501.80  |
| <b>8-Position, 8-Contact Assemblies</b> |                    |      |       |        |         |
| 1                                       | H188□-07-ND        | 7.19 | 61.43 | 440.48 | 941.81  |
|                                         | H188□-14-ND        | 8.14 | 69.60 | 499.00 | 1066.93 |
|                                         | H188□-25-ND        | 9.64 | 82.42 | 590.96 | 1263.56 |
| 2                                       | H288□-07-ND        | 7.19 | 61.43 | 440.48 | 941.81  |
|                                         | H288□-14-ND        | 8.14 | 69.60 | 499.00 | 1066.93 |
|                                         | H288□-25-ND        | 9.64 | 82.42 | 590.96 | 1263.56 |
| 3                                       | H388□-07-ND        | 4.07 | 34.80 | 249.51 | 533.49  |
|                                         | H388□-14-ND        | 5.03 | 42.96 | 308.03 | 658.61  |
|                                         | H388□-25-ND        | 6.53 | 55.79 | 399.99 | 855.24  |

\* 1 = White, 2 = Black, 3 = Silver Satin.

Note: Custom length also available — minimum order required.

## Coil Cord Assemblies

| Style                                   | Digi-Key* Part No. | 1     | 10     | 100    | 250     |
|-----------------------------------------|--------------------|-------|--------|--------|---------|
| <b>4-Position, 4-Contact Assemblies</b> |                    |       |        |        |         |
| 1                                       | H144□-05C-ND       | 4.40  | 37.63  | 269.82 | 576.92  |
|                                         | H144□-07C-ND       | 4.93  | 42.14  | 302.12 | 645.98  |
|                                         | H144□-10C-ND       | 5.86  | 50.09  | 359.12 | 767.85  |
| 2                                       | H244□-05C-ND       | 4.40  | 37.63  | 269.82 | 576.92  |
|                                         | H244□-07C-ND       | 4.93  | 42.14  | 302.12 | 645.98  |
|                                         | H244□-10C-ND       | 5.86  | 50.09  | 359.12 | 767.85  |
| 3                                       | H344□-05C-ND       | 3.24  | 27.69  | 198.55 | 424.53  |
|                                         | H344□-07C-ND       | 3.77  | 32.20  | 230.85 | 493.59  |
|                                         | H344□-10C-ND       | 4.70  | 40.15  | 287.85 | 615.47  |
| <b>6-Position, 4-Contact Assemblies</b> |                    |       |        |        |         |
| 1                                       | H164□-05C-ND       | 4.40  | 37.63  | 269.82 | 576.92  |
|                                         | H164□-07C-ND       | 4.93  | 42.14  | 302.12 | 645.98  |
|                                         | H164□-10C-ND       | 5.86  | 50.09  | 359.12 | 767.85  |
| 2                                       | H264□-05C-ND       | 4.40  | 37.63  | 269.82 | 576.92  |
|                                         | H264□-07C-ND       | 4.93  | 42.14  | 302.12 | 645.98  |
|                                         | H264□-10C-ND       | 5.86  | 50.09  | 359.12 | 767.85  |
| 3                                       | H364□-05C-ND       | 3.24  | 27.69  | 198.55 | 424.53  |
|                                         | H364□-07C-ND       | 3.77  | 32.20  | 230.85 | 493.59  |
|                                         | H364□-10C-ND       | 4.70  | 40.15  | 287.85 | 615.47  |
| <b>6-Position, 6-Contact Assemblies</b> |                    |       |        |        |         |
| 1                                       | H166□-05C-ND       | 5.26  | 44.93  | 322.13 | 688.76  |
|                                         | H166□-07C-ND       | 5.60  | 47.84  | 343.03 | 733.44  |
|                                         | H166□-10C-ND       | 7.05  | 60.30  | 432.33 | 924.38  |
| 2                                       | H266□-05C-ND       | 5.26  | 44.93  | 322.13 | 688.76  |
|                                         | H266□-07C-ND       | 5.60  | 47.84  | 343.03 | 733.44  |
|                                         | H266□-10C-ND       | 7.05  | 60.30  | 432.33 | 924.38  |
| 3                                       | H366□-05C-ND       | 3.95  | 33.73  | 241.81 | 517.03  |
|                                         | H366□-07C-ND       | 4.29  | 36.64  | 262.71 | 561.72  |
|                                         | H366□-10C-ND       | 5.74  | 49.10  | 352.01 | 752.66  |
| <b>8-Position, 8-Contact Assemblies</b> |                    |       |        |        |         |
| 1                                       | H188□-05C-ND       | 11.07 | 94.61  | 678.36 | 1450.43 |
|                                         | H188□-07C-ND       | 10.79 | 92.23  | 661.26 | 1413.87 |
|                                         | H188□-10C-ND       | 12.99 | 111.04 | 796.16 | 1702.31 |
| 2                                       | H288□-05C-ND       | 11.07 | 94.61  | 678.36 | 1450.43 |
|                                         | H288□-07C-ND       | 10.79 | 92.23  | 661.26 | 1413.87 |
|                                         | H288□-10C-ND       | 12.99 | 111.04 | 796.16 | 1702.31 |
| 3                                       | H388□-05C-ND       | 7.95  | 67.98  | 487.39 | 1042.11 |
|                                         | H388□-07C-ND       | 7.67  | 65.99  | 470.29 | 1005.55 |
|                                         | H388□-10C-ND       | 9.87  | 84.41  | 605.19 | 1293.99 |

\* 1 = White, 2 = Black, 3 = Silver Satin.

## Weidmüller Tools

Paladin Tools



Cable Tester



Professional Wire Stripper



Mini-Wire Stripper

The modular cable tester is a hand held instrument designed to test telephone (RJ11) and computer data-link (RJ45) wiring.

Stripping and cutting wires in the range of 10-28 AWG. • Solid and fine stranded conductors with all grades of PVC insulation hardness. • P.T.F.E. (Teflon®) insulation. • Stranded conductors (even several conductors in one work cycle). • Self-adjusting cable cutter. • Strips both modular and discrete wires

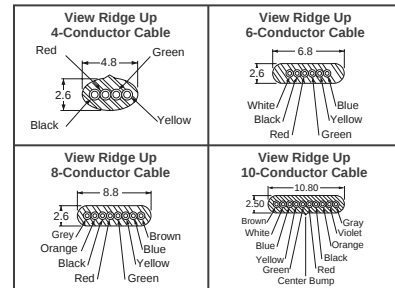
| Description                      | Digi-Key Part No. | Price Each |
|----------------------------------|-------------------|------------|
| Modular Cable Tester             | PAL1529-ND        | 63.92      |
| Replacement Blade for PAL1100-ND | PAL2101-ND        | 28.39      |
| Pro Wire Stripper (10-28 AWG)    | PA1101-ND         | 75.48      |
| Replacement Blade for PA1101     | PA2131-ND         | 28.22      |
| Mini Wire Stripper (28-18 AWG)   | PAL1115-ND        | 73.79      |
| Replacement Blade for PAL1115-ND | PAL2108-ND        | 18.45      |



## I/O INTERCONNECT

## Modular Cable

Flat modular line cord is available in either straight or coiled. **Straight:** H004 is sold in hanks of 100, 500 and 1,000 feet, spools of 2,000 feet; H006, H008 and H010 are sold in hanks of 100 and 500 feet, spools of 1,000 feet. **Coiled:** Hxx4□C, Hxx6□C, Hxx8□C and Hxx10 are sold in 5, 7, 10 and 14 feet approximate optimum extended lengths. Extension beyond the optimum extended length can degrade the retractability of the cord. Both types are available in three colors—white (designated by 1 for □ in part number), black (designated by 2 for □ in part number) and silver satin (designated by 3 for □ in part number).



| No. of Cond.                                                                                                                               | Length Ft.(Meter) | Digi-Key* Part No. | 1    | 100   | 250    |
|--------------------------------------------------------------------------------------------------------------------------------------------|-------------------|--------------------|------|-------|--------|
| <b>Coiled Line Cord — 5 ft. (1.52 meter), 7 ft. (2.13 meter), 10 ft. (3.05 meter) and 14 ft. (4.27 meter) approximate extended lengths</b> |                   |                    |      |       |        |
| 4                                                                                                                                          | 5 (1.52)          | H054□C-ND          | 2.01 | 18.09 | 160.80 |
| 4                                                                                                                                          | 7 (2.13)          | H074□C-ND          | 2.52 | 22.68 | 201.60 |
| 4                                                                                                                                          | 10 (3.05)         | H104□C-ND          | 3.42 | 30.78 | 273.60 |
| 4                                                                                                                                          | 14 (4.27)         | H144□C-ND          | 5.07 | 45.63 | 405.60 |
| 6                                                                                                                                          | 5 (1.52)          | H056□C-ND          | 2.55 | 22.95 | 204.00 |
| 6                                                                                                                                          | 7 (2.13)          | H076□C-ND          | 2.88 | 25.92 | 230.40 |
| 6                                                                                                                                          | 10 (3.05)         | H106□C-ND          | 4.29 | 38.61 | 343.20 |
| 6                                                                                                                                          | 14 (4.27)         | H146□C-ND          | 5.46 | 49.14 | 436.80 |
| 8                                                                                                                                          | 5 (1.52)          | H058□C-ND          | 4.68 | 42.12 | 374.40 |
| 8                                                                                                                                          | 7 (2.13)          | H078□C-ND          | 4.41 | 39.69 | 352.80 |
| 8                                                                                                                                          | 10 (3.05)         | H108□C-ND          | 6.54 | 58.86 | 523.20 |
| 8                                                                                                                                          | 14 (4.27)         | H148□C-ND          | 7.35 | 66.15 | 588.00 |
| 10                                                                                                                                         | 5 (1.52)          | H0510□C-ND NEW!    | 5.37 | 48.33 | 429.60 |
| 10                                                                                                                                         | 7 (2.13)          | H0710□C-ND NEW!    | 5.58 | 50.22 | 446.40 |
| 10                                                                                                                                         | 10 (3.05)         | H1010□C-ND NEW!    | 7.14 | 64.26 | 571.20 |
| 10                                                                                                                                         | 14 (4.27)         | H1410□C-ND NEW!    | 7.95 | 71.55 | 636.00 |

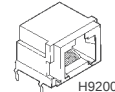
\* 1 = White, 2 = Black, 3 = Silver Satin

## HIROSE ELECTRIC CO., LTD.

## Data-Link Shielded Jack & Cable Assembly

**FEATURES:** Plug; • One piece body struct. of the shell and cable clamp make perfect "EMI" protection • A metal shell offers "ESD" protection and a plastic cover is provided for enhanced aesthetics • Using the specified tooling, will provide quick and easy cable assembly. **Jack;** • In order to protect the circuit inside the equip., the jack is constructed to allow the shielding to engage first upon mating.

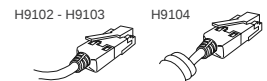
**TM11 "EMI"** protection connector is designed to fulfill the requirement of noise and "ESD" protection. The design is in conformance with the F.C.C. regulation as specified in "476 C.F.R., Part 68, subpart F."



## Shielded Jack — PCB Mount

| Positions-Contacts | Digi-Key Part No. | 1     | 100   | 250    |
|--------------------|-------------------|-------|-------|--------|
| 8-8                | H9200-ND          | 52.22 | 48.90 | 448.25 |

## Standard Style Cable Assemblies



| Positions-Contacts | Length Ft. (M) | Cable Type | Termination  | Digi-Key Part No. | Price Each |
|--------------------|----------------|------------|--------------|-------------------|------------|
| 8-8                | 4 (1.22)       | Straight   | Double-Ended | H9102-ND          | 39.52      |
| 8-8                | 7 (2.13)       | Straight   | Double-Ended | H9103-ND          | 45.28      |
| 8-8                | 6 (1.83)       | Coiled     | Double-Ended | H9104-ND          | 61.95      |

1-800-344-4539

218-681-6674 • FAX: 218-681-3380 • www.digikey.com





**Micro-Pitch Terminal Blocks:** The MPT 0.5 is the smallest screw terminal block available. With a micro-pitch of 2.54mm, the MPT 0.5 is ideal for high density applications.

**Press Fit Terminal Blocks:** The Press-Fit printed circuit board terminal block line is the perfect solution when wave soldering is not an option. The Press-Fit line is available in both fixed and pluggable configurations.

**Multi-Level Terminal Blocks:** With their small pitch, the two and three level MKKDS and MK3DS are ideal solutions due to the increasing packing and connection density on printed circuit boards.

**Insulation Displacement Terminal Blocks:** The IDC printed circuit board terminal blocks mass terminate insulated conductors quickly without the need for tools.

**Fig. 1**

**NOTE:** The 2 and 3 position versions have an additional locating pin to support the mechanical load.

**Specifications:**  
UL: 125 V @ 6 A. 30-20 AWG.  
IEC: 63 V @ 6 A. 26-20 AWG. **Color:** Green

**Fig. 2**

**Specifications:**  
UL: 300 V @ 10 A. 30-12 AWG.  
IEC: 250 V @ 12 A. 28-14 AWG. **Color:** Green

**Fig. 3**

**Specifications:**  
UL: Pending.  
IEC: 200 V @ 12 A. **Color:** Green

**Fig. 4**

**Specifications:**  
UL: 150 V @ 6 A. 26-20 AWG.  
IEC: 63 V @ 6 A. 26-20 AWG. **Color:** Green

**Fig. 5**

**Specifications:**  
UL: 150 V @ 6 A. 26-20 AWG.  
IEC: 63 V @ 6 A. 26-20 AWG. **Color:** Green

**Fig. 6**

**Specifications:**  
UL: 300 V @ 6 A.  
IEC: 250 V @ 6 A. **Color:** Green

**Fig. 7**

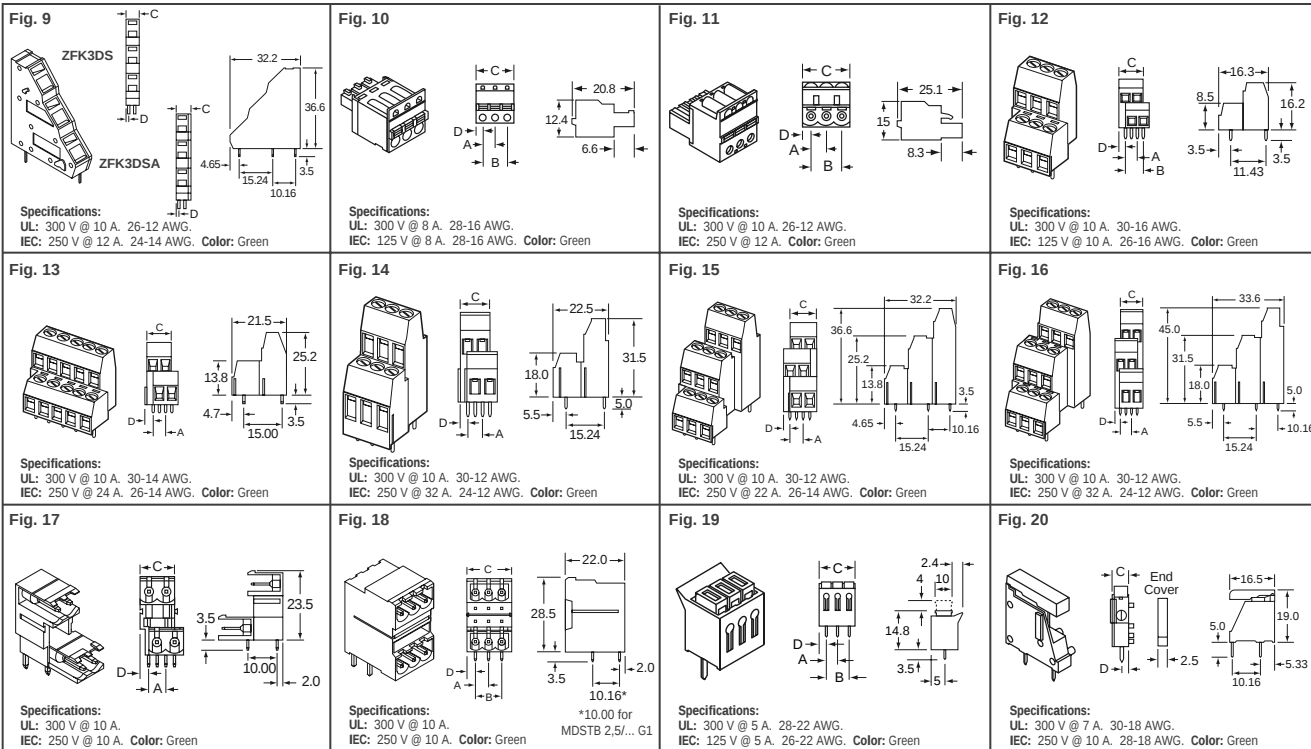
**Specifications:**  
UL: 300 V @ 6 A.  
IEC: 250 V @ 6 A. **Color:** Green

**Fig. 8**

**Specifications:**  
UL: 300 V @ 10 A. 26-12 AWG.  
IEC: 250 V @ 12 A. 24-14 AWG. **Color:** Green

| No. of Pos.                                                                                 | Dimensions (mm) |       |       |      | Digi-Key Part No. | Price Each | Phoenix Contact Type No. | Phoenix Contact Part No. |
|---------------------------------------------------------------------------------------------|-----------------|-------|-------|------|-------------------|------------|--------------------------|--------------------------|
|                                                                                             | A               | B     | C     | D    |                   | 1          | 10                       | 100                      |
| <b>MICRO-PITCH TERMINAL BLOCKS</b>                                                          |                 |       |       |      |                   |            |                          |                          |
| <i>Fig. 1 — 2.54mm Terminal Blocks</i>                                                      |                 |       |       |      |                   |            |                          |                          |
| 2                                                                                           | 2.54            | 2.54  | 5.54  | 1.50 | 277-1273-ND       | 1.04       | .94                      | .84                      |
| 3                                                                                           | 2.54            | 5.08  | 8.08  | 1.50 | 277-1274-ND       | 1.56       | 1.41                     | 1.25                     |
| 4                                                                                           | 2.54            | 7.62  | 10.62 | 1.50 | 277-1275-ND       | 2.08       | 1.88                     | 1.67                     |
| 5                                                                                           | 2.54            | 10.16 | 13.16 | 1.50 | 277-1276-ND       | 2.60       | 2.34                     | 2.08                     |
| 6                                                                                           | 2.54            | 12.70 | 15.70 | 1.50 | 277-1277-ND       | 3.12       | 2.81                     | 2.50                     |
| 7                                                                                           | 2.54            | 15.24 | 18.24 | 1.50 | 277-1278-ND       | 3.64       | 3.28                     | 2.92                     |
| 8                                                                                           | 2.54            | 17.78 | 20.78 | 1.50 | 277-1279-ND       | 4.16       | 3.75                     | 3.33                     |
| 9                                                                                           | 2.54            | 20.32 | 23.32 | 1.50 | 277-1280-ND       | 4.68       | 4.22                     | 3.75                     |
| 10                                                                                          | 2.54            | 22.86 | 25.86 | 1.50 | 277-1281-ND       | 5.20       | 4.68                     | 4.16                     |
| 11                                                                                          | 2.54            | 25.40 | 28.40 | 1.50 | 277-1282-ND       | 5.72       | 5.15                     | 4.58                     |
| 12                                                                                          | 2.54            | 27.94 | 30.94 | 1.50 | 277-1283-ND       | 6.24       | 5.62                     | 5.00                     |
| <b>PRESS-FIT TERMINAL BLOCKS</b>                                                            |                 |       |       |      |                   |            |                          |                          |
| <i>Fig. 2 — 5.08mm Press-Fit PCB Terminal Blocks</i>                                        |                 |       |       |      |                   |            |                          |                          |
| 2                                                                                           | 5.08            | 5.08  | 11.34 | 3.13 | 277-1284-ND       | 1.52       | 1.37                     | 1.22                     |
| 3                                                                                           | 5.08            | 10.16 | 16.42 | 3.13 | 277-1285-ND       | 2.28       | 2.05                     | 1.82                     |
| 4                                                                                           | 5.08            | 15.24 | 21.50 | 3.13 | 277-1286-ND       | 3.06       | 2.75                     | 2.45                     |
| 5                                                                                           | 5.08            | 20.32 | 26.58 | 3.13 | 277-1287-ND       | 3.81       | 3.43                     | 3.05                     |
| 6                                                                                           | 5.08            | 25.40 | 31.66 | 3.13 | 277-1288-ND       | 4.58       | 4.12                     | 3.67                     |
| 7                                                                                           | 5.08            | 30.48 | 36.74 | 3.13 | 277-1289-ND       | 5.33       | 4.80                     | 4.27                     |
| 8                                                                                           | 5.08            | 35.56 | 41.82 | 3.13 | 277-1290-ND       | 6.08       | 5.48                     | 4.87                     |
| 9                                                                                           | 5.08            | 40.64 | 46.90 | 3.13 | 277-1291-ND       | 6.85       | 6.17                     | 5.49                     |
| 10                                                                                          | 5.08            | 45.72 | 51.98 | 3.13 | 277-1292-ND       | 7.61       | 6.85                     | 6.09                     |
| 11                                                                                          | 5.08            | 50.80 | 57.06 | 3.13 | 277-1293-ND       | 8.39       | 7.55                     | 6.71                     |
| 12                                                                                          | 5.08            | 55.88 | 62.14 | 3.13 | 277-1294-ND       | 9.14       | 8.23                     | 7.32                     |
| <i>Fig. 3 — 5.08mm Press-Fit PCB Headers</i>                                                |                 |       |       |      |                   |            |                          |                          |
| 2                                                                                           | 5.08            | 5.08  | 12.16 | 3.54 | 277-1295-ND       | .78        | .71                      | .63                      |
| 3                                                                                           | 5.08            | 10.16 | 17.24 | 3.54 | 277-1296-ND       | 1.16       | 1.05                     | .93                      |
| 4                                                                                           | 5.08            | 15.24 | 22.32 | 3.54 | 277-1297-ND       | 1.55       | 1.40                     | 1.24                     |
| 5                                                                                           | 5.08            | 20.32 | 27.40 | 3.54 | 277-1298-ND       | 1.94       | 1.75                     | 1.55                     |
| 6                                                                                           | 5.08            | 25.40 | 32.48 | 3.54 | 277-1299-ND       | 2.33       | 2.10                     | 1.87                     |
| 7                                                                                           | 5.08            | 30.48 | 37.56 | 3.54 | 277-1300-ND       | 2.72       | 2.45                     | 2.18                     |
| 8                                                                                           | 5.08            | 35.56 | 42.64 | 3.54 | 277-1301-ND       | 3.09       | 2.79                     | 2.48                     |
| 9                                                                                           | 5.08            | 40.64 | 47.72 | 3.54 | 277-1302-ND       | 3.48       | 3.14                     | 2.79                     |
| 10                                                                                          | 5.08            | 45.72 | 52.80 | 3.54 | 277-1303-ND       | 3.87       | 3.49                     | 3.10                     |
| 11                                                                                          | 5.08            | 50.80 | 57.88 | 3.54 | 277-1304-ND       | 4.26       | 3.84                     | 3.42                     |
| 12                                                                                          | 5.08            | 55.88 | 62.96 | 3.54 | 277-1305-ND       | 4.65       | 4.19                     | 3.73                     |
| 13                                                                                          | 5.08            | 60.96 | 68.04 | 3.54 | 277-1306-ND       | 4.98       | 4.49                     | 3.99                     |
| 14                                                                                          | 5.08            | 66.04 | 73.12 | 3.54 | 277-1307-ND       | 5.42       | 4.88                     | 4.34                     |
| 15                                                                                          | 5.08            | 71.12 | 78.20 | 3.54 | 277-1308-ND       | 5.81       | 5.23                     | 4.65                     |
| 16                                                                                          | 5.08            | 76.20 | 83.28 | 3.54 | 277-1309-ND       | 6.20       | 5.59                     | 4.97                     |
| <b>SPRING CAGE TERMINAL BLOCKS</b>                                                          |                 |       |       |      |                   |            |                          |                          |
| <i>Fig. 4 — Modular 2.54mm PCB Spring Cage Fixed Terminal Block - Horizontal Wire Entry</i> |                 |       |       |      |                   |            |                          |                          |
| 1                                                                                           | —               | —     | 2.54  | 0.90 | 277-1310-ND       | .72        | .65                      | .58                      |
| <i>Fig. 4 — End Terminal Block for FFKDS/H-2.54</i>                                         |                 |       |       |      |                   |            |                          |                          |
| 1                                                                                           | —               | —     | 5.08  | 0.90 | 277-1311-ND       | 1.14       | 1.03                     | .92                      |

| No. of Pos.                                                                                  | Dimensions (mm) |       |       |      | Digi-Key Part No. | Price Each | Phoenix Contact Type No. | Phoenix Contact Part No. |
|----------------------------------------------------------------------------------------------|-----------------|-------|-------|------|-------------------|------------|--------------------------|--------------------------|
|                                                                                              | A               | B     | C     | D    |                   | 1          | 10                       | 100                      |
| <i>Fig. 5 — Modular 2.54mm PCB Spring Cage Fixed Terminal Block - Vertical Wire Entry</i>    |                 |       |       |      |                   |            |                          |                          |
| 1                                                                                            | —               | —     | 2.54  | 0.90 | 277-1312-ND       | .72        | .65                      | .58                      |
| <i>Fig. 5 — End Terminal Block for FFKDS/V-2.54</i>                                          |                 |       |       |      |                   |            |                          |                          |
| 1                                                                                            | —               | —     | 5.08  | 0.90 | 277-1313-ND       | 1.09       | .99                      | .88                      |
| <i>Fig. 6 — Modular 5.08mm PCB Spring Cage Fixed Terminal Block - Single Level w/o Lever</i> |                 |       |       |      |                   |            |                          |                          |
| 1                                                                                            | —               | —     | 5.08  | 2.54 | 277-1314-ND       | .38        | .34                      | .31                      |
| <i>Fig. 6 — End Terminal Block for ZFKDS 1.5-5.08</i>                                        |                 |       |       |      |                   |            |                          |                          |
| 1                                                                                            | —               | —     | 7.62  | 2.54 | 277-1315-ND       | .64        | .58                      | .51                      |
| <i>Fig. 7 — Modular 5.08mm PCB Spring Cage Fixed Terminal Block - Single Level w/ Lever</i>  |                 |       |       |      |                   |            |                          |                          |
| 1                                                                                            | —               | —     | 5.08  | 2.54 | 277-1316-ND       | .47        | .43                      | .38                      |
| <i>Fig. 7 — End Terminal Block for ZFKDS 1.5-W-5.08</i>                                      |                 |       |       |      |                   |            |                          |                          |
| 1                                                                                            | —               | —     | 7.62  | 2.54 | 277-1317-ND       | .65        | .59                      | .52                      |
| <i>Fig. 8 — Modular 5.08mm PCB Spring Cage Fixed Terminal Block - Double Level w/o Lever</i> |                 |       |       |      |                   |            |                          |                          |
| 1                                                                                            | —               | —     | 5.08  | 1.27 | 277-1318-ND       | 1.07       | .96                      | .86                      |
| <i>Fig. 8 — End Terminal Block for ZFKKDS 1.5-5.08</i>                                       |                 |       |       |      |                   |            |                          |                          |
| 1                                                                                            | —               | —     | 6.08  | 1.27 | 277-1319-ND       | 1.37       | 1.23                     | 1.10                     |
| <i>Fig. 9 — Modular 5.08mm PCB Spring Cage Fixed Terminal Block - Three Level w/o Lever</i>  |                 |       |       |      |                   |            |                          |                          |
| 1                                                                                            | —               | —     | 5.08  | 1.27 | 277-1320-ND       | 1.57       | 1.42                     | 1.26                     |
| <i>Fig. 9 — End Terminal Block for ZFK3DS 1.5-5.08</i>                                       |                 |       |       |      |                   |            |                          |                          |
| 1                                                                                            | —               | —     | 6.08  | 1.27 | 277-1321-ND       | 1.87       | 1.69                     | 1.50                     |
| <i>Fig. 10 — 3.81mm Spring Cage Terminal Block Plug</i>                                      |                 |       |       |      |                   |            |                          |                          |
| 2                                                                                            | 3.81            | 3.81  | 8.41  | 2.30 | 277-1322-ND       | 2.60       | 2.34                     | 2.08                     |
| 3                                                                                            | 3.81            | 7.62  | 12.22 | 2.30 | 277-1323-ND       | 3.90       | 3.51                     | 3.12                     |
| 4                                                                                            | 3.81            | 11.43 | 16.03 | 2.30 | 277-1324-ND       | 5.20       | 4.68                     | 4.16                     |
| 5                                                                                            | 3.81            | 15.24 | 19.84 | 2.30 | 277-1325-ND       | 6.50       | 5.85                     | 5.24                     |
| 6                                                                                            | 3.81            | 19.05 | 23.65 | 2.30 | 277-1326-ND       | 7.80       | 7.02                     | 6.28                     |
| 7                                                                                            | 3.81            | 22.86 | 27.46 | 2.30 | 277-1327-ND       | 9.10       | 8.19                     | 7.28                     |
| 8                                                                                            | 3.81            | 26.67 | 31.27 | 2.30 | 277-1328-ND       | 10.40      | 9.36                     | 8.32                     |
| 9                                                                                            | 3.81            | 30.48 | 35.08 | 2.30 | 277-1329-ND       | 11.70      | 10.53                    | 9.36                     |
| 10                                                                                           | 3.81            | 34.29 | 38.89 | 2.30 | 277-1330-ND       | 13.00      | 11.70                    | 10.40                    |
| 11                                                                                           | 3.81            | 38.10 | 42.70 | 2.30 | 277-1331-ND       | 14.30      | 12.87                    | 11.44                    |
| 12                                                                                           | 3.81            | 41.91 | 46.51 | 2.30 | 277-1332-ND       | 15.60      | 14.04                    | 12.48                    |
| 13                                                                                           | 3.81            | 45.72 | 50.32 | 2.30 | 277-1333-ND       | 16.90      | 15.21                    | 13.52                    |
| 14                                                                                           | 3.81            | 49.53 | 54.13 | 2.30 | 277-1334-ND       | 18.20      | 16.38                    | 14.56                    |
| 15                                                                                           | 3.81            | 53.34 | 57.94 | 2.30 | 277-1335-ND       | 19.50      | 17.55                    | 15.60                    |
| 16                                                                                           | 3.81            | 57.15 | 61.75 | 2.30 | 277-1336-ND       | 20.80      | 18.72                    | 16.64                    |
| 17                                                                                           | 3.81            | 60.96 | 65.56 | 2.30 | 277-1337-ND       | 22.10      | 19.89                    | 17.68                    |
| 18                                                                                           | 3.81            | 64.77 | 69.37 | 2.30 | 277-1338-ND       | 23.40      | 21.06                    | 18.72                    |
| 19                                                                                           | 3.81            | 68.58 | 73.18 | 2.30 | 277-1339-ND       | 24.70      | 22.23                    | 19.76                    |
| 20                                                                                           | 3.81            | 72.39 | 76.99 | 2.30 | 277-1340-ND       | 26.00      | 23.40                    | 20.80                    |
| <i>Fig. 11 — 5.08mm Spring Cage Terminal Block Plug</i>                                      |                 |       |       |      |                   |            |                          |                          |
| 2                                                                                            | 5.08            | 5.08  | 10.78 | 2.85 | 277-1341-ND       | 2.42       | 2.18                     | 1.94                     |
| 3                                                                                            | 5.08            | 10.16 | 15.86 | 2.85 | 277-1342-ND       | 3.47       | 3.13                     | 2.78                     |
| 4                                                                                            | 5.08            | 15.24 | 20.94 | 2.85 | 277-1343-ND       | 4.52       | 4.08                     | 3.62                     |



| No. of Pos. | Dimensions (mm) |       |       |      | Digi-Key Part No. | Price Each |       |       | Phoenix Contact Type No. | Phoenix Contact Part No. |
|-------------|-----------------|-------|-------|------|-------------------|------------|-------|-------|--------------------------|--------------------------|
|             | A               | B     | C     | D    |                   | 1          | 10    | 100   |                          |                          |
| 5           | 5.08            | 20.32 | 26.02 | 2.85 | 277-1344-ND       | 5.66       | 5.09  | 4.53  | FKC 2.5/5-ST-5.08        | 1873087                  |
| 6           | 5.08            | 25.40 | 31.10 | 2.85 | 277-1345-ND       | 6.77       | 6.10  | 5.42  | FKC 2.5/6-ST-5.08        | 1873090                  |
| 7           | 5.08            | 30.48 | 36.18 | 2.85 | 277-1346-ND       | 7.77       | 7.00  | 6.22  | FKC 2.5/7-ST-5.08        | 1873100                  |
| 8           | 5.08            | 35.56 | 41.26 | 2.85 | 277-1347-ND       | 8.89       | 8.01  | 7.12  | FKC 2.5/8-ST-5.08        | 1873113                  |
| 9           | 5.08            | 40.64 | 46.34 | 2.85 | 277-1348-ND       | 9.79       | 8.81  | 7.84  | FKC 2.5/9-ST-5.08        | 1873126                  |
| 10          | 5.08            | 45.72 | 51.42 | 2.85 | 277-1349-ND       | 10.99      | 9.81  | 8.72  | FKC 2.5/10-ST-5.08       | 1873139                  |
| 11          | 5.08            | 50.80 | 56.50 | 2.85 | 277-1350-ND       | 11.99      | 10.79 | 9.59  | FKC 2.5/11-ST-5.08       | 1873142                  |
| 12          | 5.08            | 55.88 | 61.58 | 2.85 | 277-1351-ND       | 13.04      | 11.74 | 10.44 | FKC 2.5/12-ST-5.08       | 1873155                  |
| 13          | 5.08            | 60.96 | 66.66 | 2.85 | 277-1352-ND       | 13.60      | 12.24 | 10.88 | FKC 2.5/13-ST-5.08       | 1873168                  |
| 14          | 5.08            | 66.04 | 71.74 | 2.85 | 277-1353-ND       | 14.98      | 13.48 | 11.99 | FKC 2.5/14-ST-5.08       | 1873171                  |
| 15          | 5.08            | 71.12 | 76.82 | 2.85 | 277-1354-ND       | 16.06      | 14.45 | 12.85 | FKC 2.5/15-ST-5.08       | 1873184                  |
| 16          | 5.08            | 76.20 | 81.90 | 2.85 | 277-1355-ND       | 17.36      | 15.62 | 13.89 | FKC 2.5/16-ST-5.08       | 1873197                  |

## MULTI-LEVEL TERMINAL BLOCKS

Fig. 12 — 3.81mm Double Level Terminal Blocks

| No. of Pos. | Dimensions (mm) |       |       |      | Digi-Key Part No. | Price Each |       |       | Phoenix Contact Type No. | Phoenix Contact Part No. |
|-------------|-----------------|-------|-------|------|-------------------|------------|-------|-------|--------------------------|--------------------------|
|             | A               | B     | C     | D    |                   | 1          | 10    | 100   |                          |                          |
| 2           | 3.81            | 3.81  | 7.62  | 1.90 | 277-1356-ND       | 2.59       | 2.33  | 2.07  | MKKDS 1/2-3.81           | 1708026                  |
| 3           | 3.81            | 7.62  | 11.43 | 1.90 | 277-1357-ND       | 3.87       | 3.49  | 3.10  | MKKDS 1/3-3.81           | 1708039                  |
| 4           | 3.81            | 11.43 | 15.24 | 1.90 | 277-1358-ND       | 5.17       | 4.66  | 4.14  | MKKDS 1/4-3.81           | 1708042                  |
| 5           | 3.81            | 15.24 | 19.05 | 1.90 | 277-1359-ND       | 6.47       | 5.83  | 5.18  | MKKDS 1/5-3.81           | 1708055                  |
| 6           | 3.81            | 19.05 | 22.86 | 1.90 | 277-1360-ND       | 7.76       | 6.99  | 6.21  | MKKDS 1/6-3.81           | 1708068                  |
| 7           | 3.81            | 22.86 | 26.67 | 1.90 | 277-1361-ND       | 9.06       | 8.16  | 7.25  | MKKDS 1/7-3.81           | 1708071                  |
| 8           | 3.81            | 26.67 | 30.48 | 1.90 | 277-1362-ND       | 10.36      | 9.33  | 8.29  | MKKDS 1/8-3.81           | 1708084                  |
| 9           | 3.81            | 30.48 | 34.29 | 1.90 | 277-1363-ND       | 11.65      | 10.49 | 9.32  | MKKDS 1/9-3.81           | 1708107                  |
| 10          | 3.81            | 34.29 | 38.10 | 1.90 | 277-1364-ND       | 12.94      | 11.65 | 10.35 | MKKDS 1/10-3.81          | 1708110                  |
| 11          | 3.81            | 38.10 | 41.91 | 1.90 | 277-1365-ND       | 14.24      | 12.82 | 11.39 | MKKDS 1/11-3.81          | 1708123                  |
| 12          | 3.81            | 41.91 | 45.72 | 1.90 | 277-1366-ND       | 15.54      | 13.99 | 12.43 | MKKDS 1/12-3.81          | 1708136                  |

Fig. 13 — 5.0mm &amp; 5.08mm Double Level Terminal Blocks

| No. of Pos. | Dimensions (mm) |   |       |      | Digi-Key Part No. | Price Each |      |      | Phoenix Contact Type No. | Phoenix Contact Part No. |
|-------------|-----------------|---|-------|------|-------------------|------------|------|------|--------------------------|--------------------------|
|             | A               | B | C     | D    |                   | 1          | 10   | 100  |                          |                          |
| 2           | 5.00            | — | 10.00 | 2.50 | 277-1367-ND       | 2.00       | 1.81 | 1.61 | MKKDS 1.5/2              | 1725012                  |
| 3           | 5.00            | — | 15.00 | 2.50 | 277-1368-ND       | 3.00       | 2.71 | 2.41 | MKKDS 1.5/3              | 1725025                  |
| 2           | 5.08            | — | 10.16 | 2.54 | 277-1369-ND       | 2.00       | 1.81 | 1.61 | MKKDS 1.5/2-5.08         | 1725038                  |
| 3           | 5.08            | — | 15.24 | 2.54 | 277-1370-ND       | 3.00       | 2.71 | 2.41 | MKKDS 1.5/3-5.08         | 1725041                  |

Fig. 14 — 5.0mm &amp; 5.08mm Double Level Terminal Blocks

| No. of Pos. | Dimensions (mm) |   |       |      | Digi-Key Part No. | Price Each |      |      | Phoenix Contact Type No. | Phoenix Contact Part No. |
|-------------|-----------------|---|-------|------|-------------------|------------|------|------|--------------------------|--------------------------|
|             | A               | B | C     | D    |                   | 1          | 10   | 100  |                          |                          |
| 2           | 5.00            | — | 10.00 | 2.50 | 277-1371-ND       | 3.41       | 3.07 | 2.73 | MKKDS 3/2                | 1721029                  |
| 3           | 5.00            | — | 15.00 | 2.50 | 277-1372-ND       | 5.11       | 4.60 | 4.09 | MKKDS 3/3                | 1721032                  |
| 2           | 5.08            | — | 10.16 | 2.54 | 277-1373-ND       | 3.41       | 3.07 | 2.73 | MKKDS 3/2-5.08           | 1721728                  |
| 3           | 5.08            | — | 15.24 | 2.54 | 277-1374-ND       | 5.11       | 4.60 | 4.09 | MKKDS 3/3-5.08           | 1721731                  |

Fig. 15 — 5.08mm Triple Level Terminal Blocks

| No. of Pos. | Dimensions (mm) |   |       |      | Digi-Key Part No. | Price Each |      |      | Phoenix Contact Type No. | Phoenix Contact Part No. |
|-------------|-----------------|---|-------|------|-------------------|------------|------|------|--------------------------|--------------------------|
|             | A               | B | C     | D    |                   | 1          | 10   | 100  |                          |                          |
| 2           | 5.08            | — | 10.16 | 2.54 | 277-1375-ND       | 5.29       | 4.77 | 4.24 | MK3DS 1.5/2-5.08         | 1724013                  |
| 3           | 5.08            | — | 15.24 | 2.54 | 277-1376-ND       | 7.93       | 7.14 | 6.35 | MK3DS 1.5/3-5.08         | 1724026                  |

Fig. 16 — 5.08mm Triple Level Terminal Blocks

| No. of Pos. | Dimensions (mm) |   |       |      | Digi-Key Part No. | Price Each |      |      | Phoenix Contact Type No. | Phoenix Contact Part No. |
|-------------|-----------------|---|-------|------|-------------------|------------|------|------|--------------------------|--------------------------|
|             | A               | B | C     | D    |                   | 1          | 10   | 100  |                          |                          |
| 2           | 5.08            | — | 10.16 | 2.54 | 277-1377-ND       | 4.80       | 4.32 | 3.84 | MK3DS 3/2-5.08           | 1723014                  |
| 3           | 5.08            | — | 15.24 | 2.54 | 277-1378-ND       | 7.19       | 6.47 | 5.76 | MK3DS 3/3-5.08           | 1723027                  |

Fig. 17 — 5.0mm &amp; 5.08mm Double Level PCB Header w/o Side Panels

| No. of Pos. | Dimensions (mm) |   |       |      | Digi-Key Part No. | Price Each |      |      | Phoenix Contact Type No. | Phoenix Contact Part No. |
|-------------|-----------------|---|-------|------|-------------------|------------|------|------|--------------------------|--------------------------|
|             | A               | B | C     | D    |                   | 1          | 10   | 100  |                          |                          |
| 2           | 5.00            | — | 10.00 | 2.50 | 277-1379-ND       | 1.71       | 1.54 | 1.37 | MDSTB 2.5/2-G            | 1762046                  |
| 3           | 5.00            | — | 15.00 | 2.50 | 277-1380-ND       | 2.55       | 2.30 | 2.05 | MDSTB 2.5/3-G            | 1762059                  |
| 2           | 5.08            | — | 10.16 | 2.54 | 277-1381-ND       | 1.71       | 1.54 | 1.37 | MDSTB 2.5/4-G            | 1762062                  |
| 3           | 5.08            | — | 15.24 | 2.54 | 277-1382-ND       | 2.55       | 2.30 | 2.05 | MDSTB 2.5/5-G            | 1762075                  |

Fig. 18 — 5.0mm Double Level PCB Header w/Side Panels

| No. of Pos. | Dimensions (mm) |       |       |      | Digi-Key Part No. | Price Each |      |      | Phoenix Contact Type No. | Phoenix Contact Part No. |
|-------------|-----------------|-------|-------|------|-------------------|------------|------|------|--------------------------|--------------------------|
|             | A               | B     | C     | D    |                   | 1          | 10   | 100  |                          |                          |
| 3           | 5.00            | 10.00 | 17.00 | 3.50 | 277-1383-ND       | 2.99       | 2.60 | 2.31 | MDSTB 2.5/3-G1           | 1736687                  |
| 4           | 5.00            | 15.00 | 22.00 | 3.50 | 277-1384-ND       | 3.86       | 3.48 | 3.09 | MDSTB 2.5/4-G1           | 1736690                  |

| No. of Pos. | Dimensions (mm) |       |        |      | Digi-Key Part No. | Price Each |       |       | Phoenix Contact Type No. | Phoenix Contact Part No. |
|-------------|-----------------|-------|--------|------|-------------------|------------|-------|-------|--------------------------|--------------------------|
|             | A               | B     | C      | D    |                   | 1          | 10    | 100   |                          |                          |
| 6           | 5.00            | 25.00 | 32.00  | 3.50 | 277-1385-ND       | 5.80       | 5.22  | 4.64  | MDSTB 2.5/6-G1           | 1762732                  |
| 7           | 5.00            | 30.00 | 37.00  | 3.50 | 277-1386-ND       | 6.76       | 6.09  | 5.41  | MDSTB 2.5/7-G1           | 1762745                  |
| 8           | 5.00            | 35.00 | 42.00  | 3.50 | 277-1387-ND       | 7.72       | 6.95  | 6.18  | MDSTB 2.5/8-G1           | 1762758                  |
| 9           | 5.00            | 40.00 | 47.00  | 3.50 | 277-1388-ND       | 8.68       | 7.82  | 6.95  | MDSTB 2.5/9-G1           | 1762771                  |
| 10          | 5.00            | 45.00 | 52.00  | 3.50 | 277-1389-ND       | 9.66       | 8.70  | 7.73  | MDSTB 2.5/10-G1          | 1762774                  |
| 11          | 5.00            | 50.00 | 57.00  | 3.50 | 277-1390-ND       | 10.62      | 9.56  | 8.50  | MDSTB 2.5/11-G1          | 1762787                  |
| 12          | 5.00            | 55.00 | 62.00  | 3.50 | 277-1391-ND       | 11.58      | 10.43 | 9.27  | MDSTB 2.5/12-G1          | 1762790                  |
| 13          | 5.00            | 60.00 | 67.00  | 3.50 | 277-1392-ND       | 12.55      | 11.30 | 10.04 | MDSTB 2.5/13-G1          | 1762800                  |
| 14          | 5.00            | 65.00 | 72.00  | 3.50 | 277-1393-ND       | 13.51      | 12.16 | 10.81 | MDSTB 2.5/14-G1          | 1762813                  |
| 15          | 5.00            | 70.00 | 77.00  | 3.50 | 277-1394-ND       | 14.48      | 13.04 | 11.59 | MDSTB 2.5/15-G1          | 1762826                  |
| 16          | 5.00            | 75.00 | 82.00  | 3.50 | 277-1395-ND       | 15.44      | 13.90 | 12.36 | MDSTB 2.5/16-G1          | 1762839                  |
| 17          | 5.00            | 80.00 | 87.00  | 3.50 | 277-1396-ND       | 16.42      | 14.78 | 13.14 | MDSTB 2.5/17-G1          | 1762842                  |
| 18          | 5.00            | 85.00 | 92.00  | 3.50 | 277-1397-ND       | 17.37      | 15.64 | 13.90 | MDSTB 2.5/18-G1          | 1762855                  |
| 19          | 5.00            | 90.00 | 97.00  | 3.50 | 277-1398-ND       | 18.34      | 16.51 | 14.68 | MDSTB 2.5/19-G1          | 1762868                  |
| 20          | 5.00            | 95.00 | 102.00 | 3.50 | 277-1399-ND       | 19.31      | 17.38 | 15.45 | MDSTB 2.5/20-G1          | 1762871                  |

Fig. 19 — 5.08mm Double Level PCB Header w/Side Panels

|    |      |       |        |      |             |       |       |       |                      |         |
|----|------|-------|--------|------|-------------|-------|-------|-------|----------------------|---------|
| 3  | 5.08 | 10.16 | 17.24  | 3.54 | 277-1400-ND | 2.89  | 2.60  | 2.31  | MDSTB 2.5/3-G1-5.08  | 1762376 |
| 4  | 5.08 | 15.24 | 22.32  | 3.54 | 277-1401-ND | 3.86  | 3.48  | 3.09  | MDSTB 2.5/4-G1-5.08  | 1736713 |
| 6  | 5.08 | 25.40 | 32.48  | 3.54 | 277-1402-ND | 5.80  | 5.22  | 4.64  | MDSTB 2.5/6-G1-5.08  | 1762415 |
| 7  | 5.08 | 30.48 | 37.56  | 3.54 | 277-1403-ND | 6.76  | 6.09  | 5.41  | MDSTB 2.5/7-G1-5.08  | 1762428 |
| 8  | 5.08 | 35.56 | 42.64  | 3.54 | 277-1404-ND | 7.72  | 6.95  | 6.18  | MDSTB 2.5/8-G1-5.08  | 1762431 |
| 9  | 5.08 | 40.64 | 47.72  | 3.54 | 277-1405-ND | 8.68  | 7.82  | 6.95  | MDSTB 2.5/9-G1-5.08  | 1762444 |
| 10 | 5.08 | 45.72 | 52.80  | 3.54 | 277-1406-ND | 9.66  | 8.70  | 7.73  | MDSTB 2.5/10-G1-5.08 | 1762457 |
| 11 | 5.08 | 50.80 | 57.88  | 3.54 | 277-1407-ND | 10.62 | 9.56  | 8.50  | MDSTB 2.5/11-G1-5.08 | 1762460 |
| 12 | 5.08 | 55.88 | 62.96  | 3.54 | 277-1408-ND | 11.58 | 10.43 | 9.27  | MDSTB 2.5/12-G1-5.08 | 1762703 |
| 13 | 5.08 | 60.96 | 68.04  | 3.54 | 277-1409-ND | 12.55 | 11.30 | 10.04 | MDSTB 2.5/13-G1-5.08 | 1762747 |
| 14 | 5.08 | 66.04 | 73.12  | 3.54 | 277-1410-ND | 13.51 | 12.16 | 10.81 | MDSTB 2.5/14-G1-5.08 | 1762486 |
| 15 | 5.08 | 71.12 | 78.20  | 3.54 | 277-1411-ND | 14.48 | 13.04 | 11.59 | MDSTB 2.5/15-G1-5.08 | 1762499 |
| 16 | 5.08 | 76.20 | 83.28  | 3.54 | 277-1412-ND | 15.44 | 13.90 | 12.36 | MDSTB 2.5/16-G1-5.08 | 1762509 |
| 17 | 5.08 | 81.28 | 88.36  | 3.54 | 277-1413-ND | 16.42 | 14.78 | 13.14 | MDSTB 2.5/17-G1-5.08 | 1762512 |
| 18 | 5.08 | 86.36 | 93.44  | 3.54 | 277-1414-ND | 17.37 | 15.64 | 13.90 | MDSTB 2.5/18-G1-5.08 | 1762525 |
| 19 | 5.08 | 91.44 | 98.52  | 3.54 | 277-1415-ND | 18.34 | 16.51 | 14.68 | MDSTB 2.5/19-G1-5.08 | 1762538 |
| 20 | 5.08 | 96.52 | 103.60 | 3.54 | 277-1416-ND | 19.31 | 17.38 | 15.45 | MDSTB 2.5/20-G1-5.08 | 1762680 |

# Weidmüller Terminal Blocks

## Plugs and Headers

| Specifications        | UL          |             | CSA*        |             | VDE                 |                     |                     |
|-----------------------|-------------|-------------|-------------|-------------|---------------------|---------------------|---------------------|
| Pitch                 | 3.50 mm     | All Others  | 3.50 mm     | All Others  | 3.50 mm             | 5.00/5.08 mm        | 7.50/7.62 mm        |
| Rated Voltage         | 300V        | 300V        | 300V        | 300V        | 125V-Gr.C           | 250V-Gr.C           | 3500V-Gr.C          |
| Rated Current         | 10A         | 10A         | 10A         | 10A         | 12A                 | 12A                 | 15A                 |
| Wire Size             | 22...14 AWG | 22...12 AWG | 28...14 AWG | 26...12 AWG | 1.5 mm <sup>2</sup> | 2.5 mm <sup>2</sup> | 2.5 mm <sup>2</sup> |
| Strip Length mm (in.) | 7 (2.24)    | 7 (2.24)    | 7 (2.24)    | 7 (2.24)    | 7 (2.24)            | 7 (2.24)            | 7 (2.24)            |
| Torque Nm (lb. in.)   | .25 (2.25)  | .50 (4.50)  | .25 (2.25)  | .50 (4.50)  | .25 (2.25)          | .50 (4.50)          | .50 (4.50)          |

\* Standard UL 1050 Standard CSA C22.2 No. 158 VDE Standard 0110b 2.79

## PCB Terminal Blocks

| Specifications        | UL          |              |              | CSA*        |              |              | VDE                 |                     |                     |
|-----------------------|-------------|--------------|--------------|-------------|--------------|--------------|---------------------|---------------------|---------------------|
| Pitch                 | LM 3.50     | LM 5.00/5.08 | LP 5.00/5.08 | LM 3.50     | LM 5.00/5.08 | LP 5.00/5.08 | LM 3.50             | LM 5.00/5.08        | LP 5.00/5.08        |
| Rated Voltage         | 300V        | 300V         | 300V         | 300V        | 300V         | 300V         | 125V                | 250V                | 250V                |
| Rated Current         | 10A         | 10A          | 10A          | 10A         | 10A          | 10A          | 12A                 | 17.5A               | 24A                 |
| Wire Size             | 28...14 AWG | 24...14 AWG  | 26...12 AWG  | 28...16 AWG | 24...12 AWG  | 26...12 AWG  | 1.5 mm <sup>2</sup> | 1.5 mm <sup>2</sup> | 2.5 mm <sup>2</sup> |
| Strip Length mm (in.) | 5 (1.97)    | 6 (2.36)     | 7 (2.75)     | 5 (1.97)    | 6 (2.36)     | 7 (2.75)     | 6 (2.36)            | 7 (2.75)            | 7 (2.75)            |
| Torque Nm (lb. in.)   | 0.4 (4.4)   | 0.4 (4.4)    | 0.5 (4.4)    | 0.4 (4.4)   | 0.4 (4.4)    | 0.5 (4.4)    | 0.4 (4.4)           | 0.4 (4.4)           | 0.5 (4.4)           |

\* CSA Pending for LP Series

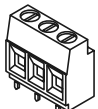
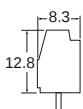
## SPECIFICATIONS

**Molding Material:** Polyamide  
**Temperature Range:** -50°C to +100°C  
 (-58°F to +212°F)  
**Contact:** Copper alloy  
**Plating:** Tin-Plated  
**Solder Pin Length:** 4.5 mm (Standard)  
**Connection:** Screw Clamp, Tension Clamp  
**Color:** LM Series - Black; LP Series - Orange

Dimensions in mm

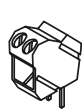
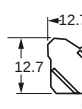
**Fig. 1**  
**LM 3.5/90/... BK**

- Screw Clamp
- 90° Orientation without test point

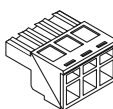
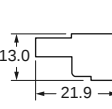
**Fig. 2**  
**LM 3.5/1350/... BK**

- Screw Clamp
- 130° Orientation without test point

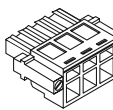
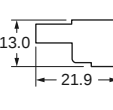
**Fig. 3**  
**BLZF 3.5/... BK**

- Tension Clamp
- 180° Orientation
- Non-Locking

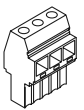
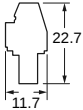
**Fig. 4**  
**BLZF 3.5/... F BK**

- Tension Clamp
- 180° Orientation
- Locking

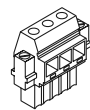
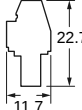
**Fig. 5**  
**BL 3.5/90/... BK**

- Screw Clamp
- 90° Orientation
- Non-Locking

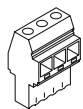
**Fig. 6**  
**BL 3.5/90/... F BK**

- Screw Clamp
- 90° Orientation
- Locking

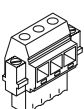
**Fig. 7**  
**BL 3.5/270/... BK**

- Screw Clamp
- 270° Orientation
- Non-Locking



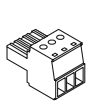
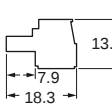

**Fig. 8**  
**BL 3.5/270/... F BK**

- Screw Clamp
- 270° Orientation
- Locking



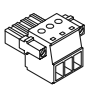

**Fig. 9**  
**BL 3.5/... BK**

- Screw Clamp
- 180° Orientation
- Non-Locking

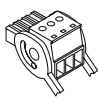
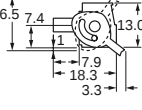
**Fig. 10**  
**BL 3.5/... F BK**

- Screw Clamp
- 180° Orientation
- Locking



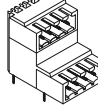
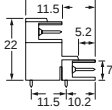

**Fig. 11**  
**BL 3.5/... LH BK**

- Screw Clamp
- 180° Orientation
- Non-Locking
- Quick Release Mechanism

**Fig. 12**  
**SLD 3.5/90/... G BK**

- Double-Level Recessed
- 90° Orientation
- Closed End
- Non-Locking

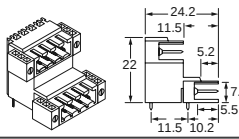
|                              | No. of Fig. Poles | Block Length (mm) | Digi-Key Part No. | 1      | Pricing 10 100 | Mfg. Part No. |        |
|------------------------------|-------------------|-------------------|-------------------|--------|----------------|---------------|--------|
| 3.50 mm PCB Terminal Blocks  |                   |                   |                   |        |                |               |        |
| 1                            | 2                 | 7.6               | 281-1400-ND       | .73    | 6.53           | 58.00         | 169967 |
|                              | 3                 | 11.1              | 281-1401-ND       | 1.08   | 9.68           | 96.00         | 169968 |
|                              | 4                 | 14.6              | 281-1402-ND       | 1.50   | 13.50          | 120.00        | 996770 |
|                              | 6                 | 21.6              | 281-1403-ND       | 2.25   | 20.25          | 180.00        | 996772 |
|                              | 8                 | 28.6              | 281-1404-ND       | 2.98   | 26.78          | 238.00        | 996774 |
|                              | 10                | 35.6              | 281-1405-ND       | 3.73   | 33.53          | 298.00        | 996776 |
| 2                            | 12                | 42.6              | 281-1406-ND       | 4.48   | 40.28          | 358.00        | 996778 |
|                              | 2                 | 7.59              | 281-1407-ND       | .85    | 7.65           | 68.00         | 171501 |
|                              | 3                 | 11.09             | 281-1408-ND       | 1.28   | 11.48          | 102.00        | 171505 |
|                              | 4                 | 14.59             | 281-1409-ND       | 1.68   | 15.08          | 134.00        | 999568 |
|                              | 6                 | 21.59             | 281-1410-ND       | 2.50   | 22.50          | 200.00        | 999570 |
|                              | 8                 | 28.59             | 281-1411-ND       | 3.45   | 31.05          | 276.00        | 999572 |
| 3                            | 10                | 35.59             | 281-1412-ND       | 4.13   | 37.13          | 330.00        | 999574 |
|                              | 12                | 42.59             | 281-1413-ND       | 5.03   | 45.23          | 402.00        | 999576 |
| 3.50 mm Lead Spacing - Plugs |                   |                   |                   |        |                |               |        |
| 3                            | 2                 | 7.0               | 281-1000-ND       | 1.48   | 13.28          | 118.00        | 169042 |
|                              | 3                 | 10.5              | 281-1001-ND       | 2.20   | 19.80          | 176.00        | 169043 |
|                              | 4                 | 14.0              | 281-1002-ND       | 2.90   | 26.10          | 232.00        | 169044 |
|                              | 6                 | 21.0              | 281-1003-ND       | 4.38   | 39.38          | 350.00        | 169046 |
|                              | 8                 | 28.0              | 281-1004-ND       | 5.83   | 52.43          | 466.00        | 169048 |
|                              | 10                | 35.0              | 281-1005-ND       | 7.30   | 65.70          | 584.00        | 169050 |
| 16                           | 42.0              | 281-1006-ND       | 8.73              | 78.53  | 698.00         | 169052        |        |
|                              | 56.0              | 281-1007-ND       | 11.65             | 104.85 | 932.00         | 169056        |        |
|                              | 84.0              | 281-1008-ND       | 17.48             | 157.28 | 1398.00        | 169064        |        |
| 4                            | 2                 | 14.0              | 281-1009-ND       | 1.53   | 13.73          | 122.00        | 169111 |
|                              | 3                 | 17.5              | 281-1010-ND       | 2.30   | 20.70          | 184.00        | 169112 |
|                              | 4                 | 21.0              | 281-1011-ND       | 3.05   | 27.45          | 244.00        | 169113 |
|                              | 6                 | 28.0              | 281-1012-ND       | 4.60   | 41.40          | 368.00        | 169115 |
|                              | 8                 | 35.0              | 281-1013-ND       | 6.23   | 56.03          | 498.00        | 169117 |
|                              | 10                | 42.0              | 281-1014-ND       | 7.80   | 70.20          | 624.00        | 169119 |
| 12                           | 49.0              | 281-1015-ND       | 9.35              | 84.15  | 748.00         | 169121        |        |
|                              | 63.0              | 281-1016-ND       | 12.48             | 112.28 | 998.00         | 169125        |        |
|                              | 91.0              | 281-1017-ND       | 18.70             | 168.30 | 1496.00        | 169133        |        |
| 5                            | 2                 | 7.0               | 281-1018-ND       | 1.63   | 14.63          | 130.00        | 163878 |
|                              | 3                 | 10.5              | 281-1019-ND       | 2.45   | 22.05          | 196.00        | 163879 |
|                              | 4                 | 14.0              | 281-1020-ND       | 3.25   | 29.25          | 260.00        | 163880 |
|                              | 6                 | 21.0              | 281-1021-ND       | 4.88   | 43.88          | 390.00        | 163882 |
|                              | 8                 | 28.0              | 281-1022-ND       | 6.50   | 58.50          | 520.00        | 163884 |
|                              | 10                | 35.0              | 281-1023-ND       | 8.13   | 73.13          | 650.00        | 163886 |
| 12                           | 42.0              | 281-1024-ND       | 9.75              | 87.75  | 780.00         | 163888        |        |
|                              | 56.0              | 281-1025-ND       | 13.00             | 117.00 | 1040.00        | 163892        |        |
|                              | 84.0              | 281-1026-ND       | 19.50             | 175.50 | 1560.00        | 163900        |        |

|    | No. of Fig. | Poles       | Block Length (mm) | Digi-Key Part No. | 1      | Pricing 10 | 100    | Mfg. Part No. |
|----|-------------|-------------|-------------------|-------------------|--------|------------|--------|---------------|
| 6  | 2           | 14.0        | 281-1027-ND       | 1.75              | 15.75  | 140.00     | 163924 |               |
|    | 3           | 17.5        | 281-1028-ND       | 2.63              | 23.63  | 210.00     | 163925 |               |
|    | 4           | 21.0        | 281-1029-ND       | 3.48              | 31.28  | 278.00     | 163926 |               |
|    | 6           | 28.0        | 281-1030-ND       | 5.23              | 47.03  | 418.00     | 163928 |               |
|    | 8           | 35.0        | 281-1031-ND       | 6.95              | 62.55  | 556.00     | 163930 |               |
|    | 10          | 42.0        | 281-1032-ND       | 8.70              | 78.30  | 696.00     | 163932 |               |
|    | 12          | 49.0        | 281-1033-ND       | 10.45             | 94.05  | 836.00     | 163934 |               |
| 7  | 16          | 63.0        | 281-1034-ND       | 13.93             | 125.33 | 1114.00    | 163938 |               |
|    | 24          | 91.0        | 281-1035-ND       | 20.88             | 187.88 | 1670.00    | 163946 |               |
|    | 2           | 7.0         | 281-1036-ND       | 1.63              | 14.63  | 130.00     | 163970 |               |
|    | 3           | 10.5        | 281-1037-ND       | 2.45              | 22.05  | 196.00     | 163971 |               |
|    | 4           | 14.0        | 281-1038-ND       | 3.25              | 29.25  | 260.00     | 163972 |               |
|    | 6           | 21.0        | 281-1039-ND       | 4.88              | 43.88  | 390.00     | 163974 |               |
|    | 8           | 28.0        | 281-1040-ND       | 6.50              | 58.50  | 520.00     | 163976 |               |
| 8  | 10          | 35.0        | 281-1041-ND       | 8.13              | 73.13  | 650.00     | 163978 |               |
|    | 12          | 42.0        | 281-1042-ND       | 9.75              | 87.75  | 780.00     | 163980 |               |
|    | 16          | 56.0        | 281-1043-ND       | 13.00             | 117.00 | 1040.00    | 163984 |               |
|    | 24          | 84.0        | 281-1044-ND       | 19.50             | 175.50 | 1560.00    | 163992 |               |
|    | 2           | 14.0        | 281-1045-ND       | 1.75              | 15.75  | 140.00     | 164016 |               |
|    | 3           | 17.5        | 281-1046-ND       | 2.63              | 23.63  | 210.00     | 164017 |               |
|    | 4           | 21.0        | 281-1047-ND       | 3.48              | 31.28  | 278.00     | 164018 |               |
| 9  | 6           | 28.0        | 281-1048-ND       | 5.23              | 47.03  | 418.00     | 164020 |               |
|    | 8           | 35.0        | 281-1049-ND       | 6.95              | 62.55  | 556.00     | 164022 |               |
|    | 10          | 42.0        | 281-1050-ND       | 8.70              | 78.30  | 696.00     | 164024 |               |
|    | 12          | 49.0        | 281-1051-ND       | 10.45             | 94.05  | 836.00     | 164026 |               |
|    | 16          | 63.0        | 281-1052-ND       | 13.93             | 125.33 | 1114.00    | 164030 |               |
|    | 24          | 91.0        | 281-1053-ND       | 20.88             | 187.88 | 1670.00    | 164038 |               |
|    | 2           | 7.0         | 281-1054-ND       | 1.55              | 13.95  | 124.00     | 161567 |               |
| 10 | 3           | 10.5        | 281-1055-ND       | 2.33              | 20.93  | 186.00     | 161568 |               |
|    | 4           | 14.0        | 281-1056-ND       | 3.10              | 27.90  | 248.00     | 161569 |               |
|    | 6           | 21.0        | 281-1057-ND       | 4.65              | 41.85  | 372.00     | 161018 |               |
|    | 8           | 28.0        | 281-1058-ND       | 6.20              | 55.80  | 496.00     | 161570 |               |
|    | 10          | 35.0        | 281-1059-ND       | 7.75              | 69.75  | 620.00     | 161020 |               |
|    | 12          | 42.0        | 281-1060-ND       | 9.30              | 83.70  | 744.00     | 161573 |               |
|    | 16          | 56.0        | 281-1061-ND       | 12.40             | 111.60 | 992.00     | 161577 |               |
| 11 | 24          | 84.0        | 281-1062-ND       | 18.58             | 167.18 | 1486.00    | 162044 |               |
|    | 2           | 14.0        | 281-1063-ND       | 1.63              | 14.63  | 130.00     | 161578 |               |
|    | 3           | 17.5        | 281-1064-ND       | 2.45              | 22.05  | 196.00     | 161579 |               |
|    | 4           | 21.0        | 281-1065-ND       | 3.25              | 29.25  | 260.00     | 161580 |               |
|    | 6           | 28.0        | 281-1066-ND       | 4.90              | 44.10  | 392.00     | 161582 |               |
|    | 8           | 35.0        | 281-1067-ND       | 6.63              | 59.63  | 530.00     | 161584 |               |
|    | 10          | 42.0        | 281-1068-ND       | 8.30              | 74.70  | 664.00     | 161586 |               |
| 12 | 49.0        | 281-1069-ND | 9.95              | 89.55             | 796.00 | 161588     |        |               |

|                                | No. of<br>Fig. Poles | Block<br>Length<br>(mm) | Digi-Key<br>Part No. |       | Pricing<br>10 | 100     | Mfg.<br>Part No. |
|--------------------------------|----------------------|-------------------------|----------------------|-------|---------------|---------|------------------|
| 10                             | 16                   | 63.0                    | 281-1070-ND          | 13.28 | 119.48        | 1062.00 | 161592           |
|                                | 24                   | 91.0                    | 281-1071-ND          | 19.90 | 179.10        | 1592.00 | 162091           |
|                                | 2                    | 14.0                    | 281-1072-ND          | 2.60  | 23.40         | 208.00  | 168788           |
| 11                             | 3                    | 17.5                    | 281-1073-ND          | 3.43  | 30.83         | 274.00  | 168789           |
|                                | 4                    | 21.0                    | 281-1074-ND          | 4.28  | 38.48         | 342.00  | 168790           |
|                                | 6                    | 28.0                    | 281-1075-ND          | 5.98  | 53.78         | 478.00  | 168792           |
|                                | 8                    | 35.0                    | 281-1076-ND          | 7.68  | 69.08         | 614.00  | 168794           |
|                                | 10                   | 42.0                    | 281-1077-ND          | 9.35  | 84.15         | 748.00  | 168796           |
|                                | 12                   | 49.0                    | 281-1078-ND          | 11.05 | 99.45         | 884.00  | 168798           |
|                                | 16                   | 63.0                    | 281-1079-ND          | 14.45 | 130.05        | 1156.00 | 168802           |
|                                | 24                   | 91.0                    | 281-1080-ND          | 21.23 | 191.03        | 1698.00 | 168810           |
| 3.50 mm Lead Spacing - Headers |                      |                         |                      |       |               |         |                  |
| 12                             | 4                    | 8.4                     | 281-1081-ND          | 1.50  | 13.50         | 120.00  | 164286           |
|                                | 6                    | 11.9                    | 281-1082-ND          | 2.25  | 20.25         | 180.00  | 169927           |
|                                | 8                    | 15.4                    | 281-1083-ND          | 3.00  | 27.00         | 240.00  | 164287           |
|                                | 12                   | 22.4                    | 281-1084-ND          | 4.50  | 40.50         | 360.00  | 164288           |
|                                | 16                   | 29.4                    | 281-1085-ND          | 5.98  | 53.78         | 478.00  | 164289           |
| 13                             | 20                   | 36.4                    | 281-1086-ND          | 7.48  | 67.28         | 598.00  | 164290           |
|                                | 24                   | 43.4                    | 281-1087-ND          | 8.98  | 80.78         | 718.00  | 164291           |
|                                | 32                   | 57.4                    | 281-1088-ND          | 11.95 | 107.55        | 956.00  | 164293           |
|                                | 48                   | 85.4                    | 281-1089-ND          | 17.95 | 161.55        | 1436.00 | 164297           |
|                                | 4                    | 14.0                    | 281-1090-ND          | 2.50  | 22.50         | 200.00  | 164310           |
|                                | 6                    | 17.5                    | 281-1091-ND          | 3.25  | 29.25         | 252.00  | 164311           |
|                                | 8                    | 21.0                    | 281-1092-ND          | 4.08  | 36.68         | 325.00  | 164311           |
|                                | 12                   | 28.0                    | 281-1093-ND          | 5.25  | 47.25         | 420.00  | 164312           |
| 14                             | 16                   | 35.0                    | 281-1094-ND          | 7.00  | 63.00         | 560.00  | 164313           |
|                                | 20                   | 42.0                    | 281-1095-ND          | 8.73  | 78.53         | 698.00  | 164314           |
|                                | 24                   | 49.0                    | 281-1096-ND          | 10.48 | 94.28         | 838.00  | 164314           |
|                                | 32                   | 63.0                    | 281-1097-ND          | 13.98 | 128.78        | 1118.00 | 164317           |
|                                | 48                   | 91.0                    | 281-1098-ND          | 20.95 | 185.55        | 1676.00 | 164321           |
| 15                             | 4                    | 8.4                     | 281-1099-ND          | 1.50  | 13.50         | 120.00  | 164173           |
|                                | 6                    | 11.9                    | 281-1100-ND          | 2.25  | 20.25         | 180.00  | 169895           |
|                                | 8                    | 15.4                    | 281-1101-ND          | 3.00  | 27.00         | 240.00  | 164174           |
|                                | 12                   | 22.4                    | 281-1102-ND          | 4.50  | 40.50         | 360.00  | 164175           |
|                                | 16                   | 29.4                    | 281-1103-ND          | 5.98  | 53.78         | 478.00  | 164176           |
|                                | 20                   | 36.4                    | 281-1104-ND          | 7.48  | 67.28         | 598.00  | 164177           |
|                                | 24                   | 43.4                    | 281-1105-ND          | 8.98  | 80.78         | 718.00  | 164178           |
|                                | 32                   | 57.4                    | 281-1106-ND          | 11.95 | 107.55        | 956.00  | 164180           |
| 16                             | 48                   | 85.4                    | 281-1107-ND          | 17.95 | 161.55        | 1436.00 | 164184           |
|                                | 4                    | 14.0                    | 281-1108-ND          | 2.50  | 22.50         | 200.00  | 164197           |
|                                | 6                    | 17.5                    | 281-1109-ND          | 3.28  | 29.48         | 262.00  | 169906           |
|                                | 8                    | 21.0                    | 281-1110-ND          | 4.08  | 36.68         | 325.00  | 164198           |
| 17                             | 12                   | 28.0                    | 281-1111-ND          | 5.25  | 47.25         | 420.00  | 164199           |

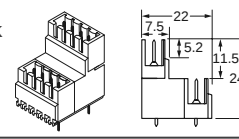
**Fig. 13**  
SLD 3.5V/90/... F BK

- Double-Level Recessed
- 90° Orientation
- Closed End
- Locking



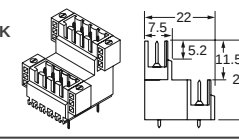
**Fig. 14**  
SLD 3.5V/180/... G BK

- Double-Level Recessed
- 180° Orientation
- Closed End
- Non-Locking



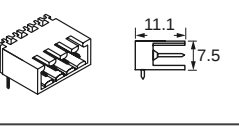
**Fig. 15**  
SLD 3.5V/180/... F BK

- Double-Level Recessed
- 180° Orientation
- Closed End
- Locking



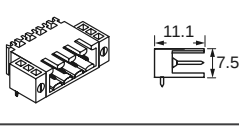
**Fig. 16**  
SL 3.5/90/... G BK

- Single-Level
- 90° Orientation
- Closed End
- Non-Locking



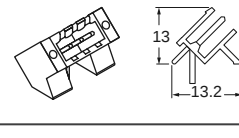
**Fig. 17**  
SL 3.5/90/... F BK

- Single-Level
- 90° Orientation
- Closed End
- Non-Locking



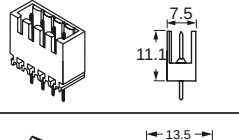
**Fig. 18**  
SL 3.5/135/... BK

- Single-Level
- 135° Orientation
- Closed End
- Locking



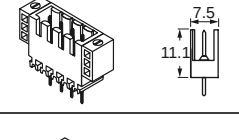
**Fig. 19**  
SL 3.5/180/... G BK

- Single-Level
- 180° Orientation
- Closed End
- Non-Locking



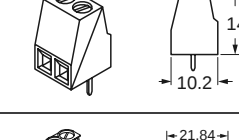
**Fig. 20**  
SL 3.5/180/... F BK

- Single-Level
- 180° Orientation
- Closed End
- Locking



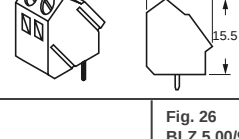
**Fig. 21**  
LM 5.00/90/... BK

- Screw Clamp
- 90° Orientation without test point



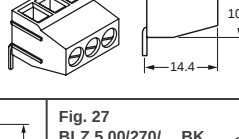
**Fig. 22**  
LM 5.00/135/... BK

- Screw Clamp
- 135° Orientation without test point



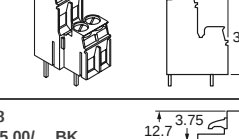
**Fig. 23**  
LM 5.00/180/... BK

- Screw Clamp
- 180° Orientation without test point



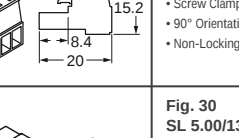
**Fig. 24**  
LP 2N/5.00/... BK

- Double-Level
- 90° Orientation
- Low Profile/Offset Left



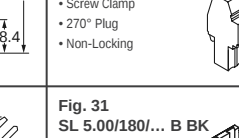
**Fig. 25**  
BLZ 5.00/... BK

- Screw Clamp
- 180° Orientation
- Non-Locking



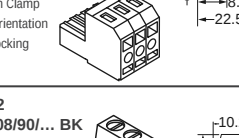
**Fig. 26**  
BLZ 5.00/90/... BK

- Screw Clamp
- 90° Orientation
- Non-Locking



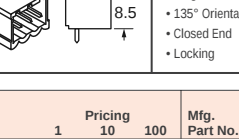
**Fig. 27**  
BLZ 5.00/270/... BK

- Screw Clamp
- 270° Plug
- Non-Locking



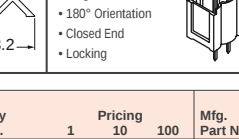
**Fig. 28**  
BLZF 5.00/... BK

- Tension Clamp
- 180° Orientation
- Non-Locking



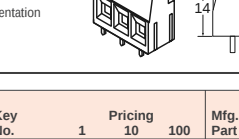
**Fig. 29**  
SL 5.00/90/... B BK

- Single-Level
- 90° Orientation
- Closed End
- Locking



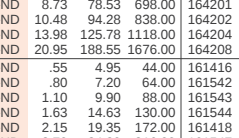
**Fig. 30**  
SL 5.00/135/... B BK

- Single-Level
- 135° Orientation
- Closed End
- Locking



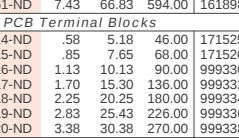
**Fig. 31**  
SL 5.00/180/... B BK

- Single-Level
- 180° Orientation
- Closed End
- Locking



**Fig. 32**  
LM 5.08/90/... BK

- Screw Clamp
- 90° Orientation

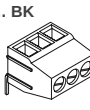
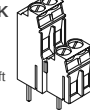
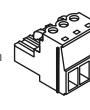
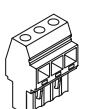
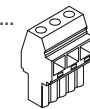
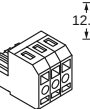
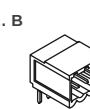
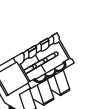
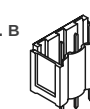
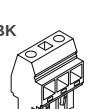
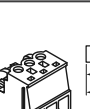
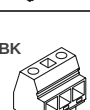


| Fig. | No. of Poles | Block Length (mm) | Digi-Key Part No. | 1     | Pricing 10 100 | Mfg. Part No. |
|------|--------------|-------------------|-------------------|-------|----------------|---------------|
| 15   | 16           | 35.0              | 281-1112-ND       | 7.00  | 63.00 560.00   | 164200        |
|      | 20           | 42.0              | 281-1113-ND       | 8.73  | 78.53 698.00   | 164201        |
|      | 24           | 49.0              | 281-1114-ND       | 10.48 | 94.28 838.00   | 164202        |
|      | 32           | 63.0              | 281-1115-ND       | 13.98 | 125.78 1118.00 | 164204        |
|      | 48           | 91.0              | 281-1116-ND       | 20.95 | 188.55 1676.00 | 164208        |
| 16   | 2            | 8.4               | 281-1117-ND       | .55   | 4.95 44.00     | 161416        |
|      | 3            | 11.9              | 281-1118-ND       | .80   | 7.20 64.00     | 161542        |
|      | 4            | 15.4              | 281-1119-ND       | 1.10  | 9.90 88.00     | 161543        |
|      | 6            | 22.4              | 281-1120-ND       | 1.63  | 14.63 130.00   | 161544        |
|      | 8            | 29.4              | 281-1121-ND       | 2.15  | 19.35 172.00   | 161418        |
| 17   | 10           | 36.4              | 281-1122-ND       | 2.70  | 24.30 216.00   | 161547        |
|      | 12           | 43.4              | 281-1123-ND       | 3.25  | 29.25 260.00   | 161549        |
|      | 16           | 57.4              | 281-1124-ND       | 4.30  | 38.70 344.00   | 161419        |
|      | 24           | 85.4              | 281-1125-ND       | 6.45  | 58.05 516.00   | 161805        |
|      | 2            | 14.0              | 281-1126-ND       | .83   | 7.43 66.00     | 161553        |
| 18   | 3            | 17.5              | 281-1127-ND       | 1.38  | 12.38 110.00   | 161554        |
|      | 4            | 21.0              | 281-1128-ND       | 1.25  | 11.25 100.00   | 161555        |
|      | 6            | 28.0              | 281-1129-ND       | 1.88  | 16.88 150.00   | 161557        |
|      | 8            | 35.0              | 281-1130-ND       | 2.50  | 22.50 200.00   | 161420        |
|      | 10           | 42.0              | 281-1131-ND       | 3.10  | 27.90 248.00   | 161560        |
| 19   | 12           | 49.0              | 281-1132-ND       | 3.73  | 33.53 298.00   | 161562        |
|      | 16           | 63.0              | 281-1133-ND       | 4.95  | 44.55 396.00   | 161566        |
|      | 24           | 91.0              | 281-1134-ND       | 7.43  | 66.83 594.00   | 161835        |
|      | 2            | 7.0               | 281-1135-ND       | .60   | 5.40 48.00     | 164381        |
|      | 3            | 10.5              | 281-1136-ND       | .90   | 8.10 72.00     | 164382        |
| 20   | 4            | 14.0              | 281-1137-ND       | 1.20  | 10.80 96.00    | 164383        |
|      | 6            | 21.0              | 281-1138-ND       | 1.83  | 16.43 146.00   | 164385        |
|      | 8            | 28.0              | 281-1139-ND       | 2.43  | 21.83 194.00   | 164387        |
|      | 10           | 35.0              | 281-1140-ND       | 3.05  | 27.45 244.00   | 164389        |
|      | 12           | 42.0              | 281-1141-ND       | 3.68  | 33.08 294.00   | 164391        |
| 21   | 16           | 56.0              | 281-1142-ND       | 4.90  | 44.10 392.00   | 164395        |
|      | 24           | 84.0              | 281-1143-ND       | 7.35  | 66.15 588.00   | 164403        |
|      | 2            | 8.4               | 281-1144-ND       | .55   | 4.95 44.00     | 161424        |
|      | 3            | 11.9              | 281-1145-ND       | .80   | 7.20 64.00     | 161602        |
|      | 4            | 15.4              | 281-1146-ND       | 1.10  | 9.90 88.00     | 161603        |
| 22   | 6            | 22.4              | 281-1147-ND       | 1.63  | 14.63 130.00   | 161605        |
|      | 8            | 29.4              | 281-1148-ND       | 2.15  | 19.35 172.00   | 161425        |
|      | 10           | 36.4              | 281-1149-ND       | 2.70  | 24.30 216.00   | 161608        |
|      | 12           | 43.4              | 281-1150-ND       | 3.25  | 29.25 260.00   | 161610        |
|      | 16           | 57.4              | 281-1151-ND       | 4.30  | 38.70 344.00   | 161426        |
| 23   | 24           | 85.4              | 281-1152-ND       | 6.45  | 58.05 516.00   | 161868        |
|      | 2            | 14.0              | 281-1153-ND       | .83   | 7.43 66.00     | 161614        |
|      | 3            | 17.5              | 281-1154-ND       | 1.38  | 12.38 110.00   | 161615        |
|      | 4            | 21.0              | 281-1155-ND       | 1.25  | 11.25 100.00   | 161616        |
|      | 6            | 28.0              | 281-1156-ND       | 1.88  | 16.88 150.00   | 161618        |
| 24   | 8            | 35.0              | 281-1157-ND       | 2.50  | 22.50 200.00   | 161427        |
|      | 10           | 42.0              | 281-1158-ND       | 3.10  | 27.90 248.00   | 161621        |
|      | 12           | 49.0              | 281-1159-ND       | 3.73  | 33.53 298.00   | 161623        |

| Fig. | No. of Poles | Block Length (mm) | Digi-Key Part No. | 1     | Pricing 10 100 | Mfg. Part No. |
|------|--------------|-------------------|-------------------|-------|----------------|---------------|
| 20   | 16           | 63.0              | 281-1160-ND       | 4.95  | 44.55 396.00   | 161627        |
|      | 24           | 91.0              | 281-1161-ND       | 7.43  | 66.83 594.00   | 161898        |
|      | 2            | 10.6              | 281-1414-ND       | .58   | 5.18 46.00     | 171525        |
|      | 3            | 15.6              | 281-1415-ND       | .85   | 7.65 68.00     | 171526        |
|      | 4            | 20.6              | 281-1416-ND       | 1.13  | 10.13 90.00    | 999330        |
| 21   | 6            | 30.6              | 281-1417-ND       | 1.70  | 15.30 136.00   | 999332        |
|      | 8            | 40.6              | 281-1418-ND       | 2.25  | 20.25 180.00   | 999334        |
|      | 10           | 50.6              | 281-1419-ND       | 2.83  | 25.43 226.00   | 999336        |
|      | 12           | 60.6              | 281-1420-ND       | 3.38  | 30.38 270.00   | 999338        |
|      | 2            | 10.6              | 281-1421-ND       | .63   | 5.63 50.00     | 171529        |
| 22   | 4            | 15.6              | 281-1422-ND       | .93   | 8.33 74.00     | 171530        |
|      | 6            | 20.6              | 281-1423-ND       | 1.23  | 11.03 98.00    | 999351        |
|      | 6            | 30.6              | 281-1424-ND       | 1.85  | 16.65 148.00   | 999353        |
|      | 8            | 40.6              | 281-1425-ND       | 2.45  | 22.05 196.00   | 999355        |
|      | 10           | 50.6              | 281-1426-ND       | 3.08  | 27.68 246.00   | 999357        |
| 23   | 12           | 60.6              | 281-1427-ND       | 3.68  | 33.08 294.00   | 999359        |
|      | 2            | 10.6              | 281-1428-ND       | .63   | 5.63 50.00     | 171527        |
|      | 3            | 15.6              | 281-1429-ND       | .93   | 8.33 74.00     | 171528        |
|      | 4            | 20.6              | 281-1430-ND       | 1.23  | 11.03 98.00    | 999372        |
|      | 6            | 30.6              | 281-1431-ND       | 1.85  | 16.65 148.00   | 999374        |
| 24   | 8            | 40.6              | 281-1432-ND       | 2.45  | 22.05 196.00   | 999376        |
|      | 10           | 50.6              | 281-1433-ND       | 3.08  | 27.68 246.00   | 999378        |
|      | 12           | 60.6              | 281-1434-ND       | 3.68  | 33.08 294.00   | 999380        |
|      | 4            | 17.5              | 281-1456-ND       | 2.00  | 18.00 160.00   | 163517        |
|      | 6            | 27.5              | 281-1457-ND       | 3.00  | 27.00 240.00   | 162557        |
| 25   | 8            | 37.5              | 281-1458-ND       | 4.00  | 36.00 320.00   | 159644        |
|      | 10           | 47.5              | 281-1459-ND       | 5.00  | 45.00 400.00   | 159648        |
|      | 12           | 57.5              | 281-1460-ND       | 6.00  | 54.00 480.00   | 163271        |
|      | 2            | 10.0              | 281-1180-ND       | 1.34  | 12.04 103.60   | 162561        |
|      | 3            | 15.0              | 281-1181-ND       | 2.02  | 18.06 155.40   | 162562        |
| 26   | 4            | 20.0              | 281-1182-ND       | 2.66  | 23.87 205.35   | 159608        |
|      | 6            | 30.0              | 281-1183-ND       | 3.91  | 35.05 301.55   | 159609        |
|      | 8            | 40.0              | 281-1184-ND       | 5.33  | 47.73 410.70   | 159611        |
|      | 10           | 50.0              | 281-1185-ND       | 6.65  | 59.56 512.45   | 159612        |
|      | 12           | 60.0              | 281-1186-ND       | 7.94  | 71.17 612.35   | 160299        |
| 27   | 16           | 80.0              | 281-1187-ND       | 10.39 | 93.10 801.05   | 160330        |
|      | 24           | 120.0             | 281-1188-ND       | 15.55 | 139.32 1198.80 | 161147        |
|      | 2            | 10.0              | 281-1189-ND       | 1.51  | 13.55 116.55   | 163689        |
|      | 3            | 15.0              | 281-1190-ND       | 2.30  | 20.64 177.60   | 163690        |
|      | 4            | 20.0              | 281-1191-ND       | 3.07  | 27.52 236.80   | 163691        |
| 28   | 6            | 30.0              | 281-1192-ND       | 4.49  | 40.21 345.95   | 163693        |
|      | 8            | 40.0              | 281-1193-ND       | 6.12  | 54.83 471.75   | 163695        |
|      | 10           | 50.0              | 281-1194-ND       | 7.63  | 68.37 588.30   | 163697        |
|      | 12           | 60.0              | 281-1195-ND       | 8.95  | 80.20 690.05   | 163699        |
|      | 16           | 80.0              | 281-1196-ND       | 11.93 | 106.86 919.45  | 163703        |
| 29   | 24           | 120.0             | 281-1197-ND       | 18.55 | 166.20 1430.05 | 163711        |

| Fig. | No. of Poles | Block Length (mm) | Digi-Key Part No. | 1     | Pricing 10 100 | Mfg. Part No. |
|------|--------------|-------------------|-------------------|-------|----------------|---------------|
| 27   | 2            | 10.0              | 281-1198-ND       | 1.51  | 13.55 116.55   | 163781        |
|      | 3            | 15.0              | 281-1199-ND       | 2.30  | 20.64 177.60   | 163782        |
|      | 4            | 20.0              | 281-1200-ND       | 3.07  | 27.52 236.80   | 163783        |
|      | 6            | 30.0              | 281-1201-ND       | 4.49  | 40.21 345.95   | 163785        |
|      | 8            | 40.0              | 281-1202-ND       | 6.12  | 54.83 471.75   | 163787        |
| 28   | 10           | 50.0              | 281-1203-ND       | 7.63  | 68.37 588.30   | 163789        |
|      | 12           | 60.0              | 281-1204-ND       | 8.95  | 80.20 690.05   | 163791        |
|      | 16           | 80.0              | 281-1205-ND       | 12.19 | 109.22 939.80  | 163795        |
|      | 24           | 120.0             | 281-1206-ND       | 18.14 | 162.54 1398.60 | 163803        |
|      | 2            | 10.0              | 281-1207-ND       | 1.20  | 10.75 92.50    | 169660        |
| 29   | 3            | 15.0              | 281-1208-ND       | 1.70  | 15.27 131.35   | 169661        |
|      | 4            | 20.0              | 281-1209-ND       | 2.23  | 20.00 172.05   | 169662        |
|      | 6            | 30.0              | 281-1210-ND       | 3.34  | 29.89 257.15   | 169664        |
|      | 8            | 40.0              | 281-1211-ND       | 4.37  | 39.13 336.70   | 169666        |
|      | 10           | 50.0              | 281-1212-ND       | 5.35  | 47.95 412.55   | 169668        |
| 30   | 12           | 60.0              | 281-1213-ND       | 6.41  | 57.41 493.95   | 169670        |
|      | 16           | 80.0              | 281-1214-ND       | 8.54  | 76.54 658.60   | 169674        |

A

|                                                                                                                                                                                                                                                        |                                                                                                                                                                                                                                                         |                                                                                                                                                                                                                                                           |                                                                                                                                                                                                                                                             |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Fig. 33</b><br>LM 5.08/135/... BK<br><ul style="list-style-type: none"> <li>Screw Clamp</li> <li>135° Orientation</li> </ul>                                       | <b>Fig. 34</b><br>LM 5.08/180/... BK<br><ul style="list-style-type: none"> <li>Screw Clamp</li> <li>180° Orientation</li> </ul>                                        | <b>Fig. 35</b><br>LP 2N/5.08/... BK<br><ul style="list-style-type: none"> <li>Double Level</li> <li>90° Orientation</li> <li>Low Profile/Offset Left</li> </ul>          | <b>Fig. 36</b><br>BLZ 5.08/...<br><ul style="list-style-type: none"> <li>Screw Clamp</li> <li>180° Orientation</li> <li>Non-Locking</li> </ul>                           |
| <b>Fig. 37</b><br>BLZ 5.08/90/...<br><ul style="list-style-type: none"> <li>Screw Clamp</li> <li>90° Orientation</li> <li>Non-Locking</li> </ul>                      | <b>Fig. 38</b><br>BLZ 5.08/270/...<br><ul style="list-style-type: none"> <li>Screw Clamp</li> <li>270° Orientation</li> <li>Non-Locking</li> </ul>                     | <b>Fig. 39</b><br>BLZF 5.08/...<br><ul style="list-style-type: none"> <li>Tension Clamp</li> <li>180° Orientation</li> <li>Non-Locking</li> </ul>                        | <b>Fig. 40</b><br>SL 5.08/90/... B<br><ul style="list-style-type: none"> <li>Single-Level</li> <li>90° Orientation</li> <li>Closed End</li> <li>Locking</li> </ul>       |
| <b>Fig. 41</b><br>SL 5.08/135/... B<br><ul style="list-style-type: none"> <li>Single-Level</li> <li>135° Orientation</li> <li>Closed End</li> <li>Locking</li> </ul>  | <b>Fig. 42</b><br>SL 5.08/180/... B<br><ul style="list-style-type: none"> <li>Single-Level</li> <li>180° Orientation</li> <li>Closed End</li> <li>Locking</li> </ul>   | <b>Fig. 43</b><br>BLZ 7.50/90/... BK<br><ul style="list-style-type: none"> <li>Screw Clamp</li> <li>90° Orientation</li> <li>Non-Locking</li> </ul>                      | <b>Fig. 44</b><br>BLZ 7.50/270/... BK<br><ul style="list-style-type: none"> <li>Screw Clamp</li> <li>270° Orientation</li> <li>Non-Locking</li> </ul>                    |
| <b>Fig. 45</b><br>BLZ 7.50/... BK<br><ul style="list-style-type: none"> <li>Screw Clamp</li> <li>180° Orientation</li> <li>Non-Locking</li> </ul>                     | <b>Fig. 46</b><br>SL 7.50/90/... B BK<br><ul style="list-style-type: none"> <li>Single-Level</li> <li>90° Orientation</li> <li>Closed End</li> <li>Locking</li> </ul>  | <b>Fig. 47</b><br>SL 7.50/180/... B BK<br><ul style="list-style-type: none"> <li>Single-Level</li> <li>180° Orientation</li> <li>Closed End</li> <li>Locking</li> </ul>  | <b>Fig. 48</b><br>BLZ 7.62/90/... BK<br><ul style="list-style-type: none"> <li>Screw Clamp</li> <li>90° Orientation</li> <li>Non-Locking</li> </ul>                      |
| <b>Fig. 49</b><br>BLZ 7.62/270/... BK<br><ul style="list-style-type: none"> <li>Screw Clamp</li> <li>270° Orientation</li> <li>Non-Locking</li> </ul>                 | <b>Fig. 50</b><br>BLZ 7.62/... BK<br><ul style="list-style-type: none"> <li>Screw Clamp</li> <li>180° Orientation</li> <li>Non-Locking</li> </ul>                      | <b>Fig. 51</b><br>SL 7.62/90/... B BK<br><ul style="list-style-type: none"> <li>Single-Level</li> <li>90° Orientation</li> <li>Closed End</li> <li>Locking</li> </ul>    | <b>Fig. 52</b><br>SL 7.62/180/... B BK<br><ul style="list-style-type: none"> <li>Single-Level</li> <li>180° Orientation</li> <li>Closed End</li> <li>Locking</li> </ul>  |

|                              |    | No. of Poles | Block Length (mm) | Digi-Key Part No. | 1      | Pricing 10 100 | Mfg. Part No. |
|------------------------------|----|--------------|-------------------|-------------------|--------|----------------|---------------|
| 32                           | 4  | 20.92        | 281-1437-ND       | 1.13              | 10.13  | 90.00          | 999392        |
|                              | 6  | 31.08        | 281-1438-ND       | 1.70              | 15.30  | 136.00         | 999394        |
|                              | 8  | 41.24        | 281-1439-ND       | 2.25              | 20.25  | 180.00         | 999396        |
|                              | 10 | 51.4         | 281-1440-ND       | 2.83              | 25.43  | 226.00         | 999398        |
|                              | 12 | 61.56        | 281-1441-ND       | 3.38              | 30.38  | 270.00         | 999400        |
| 33                           | 2  | 10.76        | 281-1442-ND       | .63               | 5.63   | 50.00          | 171606        |
|                              | 3  | 15.84        | 281-1443-ND       | .93               | 8.33   | 74.00          | 171607        |
|                              | 4  | 20.92        | 281-1444-ND       | 1.23              | 11.03  | 98.00          | 999434        |
|                              | 6  | 31.08        | 281-1445-ND       | 1.85              | 16.65  | 148.00         | 999436        |
|                              | 8  | 41.24        | 281-1446-ND       | 2.45              | 22.05  | 196.00         | 999438        |
| 34                           | 10 | 51.4         | 281-1447-ND       | 3.08              | 27.68  | 246.00         | 999440        |
|                              | 12 | 61.56        | 281-1448-ND       | 3.68              | 33.08  | 294.00         | 999442        |
|                              | 2  | 10.76        | 281-1449-ND       | .63               | 5.63   | 50.00          | 171604        |
|                              | 3  | 15.84        | 281-1450-ND       | .93               | 8.33   | 74.00          | 171605        |
|                              | 4  | 20.92        | 281-1451-ND       | 1.23              | 11.03  | 98.00          | 999476        |
| 35                           | 6  | 31.08        | 281-1452-ND       | 1.85              | 16.65  | 148.00         | 999478        |
|                              | 8  | 41.24        | 281-1453-ND       | 2.45              | 22.05  | 196.00         | 999480        |
|                              | 10 | 51.4         | 281-1454-ND       | 3.08              | 27.68  | 246.00         | 999482        |
|                              | 12 | 61.56        | 281-1455-ND       | 3.68              | 33.08  | 294.00         | 999484        |
|                              | 4  | 17.78        | 281-1461-ND       | 2.00              | 18.00  | 160.00         | 163515        |
| 36                           | 6  | 27.94        | 281-1462-ND       | 3.00              | 27.00  | 240.00         | 162555        |
|                              | 8  | 38.1         | 281-1463-ND       | 4.00              | 36.00  | 320.00         | 159647        |
|                              | 10 | 48.26        | 281-1464-ND       | 5.00              | 45.00  | 400.00         | 159650        |
|                              | 12 | 58.42        | 281-1465-ND       | 6.00              | 54.00  | 480.00         | 163256        |
| 5.08 mm Lead Spacing - Plugs |    |              |                   |                   |        |                |               |
| 37                           | 2  | 10.16        | 281-1243-ND       | 1.34              | 12.04  | 103.60         | 152641        |
|                              | 3  | 15.24        | 281-1244-ND       | 2.02              | 18.06  | 155.40         | 152651        |
|                              | 4  | 20.32        | 281-1245-ND       | 2.66              | 23.87  | 205.35         | 152661        |
|                              | 6  | 30.48        | 281-1246-ND       | 4.01              | 35.91  | 308.95         | 152681        |
|                              | 8  | 40.64        | 281-1247-ND       | 5.33              | 47.73  | 410.70         | 152701        |
| 38                           | 10 | 50.80        | 281-1248-ND       | 6.65              | 59.56  | 512.45         | 152721        |
|                              | 12 | 60.96        | 281-1249-ND       | 7.94              | 71.17  | 612.35         | 152741        |
|                              | 16 | 81.28        | 281-1250-ND       | 10.61             | 95.03  | 817.70         | 152781        |
|                              | 24 | 121.92       | 281-1251-ND       | 15.91             | 142.55 | 1226.55        | 152861        |
|                              | 2  | 10.16        | 281-1252-ND       | 1.56              | 13.98  | 120.25         | 155271        |
| 39                           | 3  | 15.24        | 281-1253-ND       | 2.30              | 20.64  | 177.60         | 155281        |
|                              | 4  | 20.32        | 281-1254-ND       | 3.07              | 27.52  | 236.80         | 155291        |
|                              | 6  | 30.48        | 281-1255-ND       | 4.57              | 41.07  | 353.35         | 155311        |
|                              | 8  | 40.64        | 281-1256-ND       | 6.12              | 54.83  | 471.75         | 155331        |
|                              | 10 | 50.80        | 281-1257-ND       | 7.63              | 68.37  | 588.30         | 155351        |
| 40                           | 12 | 60.96        | 281-1258-ND       | 9.14              | 81.92  | 704.85         | 155371        |
|                              | 16 | 81.28        | 281-1259-ND       | 12.19             | 109.22 | 938.80         | 155411        |
|                              | 24 | 121.92       | 281-1260-ND       | 18.55             | 166.20 | 1430.05        | 155491        |
|                              | 2  | 10.16        | 281-1261-ND       | 1.56              | 13.98  | 120.25         | 155731        |
|                              | 3  | 15.24        | 281-1262-ND       | 2.30              | 20.64  | 177.60         | 155741        |
| 41                           | 4  | 20.32        | 281-1263-ND       | 3.07              | 27.52  | 236.80         | 155751        |
|                              | 6  | 30.48        | 281-1264-ND       | 4.58              | 41.07  | 353.35         | 155771        |
|                              | 8  | 40.64        | 281-1265-ND       | 6.12              | 54.83  | 471.75         | 155791        |
|                              | 10 | 50.80        | 281-1266-ND       | 7.63              | 68.37  | 588.30         | 155811        |
|                              | 12 | 60.96        | 281-1267-ND       | 9.14              | 81.92  | 704.85         | 155831        |
| 42                           | 16 | 81.28        | 281-1268-ND       | 12.19             | 109.22 | 938.80         | 155871        |
|                              | 24 | 121.92       | 281-1269-ND       | 18.14             | 162.54 | 1398.60        | 155951        |
|                              | 2  | 10.16        | 281-1270-ND       | 1.20              | 10.75  | 92.50          | 168916        |
| 43                           | 3  | 15.24        | 281-1271-ND       | 1.70              | 15.27  | 131.35         | 168917        |
|                              | 4  | 20.32        | 281-1272-ND       | 2.23              | 20.00  | 172.05         | 168918        |
|                              | 6  | 30.48        | 281-1273-ND       | 3.34              | 29.89  | 257.15         | 168920        |

|                                |                              | No. of Poles | Block Length (mm) | Digi-Key Part No. | 1           | Pricing 10 | 100     | Mfg. Part No. |        |
|--------------------------------|------------------------------|--------------|-------------------|-------------------|-------------|------------|---------|---------------|--------|
| 39                             | 8                            | 40.64        |                   | 281-1274-ND       | 4.37        | 39.13      | 336.70  | 168922        |        |
|                                | 10                           | 50.80        |                   | 281-1275-ND       | 5.35        | 47.95      | 412.55  | 168924        |        |
|                                | 12                           | 60.96        |                   | 281-1276-ND       | 6.41        | 57.41      | 493.95  | 168926        |        |
|                                | 16                           | 81.28        |                   | 281-1277-ND       | 8.54        | 76.54      | 658.60  | 168930        |        |
|                                | 24                           | 121.92       |                   | 281-1278-ND       | 12.70       | 113.74     | 978.65  | 168938        |        |
| 5.08 mm Lead Spacing - Headers |                              |              |                   |                   |             |            |         |               |        |
| 40                             | 2                            | 12.16        |                   | 281-1279-ND       | .48         | 4.30       | 37.00   | 151491        |        |
|                                | 3                            | 17.24        |                   | 281-1280-ND       | .70         | 6.24       | 53.65   | 151501        |        |
|                                | 4                            | 22.32        |                   | 281-1281-ND       | .96         | 8.60       | 74.00   | 151511        |        |
|                                | 6                            | 32.48        |                   | 281-1282-ND       | 1.42        | 12.69      | 109.15  | 151531        |        |
|                                | 8                            | 42.64        |                   | 281-1283-ND       | 1.85        | 16.56      | 142.45  | 151551        |        |
| 41                             | 10                           | 52.80        |                   | 281-1284-ND       | 2.33        | 20.86      | 179.45  | 151571        |        |
|                                | 12                           | 62.96        |                   | 281-1285-ND       | 2.78        | 24.94      | 214.60  | 151591        |        |
|                                | 16                           | 83.28        |                   | 281-1286-ND       | 3.70        | 33.11      | 284.90  | 151631        |        |
|                                | 24                           | 123.92       |                   | 281-1287-ND       | 5.40        | 48.38      | 416.25  | 151711        |        |
|                                | 2                            | 12.16        |                   | 281-1288-ND       | .36         | 3.23       | 27.75   | 163550        |        |
| 42                             | 3                            | 17.24        |                   | 281-1289-ND       | .55         | 4.95       | 42.55   | 163551        |        |
|                                | 4                            | 22.32        |                   | 281-1290-ND       | .72         | 6.45       | 55.50   | 163552        |        |
|                                | 6                            | 32.48        |                   | 281-1291-ND       | 1.10        | 9.89       | 85.10   | 163554        |        |
|                                | 8                            | 42.64        |                   | 281-1292-ND       | 1.44        | 12.90      | 111.00  | 163556        |        |
|                                | 10                           | 52.80        |                   | 281-1293-ND       | 1.80        | 16.13      | 138.75  | 163558        |        |
| 43                             | 12                           | 62.96        |                   | 281-1294-ND       | 2.16        | 19.35      | 166.50  | 163560        |        |
|                                | 16                           | 83.28        |                   | 281-1295-ND       | 2.88        | 25.80      | 222.00  | 163564        |        |
|                                | 24                           | 123.92       |                   | 281-1296-ND       | 4.32        | 38.70      | 333.00  | 163572        |        |
|                                | 2                            | 12.16        |                   | 281-1297-ND       | .48         | 4.30       | 37.00   | 152411        |        |
|                                | 3                            | 17.24        |                   | 281-1298-ND       | .70         | 6.24       | 53.65   | 152421        |        |
| 44                             | 4                            | 22.32        |                   | 281-1299-ND       | .96         | 8.60       | 74.00   | 152431        |        |
|                                | 6                            | 32.48        |                   | 281-1300-ND       | 1.42        | 12.69      | 109.15  | 152451        |        |
|                                | 8                            | 42.64        |                   | 281-1301-ND       | 1.85        | 16.56      | 142.45  | 152471        |        |
|                                | 10                           | 52.80        |                   | 281-1302-ND       | 2.33        | 20.86      | 179.45  | 152491        |        |
|                                | 12                           | 62.96        |                   | 281-1303-ND       | 2.78        | 24.94      | 214.60  | 152511        |        |
| 45                             | 16                           | 83.28        |                   | 281-1304-ND       | 3.70        | 33.11      | 284.90  | 152551        |        |
|                                | 24                           | 123.92       |                   | 281-1305-ND       | 5.52        | 49.45      | 425.50  | 152631        |        |
|                                | 7.50 mm Lead Spacing - Plugs |              |                   |                   |             |            |         |               |        |
|                                | 46                           | 2            | 15.0              |                   | 281-1306-ND | 2.15       | 19.35   | 172.00        | 170190 |
|                                |                              | 3            | 22.5              |                   | 281-1307-ND | 3.23       | 29.03   | 258.00        | 170191 |
| 4                              |                              | 30.0         |                   | 281-1308-ND       | 4.30        | 38.70      | 344.00  | 170192        |        |
| 6                              |                              | 45.0         |                   | 281-1309-ND       | 6.43        | 57.83      | 514.00  | 170194        |        |
| 8                              |                              | 60.0         |                   | 281-1310-ND       | 8.57        | 77.18      | 686.00  | 170196        |        |
| 47                             | 10                           | 75.0         |                   | 281-1311-ND       | 10.73       | 96.53      | 858.00  | 170198        |        |
|                                | 12                           | 90.0         |                   | 281-1312-ND       | 12.85       | 115.65     | 1028.00 | 170200        |        |
|                                | 2                            | 15.0         |                   | 281-1313-ND       | 2.15        | 19.35      | 172.00  | 170234        |        |
|                                | 3                            | 22.5         |                   | 281-1314-ND       | 3.23        | 29.03      | 258.00  | 170235        |        |
|                                | 4                            | 30.0         |                   | 281-1315-ND       | 4.30        | 38.70      | 344.00  | 170236        |        |
| 48                             | 6                            | 45.0         |                   | 281-1316-ND       | 6.43        | 57.83      | 514.00  | 170238        |        |
|                                | 8                            | 60.0         |                   | 281-1317-ND       | 8.57        | 77.18      | 686.00  | 170240        |        |
|                                | 10                           | 75.0         |                   | 281-1318-ND       | 10.73       | 96.53      | 858.00  | 170242        |        |
|                                | 12                           | 90.0         |                   | 281-1319-ND       | 12.85       | 115.65     | 1028.00 | 170244        |        |
|                                | 2                            | 15.0         |                   | 281-1320-ND       | 1.90        | 17.10      | 152.00  | 162803        |        |
| 49                             | 3                            | 22.5         |                   | 281-1321-ND       | 2.78        | 24.98      | 222.00  | 162804        |        |
|                                | 4                            | 30.0         |                   | 281-1322-ND       | 3.70        | 33.30      | 296.00  | 162805        |        |
|                                | 6                            | 45.0         |                   | 281-1323-ND       | 5.55        | 49.95      | 444.00  | 162807        |        |
|                                | 8                            | 60.0         |                   | 281-1324-ND       | 7.40        | 66.60      | 592.00  | 162809        |        |
|                                | 10                           | 75.0         |                   | 281-1325-ND       | 9.25        | 83.25      | 740.00  | 162811        |        |
| 50                             | 12                           | 90.0         |                   | 281-1326-ND       | 11.10       | 99.90      | 888.00  | 162813        |        |

These On-Shore Technology Terminal Blocks are Stackable for any number of contacts. 4.5mm Lead Length.

## SPECIFICATIONS:

FIGURES 1 & 2: • Rated Voltage: 320V - 125V • Rated Current: 6A • Temperature Range: -30°C/+100°C • Flame Class: UL94 V-0 • Color: Grey

FIGURE 3: • Rated Voltage: VDE 0110-V, Group 2: 630V; VDE 0110-V, Group 3: 250V • Rated Current: 16A • Terminal Screw: M 3 • Rated Torque: 0.5 Nm max. • Temperature Range: -30°C/+100°C • Flame Class: UL94 V-0

FIGURES 4 & 5: • Rated Voltage: 630V • Rated Current: 16A • Temperature Range: -30°C/+100°C • Flame Class: UL94 V-0 • Color: Green

FIGURES 6 & 7: • Rated Voltage: VDE 0110-V, Group 2: 630V; VDE 0110-V, Group 3: 250V • Rated Current: 16A • Terminal Screw: M 3 • Rated Torque: 0.5 Nm max. • Temperature Range: -30°C/+100°C • Flame Class: UL94 V-0

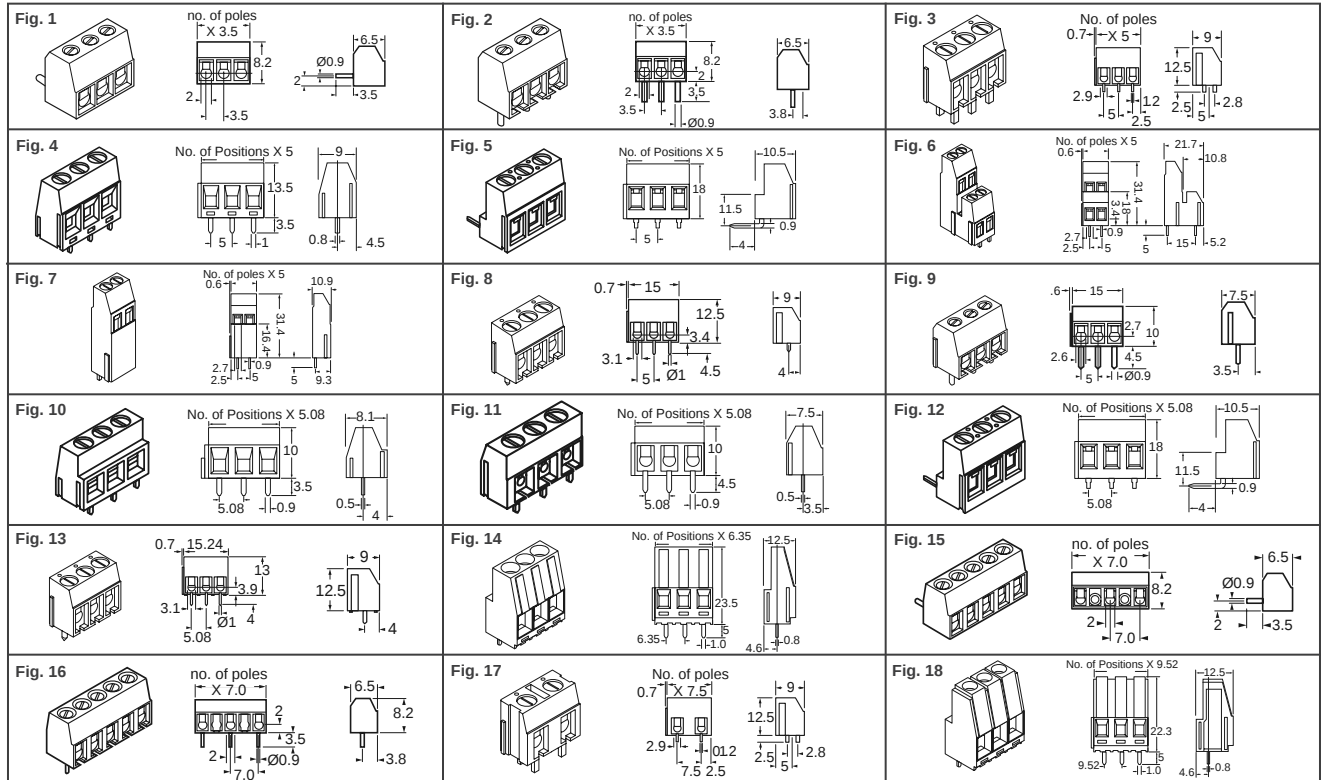
FIGURES 8, 9 & 13: • Rated Voltage: 250V • Rated Current: 15A • Wire Size: AWG 22-14 • Temperature Range: -30°C/+105°C • Flame Class: UL94 V-0 • Color: Blue

FIGURES 10, 11, 12, & 14: • Rated Voltage: 630V (Fig. 14: 500V) • Rated Current: 16A (Fig. 14: 32A) • Temperature Range: -30°C/+100°C (Fig. 10 & 14: -30°C/+105°C) • Flame Class: UL94 V-0 • Color: Green (Fig. 11: Grey)

FIGURES 15 & 16: • Rated Voltage: 400V • Rated Current: 6A • Temperature Range: -30°C/+100°C • Flame Class: UL94 V-0 • Color: Charcoal Grey

FIGURE 17: • Rated Voltage: VDE 0110-V, Group 3: 500V • Rated Current: 16A • Terminal Screw: M 3 • Rated Torque: 0.5 Nm max. • Temperature Range: -30°C/+100°C • Flame Class: UL94 V-0 • Color: Blue

FIGURE 18: • Rated Voltage: 630V • Rated Current: 32A • Temperature Range: -30°C/+105°C • Flame Class: UL94 V-0 • Color: Green



| Fig.                                        | No. of Pos. | Block Length (mm) | Digi-Key Part No. | 1    | Pricing 10 100 |
|---------------------------------------------|-------------|-------------------|-------------------|------|----------------|
| <b>3.5mm Lead Spacing - Terminal Blocks</b> |             |                   |                   |      |                |
| 1                                           | 2           | 7.0               | ED1501-ND         | .40  | 3.60 32.00     |
|                                             | 3           | 10.5              | ED1502-ND         | .60  | 5.40 48.00     |
|                                             | 4           | 14.0              | ED1503-ND         | .80  | 7.20 64.00     |
|                                             | 5           | 17.5              | ED1504-ND         | 1.00 | 9.00 80.00     |
|                                             | 6           | 21.0              | ED1505-ND         | 1.20 | 10.80 96.00    |
|                                             | 7           | 24.5              | ED1506-ND         | 1.40 | 12.60 112.00   |
|                                             | 8           | 28.0              | ED1507-ND         | 1.60 | 14.40 128.00   |
|                                             | 9           | 31.5              | ED1508-ND         | 1.80 | 16.20 144.00   |
|                                             | 10          | 35.0              | ED1509-ND         | 2.00 | 18.00 160.00   |
|                                             | 11          | 38.5              | ED1510-ND         | 2.20 | 19.80 176.00   |
|                                             | 12          | 42.0              | ED1511-ND         | 2.40 | 21.60 192.00   |
|                                             | 14          | 49.0              | ED1512-ND         | 2.80 | 25.20 224.00   |
|                                             | 16          | 56.0              | ED1513-ND         | 3.20 | 28.80 256.00   |
| 2                                           | 2           | 7.0               | ED1514-ND         | .40  | 3.60 32.00     |
|                                             | 3           | 10.5              | ED1515-ND         | .60  | 5.40 48.00     |
|                                             | 4           | 14.0              | ED1516-ND         | .80  | 7.20 64.00     |
|                                             | 5           | 17.5              | ED1517-ND         | 1.00 | 9.00 80.00     |
|                                             | 6           | 21.0              | ED1518-ND         | 1.20 | 10.80 96.00    |
|                                             | 7           | 24.5              | ED1519-ND         | 1.40 | 12.60 112.00   |
|                                             | 8           | 28.0              | ED1520-ND         | 1.60 | 14.40 128.00   |
|                                             | 9           | 31.5              | ED1521-ND         | 1.80 | 16.20 144.00   |
|                                             | 10          | 35.0              | ED1522-ND         | 2.00 | 18.00 160.00   |
|                                             | 11          | 38.5              | ED1523-ND         | 2.20 | 19.80 176.00   |
|                                             | 12          | 42.0              | ED1524-ND         | 2.40 | 21.60 192.00   |
|                                             | 14          | 49.0              | ED1525-ND         | 2.80 | 25.20 224.00   |
|                                             | 16          | 56.0              | ED1526-ND         | 3.20 | 28.80 256.00   |
| 3                                           | 2           | 10.0              | ED1556-ND         | .78  | 6.98 62.00     |
|                                             | 3           | 15.0              | ED1557-ND         | 1.16 | 10.46 93.00    |
|                                             | 4           | 20.0              | ED1558-ND         | 1.55 | 13.95 124.00   |
|                                             | 5           | 25.0              | ED1559-ND         | 1.94 | 17.44 155.00   |
|                                             | 6           | 30.0              | ED1560-ND         | 2.33 | 20.93 186.00   |
|                                             | 7           | 35.0              | ED1561-ND         | 2.71 | 24.41 217.00   |
|                                             | 8           | 40.0              | ED1562-ND         | 3.10 | 27.90 248.00   |
|                                             | 9           | 45.0              | ED1563-ND         | 3.49 | 31.39 279.00   |
|                                             | 10          | 50.0              | ED1564-ND         | 3.88 | 34.88 310.00   |
|                                             | 11          | 55.0              | ED1565-ND         | 4.26 | 38.36 341.00   |
|                                             | 12          | 60.0              | ED1566-ND         | 4.65 | 41.85 372.00   |
| 4                                           | 2           | 10.0              | ED1930-ND         | .63  | 5.69 50.60     |
|                                             | 3           | 15.0              | ED1931-ND         | .94  | 8.44 75.00     |

| Fig.                                         | No. of Pos. | Block Length (mm) | Digi-Key Part No. | 1     | Pricing 10 100 |
|----------------------------------------------|-------------|-------------------|-------------------|-------|----------------|
| 5                                            | 2           | 10.0              | ED1932-ND         | 1.02  | 9.14 81.20     |
|                                              | 3           | 15.0              | ED1933-ND         | 1.52  | 13.70 121.80   |
|                                              | 2           | 10.0              | ED1578-ND         | 2.20  | 19.80 176.00   |
|                                              | 3           | 15.0              | ED1579-ND         | 3.30  | 29.70 264.00   |
|                                              | 4           | 20.0              | ED1580-ND         | 4.40  | 39.60 352.00   |
|                                              | 5           | 25.0              | ED1581-ND         | 5.50  | 49.50 440.00   |
|                                              | 6           | 30.0              | ED1582-ND         | 6.60  | 59.40 528.00   |
|                                              | 7           | 35.0              | ED1583-ND         | 7.70  | 69.30 616.00   |
|                                              | 8           | 40.0              | ED1584-ND         | 8.80  | 79.20 704.00   |
|                                              | 9           | 45.0              | ED1585-ND         | 9.90  | 89.10 792.00   |
|                                              | 10          | 50.0              | ED1586-ND         | 11.00 | 99.00 880.00   |
|                                              | 11          | 55.0              | ED1587-ND         | 12.10 | 108.90 896.80  |
| 6                                            | 12          | 60.0              | ED1588-ND         | 13.20 | 118.80 1056.00 |
|                                              | 2           | 10.0              | ED1589-ND         | 1.35  | 12.15 108.00   |
|                                              | 4           | 20.0              | ED1591-ND         | 2.70  | 24.30 216.00   |
|                                              | 6           | 30.0              | ED1593-ND         | 4.05  | 36.45 324.00   |
|                                              | 8           | 40.0              | ED1595-ND         | 5.40  | 48.60 432.00   |
|                                              | 10          | 50.0              | ED1597-ND         | 6.75  | 60.75 540.00   |
|                                              | 12          | 60.0              | ED1599-ND         | 8.10  | 72.90 648.00   |
| 7                                            | 2           | 10.0              | ED1601-ND         | .34   | 3.08 27.40     |
|                                              | 3           | 15.0              | ED1602-ND         | .51   | 4.61 41.00     |
|                                              | 4           | 20.0              | ED2233-ND         | .69   | 6.21 55.20     |
|                                              | 6           | 30.0              | ED2234-ND         | 1.04  | 9.32 82.80     |
|                                              | 8           | 40.0              | ED2235-ND         | 1.38  | 12.42 110.40   |
|                                              | 12          | 60.0              | ED2236-ND         | 2.07  | 18.63 165.60   |
| 8                                            | 2           | 10.0              | ED1623-ND         | .37   | 3.33 29.60     |
|                                              | 3           | 15.0              | ED1624-ND         | .56   | 5.02 44.60     |
|                                              | 4           | 20.0              | ED2221-ND         | .74   | 6.66 59.20     |
|                                              | 5           | 25.0              | ED2222-ND         | .93   | 8.33 74.00     |
|                                              | 6           | 30.0              | ED2223-ND         | 1.11  | 9.99 88.80     |
|                                              | 7           | 35.0              | ED2224-ND         | 1.30  | 11.66 103.60   |
|                                              | 10          | 50.0              | ED2225-ND         | 1.85  | 16.65 148.00   |
|                                              | 12          | 60.0              | ED2226-ND         | 2.22  | 19.98 177.60   |
| <b>5.08mm Lead Spacing - Terminal Blocks</b> |             |                   |                   |       |                |
| 10                                           | 2           | 10.16             | ED1973-ND         | .70   | 6.30 56.00     |
|                                              | 3           | 15.24             | ED1974-ND         | 1.05  | 9.45 84.00     |
|                                              | 2           | 10.16             | ED1975-ND         | .40   | 3.60 32.00     |
| 11                                           | 3           | 15.24             | ED1976-ND         | .60   | 5.40 48.00     |
|                                              | 2           | 10.16             | ED1977-ND         | 1.02  | 9.14 81.20     |
| 12                                           | 3           | 15.24             | ED1978-ND         | 1.52  | 13.70 121.80   |

| Fig.                                         | No. of Pos. | Block Length (mm) | Digi-Key Part No. | 1    | Pricing 10 100 |
|----------------------------------------------|-------------|-------------------|-------------------|------|----------------|
| 13                                           | 2           | 10.16             | ED1609-ND         | .37  | 3.33 29.60     |
|                                              | 3           | 15.24             | ED1610-ND         | .55  | 4.97 44.20     |
|                                              | 4           | 20.32             | ED2227-ND         | .74  | 6.66 59.20     |
|                                              | 5           | 25.40             | ED2228-ND         | .93  | 8.33 74.00     |
|                                              | 6           | 30.48             | ED2229-ND         | 1.11 | 9.99 88.80     |
|                                              | 7           | 35.56             | ED2230-ND         | 1.30 | 11.66 103.60   |
|                                              | 10          | 50.80             | ED2231-ND         | 1.85 | 16.65 148.00   |
|                                              | 12          | 60.96             | ED2232-ND         | 2.22 | 19.98 177.60   |
| <b>6.35mm Lead Spacing - Terminal Blocks</b> |             |                   |                   |      |                |
| 14                                           | 2           | 12.7              | ED1979-ND         | 1.90 | 17.10 152.00   |
|                                              | 3           | 19.05             | ED1980-ND         | 2.60 | 23.40 208.00   |
| <b>7.0mm Lead Spacing - Terminal Blocks</b>  |             |                   |                   |      |                |
| 15                                           | 2           | 14.0              | ED1527-ND         | .44  | 3.96 35.20     |
|                                              | 3           | 21.0              | ED1528-ND         | .66  | 5.94 52.80     |
|                                              | 4           | 28.0              | ED1529-ND         | .88  | 7.92 70.40     |
|                                              | 5           | 35.0              | ED1530-ND         | 1.10 | 9.90 88.00     |
|                                              | 6           | 42.0              | ED1531-ND         | 1.32 | 11.88 105.60   |
|                                              | 7           | 49.0              | ED1532-ND         | 1.54 | 13.86 123.20   |
|                                              | 8           | 56.0              | ED1533-ND         | 1.76 | 15.84 140.80   |
| 16                                           | 2           | 14.0              | ED1534-ND         | .44  | 3.96 35.20     |
|                                              | 3           | 21.0              | ED1535-ND         | .66  | 5.94 52.80     |
|                                              | 4           | 28.0              | ED1536-ND         | .88  | 7.92 70.40     |
|                                              | 5           | 35.0              | ED1537-ND         | 1.10 | 9.90 88.00     |
|                                              | 6           | 42.0              | ED1538-ND         | 1.32 | 11.88 105.60   |
|                                              | 7           | 49.0              | ED1539-ND         | 1.54 | 13.86 123.20   |
|                                              | 8           | 56.0              | ED1540-ND         | 1.76 | 15.84 140.80   |
| <b>7.5mm Lead Spacing - Terminal Blocks</b>  |             |                   |                   |      |                |
| 17                                           | 2           | 15.0              | ED1567-ND         | .88  | 7.88 70.00     |
|                                              | 3           | 22.5              | ED1568-ND         | 1.31 | 11.81 105.00   |
|                                              | 4           | 30.0              | ED1569-ND         | 1.75 | 15.75 140.00   |
|                                              | 5           | 37.5              | ED1570-ND         | 2.19 | 19.69 175.00   |
|                                              | 6           | 45.0              | ED1571-ND         | 2.63 | 23.63 210.00   |
|                                              | 7           | 52.5              | ED1572-ND         | 3.06 | 27.56 245.00   |
|                                              | 8           | 60.0              | ED1573-ND         | 3.50 | 31.50 280.00   |
|                                              | 9           | 67.5              | ED1574-ND         | 3.94 | 35.44 315.00   |
|                                              | 10          | 75.0              | ED1575-ND         | 4.38 | 39.38 350.00   |
|                                              | 11          | 82.5              | ED1576-ND         | 4.81 | 43.31 385.00   |
|                                              | 12          | 90.0              | ED1577-ND         | 5.25 | 47.25 420.00   |
| <b>9.52mm Lead Spacing - Terminal Blocks</b> |             |                   |                   |      |                |
| 18                                           | 2           | 19.04             | ED1981-ND         | 2.00 | 18.00 160.00   |
|                                              | 3           | 28.56             | ED1982-ND         | 3.00 | 27.00 240.00   |

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## FEATURES

### • Modularity:

Fixed and Pluggable PCB Terminals are available in both metric and inch pin spacings. The key feature of our modular terminal housings is their tongue and groove joint design that permits individual 2 or 3 pole terminal modules to be joined together to produce multi-pole terminal assemblies.

### • Housings:

PCB Mini-Terminal Block housings are precision molded from self-extinguishing 6.6 polyamide (nylon) molding material. All housings have funnel shaped wire entry guides to prevent wire fraying and minimize misconnections.

### SPECIFICATIONS:

#### Figures 1-3:

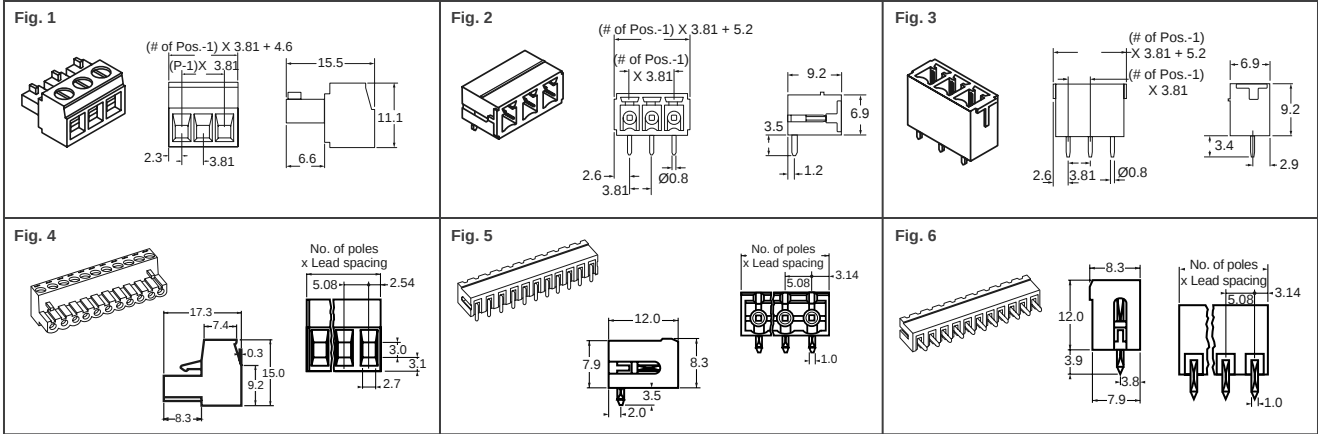
- Rated Voltage: 125V • Rated Current: 8A • Temperature Range: -30°C/+105°C
- Flame Class: UL 94 V-O • Color: Green

#### Figures 4-12:

- Rated Voltage: 250V • Rated Current: 12A • Temperature Range: -30°C/+100°C
- Flame Class: UL 94 V-O • Color: Green

#### Figures 13-15:

- Rated Voltage: 400V • Rated Current: 12A • Temperature Range: -30°C/+100°C
- Flame Class: UL 94 V-O • Color: Green

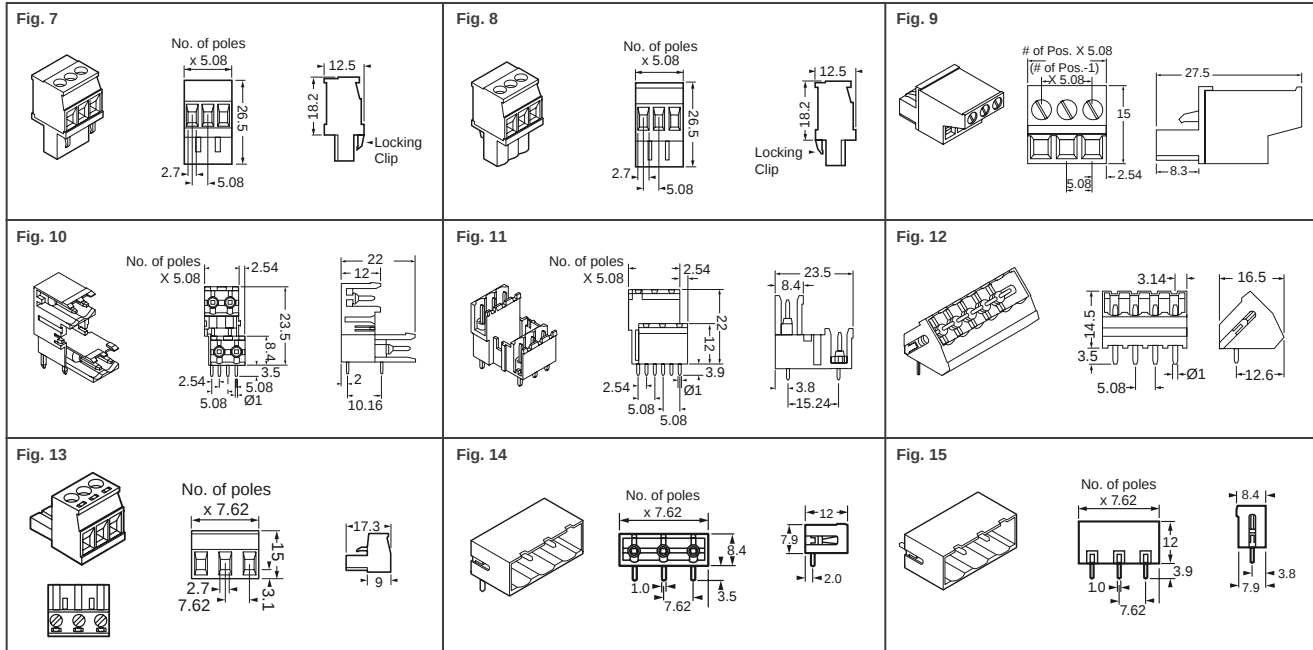


| Fig.                                           | No. of Poles | Block Length (mm) | Digi-Key Part No. | Pricing            |
|------------------------------------------------|--------------|-------------------|-------------------|--------------------|
|                                                |              |                   |                   | 1 10 100           |
| <b>3.81mm Lead Spacing — Plugs</b>             |              |                   |                   |                    |
| 1                                              | 2            | 3.81              | ED1960-ND         | 1.30 11.70 104.00  |
|                                                | 3            | 7.62              | ED1961-ND         | 1.95 17.55 156.00  |
|                                                | 4            | 11.43             | ED1962-ND         | 2.60 23.40 208.00  |
|                                                | 5            | 15.24             | ED1963-ND         | 3.25 29.25 260.00  |
|                                                | 6            | 19.05             | ED1964-ND         | 3.90 35.10 312.00  |
|                                                | 7            | 22.86             | ED1965-ND         | 4.55 40.95 364.00  |
|                                                | 8            | 26.67             | ED1966-ND         | 5.20 46.80 416.00  |
|                                                | 9            | 30.48             | ED1967-ND         | 5.85 52.65 468.00  |
|                                                | 10           | 34.29             | ED1968-ND         | 6.50 58.50 520.00  |
|                                                | 11           | 38.10             | ED1969-ND         | 7.15 64.35 572.00  |
|                                                | 12           | 41.91             | ED1970-ND         | 7.80 70.20 624.00  |
|                                                | 14           | 49.53             | ED1971-ND         | 9.10 81.90 728.00  |
|                                                | 16           | 57.15             | ED1972-ND         | 10.40 93.60 832.00 |
| <b>3.81mm Lead Spacing — Horizontal Header</b> |              |                   |                   |                    |
| 2                                              | 2            | 3.81              | ED1934-ND         | .60 5.40 48.00     |
|                                                | 3            | 7.62              | ED1935-ND         | .90 8.10 72.00     |
|                                                | 4            | 11.43             | ED1936-ND         | 1.20 10.80 96.00   |
|                                                | 5            | 15.24             | ED1937-ND         | 1.50 13.50 120.00  |
|                                                | 6            | 19.05             | ED1938-ND         | 1.80 16.20 144.00  |
|                                                | 7            | 22.86             | ED1939-ND         | 2.10 18.90 168.00  |
|                                                | 8            | 26.67             | ED1940-ND         | 2.40 21.60 192.00  |
|                                                | 9            | 30.48             | ED1941-ND         | 2.70 24.30 216.00  |
|                                                | 10           | 34.29             | ED1942-ND         | 3.00 27.00 240.00  |
|                                                | 11           | 38.10             | ED1943-ND         | 3.30 29.70 264.00  |
|                                                | 12           | 41.91             | ED1944-ND         | 3.60 32.40 288.00  |
|                                                | 14           | 49.53             | ED1945-ND         | 4.20 37.80 336.00  |
|                                                | 16           | 57.15             | ED1946-ND         | 4.80 43.20 384.00  |
| <b>3.81mm Lead Spacing — Vertical Header</b>   |              |                   |                   |                    |
| 3                                              | 2            | 3.81              | ED1947-ND         | .60 5.40 48.00     |
|                                                | 3            | 7.62              | ED1948-ND         | .90 8.10 72.00     |
|                                                | 4            | 11.43             | ED1949-ND         | 1.20 10.80 96.00   |
|                                                | 5            | 15.24             | ED1950-ND         | 1.50 13.50 120.00  |
|                                                | 6            | 19.05             | ED1951-ND         | 1.80 16.20 144.00  |
|                                                | 7            | 22.86             | ED1952-ND         | 2.10 18.90 168.00  |
|                                                | 8            | 26.67             | ED1953-ND         | 2.40 21.60 192.00  |
|                                                | 9            | 30.48             | ED1954-ND         | 2.70 24.30 216.00  |
|                                                | 10           | 34.29             | ED1955-ND         | 3.00 27.00 240.00  |
|                                                | 11           | 38.10             | ED1956-ND         | 3.30 29.70 264.00  |
|                                                | 12           | 41.91             | ED1957-ND         | 3.60 32.40 288.00  |
|                                                | 14           | 49.53             | ED1958-ND         | 4.20 37.80 336.00  |
|                                                | 16           | 57.15             | ED1959-ND         | 4.80 43.20 384.00  |

| Fig.                                         | No. of Poles | Block Length (mm) | Digi-Key Part No. | Pricing            |
|----------------------------------------------|--------------|-------------------|-------------------|--------------------|
|                                              |              |                   |                   | 1 10 100           |
| <b>5mm Lead Spacing — Plugs</b>              |              |                   |                   |                    |
| 4                                            | 2            | 10                | ED1701-ND*        | 1.05 9.35 82.00    |
|                                              | 3            | 15                | ED1702-ND*        | 1.58 14.03 123.00  |
|                                              | 4            | 20                | ED1703-ND*        | 1.80 16.20 144.00  |
|                                              | 5            | 25                | ED1704-ND*        | 2.25 20.25 180.00  |
|                                              | 6            | 30                | ED1705-ND*        | 2.70 24.30 216.00  |
|                                              | 7            | 35                | ED1706-ND*        | 3.15 28.35 252.00  |
|                                              | 8            | 40                | ED1707-ND*        | 3.60 32.40 288.00  |
|                                              | 9            | 45                | ED1708-ND*        | 4.05 36.45 324.00  |
|                                              | 10           | 50                | ED1709-ND*        | 4.50 40.50 360.00  |
|                                              | 11           | 55                | ED1710-ND*        | 4.95 44.55 396.00  |
|                                              | 12           | 60                | ED1711-ND*        | 5.40 48.60 432.00  |
|                                              | 14           | 70                | ED1712-ND*        | 6.30 56.70 504.00  |
|                                              | 16           | 80                | ED1713-ND*        | 7.20 64.80 576.00  |
|                                              | 18           | 90                | ED1714-ND*        | 8.10 72.90 648.00  |
|                                              | 20           | 100               | ED1715-ND*        | 9.00 81.00 720.00  |
|                                              | 24           | 120               | ED1716-ND*        | 10.80 97.20 864.00 |
| <b>5mm Lead Spacing — Horizontal Headers</b> |              |                   |                   |                    |
| 5                                            | 2            | 10                | ED1801-ND†        | .37 3.30 29.00     |
|                                              | 3            | 15                | ED1802-ND†        | .56 4.95 43.50     |
|                                              | 4            | 20                | ED1803-ND†        | .74 6.60 58.00     |
|                                              | 5            | 25                | ED1804-ND†        | .93 8.25 72.50     |
|                                              | 6            | 30                | ED1805-ND†        | 1.11 9.90 87.00    |
|                                              | 7            | 35                | ED1806-ND†        | 1.30 11.55 101.50  |
|                                              | 8            | 40                | ED1807-ND†        | 1.48 13.20 116.00  |
|                                              | 9            | 45                | ED1808-ND†        | 1.67 14.85 130.50  |
|                                              | 10           | 50                | ED1809-ND†        | 1.85 16.50 145.00  |
|                                              | 11           | 55                | ED1810-ND†        | 2.04 18.15 159.50  |
|                                              | 12           | 60                | ED1811-ND†        | 2.22 19.80 174.00  |
|                                              | 14           | 70                | ED1812-ND†        | 2.59 23.10 203.00  |
|                                              | 16           | 80                | ED1813-ND†        | 2.96 26.40 232.00  |
|                                              | 18           | 90                | ED1814-ND†        | 3.33 29.70 261.00  |
|                                              | 20           | 100               | ED1815-ND†        | 3.70 33.00 290.00  |
|                                              | 24           | 120               | ED1816-ND†        | 4.44 39.60 348.00  |
| <b>5mm Lead Spacing — Vertical Headers</b>   |              |                   |                   |                    |
| 6                                            | 2            | 10                | ED1833-ND†        | .37 3.30 29.00     |
|                                              | 3            | 15                | ED1834-ND†        | .56 4.95 43.50     |
|                                              | 4            | 20                | ED1835-ND†        | .74 6.60 58.00     |
|                                              | 5            | 25                | ED1836-ND†        | .93 8.25 72.50     |
|                                              | 6            | 30                | ED1837-ND†        | 1.11 9.90 87.00    |
|                                              | 7            | 35                | ED1838-ND†        | 1.30 11.55 101.50  |
|                                              | 8            | 40                | ED1839-ND†        | 1.48 13.20 116.00  |
|                                              | 9            | 45                | ED1840-ND†        | 1.67 14.85 130.50  |
|                                              | 10           | 50                | ED1841-ND†        | 1.85 16.50 145.00  |
|                                              | 11           | 55                | ED1842-ND†        | 2.04 18.15 159.50  |

| Fig.                                            | No. of Poles | Block Length (mm) | Digi-Key Part No. | Pricing             |
|-------------------------------------------------|--------------|-------------------|-------------------|---------------------|
|                                                 |              |                   |                   | 1 10 100            |
| 6                                               | 12           | 60                | ED1843-ND†        | 2.22 19.80 174.00   |
|                                                 | 14           | 70                | ED1844-ND†        | 2.59 23.10 203.00   |
|                                                 | 16           | 80                | ED1845-ND†        | 2.96 26.40 232.00   |
|                                                 | 18           | 90                | ED1846-ND†        | 3.33 29.70 261.00   |
|                                                 | 20           | 100               | ED1847-ND†        | 3.70 33.00 290.00   |
|                                                 | 24           | 120               | ED1848-ND†        | 4.44 39.60 348.00   |
| <b>5.08mm Lead Spacing — Plugs</b>              |              |                   |                   |                     |
| 4                                               | 2            | 10.16             | ED1717-ND*        | 1.05 9.35 82.00     |
|                                                 | 3            | 15.24             | ED1718-ND*        | 1.58 14.03 123.00   |
|                                                 | 4            | 20.32             | ED1719-ND*        | 2.10 18.70 164.00   |
|                                                 | 5            | 25.40             | ED1720-ND*        | 2.63 23.38 205.00   |
|                                                 | 6            | 30.48             | ED1721-ND*        | 3.15 28.05 246.00   |
|                                                 | 7            | 35.56             | ED1722-ND*        | 3.68 32.73 287.00   |
|                                                 | 8            | 40.64             | ED1723-ND*        | 4.20 37.40 328.00   |
|                                                 | 9            | 45.72             | ED1724-ND*        | 4.73 42.08 369.00   |
|                                                 | 10           | 50.80             | ED1725-ND*        | 5.25 46.75 410.00   |
|                                                 | 11           | 55.88             | ED1726-ND*        | 5.78 51.43 451.00   |
|                                                 | 12           | 60.96             | ED1727-ND*        | 6.30 56.10 492.00   |
|                                                 | 14           | 71.12             | ED1728-ND*        | 7.35 64.69 574.00   |
|                                                 | 16           | 81.28             | ED1729-ND*        | 8.40 73.94 656.00   |
|                                                 | 18           | 91.44             | ED1730-ND*        | 9.45 83.18 738.00   |
|                                                 | 20           | 101.60            | ED1731-ND*        | 10.50 92.42 820.00  |
|                                                 | 24           | 121.92            | ED1732-ND*        | 12.60 110.90 984.00 |
| <b>5.08mm Lead Spacing — Horizontal Headers</b> |              |                   |                   |                     |
| 5                                               | 2            | 10.16             | ED1817-ND†        | .37 3.30 29.00      |
|                                                 | 3            | 15.24             | ED1818-ND†        | .56 4.95 43.50      |
|                                                 | 4            | 20.32             | ED1819-ND†        | .74 6.60 58.00      |
|                                                 | 5            | 25.40             | ED1820-ND†        | .93 8.25 72.50      |
|                                                 | 6            | 30.48             | ED1821-ND†        | 1.11 9.90 87.00     |
|                                                 | 7            | 35.56             | ED1822-ND†        | 1.30 11.55 101.50   |
|                                                 | 8            | 40.64             | ED1823-ND†        | 1.48 13.20 116.00   |
|                                                 | 9            | 45.72             | ED1824-ND†        | 1.67 14.85 130.50   |
|                                                 | 10           | 50.80             | ED1825-ND†        | 1.85 16.50 145.00   |
|                                                 | 11           | 55.88             | ED1826-ND†        | 2.04 18.15 159.50   |
|                                                 | 12           | 60.96             | ED1827-ND†        | 2.22 19.80 174.00   |
|                                                 | 14           | 71.12             | ED1828-ND†        | 2.59 23.10 203.00   |
|                                                 | 16           | 81.28             | ED1829-ND†        | 2.96 26.40 232.00   |
|                                                 | 18           | 91.44             | ED1830-ND†        | 3.33 29.70 261.00   |
|                                                 | 20           | 101.60            | ED1831-ND†        | 3.70 33.00 290.00   |
|                                                 | 24           | 121.92            | ED1832-ND†        | 4.44 39.60 348.00   |
| <b>5.08mm Lead Spacing — Vertical Headers</b>   |              |                   |                   |                     |
| 6                                               | 2            | 10.16             | ED1849-ND†        | .37 3.30 29.00      |
|                                                 | 3            | 15.24             | ED1850-ND†        | .56 4.95 43.50      |
|                                                 | 4            | 20.32             | ED1851-ND†        | .74 6.60 58.00      |
|                                                 | 5            | 25.40             | ED1852-ND†        | .93 8.25 72.50      |
|                                                 | 6            | 30.48             | ED1853-ND†        | 1.11 9.90 87.00     |

\* Use Keying Star ED1901-ND † Use Keying Star ED1902-ND



| Fig. | No. of Poles | Block Length (mm) | Digi-Key Part No. | 1     | Pricing 10 | 100    |
|------|--------------|-------------------|-------------------|-------|------------|--------|
| 6    | 7            | 35.56             | ED1854-ND†        | 1.30  | 11.55      | 101.50 |
|      | 8            | 40.64             | ED1855-ND†        | 1.48  | 13.20      | 116.00 |
|      | 9            | 45.72             | ED1856-ND†        | 1.67  | 14.85      | 130.50 |
|      | 10           | 50.80             | ED1857-ND†        | 1.85  | 16.50      | 145.00 |
|      | 11           | 55.88             | ED1858-ND†        | 2.04  | 18.15      | 159.50 |
|      | 12           | 60.96             | ED1859-ND†        | 2.22  | 19.80      | 174.00 |
| 7    | 14           | 71.12             | ED1860-ND†        | 2.59  | 23.10      | 203.00 |
|      | 16           | 81.28             | ED1861-ND†        | 2.96  | 26.40      | 232.00 |
|      | 18           | 91.44             | ED1862-ND†        | 3.33  | 29.70      | 261.00 |
|      | 20           | 101.60            | ED1863-ND†        | 3.70  | 33.00      | 290.00 |
|      | 24           | 121.92            | ED1864-ND†        | 4.44  | 39.60      | 348.00 |
|      | 2            | 10.16             | ED1746-ND†        | 1.48  | 13.28      | 118.00 |
| 7    | 3            | 15.24             | ED1747-ND†        | 2.21  | 19.91      | 177.00 |
|      | 4            | 20.32             | ED1748-ND†        | 2.95  | 26.55      | 236.00 |
|      | 5            | 25.40             | ED1749-ND†        | 3.68  | 33.08      | 294.00 |
|      | 6            | 30.48             | ED1750-ND†        | 4.43  | 39.83      | 354.00 |
|      | 7            | 35.56             | ED1751-ND†        | 5.15  | 46.35      | 412.00 |
|      | 8            | 40.64             | ED1752-ND†        | 5.90  | 53.10      | 472.00 |
| 8    | 9            | 45.72             | ED1753-ND†        | 6.63  | 59.63      | 530.00 |
|      | 10           | 50.80             | ED1754-ND†        | 7.38  | 66.38      | 590.00 |
|      | 11           | 55.88             | ED1755-ND†        | 8.10  | 72.90      | 648.00 |
|      | 12           | 60.96             | ED1756-ND†        | 8.85  | 79.65      | 708.00 |
|      | 14           | 71.12             | ED1757-ND†        | 10.33 | 92.93      | 826.00 |
|      | 16           | 81.28             | ED1758-ND†        | 11.80 | 106.20     | 944.00 |
| 8    | 2            | 10.16             | ED1759-ND†        | 1.48  | 13.28      | 118.00 |
|      | 3            | 15.24             | ED1760-ND†        | 2.21  | 19.91      | 177.00 |
|      | 4            | 20.32             | ED1761-ND†        | 2.95  | 26.55      | 236.00 |
|      | 5            | 25.40             | ED1762-ND†        | 3.68  | 33.08      | 294.00 |
|      | 6            | 30.48             | ED1763-ND†        | 4.43  | 39.83      | 354.00 |
|      | 7            | 35.56             | ED1764-ND†        | 5.15  | 46.35      | 412.00 |
| 8    | 8            | 40.64             | ED1765-ND†        | 5.90  | 53.10      | 472.00 |
|      | 9            | 45.72             | ED1766-ND†        | 6.63  | 59.63      | 530.00 |
|      | 10           | 50.80             | ED1767-ND†        | 7.38  | 66.38      | 590.00 |
|      | 11           | 55.88             | ED1768-ND†        | 8.10  | 72.90      | 648.00 |
|      | 12           | 60.96             | ED1769-ND†        | 8.85  | 79.65      | 708.00 |
|      | 14           | 71.12             | ED1770-ND†        | 10.33 | 92.93      | 826.00 |
| 9    | 16           | 81.28             | ED1771-ND†        | 11.80 | 106.20     | 944.00 |
|      | 2            | 5.08              | ED1983-ND         | 2.20  | 19.80      | 176.00 |
|      | 3            | 10.16             | ED1984-ND         | 3.30  | 29.70      | 264.00 |
|      | 4            | 15.24             | ED1985-ND         | 4.40  | 39.60      | 352.00 |
|      | 5            | 20.32             | ED1986-ND         | 5.50  | 49.50      | 440.00 |
|      | 6            | 25.40             | ED1987-ND         | 6.60  | 59.40      | 528.00 |

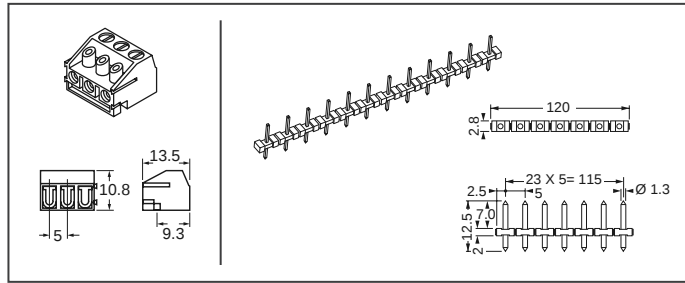
|                                          | No. of Poles | Block Length (mm) | Digi-Key Part No. | Pricing |         |         |
|------------------------------------------|--------------|-------------------|-------------------|---------|---------|---------|
| Fig.                                     |              |                   |                   | 1       | 10      | 100     |
| 9                                        | 7            | 30.48             | ED1988-ND         | 7.70    | 69.30   | 616.00  |
|                                          | 8            | 35.56             | ED1989-ND         | 8.80    | 79.20   | 704.00  |
|                                          | 9            | 40.64             | ED1990-ND         | 9.90    | 89.10   | 792.00  |
|                                          | 10           | 45.72             | ED1991-ND         | 11.00   | 99.00   | 880.00  |
|                                          | 11           | 50.80             | ED1992-ND         | 12.10   | 108.90  | 968.00  |
|                                          | 12           | 55.88             | ED1993-ND         | 13.20   | 118.80  | 1056.00 |
|                                          | 14           | 66.04             | ED1994-ND         | 15.40   | 138.60  | 1232.00 |
|                                          | 16           | 76.20             | ED1995-ND         | 17.60   | 158.40  | 1408.00 |
|                                          | 18           | 86.36             | ED1996-ND         | 19.80   | 178.20  | 1584.00 |
|                                          | 20           | 96.52             | ED1997-ND         | 22.00   | 198.00  | 1760.00 |
| 24                                       | 116.84       | ED1998-ND         | 26.40             | 237.60  | 2112.00 |         |
| 5.08mm Lead Spacing — Horizontal Headers |              |                   |                   |         |         |         |
| 10                                       | 4            | 5.08              | ED1903-ND         | 1.70    | 15.30   | 136.00  |
|                                          | 6            | 10.16             | ED1904-ND         | 2.55    | 22.95   | 204.00  |
| 5.08mm Lead Spacing — Vertical Headers   |              |                   |                   |         |         |         |
| 11                                       | 4            | 5.08              | ED1905-ND         | 1.70    | 15.30   | 136.00  |
|                                          | 6            | 10.16             | ED1906-ND         | 2.55    | 22.95   | 204.00  |
| 5.08mm Lead Spacing — 45° Header         |              |                   |                   |         |         |         |
| 12                                       | 2            | 5.08              | ED1907-ND         | .50     | 4.50    | 40.00   |
|                                          | 3            | 10.16             | ED1908-ND         | .75     | 6.75    | 60.00   |
|                                          | 4            | 15.24             | ED1909-ND         | 1.00    | 9.00    | 80.00   |
|                                          | 5            | 20.32             | ED1910-ND         | 1.25    | 11.25   | 100.00  |
|                                          | 6            | 25.40             | ED1911-ND         | 1.50    | 13.50   | 120.00  |
|                                          | 7            | 30.48             | ED1912-ND         | 1.75    | 15.75   | 140.00  |
|                                          | 8            | 35.56             | ED1913-ND         | 2.00    | 18.00   | 160.00  |
|                                          | 9            | 40.64             | ED1914-ND         | 2.25    | 20.25   | 180.00  |
|                                          | 10           | 45.72             | ED1915-ND         | 2.50    | 22.50   | 200.00  |
|                                          | 11           | 50.80             | ED1916-ND         | 2.75    | 24.75   | 220.00  |
|                                          | 12           | 55.88             | ED1917-ND         | 3.00    | 27.00   | 240.00  |
|                                          | 13           | 60.96             | ED1918-ND         | 3.25    | 29.25   | 260.00  |
|                                          | 14           | 66.04             | ED1919-ND         | 3.50    | 31.50   | 280.00  |
|                                          | 15           | 71.12             | ED1920-ND         | 3.75    | 33.75   | 300.00  |
|                                          | 16           | 76.20             | ED1921-ND         | 4.00    | 36.00   | 320.00  |
|                                          | 17           | 81.28             | ED1922-ND         | 4.25    | 38.25   | 340.00  |
|                                          | 18           | 86.36             | ED1923-ND         | 4.50    | 40.50   | 360.00  |
|                                          | 19           | 91.44             | ED1924-ND         | 4.75    | 42.75   | 380.00  |
|                                          | 20           | 96.52             | ED1925-ND         | 5.00    | 45.00   | 400.00  |
|                                          | 21           | 101.60            | ED1926-ND         | 5.25    | 47.25   | 420.00  |
| 22                                       | 106.68       | ED1927-ND         | 5.50              | 49.50   | 440.00  |         |
| 23                                       | 111.76       | ED1928-ND         | 5.75              | 51.75   | 460.00  |         |
| 24                                       | 116.84       | ED1929-ND         | 6.00              | 54.00   | 480.00  |         |

| Fig.                                  | No. of Poles                                            | Block Length (mm) | Digi-Key Part No. | 1          | Pricing 10 | 100    |       |
|---------------------------------------|---------------------------------------------------------|-------------------|-------------------|------------|------------|--------|-------|
| 7.62mm Lead Spacing — Plugs           |                                                         |                   |                   |            |            |        |       |
| 13                                    | 2                                                       | 15.24             | ED1733-ND*        | 1.47       | 13.19      | 117.20 |       |
|                                       | 3                                                       | 22.86             | ED1734-ND*        | 2.20       | 19.78      | 175.80 |       |
|                                       | 4                                                       | 30.48             | ED1735-ND*        | 2.93       | 26.33      | 234.00 |       |
|                                       | 5                                                       | 38.10             | ED1736-ND*        | 3.65       | 32.85      | 292.00 |       |
|                                       | 6                                                       | 45.72             | ED1737-ND*        | 4.40       | 39.60      | 352.00 |       |
|                                       | 7                                                       | 53.34             | ED1738-ND*        | 5.13       | 46.13      | 410.00 |       |
|                                       | 8                                                       | 60.96             | ED1739-ND*        | 5.85       | 52.65      | 468.00 |       |
|                                       | 9                                                       | 68.58             | ED1740-ND*        | 6.60       | 59.40      | 528.00 |       |
|                                       | 10                                                      | 76.20             | ED1741-ND*        | 7.33       | 65.93      | 586.00 |       |
|                                       | 11                                                      | 83.82             | ED1742-ND*        | 8.05       | 72.45      | 644.00 |       |
|                                       | 12                                                      | 91.44             | ED1743-ND*        | 8.80       | 79.20      | 704.00 |       |
|                                       | 14                                                      | 106.68            | ED1744-ND*        | 10.25      | 92.25      | 820.00 |       |
|                                       | 16                                                      | 121.92            | ED1745-ND*        | 11.73      | 105.53     | 938.00 |       |
|                                       | 7.62mm Lead Spacing — Horizontal Header                 |                   |                   |            |            |        |       |
|                                       | 14                                                      | 2                 | 15.24             | ED1865-ND† | .48        | 4.28   | 38.00 |
|                                       |                                                         | 3                 | 22.86             | ED1866-ND† | .71        | 6.41   | 57.00 |
| 4                                     |                                                         | 30.48             | ED1867-ND†        | .95        | 8.55       | 76.00  |       |
| 5                                     |                                                         | 38.10             | ED1868-ND†        | 1.19       | 10.69      | 95.00  |       |
| 6                                     |                                                         | 45.72             | ED1869-ND†        | 1.43       | 12.83      | 114.00 |       |
| 7                                     |                                                         | 53.34             | ED1870-ND†        | 1.66       | 14.96      | 133.00 |       |
| 8                                     |                                                         | 60.96             | ED1871-ND†        | 1.90       | 17.10      | 152.00 |       |
| 9                                     |                                                         | 68.58             | ED1872-ND†        | 2.14       | 19.24      | 171.00 |       |
| 10                                    |                                                         | 76.20             | ED1873-ND†        | 2.38       | 21.38      | 190.00 |       |
| 11                                    |                                                         | 83.82             | ED1874-ND†        | 2.60       | 23.40      | 208.00 |       |
| 12                                    |                                                         | 91.44             | ED1875-ND†        | 2.85       | 25.65      | 228.00 |       |
| 14                                    |                                                         | 106.68            | ED1876-ND†        | 3.33       | 29.93      | 266.00 |       |
| 16                                    |                                                         | 121.92            | ED1877-ND†        | 3.80       | 34.20      | 304.00 |       |
| 7.62mm Lead Spacing — Vertical Header |                                                         |                   |                   |            |            |        |       |
| 15                                    |                                                         | 2                 | 15.24             | ED1878-ND† | .48        | 4.28   | 38.00 |
|                                       |                                                         | 3                 | 22.86             | ED1879-ND† | .71        | 6.41   | 57.00 |
|                                       | 4                                                       | 30.48             | ED1880-ND†        | .95        | 8.55       | 76.00  |       |
|                                       | 5                                                       | 38.10             | ED1881-ND†        | 1.19       | 10.69      | 95.00  |       |
|                                       | 6                                                       | 45.72             | ED1882-ND†        | 1.43       | 12.83      | 114.00 |       |
|                                       | 7                                                       | 53.34             | ED1883-ND†        | 1.66       | 14.96      | 133.00 |       |
|                                       | 8                                                       | 60.96             | ED1884-ND†        | 1.90       | 17.10      | 152.00 |       |
|                                       | 9                                                       | 68.58             | ED1885-ND†        | 2.14       | 19.24      | 171.00 |       |
|                                       | 10                                                      | 76.20             | ED1886-ND†        | 2.38       | 21.38      | 190.00 |       |
|                                       | 11                                                      | 83.82             | ED1887-ND†        | 2.61       | 23.51      | 209.00 |       |
|                                       | 12                                                      | 91.44             | ED1888-ND†        | 2.85       | 25.65      | 228.00 |       |
|                                       | 14                                                      | 106.68            | ED1890-ND†        | 3.33       | 29.93      | 266.00 |       |
|                                       | 16                                                      | 121.92            | ED1891-ND†        | 3.80       | 34.20      | 304.00 |       |
|                                       | Keying Star                                             |                   |                   | ED1901-ND  | .70        | 6.30   | 56.00 |
|                                       | Keying Star                                             |                   |                   | ED1902-ND  | .70        | 6.30   | 56.00 |
|                                       | * Use Keying Star ED1901-ND † Use Keying Star ED1902-ND |                   |                   |            |            |        |       |

1-800-344-4539

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• Recommended Hole Diameter in Printed Circuit Board: 1.5mm • Spacing: 5mm • Rated Voltage: 250V • Rated Current: 10A • Rated Temperature: -30°C/+100°C • Flame Class: 94V-0 • Rated Cross Section: 1.5mm<sup>2</sup> • Terminal Plating: tin • Resistance to Tracking: KB380 • Wire Guard Material: BeCu.



| No. of Pos.                      | Digi-Key Part No. | 1    | 10    | 100    |
|----------------------------------|-------------------|------|-------|--------|
| <b>Pluggable Terminal Blocks</b> |                   |      |       |        |
| 2                                | ED1613-ND         | .62  | 5.56  | 49.40  |
| 3                                | ED1614-ND         | .93  | 8.33  | 74.00  |
| 4                                | ED2214-ND         | 1.24 | 11.16 | 99.20  |
| 5                                | ED2215-ND         | 1.55 | 13.95 | 124.00 |
| 6                                | ED2216-ND         | 1.86 | 16.74 | 148.80 |
| 7                                | ED2217-ND         | 2.17 | 19.53 | 173.60 |
| 10                               | ED2218-ND         | 3.10 | 27.90 | 248.00 |
| 12                               | ED2219-ND         | 3.72 | 33.48 | 297.60 |
| <b>Pin Headers</b>               |                   |      |       |        |
| 2                                | ED1660-ND         | .28  | 2.50  | 22.25  |
| 3                                | ED1661-ND         | .31  | 2.77  | 24.58  |
| 4                                | ED1662-ND         | .34  | 3.06  | 27.16  |
| 5                                | ED1663-ND         | .38  | 3.38  | 30.02  |
| 6                                | ED1664-ND         | .41  | 3.73  | 33.17  |
| 7                                | ED1665-ND         | .46  | 4.12  | 36.65  |

| No. of Pos. | Digi-Key Part No. | 1    | 10    | 100    |
|-------------|-------------------|------|-------|--------|
| 8           | ED1666-ND         | .51  | 4.56  | 40.50  |
| 9           | ED1667-ND         | .56  | 5.03  | 44.75  |
| 10          | ED1668-ND         | .62  | 5.56  | 49.44  |
| 11          | ED1669-ND         | .68  | 6.15  | 54.63  |
| 12          | ED1670-ND         | .75  | 6.79  | 60.37  |
| 13          | ED1671-ND         | .83  | 7.50  | 66.71  |
| 14          | ED1672-ND         | .92  | 8.29  | 73.71  |
| 15          | ED1673-ND         | 1.02 | 9.16  | 81.45  |
| 16          | ED1674-ND         | 1.12 | 10.12 | 90.00  |
| 17          | ED1675-ND         | 1.24 | 11.19 | 99.44  |
| 18          | ED1676-ND         | 1.37 | 12.36 | 109.88 |
| 19          | ED1677-ND         | 1.52 | 13.66 | 121.42 |
| 20          | ED1678-ND         | 1.68 | 15.09 | 134.16 |
| 21          | ED1679-ND         | 1.85 | 16.68 | 148.24 |
| 22          | ED1680-ND         | 2.05 | 18.43 | 163.81 |
| 23          | ED1681-ND         | 2.26 | 20.36 | 181.00 |
| 24          | ED1682-ND         | 2.50 | 22.50 | 200.00 |

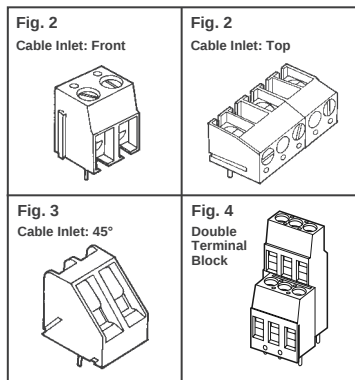
## Terminal Blocks

UL# E101811, 86ME2081 CSA# 068503X0000

### SPECIFICATIONS:

- Rated Current: 16A
- Insulator: PA 6 GV/PBTP
- Temperature Range: -30°C to +100°C
- Flame Class: 94V-0

These On-Shore Technology Terminal Blocks are Stackable for any number of contacts. 4.5mm Lead Length.



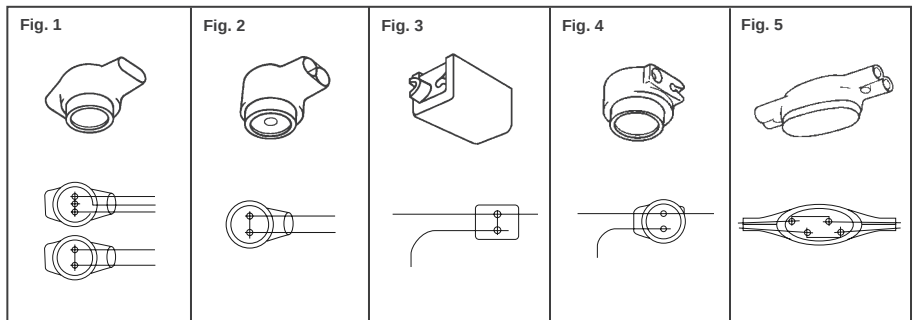
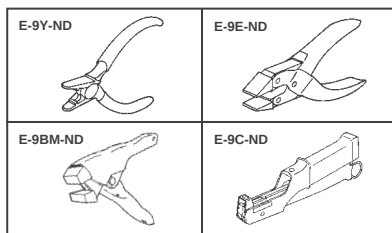
| Fig. | No. Of Pos. | Lead Spacing (mm) | Rated Volt. (V-) VDE 0110 | Term-inal Plating | Block Length (mm) | Digi-Key Part No. | 1    | 10    | 100   |
|------|-------------|-------------------|---------------------------|-------------------|-------------------|-------------------|------|-------|-------|
| 1    | 2           | 5.0               | 250                       | Nickel            | 10                | ED1631-ND         | .75  | 6.75  | 60.00 |
|      | 2           | 5.08              | 300                       | Tin               | 10.16             | ED1643-ND         | .63  | 5.69  | 50.60 |
|      | 2           | 7.5               | 380                       | Tin               | 15                | ED1605-ND         | .53  | 4.73  | 42.00 |
|      | 2           | 10.0              | 500                       | Tin               | 15                | ED1615-ND         | .53  | 4.73  | 42.00 |
|      | 2           | 10.0              | 250                       | Tin               | 15                | ED1627-ND         | .53  | 4.73  | 42.00 |
| 1    | 2           | 10.0              | 500                       | Nickel            | 15                | ED1633-ND         | .80  | 7.20  | 64.00 |
|      | 3           | 5.0               | 250                       | Nickel            | 15                | ED1632-ND         | 1.13 | 10.13 | 90.00 |
|      | 3           | 5.08              | 300                       | Tin               | 15.24             | ED1644-ND         | .94  | 8.44  | 75.00 |
|      | 3           | 7.5               | 380                       | Tin               | 22.5              | ED1606-ND         | .79  | 7.09  | 63.00 |
|      | 3           | 10.0              | 500                       | Tin               | 25                | ED1616-ND         | .79  | 7.09  | 63.00 |
| 1    | 3           | 10.0              | 250                       | Tin               | 25                | ED1628-ND         | .79  | 7.09  | 63.00 |
|      | 3           | 10.0              | 500                       | Nickel            | 25                | ED1634-ND         | 1.20 | 10.80 | 96.00 |
| 2    | 2           | 5.0               | 250                       | Tin               | 10                | ED1603-ND         | .53  | 4.73  | 42.00 |
|      | 2           | 5.0               | 125                       | Tin               | 10                | ED1625-ND         | .53  | 4.73  | 42.00 |
|      | 2           | 5.08              | 250                       | Tin               | 10.16             | ED1611-ND         | .53  | 4.73  | 42.00 |

|      | No. Of | Lead Spacing | Rated Volt. (V-) | Term-inal | Block       | Digi-Key  | Pricing |       |        |
|------|--------|--------------|------------------|-----------|-------------|-----------|---------|-------|--------|
| Fig. | Pos.   | (mm)         | VDE 0110         | Plating   | Length (mm) | Part No.  | 1       | 10    | 100    |
| 2    | 2      | 7.5          | 380              | Tin       | 15          | ED1607-ND | .60     | 5.40  | 48.00  |
|      | 2      | 10.0         | 250              | Tin       | 15          | ED1617-ND | .60     | 5.40  | 48.00  |
|      | 2      | 10.0         | 250              | Tin       | 15          | ED1629-ND | .60     | 5.40  | 48.00  |
| 2    | 3      | 5.0          | 250              | Tin       | 15          | ED1604-ND | .79     | 7.09  | 63.00  |
|      | 3      | 5.0          | 125              | Tin       | 15          | ED1626-ND | .79     | 7.09  | 63.00  |
|      | 3      | 5.08         | 250              | Tin       | 15.25       | ED1612-ND | .79     | 7.09  | 63.00  |
|      | 3      | 7.5          | 380              | Tin       | 22.5        | ED1608-ND | .90     | 8.10  | 72.00  |
|      | 3      | 10.0         | 250              | Tin       | 25          | ED1618-ND | .90     | 8.10  | 72.00  |
| 3    | 3      | 10.0         | 250              | Tin       | 25          | ED1630-ND | .90     | 8.10  | 72.00  |
| 3    | 2      | 5.0          | 250              | Nickel    | 10          | ED1619-ND | .59     | 5.27  | 46.80  |
|      | 2      | 10.0         | 250              | Nickel    | 15          | ED1621-ND | .75     | 6.75  | 60.00  |
| 3    | 3      | 5.0          | 250              | Nickel    | 15          | ED1620-ND | .88     | 7.88  | 70.00  |
|      | 3      | 10.0         | 250              | Nickel    | 25          | ED1622-ND | 1.13    | 10.13 | 90.00  |
| 4    | 2      | 5.0          | 300              | Tin       | 10          | ED1653-ND | 1.41    | 12.71 | 113.00 |
| 4    | 3      | 5.0          | 300              | Tin       | 15          | ED1654-ND | 2.13    | 19.17 | 170.40 |

## 3M Scotchlok™ Brand Discrete Connectors and Tools

3M Insulated Terminal Kit — 650 assorted terminals (14 sizes), 200 cable ties (100 each, 2 sizes), one wire marker dispenser, one crimping tool, one reusable metal box, one reordering information card.

923000-I-ND ..... \$102.93



| Fig. | Color  | Max. Insul. O.D. (mm) | Cable Type       |                |                   | How Pkg. | Digi-Key Part No. | Pricing |       |        | E-9Y-ND \$26.64 | E-9E-ND \$24.36 | E-9BM-ND \$62.10 | E-9C-ND \$118.90 |
|------|--------|-----------------------|------------------|----------------|-------------------|----------|-------------------|---------|-------|--------|-----------------|-----------------|------------------|------------------|
|      |        |                       | PIC-Unfilled AWG | PIC-Filled AWG | Pulp or Paper AWG |          |                   | 1       | 10    | 100    |                 |                 |                  |                  |
| 1    | Red    | 1.67                  | 19-26            | 22-26*         | 19-26             | Loose    | UR20074-ND        | .32     | 2.41  | 17.36  | √ (2 Wire)      | √ (3 Wire)      | —                | —                |
|      | Grey   | 2.08 (out.)           | 19-24            | 19-24          | 19-24             | Loose    | UAL27827-ND       | .44     | 3.33  | 23.87  | √ (2 Wire)      | √ (3 Wire)      | √                | √                |
|      | Grey   | 1.93 (cntr.)          | 17-20            | 19-24          | 19-24             | Loose    | UAL27828-ND       | —       | 3.71  | 26.82  | —               | —               | —                | √                |
|      | Green  | 2.08 (out.)           | 19-24            | 19-24          | 19-24             | Loose    | ULG30198-ND       | .36     | 2.70  | 19.53  | √ (2 Wire)      | √ (3 Wire)      | √                | √                |
| 2    | Green  | 1.93 (cntr.)          | 19-24            | 19-24          | 19-24             | Loose    | ULG30199-ND       | —       | 3.12  | 22.58  | —               | —               | —                | √                |
| 3    | Yellow | 1.52                  | 22-26            | 22-26          | 22-26             | Loose    | UY14911-ND        | .29     | 2.20  | 15.20  | √               | √               | √                | √                |
| 4    | Blue   | 1.27                  | 22-26            | 24-26#         | 22-26             | Loose    | UB30201-ND        | .58     | 4.36  | 31.72  | √               | √               | √                | —                |
| 4    | Green  | 1.67                  | 19-26            | 22-26          | 19-26             | Loose    | UG20082-ND        | .40     | 2.99  | 21.65  | √               | √               | √                | —                |
| 5    | Red    | 3.18                  | 19-24            | 19-24          | 19-24             | Loose    | UIR20017-ND       | 2.79    | 24.19 | 209.25 | —               | —               | √                | —                |

\* Can be used on 19AWG (.9mm) Foam Insulated Cable. # Can be used on 22AWG (.7mm) Form Insulated Cable.



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ELECTRICAL INC.**

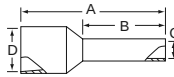
# Crimp Wire Ferrules

For Use with European Style Terminal Blocks

CE

## Wire Ferrules – Insulated

Material: Copper/Plastic. Surface: Tin-plated.



| Size mm <sup>2</sup> | AWG | Type | Color Code | Dimensions (mm)  | Digi-Key Part No. | Pricing           | AE Part No. |
|----------------------|-----|------|------------|------------------|-------------------|-------------------|-------------|
|                      |     |      |            | A B C D          |                   | 10 50 100         |             |
| 0.14                 | 26  | DIN  | Gray       | 10.5 6 0.8 2.0   | 288-1001-ND*      | 2.32 10.15 17.40  | 1161014     |
|                      |     |      |            | 12.5 8 0.8 2.0   | 288-1002-ND*      | 2.48 10.85 18.60  | 1181014     |
|                      |     |      |            | 10.5 6 0.8 2.0   | 288-1039-ND*      | 2.32 10.15 17.40  | 1162014     |
|                      | 24  | DIN  | Yellow     | 10.5 6 0.8 2.0   | 288-1003-ND*      | 2.32 10.15 17.40  | 11610025    |
|                      |     |      |            | 12.5 8 0.8 2.0   | 288-1004-ND*      | 2.48 10.85 18.60  | 11810025    |
|                      |     |      |            | 10.5 6 0.8 2.0   | 288-1041-ND*      | 2.32 10.15 17.40  | 11620025    |
| 0.25                 | 24  | DIN  | Blue       | 10.5 6 0.8 2.0   | 288-1004-ND*      | 2.48 10.85 18.60  | 11820025    |
|                      |     |      |            | 12.5 8 0.8 2.0   | 288-1042-ND*      | 2.48 10.85 18.60  | 11820025    |
|                      |     |      |            | 10.5 6 0.8 2.0   | 288-1005-ND*      | 2.32 10.15 17.40  | 1161034     |
|                      | 24  | DIN  | Turquoise  | 10.5 6 0.8 2.0   | 288-1006-ND*      | 2.48 10.85 18.60  | 1181034     |
|                      |     |      |            | 12.5 8 0.8 2.0   | 288-1043-ND*      | 2.32 10.15 17.40  | 1162034     |
|                      |     |      |            | 10.5 6 0.8 2.0   | 288-1044-ND*      | 2.48 10.85 18.60  | 1182034     |
| 0.50                 | 20  | DIN  | White      | 11.5 6 1.1 2.5   | 288-1007-ND       | 1.68 7.35 12.60   | 1161050     |
|                      |     |      |            | 13.5 8 1.1 2.5   | 288-1008-ND       | 1.20 5.25 9.00    | 1181050     |
|                      |     |      |            | 15.5 10 1.1 2.5  | 288-1009-ND       | 1.68 7.35 12.60   | 11101050    |
|                      | 20  | W    | Orange     | 11.5 6 1.1 2.5   | 288-1045-ND       | 1.68 7.35 12.60   | 1162050     |
|                      |     |      |            | 13.5 8 1.1 2.5   | 288-1046-ND       | 1.20 5.25 9.00    | 1182050     |
|                      |     |      |            | 15.5 10 1.1 2.5  | 288-1047-ND       | 1.68 7.35 12.60   | 11102050    |
| 0.75                 | 20  | DIN  | Gray       | 12.0 6 1.3 2.8   | 288-1010-ND       | 1.76 7.70 13.20   | 1161075     |
|                      |     |      |            | 14.0 8 1.3 2.8   | 288-1011-ND       | 1.20 5.25 9.00    | 1181075     |
|                      |     |      |            | 16.0 10 1.3 2.8  | 288-1012-ND       | 1.76 7.70 13.20   | 11101075    |
|                      | 20  | W    | White      | 12.0 6 1.3 2.8   | 288-1013-ND       | 1.76 7.70 13.20   | 11101075    |
|                      |     |      |            | 14.0 8 1.3 2.8   | 288-1048-ND       | 1.76 7.70 13.20   | 1162075     |
|                      |     |      |            | 16.0 10 1.3 2.8  | 288-1049-ND       | 1.20 5.25 9.00    | 1182075     |
| 1.00                 | 18  | DIN  | Red        | 12.0 6 1.3 2.8   | 288-1051-ND       | 1.76 7.70 13.20   | 11102075    |
|                      |     |      |            | 18.0 12 1.3 2.8  | 288-1052-ND       | 2.00 8.75 15.00   | 1161010     |
|                      |     |      |            | 12.0 6 1.3 2.8   | 288-1014-ND       | 1.76 7.70 13.20   | 11101010    |
|                      | 18  | DIN  | Yellow     | 14.5 8 1.5 3.0   | 288-1015-ND       | 1.28 5.60 9.60    | 1181010     |
|                      |     |      |            | 16.5 10 1.5 3.0  | 288-1016-ND       | 2.00 8.75 15.00   | 11101010    |
|                      |     |      |            | 18.5 12 1.5 3.0  | 288-1017-ND       | 2.00 8.75 15.00   | 11101010    |
| 1.50                 | 16  | DIN  | Black      | 12.5 6 1.5 3.0   | 288-1052-ND       | 2.00 8.75 15.00   | 1162010     |
|                      |     |      |            | 14.5 8 1.5 3.0   | 288-1053-ND       | 1.28 5.60 9.60    | 1182010     |
|                      |     |      |            | 16.5 10 1.5 3.0  | 288-1054-ND       | 2.00 8.75 15.00   | 11102010    |
|                      | 16  | W    | Red        | 18.5 12 1.5 3.0  | 288-1055-ND       | 2.00 8.75 15.00   | 11102010    |
|                      |     |      |            | 12.5 6 1.8 3.4   | 288-1018-ND*      | 2.80 12.25 21.00  | 1161015     |
|                      |     |      |            | 14.5 8 1.8 3.4   | 288-1019-ND       | 1.76 7.70 13.20   | 1181015     |
| 2.08                 | 14  | DIN  | Black      | 16.5 10 1.8 3.4  | 288-1020-ND       | 1.80 12.25 21.00  | 11101015    |
|                      |     |      |            | 18.5 12 1.8 3.4  | 288-1021-ND       | 2.80 12.25 21.00  | 11101015    |
|                      |     |      |            | 24.5 18 1.8 3.4  | 288-1022-ND       | 2.80 12.25 21.00  | 1181015     |
|                      | 14  | W    | Yellow     | 12.5 6 1.8 3.4   | 288-1056-ND*      | 2.80 12.25 21.00  | 1162015     |
|                      |     |      |            | 14.5 8 1.8 3.4   | 288-1057-ND       | 1.76 7.70 13.20   | 1182015     |
|                      |     |      |            | 16.5 10 1.8 3.4  | 288-1058-ND       | 2.80 12.25 21.00  | 11102015    |
| 2.50                 | 14  | DIN  | Blue       | 18.5 12 1.8 3.4  | 288-1059-ND       | 2.80 12.25 21.00  | 1112015     |
|                      |     |      |            | 24.5 18 1.8 3.4  | 288-1060-ND       | 2.80 12.25 21.00  | 1182015     |
|                      |     |      |            | 14.5 8 2.05 3.6  | 288-1023-ND*      | 2.20 9.63 16.50   | 1181208     |
|                      | 14  | W    | Yellow     | 14.5 8 2.05 3.6  | 288-1061-ND*      | 2.20 9.63 16.50   | 1182208     |
|                      |     |      |            | 15.0 8 2.3 4.2   | 288-1024-ND       | 1.76 7.70 13.20   | 1181025     |
|                      |     |      |            | 19.0 12 2.3 4.2  | 288-1025-ND       | 2.40 10.50 18.00  | 11101025    |
| 4.00                 | 12  | DIN  | Gray       | 25.0 18 2.3 4.2  | 288-1026-ND       | 3.20 14.00 24.00  | 1181025     |
|                      |     |      |            | 15.0 8 2.3 4.2   | 288-1062-ND       | 1.76 7.70 13.20   | 1182025     |
|                      |     |      |            | 19.0 12 2.3 4.2  | 288-1063-ND       | 2.40 10.50 18.00  | 11122025    |
|                      | 12  | W    | Blue       | 25.0 18 2.3 4.2  | 288-1064-ND       | 3.20 14.00 24.00  | 1182025     |
|                      |     |      |            | 17.5 10 2.9 4.8  | 288-1027-ND       | 2.88 12.60 21.60  | 11101040    |
|                      |     |      |            | 20.0 12 2.9 4.8  | 288-1028-ND       | 2.88 12.60 21.60  | 11101040    |
| 6.00                 | 10  | DIN  | Gray       | 26.0 18 2.9 4.8  | 288-1029-ND       | 3.68 13.80 24.00  | 1181040     |
|                      |     |      |            | 17.5 10 2.9 4.8  | 288-1065-ND       | 2.88 10.80 14.40  | 11102040    |
|                      |     |      |            | 20.0 12 2.9 4.8  | 288-1066-ND       | 2.88 10.80 14.40  | 11122040    |
|                      | 10  | W    | Gray       | 26.0 18 2.9 4.8  | 288-1067-ND       | 3.68 13.80 24.00  | 1182040     |
|                      |     |      |            | 20.0 12 3.6 6.2  | 288-1030-ND       | 3.80 14.25 19.00  | 11121060    |
|                      |     |      |            | 25.0 18 3.6 6.2  | 288-1031-ND       | 4.40 16.50 22.00  | 1181060     |
| 10.00                | 8   | DIN  | Red        | 20.0 12 3.6 6.2  | 288-1068-ND       | 3.80 14.25 19.00  | 11122060    |
|                      |     |      |            | 25.0 18 3.6 6.2  | 288-1069-ND       | 4.40 16.50 22.00  | 1182060     |
|                      |     |      |            | 21.0 12 4.6 7.5  | 288-1032-ND       | 3.80 14.25 19.00  | 11121100    |
|                      | 8   | W    | Ivory      | 27.0 18 4.6 7.5  | 288-1033-ND       | 6.40 24.00 32.00  | 1181100     |
|                      |     |      |            | 21.0 12 4.6 7.5  | 288-1070-ND       | 3.80 14.25 19.00  | 11122100    |
|                      |     |      |            | 27.0 18 4.6 7.5  | 288-1071-ND       | 6.40 24.00 32.00  | 11822100    |
| 16.00                | 6   | DIN  | Blue       | 23.0 12 6.0 8.8  | 288-1034-ND       | 5.20 19.50 26.00  | 11101160    |
|                      |     |      |            | 29.0 18 6.0 8.8  | 288-1035-ND       | 8.00 30.00 40.00  | 1181160     |
|                      |     |      |            | 23.0 12 6.0 8.8  | 288-1072-ND       | 5.20 19.50 26.00  | 11122160    |
|                      | 6   | W    | Green      | 29.0 18 6.0 8.8  | 288-1073-ND       | 8.00 30.00 40.00  | 1182160     |
|                      |     |      |            | 29.0 16 7.5 11.0 | 288-1036-ND       | 13.20 49.50 66.00 | 11611250    |
|                      |     |      |            | 31.0 18 7.5 11.0 | 288-1037-ND       | 13.20 49.50 66.00 | 11811250    |
| 25.00                | 4   | DIN  | Yellow     | 35.0 22 7.5 11.0 | 288-1038-ND       | 18.00 67.50 90.00 | 11221250    |
|                      |     |      |            | 29.0 16 7.5 11.0 | 288-1074-ND       | 13.20 49.50 66.00 | 1162250     |
|                      |     |      |            | 31.0 18 7.5 11.0 | 288-1075-ND       | 13.20 49.50 66.00 | 1182250     |
|                      | 4   | W    | Brown      | 35.0 22 7.5 11.0 | 288-1076-ND       | 18.00 67.50 90.00 | 1122250     |

\* Does not conform to DIN 46228 Part 4

## Assortment Boxes

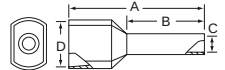
| Assortment Box 1<br>150 pieces<br>(30 pieces each of sizes<br>0.25, 0.34, 0.50,<br>0.75, and 1.00)<br>DIN Type<br>288-1147-ND .....\$50.00<br>W Type<br>288-1153-ND .....\$50.00 | Assortment Box 2<br>400 pieces<br>(50 pieces each of sizes 0.50<br>and 2.50; 100 pieces each of<br>sizes 0.75, 1.00, and 1.50)<br>DIN Type<br>288-1148-ND .....\$75.00<br>W Type<br>288-1154-ND .....\$75.00 | Assortment Box 3<br>100 pieces<br>(50 pieces each of size 4.00;<br>20 pieces each of sizes 6.00 and<br>10.00; 10 pieces of size 16.00)<br>DIN Type<br>288-1149-ND .....\$62.50<br>W Type<br>288-1155-ND .....\$62.50 |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

## Crimp Tools

|             |                                                        |          |
|-------------|--------------------------------------------------------|----------|
| 288-1158-ND | For 10-24 AWG Ferrules (AE Part No. TRAP 24-10) .....  | \$175.00 |
| 288-1159-ND | For 4-8 AWG Ferrules (AE Part No. TRAP 8-4) .....      | \$188.46 |
| 288-1160-ND | For 1-2 AWG Ferrules (AE Part No. TRAP 2-1) .....      | \$188.46 |
| 288-1161-ND | For 10-28 AWG Ferrules (AE Part No. SQ 28-10) .....    | \$210.00 |
| 288-1162-ND | For 8-12 AWG Ferrules (AE Part No. TRAP 12-8 TW) ..... | \$250.72 |

## Twin-Wire Ferrules for Two Wires

Material: Copper/Plastic.  
Surface: Tin-plated.



| Size mm <sup>2</sup> | AWG    | Color  | Dimensions (mm) | Digi-Key Part No. | Pricing            | AE Part No. |
|----------------------|--------|--------|-----------------|-------------------|--------------------|-------------|
|                      |        |        | A B C           |                   | 50 100             |             |
| 2 x 0.50             | 2 x 20 | White  | 15.0 8.0 1.5    | 288-1124-ND       | 1.60 7.00 12.00    | 1381050     |
| 2 x 0.75             | 2 x 20 | Gray   | 15.0 8.0 1.8    | 288-1125-ND       | 1.60 7.00 12.00    | 1381075     |
| 2 x 0.75             | 2 x 20 | Gray   | 17.0 10.0 1.8   | 288-1126-ND       | 2.04 8.93 15.30    | 13101075    |
| 2 x 1.00             | 2 x 18 | Red    | 15.0 8.0 2.05   | 288-1127-ND       | 1.88 8.23 14.10    | 1381010     |
| 2 x 1.00             | 2 x 18 | Red    | 17.0 10.0 2.05  | 288-1128-ND       | 2.60 11.38 19.50   | 13101010    |
| 2 x 1.50             | 2 x 16 | Black  | 16.0 8.0 2.3    | 288-1129-ND       | 2.24 9.80 16.80    | 1381015     |
| 2 x 1.50             | 2 x 16 | Black  | 20.0 12.0 2.3   | 288-1130-ND       | 3.20 14.00 24.00   | 13121015    |
| 2 x 2.50             | 2 x 14 | Blue   | 18.5 10.0 2.9   | 288-1131-ND       | 3.20 14.00 24.00   | 13101025    |
| 2 x 2.50             | 2 x 14 | Blue   | 21.5 13.0 2.9   | 288-1132-ND       | 3.20 14.00 24.00   | 13131025    |
| 2 x 4.00             | 2 x 12 | Gray   | 23.0 12.0 3.8   | 288-1133-ND       | 5.90 21.75 29.00   | 13121040    |
| 2 x 6.00             | 2 x 10 | Yellow | 25.0 14.0 4.9   | 288-1134-ND       | 6.20 23.25 31.00   | 13141060    |
| 2 x 10.00            | 2 x 8  | Red    | 26.0 14.0 6.5   | 288-1135-ND       | 7.60 28.50 38.00   | 13141100    |
| 2 x 16.00            | 2 x 6  | Blue   | 31.0 16.0 8.5   | 288-1136-ND       | 20.00 87.50 150.00 | 13161160    |

## Assortment Boxes

|             |                                                                                                                          |         |
|-------------|--------------------------------------------------------------------------------------------------------------------------|---------|
| 288-1150-ND | Asst. Box 4 — 200 pieces (50 pieces each of sizes 0.50, 0.75, 1.00, 1.50) .....                                          | \$50.00 |
| 288-1151-ND | Asst. Box 5 — 200 pieces (50 pieces each of sizes 0.50, 1.00, 1.50, 2.50) .....                                          | \$55.00 |
| 288-1152-ND | Asst. Box 6 — 90 pieces (30 pieces each of sizes 1.50 and 2.50,<br>20 pieces of size 4.00, 10 pieces of size 6.00) ..... | \$62.50 |

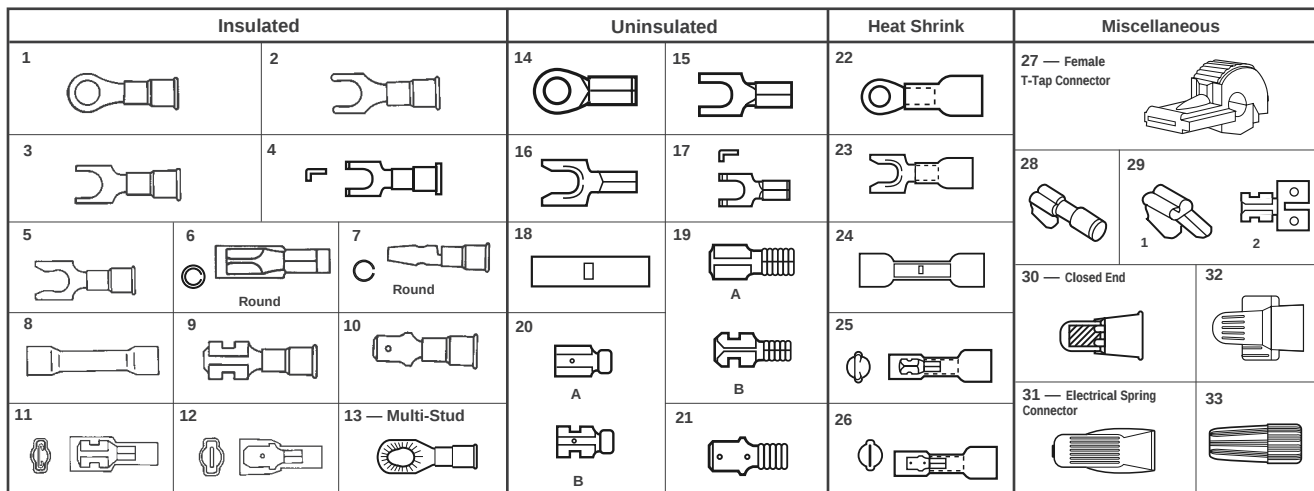
## Wire Ferrules on Strips

| Size<br>mm <sup>2</sup> | AWG | Type     | Color<br>code | Digi-Key<br>Part No. | Pricing |      | AE<br>Part No. |
|-------------------------|-----|----------|---------------|----------------------|---------|------|----------------|
|                         |     |          |               |                      | 10      | 100  |                |
| 0.50                    | 20  | DIN<br>W | White         | 288-1142-ND          | 1.50    | 6.56 | 101050         |
|                         |     |          | Orange        | 288-1137-ND          | 1.50    | 6.56 | 102050         |
| 0.75                    | 20  | DIN<br>W | Gray          | 288-1143-ND          | 1.50    | 6.56 | 101075         |
|                         |     |          | White         | 288-1138-ND          | 1.50    | 6.56 | 102075         |
| 1.00                    | 18  | DIN<br>W | Red           | 288-1144-ND          | 1.60    | 7.00 | 101100         |
|                         |     |          | Yellow        | 288-1139-ND          | 1.60    | 7.00 | 102100         |
| 1.50                    | 16  | DIN<br>W | Black         | 288-1145-ND          | 2.20    | 9.63 | 101150         |
|                         |     |          | Red           | 288-1140-ND          | 2.20    | 9.63 | 102150         |
| 2.50                    | 14  | DIN<br>W | Blue          | 288-1146-ND          | 2.20    | 9.63 | 101250         |
|                         |     |          | Blue          | 288-1141-ND          | 2.20    | 9.63 | 102250         |



# Terminals, Tools, Lugs and Connectors

A



| AWG              | Fig. | Stud Size | Insul. Dia. | Digi-Key Part No. | 10   | 50    | 100   | 500    | 3M Part No. |
|------------------|------|-----------|-------------|-------------------|------|-------|-------|--------|-------------|
| <b>Insulated</b> |      |           |             |                   |      |       |       |        |             |
| 26-24 Yellow     | 1    | #2        | 3.68        | 920010-30-ND      | 9.71 | 43.43 | 71.53 | 281.02 | 80610034318 |
|                  | 1    | #4        | 3.68        | 920010-31-ND      | 9.71 | 43.43 | 71.53 | 281.02 | 80610034326 |
|                  | 1    | #6        | 3.68        | 920010-32-ND      | 9.71 | 43.43 | 71.53 | 281.02 | 80610034334 |
|                  | 1    | #8        | 3.68        | 920010-33-ND      | 9.71 | 43.43 | 71.53 | 281.02 | 80610034342 |
|                  | 1    | #10       | 3.68        | 920010-34-ND      | 9.71 | 43.43 | 71.53 | 281.02 | 80610034359 |
| 26-20 Yellow     | 11   | —         | 3.68        | 920044-17-ND      | 4.91 | 21.97 | 36.19 | 142.18 | 80610066617 |
| 22-18 Red        | 1    | #4        | 3.68        | 920010-35-ND      | 2.61 | 11.67 | 19.23 | 75.54  | 80610035455 |
|                  | 1    | #6        | 3.68        | 920010-01-ND      | 2.61 | 11.67 | 19.23 | 75.54  | 80610035471 |
|                  | 1    | #8        | 3.68        | 920010-02-ND      | 2.61 | 11.67 | 19.23 | 75.54  | 80610035547 |
|                  | 1    | #10       | 3.68        | 920010-03-ND      | 2.61 | 11.67 | 19.23 | 75.54  | 80610035570 |
|                  | 1    | 1/4       | 3.68        | 920010-04-ND      | 3.05 | 13.64 | 22.47 | 88.29  | 80610035588 |
|                  | 1    | 5/16      | 3.68        | 920010-36-ND      | 3.88 | 17.36 | 28.59 | 112.32 | 80610035604 |
|                  | 1    | 3/8       | 3.68        | 920010-37-ND      | 3.88 | 17.36 | 28.59 | 112.32 | 80610035620 |
|                  | 3    | #4        | 3.68        | 920020-16-ND      | 2.61 | 11.67 | 19.23 | 75.54  | 80610056113 |
|                  | 3    | #6        | 3.68        | 920022-01-ND      | 2.61 | 11.67 | 19.23 | 75.54  | 80610038368 |
|                  | 3    | #8        | 3.68        | 920022-02-ND      | 2.61 | 11.67 | 19.23 | 75.54  | 80610038392 |
|                  | 3    | #10       | 3.68        | 920020-17-ND      | 2.61 | 11.67 | 19.23 | 75.54  | 80610038400 |
|                  | 4    | #6        | 3.68        | 920022-14-ND      | 3.05 | 13.64 | 22.47 | 88.28  | 80610038863 |
|                  | 4    | #8        | 3.68        | 920022-15-ND      | 3.05 | 13.64 | 22.47 | 88.28  | 80610038871 |
|                  | 4    | #10       | 3.68        | 920022-16-ND      | 3.05 | 13.64 | 22.47 | 88.28  | 80610038889 |
|                  | 5    | #4        | 3.68        | 920024-01-ND      | 2.82 | 12.62 | 20.78 | 81.63  | 80610040026 |
|                  | 5    | #6        | 3.68        | 920024-02-ND      | 2.82 | 12.62 | 20.78 | 81.63  | 80610040034 |
|                  | 5    | #8        | 3.68        | 920024-03-ND      | 2.82 | 12.62 | 20.78 | 81.63  | 80610040042 |
|                  | 5    | #10       | 3.68        | 920024-10-ND      | 2.82 | 12.62 | 20.78 | 81.63  | 80610040059 |
|                  | 6    | 3/8       | 3.68        | 920048-01-ND      | 4.45 | 19.89 | 32.76 | 128.71 | 80610057814 |
|                  | 7    | 3/8       | 3.68        | 920050-01-ND      | 2.78 | 12.45 | 20.51 | 80.59  | 80610056238 |
| 16-14 Blue       | 8    | —         | 3.68        | 920030-01-ND      | 2.77 | 12.41 | 20.43 | 80.27  | 80610039358 |
|                  | 9    | 4.75      | 3.68        | 920040-01-ND      | 2.76 | 12.33 | 20.30 | 79.75  | 80610064695 |
|                  | 9    | 6.35      | 3.68        | 920040-02-ND      | 2.76 | 12.33 | 20.30 | 79.75  | 80610039218 |
|                  | 10   | 4.75      | 3.68        | 920042-01-ND      | 2.70 | 12.10 | 19.93 | 78.29  | 80610064760 |
|                  | 10   | 6.35      | 3.68        | 920042-02-ND      | 2.55 | 11.41 | 18.80 | 73.84  | 80610064778 |
|                  | 11   | 4.75      | 3.68        | 920044-01-ND      | 4.01 | 17.94 | 29.55 | 116.11 | 80610064711 |
|                  | 11   | 6.35      | 3.68        | 920044-02-ND      | 4.01 | 17.94 | 29.55 | 116.11 | 80610057673 |
|                  | 12   | 4.75      | 3.68        | 920046-01-ND      | 4.49 | 20.08 | 33.07 | 129.91 | 80610064802 |
|                  | 12   | 6.35      | 3.68        | 920046-02-ND      | 4.49 | 20.08 | 33.07 | 129.91 | 80610057764 |
|                  | 13   | 6/8/10    | 3.68        | 920010-57-ND      | 3.52 | 15.76 | 25.95 | 101.96 | 80610039796 |
|                  | 1    | #4        | 4.32        | 920010-38-ND      | 2.61 | 11.67 | 19.23 | 75.54  | 80610040927 |
|                  | 1    | #6        | 4.32        | 920010-39-ND      | 2.61 | 11.67 | 19.23 | 75.54  | 80610040992 |
|                  | 1    | #8        | 4.32        | 920010-05-ND      | 2.61 | 11.67 | 19.23 | 75.54  | 80610040943 |
|                  | 1    | #10       | 4.32        | 920010-06-ND      | 2.61 | 11.67 | 19.23 | 75.54  | 80610040984 |
|                  | 1    | #10       | 4.32        | 920010-07-ND      | 2.61 | 11.67 | 19.23 | 75.54  | 80610041016 |
|                  | 1    | 1/4       | 4.32        | 920010-08-ND      | 3.05 | 13.64 | 22.47 | 88.29  | 80610041032 |
|                  | 1    | 5/16      | 4.32        | 920010-40-ND      | 3.88 | 17.36 | 28.59 | 112.32 | 80610041065 |
|                  | 1    | 3/8       | 4.32        | 920010-41-ND      | 3.88 | 17.36 | 28.59 | 112.32 | 80610041081 |
|                  | 2    | #6        | 4.32        | 920020-01-ND      | 2.61 | 11.67 | 19.23 | 75.54  | 80610042907 |
|                  | 2    | #8        | 4.32        | 920020-02-ND      | 2.61 | 11.67 | 19.23 | 75.54  | 80610042931 |
|                  | 3    | #4        | 4.32        | 920020-18-ND      | 2.61 | 11.67 | 19.23 | 75.54  | 80610056204 |
|                  | 3    | #6        | 4.32        | 920022-03-ND      | 2.61 | 11.67 | 19.23 | 75.54  | 80610043905 |
|                  | 3    | #8        | 4.32        | 920022-04-ND      | 2.61 | 11.67 | 19.23 | 75.54  | 80610043921 |
|                  | 3    | #10       | 4.32        | 920020-19-ND      | 2.61 | 11.67 | 19.23 | 75.54  | 80610043939 |
|                  | 4    | #6        | 4.32        | 920022-17-ND      | 3.05 | 13.64 | 22.47 | 88.28  | 80610044390 |
|                  | 4    | #8        | 4.32        | 920022-18-ND      | 3.05 | 13.64 | 22.47 | 88.28  | 80610044408 |
|                  | 4    | #10       | 4.32        | 920022-19-ND      | 3.05 | 13.64 | 22.47 | 88.28  | 80610044416 |
|                  | 5    | #4        | 4.32        | 920024-11-ND      | 2.82 | 12.62 | 20.78 | 81.63  | 80610048052 |
|                  | 5    | 1/4       | 4.32        | 920024-12-ND      | 3.43 | 15.33 | 25.25 | 99.19  | 80610048094 |
|                  | 5    | #6        | 4.32        | 920024-04-ND      | 2.82 | 12.62 | 20.78 | 81.63  | 80610048060 |
|                  | 5    | #8        | 4.32        | 920024-05-ND      | 2.82 | 12.62 | 20.78 | 81.63  | 80610048078 |
|                  | 5    | #10       | 4.32        | 920024-06-ND      | 2.82 | 12.62 | 20.78 | 81.63  | 80610048086 |
|                  | 6    | —         | 4.32        | 920048-02-ND      | 4.45 | 19.89 | 32.76 | 128.71 | 80610057590 |
|                  | 7    | —         | 4.32        | 920050-02-ND      | 2.78 | 12.45 | 20.51 | 80.59  | 80610047211 |
|                  | 8    | —         | 4.32        | 920030-02-ND      | 2.77 | 12.41 | 20.43 | 80.27  | 80610047286 |
|                  | 9    | 4.75      | 4.32        | 920040-03-ND      | 2.76 | 12.33 | 20.30 | 79.75  | 80610044825 |
|                  | 9    | 6.35      | 4.32        | 920040-04-ND      | 2.76 | 12.33 | 20.30 | 79.75  | 80610044833 |
|                  | 10   | 4.75      | 4.32        | 920042-03-ND      | 2.70 | 12.10 | 19.93 | 78.29  | 80610044865 |
|                  | 10   | 6.35      | 4.32        | 920042-04-ND      | 2.70 | 12.10 | 19.93 | 78.29  | 80610044873 |
|                  | 11   | 4.75      | 4.32        | 920044-03-ND      | 4.01 | 17.94 | 29.55 | 116.11 | 80610065007 |
|                  | 11   | 6.35      | 4.32        | 920044-04-ND      | 4.01 | 17.94 | 29.55 | 116.11 | 80610057681 |
|                  | 12   | 4.75      | 4.32        | 920046-03-ND      | 4.49 | 20.08 | 33.07 | 129.91 | 80610065015 |
|                  | 12   | 6.35      | 4.32        | 920046-04-ND      | 4.49 | 20.08 | 33.07 | 129.91 | 80610057772 |
|                  | 13   | 6/8/10    | 4.32        | 920010-58-ND      | 3.52 | 15.76 | 25.95 | 101.96 | 80610047781 |

| AWG          | Fig.   | Stud Size | Insul. Dia.  | Digi-Key Part No. | 10           | 50    | 100    | 500          | 3M Part No.  |
|--------------|--------|-----------|--------------|-------------------|--------------|-------|--------|--------------|--------------|
| 12-10 Yellow | 1      | #4        | 6.35         | 920010-42-ND      | 3.18         | 14.22 | 23.43  | 92.04        | 80610049001  |
|              | 1      | #6        | 6.35         | 920010-43-ND      | 3.18         | 14.22 | 23.43  | 92.04        | 80610049027  |
|              | 1      | #8        | 6.35         | 920010-09-ND      | 3.18         | 14.22 | 23.43  | 92.04        | 80610049043  |
|              | 1      | #10       | 6.35         | 920010-10-ND      | 3.18         | 14.22 | 23.43  | 92.04        | 80610049050  |
|              | 1      | 1/4       | 6.35         | 920010-11-ND      | 4.25         | 19.01 | 31.30  | 122.98       | 80610049076  |
|              | 1      | 5/16      | 6.35         | 920010-44-ND      | 4.25         | 19.01 | 31.30  | 122.98       | 80610049100  |
|              | 1      | 3/8       | 6.35         | 920010-12-ND      | 4.25         | 19.01 | 31.30  | 122.98       | 80610049126  |
|              | 2      | #6        | 6.35         | 920020-03-ND      | 3.18         | 14.22 | 23.43  | 92.04        | 80610049720  |
|              | 2      | #8        | 6.35         | 920020-04-ND      | 3.18         | 14.22 | 23.43  | 92.04        | 80610049738  |
|              | 2      | #10       | 6.35         | 920020-05-ND      | 3.18         | 14.22 | 23.43  | 92.04        | 80610049746  |
|              | 4      | #6        | 6.35         | 920022-20-ND      | 3.71         | 16.61 | 27.35  | 107.46       | 80610050272  |
|              | 4      | #8        | 6.35         | 920022-21-ND      | 3.71         | 16.61 | 27.35  | 107.46       | 80610050280  |
|              | 4      | #10       | 6.35         | 920022-22-ND      | 3.71         | 16.61 | 27.35  | 107.46       | 80610050298  |
|              | 5      | #6        | 6.35         | 920024-07-ND      | 4.05         | 18.13 | 29.86  | 117.32       | 80610051197  |
|              | 5      | #8        | 6.35         | 920024-08-ND      | 4.05         | 18.13 | 29.86  | 117.32       | 80610051205  |
|              | 5      | #10       | 6.35         | 920024-09-ND      | 4.05         | 18.13 | 29.86  | 117.32       | 80610051213  |
|              | 5      | 1/4       | 6.35         | 920024-13-ND      | 4.68         | 20.94 | 34.50  | 135.52       | 80610051221  |
|              | 8      | —         | 6.35         | 920030-03-ND      | 3.42         | 15.32 | 25.23  | 99.11        | 80610050702  |
|              | 9      | 6.35      | 6.35         | 920040-06-ND      | 5.13         | 22.93 | 37.77  | 148.39       | 806100531362 |
|              | 10     | 6.35      | 6.35         | 920042-05-ND      | 3.74         | 16.72 | 27.55  | 108.21       | 80610050488  |
| 11           | 6.35   | 6.35      | 920044-21-ND | 5.62              | 25.15        | 41.42 | 162.73 | 806100531313 |              |
| 12           | 6.35   | 6.35      | 920046-05-ND | 6.09              | 27.26        | 44.89 | 176.37 | 80610057780  |              |
| 13           | 6/8/10 | 6.35      | 920010-59-ND | 4.66              | 20.84        | 34.32 | 134.85 | 80610050991  |              |
| Uninsulated  |        |           |              |                   |              |       |        |              |              |
| 22-18        | 14     | #4        | —            | 920010-13-ND      | 1.35         | 6.03  | 9.93   | 39.02        | 80610034607  |
|              | 14     | #6        | —            | 920010-14-ND      | 1.35         | 6.03  | 9.93   | 39.02        | 80610034623  |
|              | 14     | #8        | —            | 920010-15-ND      | 1.35         | 6.03  | 9.93   | 39.02        | 80610034680  |
|              | 14     | #10       | —            | 920010-16-ND      | 1.27         | 5.70  | 9.39   | 36.91        | 80610034706  |
|              | 14     | 1/4       | —            | 920010-17-ND      | 2.12         | 9.50  | 15.64  | 61.45        | 80610034714  |
|              | 14     | 3/8       | —            | 920010-18-ND      | 2.34         | 10.46 | 17.22  | 67.65        | 80610034755  |
|              | 15     | #4        | —            | 920020-06-ND      | 1.35         | 6.03  | 9.93   | 39.02        | 80610056287  |
|              | 15     | #6        | —            | 920020-07-ND      | 1.35         | 6.03  | 9.93   | 39.02        | 80610038160  |
|              | 15     | #8        | —            | 920020-08-ND      | 1.35         | 6.03  | 9.93   | 39.02        | 80610038186  |
|              | 15     | #10       | —            | 920020-09-ND      | 1.35         | 6.03  | 9.93   | 39.02        | 80610038194  |
|              | 16     | #4        | —            | 920024-14-ND      | 1.41         | 6.29  | 10.36  | 40.69        | 80610039861  |
|              | 16     | #6        | —            | 920024-15-ND      | 1.41         | 6.29  | 10.36  | 40.69        | 80610039879  |
|              | 16     | #8        | —            | 920024-16-ND      | 1.41         | 6.29  | 10.36  | 40.69        | 80610039887  |
|              | 16     | #10       | —            | 920024-17-ND      | 1.41         | 6.29  | 10.36  | 40.69        | 80610039895  |
|              | 17     | #6        | —            | 920022-05-ND      | 1.40         | 6.26  | 10.30  | 40.48        | 80610038665  |
|              | 17     | #8        | —            | 920022-06-ND      | 1.40         | 6.26  | 10.30  | 40.48        | 80610038673  |
|              | 17     | #10       | —            | 920022-07-ND      | 1.40         | 6.26  | 10.30  | 40.48        | 80610038681  |
|              | 18     | —         | —            | 920030-07-ND      | 2.17         | 9.70  | 15.98  | 62.77        | 80610039317  |
| 16-14        | 14     | #4        | —            | 920010-19-ND      | 1.35         | 6.03  | 9.93   | 39.02        | 80610040075  |
|              | 14     | #6        | —            | 920010-20-ND      | 1.35         | 6.03  | 9.93   | 39.02        | 80610040091  |
|              | 14     | #8        | —            | 920010-21-ND      | 1.35         | 6.03  | 9.93   | 39.02        | 80610040141  |
|              | 14     | #10       | —            | 920010-22-ND      | 1.35         | 6.03  | 9.93   | 39.02        | 80610040158  |
|              | 14     | 1/4       | —            | 920010-23-ND      | 2.12         | 9.50  | 15.64  | 61.45        | 80610040174  |
|              | 15     | #4        | —            | 920020-10-ND      | 1.35         | 6.03  | 9.93   | 39.02        | 80610056295  |
|              | 15     | #8        | —            | 920020-11-ND      | 1.35         | 6.03  | 9.93   | 39.02        | 80610043723  |
|              | 15     | #10       | —            | 920020-12-ND      | 1.35         | 6.03  | 9.93   | 39.02        | 80610043731  |
|              | 16     | #4        | —            | 920024-18-ND      | 1.41         | 6.29  | 10.36  | 40.69        | 80610047856  |
|              | 16     | #6        | —            | 920024-19-ND      | 1.41         | 6.29  | 10.36  | 40.69        | 80610047864  |
|              | 16     | #8        | —            | 920024-20-ND      | 1.41         | 6.29  | 10.36  | 40.69        | 80610047872  |
|              | 16     | #10       | —            | 920024-21-ND      | 1.41         | 6.29  | 10.36  | 40.69        | 80610047880  |
|              | 16     | 1/4       | —            | 920024-22-ND      | 2.30         | 10.29 | 16.95  | 66.61        | 80610047898  |
|              | 17     | #6        | —            | 920022-08-ND      | 1.43         | 6.42  | 10.57  | 41.53        | 80610044192  |
|              | 17     | #8        | —            | 920022-09-ND      | 1.43         | 6.42  | 10.57  | 41.53        | 80610044200  |
|              | 17     | #10       | —            | 920022-10-ND      | 1.43         | 6.42  | 10.57  | 41.53        | 80610044218  |
|              | 18     | —         | —            | 920030-08-ND      | 2.17         | 9.70  | 15.98  | 62.77        | 80610047245  |
|              | 12-10  | 14        | #4           | —                 | 920010-24-ND | 2.05  | 9.18   | 15.12        | 59.39        |
| 14           |        | #6        | —            | 920010-25-ND      | 2.05         | 9.18  | 15.12  | 59.39        | 80610048128  |
| 14           |        | #8        | —            | 920010-26-ND      | 2.05         | 9.18  | 15.12  | 59.39        | 80610048144  |
| 14           |        | #10       | —            | 920010-27-ND      | 2.05         | 9.18  | 15.12  | 59.39        | 80610048151  |
| 14           |        | 1/4       | —            | 920010-28-ND      | 2.45         | 10.95 | 18.04  | 70.88        | 80610048169  |
| 14           |        | 5/16      | —            | 920010-29-ND      | 2.45         | 10.95 | 18.04  | 70.88        | 80610048185  |
| 15           |        | #6        | —            | 920020-13-ND      | 2.05         | 9.18  | 15.12  | 59.39        | 80610049944  |
| 15           | #8     | —         | 920020-14-ND | 2.05              | 9.18         | 15.12 | 59.39  | 80610049951  |              |
| 15           | #10    | —         | 920020-15-ND | 2.05              | 9.18         | 15.12 | 59.39  | 80610049969  |              |



## Terminals, Tools, Lugs and Connectors (cont.)

| AWG                          | Fig.  | Stud Size | Insul. Dia. | Digi-Key Part No. | 10    | 50    | 100    | 500    | 3M Part No. |
|------------------------------|-------|-----------|-------------|-------------------|-------|-------|--------|--------|-------------|
| 12-10                        | 16    | #6        | —           | 920024-23-ND      | 1.99  | 8.92  | 14.70  | 57.74  | 80610051031 |
|                              | 16    | #8        | —           | 920024-24-ND      | 1.99  | 8.92  | 14.70  | 57.74  | 80610051049 |
|                              | 16    | #10       | —           | 920024-25-ND      | 1.99  | 8.92  | 14.70  | 57.74  | 80610051056 |
|                              | 16    | 1/4       | —           | 920024-26-ND      | 3.45  | 15.44 | 25.42  | 99.88  | 80610051064 |
|                              | 17    | #6        | —           | 920022-11-ND      | 2.04  | 9.12  | 15.03  | 59.03  | 80610050124 |
|                              | 17    | #8        | —           | 920022-12-ND      | 2.04  | 9.12  | 15.03  | 59.03  | 80610050132 |
| 22-18                        | 17    | #10       | —           | 920022-13-ND      | 2.04  | 9.12  | 15.03  | 59.03  | 80610050140 |
|                              | 18    | —         | —           | 920030-09-ND      | 3.25  | 14.56 | 23.98  | 94.20  | 80610050660 |
|                              | 26-20 | 19A       | 2.79        | 920044-06-ND      | 1.46  | 6.55  | 10.78  | 42.35  | 80610034466 |
|                              | 22-18 | 19B       | 4.75        | 920044-07-ND      | 1.46  | 6.55  | 10.78  | 42.35  | 80610064679 |
|                              | 19A   | 6.35      | —           | 920044-08-ND      | 1.46  | 6.55  | 10.78  | 42.35  | 80610039200 |
|                              | 19A   | 2.79      | —           | 920044-09-ND      | 1.46  | 6.55  | 10.78  | 42.35  | 80610046668 |
| 16-14                        | 19B   | 4.75      | —           | 920044-10-ND      | 1.46  | 6.55  | 10.78  | 42.35  | 80610046684 |
|                              | 19A   | 6.35      | —           | 920044-11-ND      | 1.46  | 6.55  | 10.78  | 42.35  | 80610046692 |
|                              | 20A   | 4.75      | —           | 920044-12-ND      | 1.85  | 8.27  | 13.62  | 53.50  | 80610039226 |
|                              | 22-18 | 20B       | 6.35        | 920044-13-ND      | 1.85  | 8.27  | 13.62  | 53.50  | 80610039234 |
|                              | 16-14 | 20A       | 4.75        | 920044-14-ND      | 1.85  | 8.27  | 13.62  | 53.50  | 80610046858 |
|                              | 20B   | 6.35      | —           | 920044-15-ND      | 1.85  | 8.27  | 13.62  | 53.50  | 80610046866 |
| 12-10                        | 20A   | 6.35      | —           | 920044-16-ND      | 3.55  | 15.90 | 26.18  | 102.86 | 80610056006 |
|                              | 22-18 | 21        | 4.75        | 920042-06-ND      | 1.41  | 6.32  | 10.41  | 40.91  | 80610064737 |
|                              | 21    | 6.35      | —           | 920042-07-ND      | 1.41  | 6.32  | 10.41  | 40.91  | 80610064653 |
|                              | 16-14 | 21        | 4.75        | 920042-08-ND      | 1.41  | 6.32  | 10.41  | 40.91  | 80610046908 |
|                              | 21    | 6.35      | —           | 920042-09-ND      | 1.41  | 6.32  | 10.41  | 40.91  | 80610046916 |
|                              | 12-10 | 21        | 6.35        | 920042-10-ND      | 1.87  | 8.35  | 13.75  | 54.01  | 80610050454 |
| <b>Heat Shrink Insulated</b> |       |           |             |                   |       |       |        |        |             |
| 22-18                        | 22    | #6        | 3.68        | 920010-45-ND      | 12.48 | 55.85 | 91.99  | 361.39 | 80610530281 |
|                              | 22    | #8        | 3.68        | 920010-46-ND      | 12.48 | 55.85 | 91.99  | 361.39 | 80610530323 |
|                              | 22    | #10       | 3.68        | 920010-47-ND      | 12.48 | 55.85 | 91.99  | 361.39 | 80610530349 |
|                              | 23    | #6        | 3.68        | 920024-27-ND      | 12.48 | 55.85 | 91.99  | 361.39 | 80610530307 |
|                              | 23    | #8        | 3.68        | 920024-28-ND      | 12.48 | 55.85 | 91.99  | 361.39 | 80610530802 |
|                              | 23    | #10       | 3.68        | 920024-29-ND      | 12.48 | 55.85 | 91.99  | 361.39 | 80610530364 |
| Red                          | 24    | —         | 3.68        | 920030-10-ND      | 17.48 | 78.19 | 128.79 | 505.95 | 80610530265 |
|                              | 25    | —         | 3.68        | 920044-18-ND      | 19.52 | 87.31 | 143.80 | 564.95 | 80610530380 |
|                              | 26    | —         | 3.68        | 920042-11-ND      | 19.52 | 87.31 | 143.80 | 564.95 | 80610530406 |
|                              | 22    | #6        | 4.32        | 920010-48-ND      | 12.48 | 55.85 | 91.99  | 361.39 | 80610530042 |
|                              | 22    | #8        | 4.32        | 920010-49-ND      | 12.48 | 55.85 | 91.99  | 361.39 | 80610530083 |
|                              | 22    | #10       | 4.32        | 920010-50-ND      | 12.48 | 55.85 | 91.99  | 361.39 | 80610530109 |
| 16-14                        | 22    | 1/4       | 4.32        | 920010-51-ND      | 13.57 | 60.71 | 99.99  | 392.81 | 80610530141 |
|                              | 22    | 5/16      | 4.32        | 920010-52-ND      | 13.57 | 60.71 | 99.99  | 392.81 | 80610530208 |
|                              | 23    | #6        | 4.32        | 920010-53-ND      | 13.57 | 60.71 | 99.99  | 392.81 | 80610530182 |
|                              | 23    | #8        | 4.32        | 920024-30-ND      | 12.48 | 55.85 | 91.99  | 361.39 | 80610530067 |
|                              | 23    | #8        | 4.32        | 920024-31-ND      | 12.48 | 55.85 | 91.99  | 361.39 | 80610530786 |
|                              | 23    | #10       | 4.32        | 920024-32-ND      | 12.48 | 55.85 | 91.99  | 361.39 | 80610530125 |
| Blue                         | 23    | 1/4       | 4.32        | 920024-33-ND      | 13.57 | 60.71 | 99.99  | 392.81 | 80610530166 |

| AWG                                                          | Fig.  | Stud Size              | Insul. Dia. | Digi-Key Part No. | 10    | 50    | 100    | 500    | 3M Part No. |
|--------------------------------------------------------------|-------|------------------------|-------------|-------------------|-------|-------|--------|--------|-------------|
| 16-14                                                        | 24    | —                      | 4.32        | 920030-11-ND      | 17.48 | 78.19 | 128.79 | 505.95 | 80610530026 |
|                                                              | 25    | —                      | 4.32        | 920044-19-ND      | 19.52 | 87.31 | 143.80 | 564.95 | 80610530224 |
|                                                              | 26    | —                      | 4.32        | 920042-12-ND      | 19.80 | 88.59 | 145.92 | 573.25 | 80610530240 |
|                                                              | 22    | #10                    | 6.35        | 920010-54-ND      | 15.20 | 67.99 | 111.99 | 439.95 | 80610456396 |
|                                                              | 22    | 1/4                    | 6.35        | 920010-55-ND      | 16.83 | 75.28 | 123.98 | 487.08 | 80610456422 |
|                                                              | 22    | 3/8                    | 6.35        | 920010-56-ND      | 16.83 | 75.28 | 123.98 | 487.08 | 80610456461 |
| 12-10                                                        | 23    | #8                     | 6.35        | 920024-34-ND      | 15.74 | 70.42 | 115.98 | 455.65 | 80610530414 |
|                                                              | 23    | #10                    | 6.35        | 920024-35-ND      | 15.74 | 70.42 | 115.98 | 455.65 | 80610456412 |
|                                                              | 23    | 1/4                    | 6.35        | 920024-36-ND      | 17.37 | 77.70 | 127.98 | 502.80 | 80610456446 |
|                                                              | 24    | —                      | 6.35        | 920030-12-ND      | 19.00 | 84.99 | 139.98 | 549.93 | 80610456347 |
|                                                              | 24    | —                      | 6.35        | 920044-20-ND      | 21.35 | 95.50 | 157.29 | 617.91 | 80610456487 |
|                                                              | 26    | —                      | 6.35        | 920042-13-ND      | 21.35 | 95.50 | 157.29 | 617.91 | 80610530000 |
| 22-18                                                        | 27    | —                      | 3.81        | 920074-01-ND      | 3.33  | 14.92 | 24.57  | 96.53  | 80004000529 |
|                                                              | 16-14 | 27                     | —           | 920074-02-ND      | 3.33  | 14.92 | 24.57  | 96.53  | 80610089734 |
|                                                              | 12    | 27                     | —           | 920074-03-ND      | 3.59  | 16.07 | 26.46  | 103.95 | 80004000537 |
| <b>Multi-Stack Adapters</b>                                  |       |                        |             |                   |       |       |        |        |             |
| 22-18                                                        | 28    | 6.35                   | —           | 920084-01-ND      | 4.59  | 20.53 | 33.82  | 132.87 | 80610039614 |
| 16-14                                                        | 28    | 6.35                   | —           | 920084-02-ND      | 4.59  | 20.53 | 33.82  | 132.87 | 80610047559 |
| —                                                            | 29A   | 6.35                   | —           | 920082-01-ND      | 3.63  | 16.25 | 26.77  | 105.16 | 80610052344 |
| —                                                            | 29B   | 6.35                   | —           | 920082-02-ND      | 2.45  | 10.95 | 18.04  | 70.85  | 80610057087 |
| <b>Scotchlok Connectors</b>                                  |       |                        |             |                   |       |       |        |        |             |
| 22-14                                                        | 30    | Closed End             | —           | 920030-13-ND      | 2.00  | 8.93  | 14.70  | 57.76  | 80610039390 |
| 18-10                                                        | 30    | End                    | —           | 920030-14-ND      | 2.66  | 11.91 | 19.62  | 77.08  | 80610047328 |
| 8-14                                                         | 31    | Electrical Connector   | —           | 920090-01-ND      | 6.50  | 29.07 | 47.88  | 188.09 | 80610456123 |
| 10-18                                                        | 31    | Electrical Connector   | —           | 920090-02-ND      | 2.91  | 13.01 | 21.43  | 84.18  | 80610456131 |
| 12-22                                                        | 31    | Electrical Connector   | —           | 920090-03-ND      | 2.21  | 9.88  | 16.27  | 63.92  | 80610023519 |
| 8-12                                                         | 32    | Spring Connector       | —           | 920090-04-ND      | 6.42  | 28.72 | 47.30  | 185.83 | 80610734545 |
| 12-22                                                        | 32    | Spring Connector       | —           | 920090-05-ND      | 1.99  | 8.88  | 14.63  | 57.48  | 80610734560 |
| 8-12                                                         | 32    | Spring Connector       | —           | 920090-06-ND      | 2.96  | 13.26 | 21.84  | 85.80  | 80610734586 |
| 12-22                                                        | 31    | Nylon Spring Connector | —           | 920074-04-ND      | 2.21  | 9.88  | 16.27  | 63.92  | 80610145247 |
| 10-18                                                        | 31    | Nylon Spring Connector | —           | 920074-05-ND      | 2.90  | 12.97 | 21.36  | 83.92  | 80610145262 |
| <b>Highland™ Connectors - High Temperature 302°F (150°C)</b> |       |                        |             |                   |       |       |        |        |             |
| 22-16                                                        | 33    | Spring Connector       | —           | 920091-01-ND      | 1.86  | 8.31  | 13.68  | 53.75  | 80610733281 |
| 18-14                                                        | 33    | Spring Connector       | —           | 920091-02-ND      | 2.11  | 9.45  | 15.57  | 61.17  | 80610733307 |
| 18-12                                                        | 33    | Spring Connector       | —           | 920091-03-ND      | 2.71  | 12.13 | 19.97  | 78.47  | 80610733323 |
| 18-10                                                        | 33    | Spring Connector       | —           | 920091-04-ND      | 3.92  | 17.52 | 28.86  | 113.40 | 80610733349 |

**Weidmüller**  
**Paladin Tools**  
**Tools**

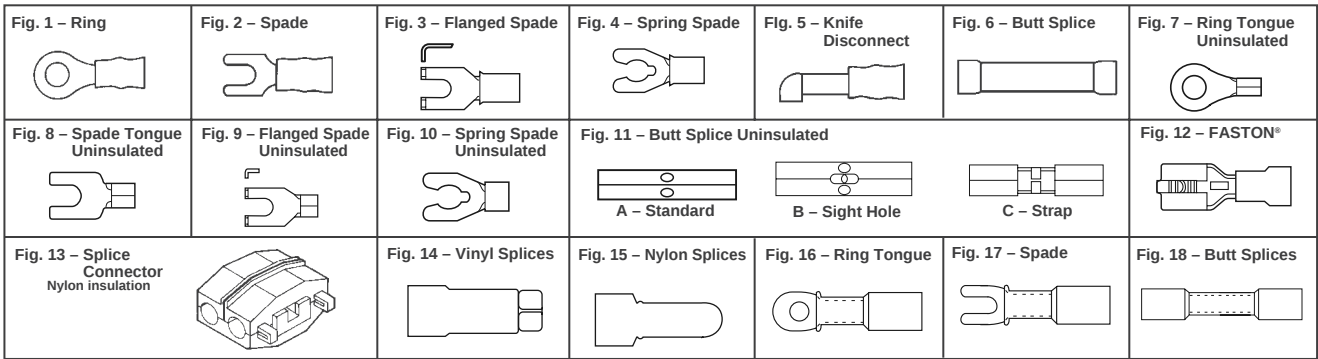
| Description                              | Digi-Key Part No. | Price Each |
|------------------------------------------|-------------------|------------|
| Crimp Tool — Frame Only                  | PAL1302-ND        | 41.17      |
| Die Set Splice Connectors for PAL1302-ND | PAL2035-ND        | 31.60      |



## 70AD Modular Contacts

The **Model 70AD Modular Contact** is a low profile modular design connector that makes a high integrity, yet quickly removable connection. **Applications:** Rechargeable batteries and battery packs, battery chargers, cellular and portable phones, two-way radios, laptop computers, etc. **Materials and Finishes:** Insulator: Glass reinforced thermoplastic; UL 94V-0 rated, black. Contact: Copper alloy. Finish Underplating: Nickel. Finish Contact Area: 30µ in. Au over Ni (male). Precious metal (female). Finish Termination: Tin alloy (meets MIL-STD-202, method 208). **Electrical Operating Characteristics:** Current Rating: DC 3A/contact. Voltage Rating: DC 30V (male). Contact Resistance: 25mΩ max. Dielectric Voltage: AC 500V. Insulating Resistance: 400MΩ min. (male), 500MΩ min. (female). **Operating Temperature:** -55°C to 125°C. **Mechanical Characteristics:** Normal Force: 100 grams min. (male). **Durability:** 5,000 cycles.

| Fig.                            | No. of Pos. | Digi-Key Part No. | 1    | 10   | 50   | 100  | Bourns Part No. |
|---------------------------------|-------------|-------------------|------|------|------|------|-----------------|
| <b>Female SMT</b>               |             |                   |      |      |      |      |                 |
| 1                               | 2           | 70ADJ-2-F-ND      | 1.23 | .98  | .76  | .72  | 70ADJ-002-FLO   |
|                                 | 3           | 70ADJ-3-F-ND      | 1.45 | 1.16 | .90  | .85  | 70ADJ-003-FLO   |
|                                 | 4           | 70ADJ-4-F-ND      | 1.83 | 1.46 | 1.13 | 1.06 | 70ADJ-004-FLO   |
|                                 | 5           | 70ADJ-5-F-ND      | 2.18 | 1.74 | 1.34 | 1.27 | 70ADJ-005-FLO   |
|                                 | 6           | 70ADJ-6-F-ND      | 2.55 | 2.04 | 1.57 | 1.48 | 70ADJ-006-FLO   |
| <b>Female SMT w/Locator Pin</b> |             |                   |      |      |      |      |                 |
| 1                               | 2           | 70ADJ-2-F1-ND     | 1.23 | .98  | .76  | .72  | 70ADJ-002-FL1   |
|                                 | 3           | 70ADJ-3-F1-ND     | 1.45 | 1.16 | .90  | .85  | 70ADJ-003-FL1   |
|                                 | 4           | 70ADJ-4-F1-ND     | 1.83 | 1.46 | 1.13 | 1.06 | 70ADJ-004-FL1   |
|                                 | 5           | 70ADJ-5-F1-ND     | 2.18 | 1.74 | 1.34 | 1.27 | 70ADJ-005-FL1   |
|                                 | 6           | 70ADJ-6-F1-ND     | 2.55 | 2.04 | 1.57 | 1.48 | 70ADJ-006-FL1   |
| <b>Female Through-Hole</b>      |             |                   |      |      |      |      |                 |
| 2                               | 2           | 70ADH-2-F-ND      | 1.23 | .98  | .76  | .72  | 70ADH-002-FLO   |
|                                 | 3           | 70ADH-3-F-ND      | 1.45 | 1.16 | .90  | .85  | 70ADH-003-FLO   |
|                                 | 4           | 70ADH-4-F-ND      | 1.83 | 1.46 | 1.13 | 1.06 | 70ADH-004-FLO   |
|                                 | 5           | 70ADH-5-F-ND      | 2.18 | 1.74 | 1.34 | 1.27 | 70ADH-005-FLO   |
|                                 | 6           | 70ADH-6-F-ND      | 2.55 | 2.04 | 1.57 | 1.48 | 70ADH-006-FLO   |
| <b>Male SMT</b>                 |             |                   |      |      |      |      |                 |
| 3                               | 2           | 70ADJ-2-M-ND      | 1.30 | 1.04 | .80  | .76  | 70ADJ-002-MLO   |
|                                 | 3           | 70ADJ-3-M-ND      | 1.63 | 1.30 | 1.00 | .95  | 70ADJ-003-MLO   |
|                                 | 4           | 70ADJ-4-M-ND      | 2.03 | 1.62 | 1.25 | 1.18 | 70ADJ-004-MLO   |
|                                 | 5           | 70ADJ-5-M-ND      | 2.45 | 1.96 | 1.51 | 1.43 | 70ADJ-005-MLO   |
|                                 | 6           | 70ADJ-6-M-ND      | 2.85 | 2.28 | 1.76 | 1.66 | 70ADJ-006-MLO   |
| <b>Male SMT w/Locator Pin</b>   |             |                   |      |      |      |      |                 |
| 3                               | 2           | 70ADJ-2-M1-ND     | 1.30 | 1.04 | .80  | .76  | 70ADJ-002-ML1   |
|                                 | 3           | 70ADJ-3-M1-ND     | 1.63 | 1.30 | 1.00 | .95  | 70ADJ-003-ML1   |
|                                 | 4           | 70ADJ-4-M1-ND     | 2.03 | 1.62 | 1.25 | 1.18 | 70ADJ-004-ML1   |
|                                 | 5           | 70ADJ-5-M1-ND     | 2.45 | 1.96 | 1.51 | 1.43 | 70ADJ-005-ML1   |
|                                 | 6           | 70ADJ-6-M1-ND     | 2.85 | 2.28 | 1.76 | 1.66 | 70ADJ-006-ML1   |



## PIDG (Pre-Insulated Diamond Grip) Terminals

Meet or exceed the requirements of MIL-T-7928, Type II, Class 1 and 2. **Temperature Rating:** 105°C Max. **Material:** • Insulation: Nylon • Terminal Body and Metallic Sleeve: Copper per QQ-C-576 • Plating: Tin per MIL-T-10727. **AMP Wire Range:** 22-16 Solid or Stranded, 16-14 Solid or Stranded, 12-10 Solid or Stranded, 300V Max. UL listed E66717. CSA certified LR 7189. **Fig. L:** 22-18 Stranded, 16-14 Stranded, 12-10 Stranded.

| AWG          | Fig. | Stud Size | Insul. Dia. (mm) | Digi-Key Part No.      | 10   | 100   | 500    | 1,000  | AMP Part No. |
|--------------|------|-----------|------------------|------------------------|------|-------|--------|--------|--------------|
| 26-22 Yellow | 1    | 2         | 2.08             | A0879-ND               | 2.11 | 18.53 | 78.81  | 117.00 | 323912       |
|              | 1    | 4         | 2.08             | A0880-ND               | 2.17 | 19.12 | 81.31  | 121.00 | 323914       |
|              | 1    | 6         | 2.08             | A0881-ND               | 2.11 | 18.53 | 78.81  | 117.00 | 323915       |
|              | 1    | 8         | 2.08             | A0882-ND               | 2.54 | 22.35 | 95.07  | 142.00 | 323916       |
|              | 1    | 10        | 2.08             | A0883-ND               | 2.65 | 23.35 | 99.30  | 148.00 | 324075       |
|              | 6    | —         | 2.08             | A0913-ND               | 5.38 | 47.34 | 201.36 | 300.00 | 2-323994-2   |
| 22-18 Red    | 1    | 4         | 3.56             | A1087-ND               | 2.17 | 19.12 | 81.31  | 121.04 | 31880        |
|              | 1    | 6         | 3.56             | A1060-ND               | 1.43 | 12.62 | 53.68  | 79.91  | 36152        |
|              | 4    | 8         | 3.56             | A1089-ND               | 2.41 | 21.19 | 90.14  | 134.18 | 52930        |
|              | 4    | 10        | 3.68             | A1099-ND               | 3.49 | 30.71 | 130.63 | 194.45 | 52931        |
| 22-16 Red    | 6    | —         | 3.18             | A1069-ND               | 5.29 | 46.54 | 197.95 | 294.66 | 320559       |
|              | 1    | 2         | 3.18             | A0884-ND               | 2.11 | 18.53 | 78.81  | 117.00 | 328657       |
|              | 1    | 8         | 3.56             | A1061-ND               | 1.48 | 13.02 | 55.39  | 82.00  | 31890        |
|              | 1    | 10        | 3.56             | A1062-ND               | 1.48 | 13.02 | 55.39  | 82.45  | 36154        |
|              | 1    | 1/4       | 3.56             | A0885-ND               | 2.54 | 22.33 | 94.99  | 141.00 | 31894        |
|              | 1    | 5/16      | 3.56             | A0886-ND               | 2.54 | 22.33 | 94.99  | 141.00 | 31895        |
|              | 1    | 3/8       | 3.56             | A0887-ND               | 2.62 | 23.01 | 97.88  | 146.00 | 31897        |
|              | 1    | 1/2       | 3.56             | A0888-ND               | 6.08 | 53.49 | 227.49 | 339.00 | 328975       |
|              | 2    | 2         | 3.56             | A0895-ND               | 2.11 | 18.53 | 78.81  | 117.00 | 328394       |
|              | 2    | 4         | 3.56             | A0896-ND               | 2.56 | 22.55 | 95.91  | 143.00 | 327717       |
|              | 2    | 6         | 3.56             | A1063-ND               | 1.43 | 12.62 | 53.68  | 79.91  | 34541        |
|              | 2    | 8         | 3.56             | A1064-ND               | 2.11 | 18.53 | 78.81  | 117.00 | 32053        |
|              | 2    | 10        | 3.68             | A1065-ND               | 2.11 | 18.53 | 78.81  | 117.00 | 32054        |
|              | 3    | 2         | 3.56             | A0899-ND               | 2.76 | 24.27 | 103.21 | 154.00 | 324608       |
|              | 3    | 6         | 3.56             | A1066-ND               | 2.29 | 20.18 | 85.84  | 128.00 | 32562        |
|              | 3    | 8         | 3.56             | A1088-ND               | 2.32 | 20.39 | 86.71  | 129.07 | 32498        |
|              | 4    | 4         | 3.18             | A0902-ND <sup>1</sup>  | 2.45 | 21.55 | 91.65  | 136.00 | 52927        |
|              | 4    | 6         | 3.56             | A1067-ND <sup>1</sup>  | 2.41 | 21.19 | 90.14  | 134.00 | 52929        |
|              | 4    | 6         | 3.18             | A09040-ND <sup>2</sup> | 4.10 | 36.12 | 153.61 | 229.00 | 52409        |
| 16-14 Blue   | 4    | 8         | 3.18             | A09041-ND <sup>2</sup> | 3.86 | 33.98 | 144.53 | 215.00 | 52410        |
|              | 4    | 10        | 3.18             | A09042-ND <sup>2</sup> | 2.41 | 21.19 | 90.14  | 134.00 | 52411        |
|              | 5    | —         | 3.56             | A1068-ND               | 4.20 | 29.02 | 123.52 | 184.68 | 32446        |
|              | 1    | 4         | 4.32             | A1091-ND               | 2.11 | 18.53 | 78.81  | 117.31 | 328996       |
|              | 1    | 6         | 4.32             | A1070-ND               | 1.43 | 12.62 | 53.68  | 79.91  | 320619       |
|              | 1    | 8         | 4.32             | A1071-ND               | 1.43 | 12.62 | 53.68  | 79.91  | 320565       |
|              | 1    | 10        | 4.32             | A1072-ND               | 1.43 | 12.62 | 53.68  | 79.91  | 36160        |
|              | 1    | 1/4       | 4.32             | A0889-ND               | 1.68 | 14.75 | 62.72  | 93.00  | 321045       |
|              | 1    | 5/16      | 4.32             | A0890-ND               | 2.46 | 21.65 | 92.07  | 137.00 | 328998       |
|              | 1    | 3/8       | 4.32             | A0891-ND               | 2.67 | 23.48 | 99.85  | 149.00 | 328999       |
|              | 1    | 1/2       | 4.32             | A0892-ND               | 5.79 | 50.92 | 216.57 | 322.00 | 328849       |
|              | 2    | 6         | 4.32             | A1073-ND               | 2.11 | 18.53 | 78.81  | 117.31 | 35559        |
|              | 2    | 8         | 3.81             | A0897-ND               | 2.11 | 18.53 | 78.81  | 117.00 | 32059        |
|              | 2    | 8         | 4.32             | A1074-ND               | 2.22 | 19.51 | 82.96  | 123.49 | 321233       |
|              | 2    | 10        | 4.32             | A1075-ND               | 2.22 | 19.51 | 82.96  | 123.49 | 32060        |
|              | 3    | 6         | 4.32             | A1076-ND               | 2.32 | 20.39 | 86.71  | 129.07 | 320861       |
|              | 3    | 8         | 4.32             | A1077-ND               | 2.32 | 20.39 | 86.71  | 129.07 | 320862       |
|              | 3    | 10        | 4.32             | A1092-ND               | 2.32 | 20.39 | 86.71  | 129.07 | 320863       |
| 12-10 Yellow | 4    | 6         | 4.32             | A1078-ND <sup>1</sup>  | 2.41 | 21.19 | 90.14  | 134.18 | 52935        |
|              | 4    | 8         | 4.32             | A1093-ND <sup>1</sup>  | 2.54 | 22.31 | 94.88  | 141.24 | 52936        |
|              | 4    | 10        | 4.32             | A1094-ND <sup>1</sup>  | 2.54 | 22.31 | 94.88  | 141.24 | 52937        |
|              | 4    | 6         | 3.81             | A09043-ND <sup>2</sup> | 2.54 | 22.31 | 94.88  | 141.00 | 52420        |
|              | 4    | 8         | 3.81             | A09044-ND <sup>2</sup> | 4.64 | 40.87 | 173.81 | 259.00 | 52421        |
|              | 4    | 10        | 4.32             | A09045-ND <sup>2</sup> | 2.54 | 22.31 | 94.88  | 141.00 | 52422-1      |
|              | 5    | —         | 4.32             | A1079-ND               | 4.20 | 29.02 | 123.52 | 184.68 | 32448        |
|              | 6    | —         | 3.81             | A1080-ND               | 5.29 | 46.54 | 197.95 | 294.66 | 320562       |
|              | 1    | 8         | 5.84             | A09035-ND*             | 3.79 | 33.39 | 142.03 | 211.00 | 320627       |
|              | 1    | 10        | 5.84             | A09036-ND*             | 4.17 | 36.73 | 156.23 | 233.00 | 320630       |
|              | 1    | 1/4       | 6.35             | A09037-ND*             | 4.01 | 35.32 | 150.23 | 224.00 | 34806        |
|              | 1    | 1/2       | 6.35             | A09038-ND*             | 7.77 | 68.34 | 290.68 | 433.00 | 35316        |
|              | 1    | 6         | 6.35             | A0893-ND               | 2.76 | 24.29 | 103.31 | 154.00 | 35149        |
|              | 1    | 8         | 6.35             | A1081-ND               | 1.87 | 14.86 | 63.07  | 94.61  | 35108        |
|              | 1    | 10        | 6.35             | A1082-ND               | 1.87 | 14.86 | 63.07  | 94.61  | 35109        |
|              | 1    | 1/4       | 6.35             | A1083-ND               | 3.31 | 26.32 | 111.71 | 167.57 | 35110        |
|              | 1    | 5/16      | 6.35             | A1095-ND               | 3.31 | 26.32 | 111.71 | 167.57 | 35111        |

| AWG          | Fig. | Stud Size | Insul. Dia. (mm) | Digi-Key Part No. | 10   | 100   | 500    | 1,000  | AMP Part No. |
|--------------|------|-----------|------------------|-------------------|------|-------|--------|--------|--------------|
| 12-10 Yellow | 1    | 3/8       | 6.35             | A1084-ND          | 3.31 | 26.32 | 111.71 | 167.57 | 35112        |
|              | 1    | 1/2       | 6.35             | A0894-ND          | 3.63 | 31.97 | 135.99 | 202.00 | 35151        |
|              | 2    | 8         | 5.84             | A0898-ND          | 2.91 | 25.57 | 108.74 | 162.00 | 32588        |
|              | 2    | 10        | 5.84             | A1085-ND          | 2.91 | 23.08 | 97.95  | 146.93 | 32589        |
|              | 3    | 6         | 6.35             | A0900-ND          | 6.07 | 53.44 | 227.29 | 338.00 | 325150       |
|              | 3    | 8         | 5.84             | A09039-ND         | 3.04 | 26.72 | 113.63 | 169.00 | 32510        |
|              | 3    | 10        | 6.35             | A0901-ND          | 3.04 | 26.72 | 113.63 | 169.00 | 324015       |
|              | 4    | 6         | 5.84             | A1096-ND          | 3.13 | 24.87 | 105.57 | 158.36 | 52941        |
|              | 4    | 8         | 6.35             | A1097-ND          | 3.30 | 26.18 | 111.13 | 166.70 | 52942        |
|              | 4    | 10        | 5.84             | A1098-ND          | 3.30 | 26.18 | 111.13 | 166.70 | 52943        |
|              | 5    | —         | 6.35             | A09046-ND         | 7.18 | 63.18 | 268.73 | 400.00 | 35762        |
|              | 6    | —         | 5.59             | A1086-ND          | 8.93 | 71.95 | 301.08 | 451.62 | 320570       |

| AWG   | Fig. | Insul. Color | Fits Tab Size (mm) | Insul. Dia. (mm) | Digi-Key Part No. | 10   | 100   | 500    | 1,000  | AMP Part No. |
|-------|------|--------------|--------------------|------------------|-------------------|------|-------|--------|--------|--------------|
| 22-18 | 12   | Trans.       | 2.79 x .51†        | 2.54             | A09049-ND†        | 2.95 | 25.99 | 110.55 | 165.00 | 61060-1      |
|       | 12   |              | 2.79 x .81†        | 2.54             | A0911-ND          | 2.95 | 25.99 | 110.55 | 165.00 | 60894-1      |
| 22-18 | 12   | Red          | 2.79 x .51††       | 3.56             | A09050-ND         | 2.74 | 24.09 | 102.44 | 152.00 | 640923-1     |
|       | 12   |              | 2.79 x .81††       | 3.56             | A09051-ND         | 2.74 | 24.09 | 102.44 | 152.00 | 640925-1     |
|       | 12   |              | 5.21 x .51         | 3.43             | A09047-ND         | 2.74 | 24.09 | 102.44 | 152.00 | 640909-1     |
|       | 12   |              | 5.21 x .81         | 3.43             | A0907-ND          | 2.74 | 24.09 | 102.44 | 152.00 | 640911-1     |
|       | 12   |              | 4.75 x .51         | 3.43             | A0909-ND          | 1.66 | 14.59 | 62.04  | 92.00  | 640917-1     |
| 16-14 | 12   | Blue         | 6.35 x .81         | 3.56             | A0903-ND          | 1.66 | 14.59 | 62.04  | 92.35  | 640903-1     |
|       | 12   |              | 5.21 x .81         | 4.32             | A0904-ND          | 1.66 | 14.59 | 62.04  | 92.35  | 640905-1     |
|       | 12   |              | 4.75 x .51         | 4.32             | A0908-ND          | 2.74 | 24.09 | 102.44 | 152.00 | 640915-1     |
|       | 12   |              | 2.79 x .51         | 4.32             | A0910-ND          | 2.74 | 24.09 | 102.44 | 152.00 | 640919-1     |
|       | 12   |              | 5.21 x .51         | 4.32             | A0912-ND          | 2.74 | 24.09 | 102.44 | 152.00 | 640929-1     |
| 14-12 | 12   | Green        | 6.35 x .81         | 6.35             | A09048-ND         | 2.74 | 24.09 | 102.44 | 152.00 | 640913-1     |
| 12-10 | 12   | Yellow       | 6.35 x .81         | 6.35             | A0905-ND          | 3.94 | 34.64 | 147.35 | 219.00 | 42844-1      |
|       | 12   |              | 6.35 x .81         | 6.35             | A0906-ND          | 2.43 | 21.36 | 90.86  | 135.00 | 640907-1     |

\* Heavy duty † Standard †† Low Insertion ‡ Not UL or CSA approved or listed

## Plasti-Grip™ Terminals and Splices

**Temperature Rating:** 90°C Max. **Material:** • Insulation: Vinyl • Terminal Body: Copper per QQ-C-576 • Plating: Tin per MIL-T-10727. **AMP Wire Range:** 22-16 Terminals, Butt & Parallel Splices 22-16 Solid or Stranded, 16-14 Terminals, Butt & Parallel Splices 16-14 Solid or Stranded, 12-10 Terminals, Butt & Parallel Splices 12-10 Solid or Stranded, 600V Max (1000V Fixture or Sign). Recognized under the component program of Underwriters Laboratories Incorporated File No. E13288.

| AWG       | Fig. | Stud Size | Insul. Dia. (mm) | Digi-Key Part No.      | 10   | 100   | 500   | 1,000  | AMP Part No. |
|-----------|------|-----------|------------------|------------------------|------|-------|-------|--------|--------------|
| 22-16 Red | 1    | 2         | 3.56             | A0954-ND               | 1.71 | 15.02 | 63.88 | 95.00  | 34140        |
|           | 1    | 4         | 3.56             | A0955-ND               | 1.71 | 15.02 | 63.88 | 95.00  | 34141        |
|           | 1    | 6         | 3.56             | A0956-ND <sup>2</sup>  | 1.71 | 15.02 | 63.88 | 95.00  | 34144        |
|           | 1    | 6         | 3.56             | A09016-ND <sup>1</sup> | 1.71 | 15.02 | 63.88 | 95.00  | 34142        |
|           | 1    | 8         | 3.56             | A0957-ND <sup>2</sup>  | 1.04 | 9.11  | 38.75 | 58.00  | 34148        |
|           | 1    | 8         | 3.56             | A09017-ND <sup>1</sup> | 1.04 | 9.11  | 38.75 | 58.00  | 34145        |
|           | 1    | 10        | 3.56             | A0958-ND <sup>2</sup>  | 1.71 | 15.02 | 63.88 | 95.00  | 34149        |
|           | 1    | 10        | 3.56             | A09018-ND <sup>1</sup> | 1.71 | 15.02 | 63.88 | 95.00  | 34146        |
|           | 1    | 10        | 3.18             | A09019-ND              | 1.71 | 15.02 | 63.88 | 95.00  | 32952        |
|           | 1    | 1/4       | 3.56             | A0959-ND               | 1.99 | 17.55 | 74.66 | 111.00 | 34150        |
|           | 1    | 5/16      | 3.56             | A0960-ND               | 1.99 | 17.55 | 74.66 | 111.00 | 34151        |
|           | 1    | 3/8       | 3.56             | A0961-ND               | 2.06 | 18.09 | 76.94 | 115.00 | 34152        |
|           | 2    | 6         | 3.56             | A0974-ND               | 1.71 | 15.02 | 63.88 | 95.00  | 320665       |
|           | 2    | 8         | 3.56             | A0975-ND               | 1.71 | 15.02 | 63.88 | 95.00  | 34155        |
|           | 2    | 10        | 3.56             | A0976-ND               | 1.71 | 15.02 | 63.88 | 95.00  | 34156        |
|           | 3    | 6         | 3.56             | A0982-ND               | 1.88 | 16.52 | 70.27 | 105.00 | 322249       |

| AWG          | Fig. | Stud Size | Insul. Dia. (mm) | Digi-Key Part No.      | Pricing |       |        |        | AMP Part No. |
|--------------|------|-----------|------------------|------------------------|---------|-------|--------|--------|--------------|
|              |      |           |                  |                        | 10      | 100   | 500    | 1,000  |              |
| 16-14 Blue   | 1    | 8         | 4.32             | A0964-ND               | 1.04    | 9.11  | 38.75  | 58.00  | 34160        |
|              | 1    | 10        | 3.68             | A09021-ND              | 1.71    | 15.02 | 63.88  | 95.00  | 32960        |
|              | 1    | 10        | 4.32             | A0965-ND               | 1.71    | 15.02 | 63.88  | 95.00  | 34161        |
|              | 1    | 1/4       | 4.32             | A0966-ND               | 1.21    | 10.65 | 45.30  | 67.00  | 34162        |
|              | 1    | 5/16      | 4.32             | A0967-ND               | 1.99    | 17.55 | 74.66  | 111.00 | 34163        |
|              | 1    | 3/8       | 4.32             | A0968-ND               | 2.06    | 18.09 | 76.94  | 115.00 | 34164        |
|              | 2    | 6         | 3.56             | A0977-ND               | 1.71    | 15.02 | 63.88  | 95.00  | 322994       |
|              | 2    | 8         | 4.32             | A0978-ND               | 1.71    | 15.02 | 63.88  | 95.00  | 34166        |
|              | 2    | 10        | 4.32             | A0979-ND               | 1.71    | 15.02 | 63.88  | 95.00  | 34167        |
|              | 3    | 6         | 4.32             | A0985-ND               | 1.88    | 16.52 | 70.27  | 105.00 | 324165       |
|              | 3    | 8         | 4.32             | A09024-ND              | 2.73    | 24.00 | 102.09 | 152.00 | 53874-1      |
|              | 4    | 6         | 4.32             | A0992-ND <sup>1</sup>  | 2.03    | 17.82 | 75.81  | 113.00 | 52955        |
|              | 4    | 6         | 4.32             | A09030-ND <sup>2</sup> | 3.28    | 28.84 | 122.66 | 183.00 | 52463        |
|              | 4    | 8         | 4.32             | A0993-ND <sup>1</sup>  | 2.35    | 20.71 | 88.08  | 131.00 | 52956        |
|              | 4    | 8         | 4.32             | A09031-ND <sup>2</sup> | 3.45    | 30.32 | 128.97 | 192.00 | 52464        |
|              | 4    | 10        | 4.32             | A0994-ND <sup>1</sup>  | 2.03    | 17.82 | 75.81  | 113.00 | 52957        |
|              | 4    | 10        | 4.32             | A09032-ND <sup>2</sup> | 4.10    | 36.07 | 153.43 | 228.00 | 52465        |
|              | 6    | —         | 4.32             | A0998-ND               | 1.24    | 10.93 | 46.49  | 69.00  | 34071        |
|              | 6    | —         | 3.43x6.22        | A09034-ND              | 2.05    | 18.02 | 76.65  | 114.00 | 34204        |
| 12-10 Yellow | 1    | 8         | 6.35             | A0969-ND               | 2.29    | 20.12 | 85.57  | 127.00 | 34853        |
|              | 1    | 10        | 6.35             | A0970-ND <sup>2</sup>  | 2.29    | 20.12 | 85.57  | 127.00 | 34854        |
|              | 1    | 10        | 5.84             | A09023-ND <sup>1</sup> | 3.92    | 34.54 | 146.89 | 219.00 | 34837        |
|              | 1    | 1/4       | 6.35             | A0971-ND               | 2.63    | 23.11 | 98.29  | 146.00 | 34855        |
|              | 1    | 1/2       | 6.35             | A09022-ND              | 2.29    | 20.12 | 85.57  | 127.00 | 34170        |
|              | 1    | 5/16      | 6.35             | A0972-ND               | 2.66    | 23.43 | 99.66  | 148.00 | 34856        |
|              | 1    | 3/8       | 5.84             | A0973-ND               | 2.63    | 23.11 | 98.29  | 146.00 | 34173        |
|              | 2    | 8         | 6.35             | A0980-ND               | 2.76    | 24.29 | 103.31 | 154.00 | 35152        |
|              | 2    | 10        | 5.84             | A0981-ND               | 2.29    | 20.12 | 85.57  | 127.00 | 34176        |
|              | 3    | 6         | 5.84             | A0986-ND               | 4.24    | 37.27 | 158.54 | 236.00 | 324581       |
|              | 3    | 8         | 5.84             | A0987-ND               | 2.12    | 18.68 | 79.45  | 118.00 | 324172       |
|              | 3    | 10        | 6.35             | A09025-ND              | 2.12    | 18.68 | 79.45  | 118.00 | 52856        |
|              | 4    | 10        | 6.35             | A09026-ND              | 3.82    | 33.61 | 142.93 | 213.00 | 52963-2      |
|              | 6    | —         | 5.84             | A0999-ND               | 2.06    | 18.15 | 77.19  | 115.00 | 34072        |

<sup>1</sup> Short; <sup>2</sup> Long

## Solistrand™ Terminals and Splices

**Temperature Rating:** 170°C Max. **Material:** • Terminal Body: copper per QQ-C-576 • Plating: Tin per MIL-T-10727 **AMP Wire Range:** 22-16 Solid or Stranded, 16-14 Solid or Stranded, 12-10 Solid or Stranded, 8 through 2/0 Solid or Stranded. UL Listed. CSA Certified. Military Approved.

| AWG   | Fig. | Stud Size | Digi-Key Part No.      | Pricing |       |       |        | AMP Part No. |
|-------|------|-----------|------------------------|---------|-------|-------|--------|--------------|
|       |      |           |                        | 10      | 100   | 500   | 1,000  |              |
| 26-22 | 11-C | —         | A09010-ND              | 1.61    | 14.21 | 60.43 | 90.00  | 321198       |
| 24-20 | 11-C | —         | A09011-ND              | 1.68    | 14.80 | 62.96 | 94.00  | 324001       |
| 22-16 | 7    | 4         | A0914-ND               | 1.15    | 10.14 | 43.11 | 64.00  | 34104        |
|       | 7    | 6         | A0915-ND               | .90     | 7.91  | 33.65 | 50.00  | 34105        |
|       | 7    | 8         | A0916-ND               | 1.12    | 9.83  | 41.79 | 62.00  | 34108        |
|       | 7    | 10        | A0917-ND               | 1.12    | 9.83  | 41.79 | 62.00  | 34109        |
|       | 7    | 1/4       | A0918-ND               | 1.31    | 11.49 | 48.86 | 73.00  | 34113        |
|       | 7    | 5/16      | A0919-ND               | 1.35    | 11.85 | 50.42 | 75.00  | 34114        |
|       | 7    | 3/8       | A0920-ND               | 1.39    | 12.21 | 51.94 | 77.00  | 34115        |
|       | 8    | 2         | A0932-ND               | 1.77    | 15.59 | 66.31 | 99.00  | 53555-1      |
|       | 8    | 4         | A09000-ND              | 2.29    | 20.14 | 85.67 | 128.00 | 321463       |
|       | 8    | 6         | A0933-ND <sup>2</sup>  | 1.12    | 9.83  | 41.79 | 62.00  | 323127       |
|       | 8    | 6         | A09001-ND <sup>1</sup> | 1.12    | 9.83  | 41.79 | 62.00  | 36195        |
|       | 8    | 8         | A0934-ND               | 1.12    | 9.83  | 41.79 | 62.00  | 34117        |
|       | 8    | 10        | A0935-ND               | 1.12    | 9.83  | 41.79 | 62.00  | 34118        |
|       | 9    | 2         | A0939-ND               | 1.23    | 10.80 | 45.95 | 68.00  | 324605       |
|       | 9    | 6         | A0940-ND <sup>2</sup>  | 1.23    | 10.80 | 45.95 | 68.00  | 320749       |
|       | 9    | 6         | A09006-ND <sup>1</sup> | 1.23    | 10.80 | 45.95 | 68.00  | 323136       |
|       | 9    | 8         | A0941-ND <sup>1</sup>  | 1.23    | 10.80 | 45.95 | 68.00  | 52730        |
|       | 9    | 8         | A09007-ND <sup>2</sup> | 1.23    | 10.80 | 45.95 | 68.00  | 323124       |
|       | 10   | 4         | A0943-ND               | 1.45    | 12.76 | 54.29 | 81.00  | 53175-1      |
|       | 10   | 6         | A0944-ND               | 1.45    | 12.76 | 54.29 | 81.00  | 53120-1      |
|       | 10   | 8         | A09005-ND              | 1.45    | 12.76 | 54.29 | 81.00  | 53831-1      |
| 16-14 | 11-A | —         | A0951-ND               | 1.30    | 11.44 | 48.65 | 72.00  | 31818        |
|       | 11-B | —         | A09012-ND              | 2.30    | 20.27 | 86.21 | 128.00 | 33067        |
|       | 7    | 6         | A0921-ND               | 1.12    | 9.83  | 41.79 | 62.00  | 34120        |
|       | 7    | 8         | A0922-ND               | 1.12    | 9.83  | 41.79 | 62.00  | 34122        |
|       | 7    | 10        | A0923-ND               | 1.12    | 9.83  | 41.79 | 62.00  | 34123        |
|       | 7    | 1/4       | A0924-ND               | 1.31    | 11.49 | 48.86 | 73.00  | 34124        |
|       | 7    | 5/16      | A0925-ND               | 1.35    | 11.85 | 50.42 | 75.00  | 34125        |
|       | 7    | 3/8       | A0152-ND               | 1.65    | 14.56 | 61.91 | 92.00  | 34126        |
|       | 8    | 6         | A09002-ND              | 1.12    | 9.83  | 41.79 | 62.00  | 322996       |
|       | 8    | 8         | A09003-ND              | 1.61    | 14.15 | 60.17 | 90.00  | 34128        |
|       | 8    | 10        | A09004-ND              | 1.12    | 9.83  | 41.79 | 62.00  | 34129        |
|       | 9    | 6         | A09008-ND              | 1.23    | 10.80 | 45.95 | 68.00  | 320855       |
|       | 9    | 8         | A0942-ND               | 1.23    | 10.80 | 45.95 | 68.00  | 320856       |
|       | 9    | 10        | A09009-ND              | 1.23    | 10.80 | 45.95 | 68.00  | 320857       |
|       | 10   | 6         | A0945-ND               | 1.45    | 12.76 | 54.29 | 81.00  | 53123-1      |
|       | 10   | 8         | A0946-ND               | 1.45    | 12.76 | 54.29 | 81.00  | 53124-1      |
|       | 10   | 10        | A0947-ND               | 1.45    | 12.76 | 54.29 | 81.00  | 53125-1      |
|       | 11-A | —         | A0952-ND               | 1.61    | 14.21 | 60.43 | 90.00  | 31819        |
| 12-10 | 11-C | —         | A09013-ND              | 2.65    | 23.34 | 99.26 | 148.00 | 327025       |
|       | 11-B | —         | A09014-ND              | 2.54    | 22.39 | 95.21 | 142.00 | 330368       |
|       | 7    | 6         | A0926-ND               | 1.65    | 14.54 | 61.83 | 92.00  | 35476        |
|       | 7    | 8         | A0927-ND               | 1.60    | 14.09 | 59.92 | 89.00  | 32994        |
|       | 7    | 10        | A0928-ND               | 1.33    | 11.71 | 49.81 | 74.00  | 33457        |
|       | 7    | 1/4       | A0929-ND               | 1.84    | 16.18 | 68.83 | 102.00 | 33458        |
|       | 7    | 5/16      | A0930-ND               | 1.90    | 16.70 | 71.03 | 106.00 | 33459        |
|       | 7    | 3/8       | A0931-ND               | 1.90    | 16.70 | 71.03 | 106.00 | 33220        |
|       | 8    | 6         | A0936-ND               | 2.23    | 19.59 | 83.30 | 124.00 | 322451       |

<sup>1</sup> Short; <sup>2</sup> Long

| AWG   | Fig. | Stud Size | Digi-Key Part No. | Pricing |       |       |        | AMP Part No. |
|-------|------|-----------|-------------------|---------|-------|-------|--------|--------------|
|       |      |           |                   | 10      | 100   | 500   | 1,000  |              |
| 12-10 | 8    | 8         | A0937-ND          | 1.60    | 14.09 | 59.92 | 89.00  | 32995        |
|       | 8    | 10        | A0938-ND          | 2.41    | 21.25 | 90.36 | 135.00 | 35495        |
|       | 10   | 6         | A0948-ND          | 2.01    | 17.69 | 75.26 | 112.00 | 53126-1      |
|       | 10   | 8         | A0949-ND          | 2.01    | 17.69 | 75.26 | 112.00 | 53127-1      |
|       | 10   | 10        | A0950-ND          | 2.01    | 17.69 | 75.26 | 112.00 | 53128-1      |
|       | 11-A | —         | A0953-ND          | 1.88    | 16.55 | 70.37 | 105.00 | 32151        |
|       | 11-B | —         | A09015-ND         | 2.33    | 20.54 | 87.36 | 130.00 | 330369       |

## ELECTRO-TAP Cable Connector/Splice

**Housing Material:** Nylon. **Contact Material:** Brass. **Contact Plating:** Tin

| AWG   | Fig. | Ins. Dia.<br>(mm) | Dim. (mm) |       |       | Color | Digi-Key<br>Part No. | Pricing |      |       |       | AMP<br>Part No. |
|-------|------|-------------------|-----------|-------|-------|-------|----------------------|---------|------|-------|-------|-----------------|
|       |      |                   | L         | W     | H     |       |                      | 1       | 10   | 100   | 250   |                 |
| 22-18 | 13   | 4.06              | 17.45     | 12.29 | 11.28 | Red   | A1050-ND             | .37     | 2.88 | 20.92 | 45.76 | 53440-2         |
| 14-18 | 13   | 4.06              | 17.45     | 12.29 | 11.28 | Blue  | A1051-ND             | .37     | 2.88 | 20.92 | 45.76 | 53440-1         |

## Closed End Splices

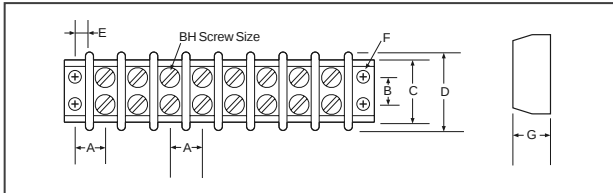
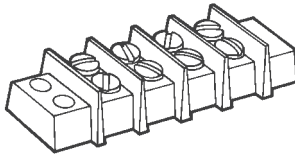
• For single and multiple wire applications • Nylon or vinyl or PVF<sup>2</sup> insulated • Temperature Ratings of 90°C, 105°C, 150°C • 300V, 600V or 1000V rated • Crescent crimp configuration • Covers wire ranges from 24 to 6 AWG (0.2 to  $\approx$ 16 mm<sup>2</sup>); 509 to 42, 700 CMA • Copper or steel splice material • Plated or unplated • Solid or stranded copper wire • UL and CSA approved.

| AWG                     | Fig. | Insul. Color | Material | Splice Mark* | Digi-Key Part No.      | Pricing |       |        |        | AMP Part No. |
|-------------------------|------|--------------|----------|--------------|------------------------|---------|-------|--------|--------|--------------|
|                         |      |              |          |              |                        | 10      | 100   | 500    | 1,000  |              |
| Vinyl BOMB-TAIL Splices |      |              |          |              |                        |         |       |        |        |              |
| 22-16                   | 14   | Blue         | Copper   | VS           | A09052-ND              | 2.17    | 19.11 | 81.30  | 121.00 | 34306        |
|                         | 14   | Trans.       | Steel    | ECV          | A09053-ND              | 1.00    | 8.79  | 37.40  | 56.00  | 330021       |
| 22-14                   | 14   | Red          | Copper   | VS           | A09054-ND              | 2.21    | 19.47 | 82.82  | 123.00 | 34304        |
|                         | 14   | Purple       | Copper   | VS           | A09055-ND              | .81     | 7.09  | 30.14  | 45.00  | 36964        |
| 22-12                   | 14   | Trans.       | Copper   | ECV          | A09056-ND              | 1.25    | 11.00 | 46.78  | 70.00  | 53234-1      |
| 22-10                   | 14   | Purple       | Copper   | VS           | A09057-ND              | 1.22    | 10.71 | 45.56  | 68.00  | 36965        |
|                         | 14   | Purple       | Copper   | ECV          | A09058-ND              | .89     | 7.80  | 33.18  | 49.00  | 321519       |
| 22-10                   | 14   | Yellow       | Copper   | VS           | A09059-ND              | 2.43    | 21.42 | 91.11  | 136.00 | 34308        |
|                         | 14   | Yellow       | Copper   | VS           | A09060-ND <sup>2</sup> | 2.43    | 21.42 | 91.11  | 136.00 | 34865        |
| 18-8                    | 14   | Green        | Copper   | ECV          | A09061-ND              | 3.81    | 33.51 | 142.53 | 212.00 | 320788       |
| Nylon Molded Splices    |      |              |          |              |                        |         |       |        |        |              |
| 22-14                   | 15   | Trans.       | Copper   | ECN          | A09062-ND              | 1.18    | 10.35 | 44.04  | 66.00  | 35115        |
| 22-10                   | 15   | Trans.       | Copper   | ECN          | A09063-ND              | 1.13    | 9.96  | 42.37  | 63.00  | 35653        |
|                         | 15   | Trans.       | Copper   | EC           | A09064-ND              | 1.55    | 13.68 | 58.18  | 87.00  | 53915-1      |

\* VS = 300V, 90°C ECV =

# CINCH

## Barrier Blocks



| Terminal Spacing | Dimensions (mm) |       |       |       |      |            |       | BH Screw Size |
|------------------|-----------------|-------|-------|-------|------|------------|-------|---------------|
| A                | B               | C     | D     | E     | F    | G          |       |               |
| 9.52             | 9.52            | 7.95  | 17.48 | 22.23 | 3.58 | 4.06       | 10.31 | 5-40x3/16     |
| 11.13            | 11.13           | 10.72 | 22.23 | 28.58 | 3.96 | 4.44/ 4.57 | 12.70 | 6-32x1/4      |
| 14.30            | 14.30           | 12.70 | 26.97 | 33.32 | 5.16 | 5.31       | 15.88 | 8-32x5/16     |

### Features:

- Interposing barriers between terminals
- Can be equipped with binder head screws only, or with binder head screws and W, 3/4W and Y solder terminals
- UL recognized

### Performance Data:

Insulation Material: Molded monoblock, general purpose phenolic

Eyelet Material: Brass

Eyelet Plating: Nickel

Screw Material: Steel or brass

Screw Plating: Nickel over copper flash

Solder Terminal Material: Brass

Solder Terminal Plating: Tin

Operating Temperature: -55°F to +300°F (-48°C to +149°C)

Maximum Wire Size: 9.53mm - #16; 11.13mm - #15; 14.30mm - #10

Voltage Rating: 9.53mm and 11.13mm - 1100VAC rms max.; 14.30mm - 1600VAC rms max.

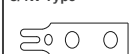
Current Rating: 9.53mm - 15A max.; 11.13mm - 20A max.; 14.30mm - 30A max.

Max. Watts per Terminal: 9.53mm - 3750; 11.13mm - 5000; 14.30mm - 7500

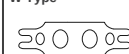
### Y Type



### 3/4W Type



### W Type

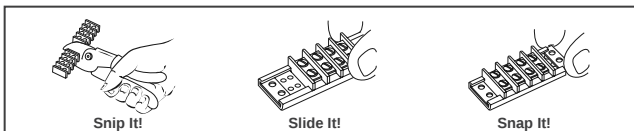
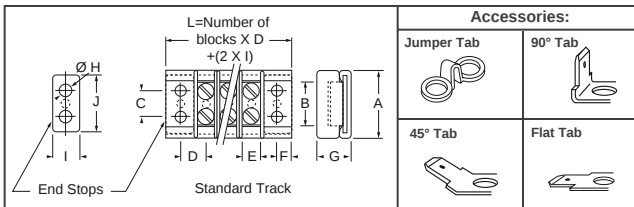


| Terminal Spacing | No. of Contacts | Digi-Key Part No. | 1    | 25     | 50     | 100    | 250     | 500     | Cinch Part No. |
|------------------|-----------------|-------------------|------|--------|--------|--------|---------|---------|----------------|
| 9.53 mm          | 2               | CBB102-ND         | 1.13 | 21.54  | 39.18  | 70.80  | 168.15  | 313.88  | 2-140          |
|                  | 3               | CBB103-ND         | 1.49 | 28.29  | 51.46  | 93.00  | 220.88  | 412.30  | 3-140          |
|                  | 4               | CBB104-ND         | 1.61 | 30.57  | 55.61  | 100.50 | 238.69  | 445.55  | 4-140          |
|                  | 5               | CBB105-ND         | 1.48 | 28.20  | 51.29  | 92.70  | 220.16  | 410.97  | 5-140          |
|                  | 6               | CBB106-ND         | 2.32 | 44.12  | 80.26  | 145.05 | 344.49  | 643.06  | 6-140          |
|                  | 7               | CBB107-ND         | 2.50 | 47.54  | 86.49  | 156.30 | 371.21  | 692.93  | 7-140          |
|                  | 8               | CBB108-ND         | 2.86 | 54.29  | 98.77  | 178.50 | 423.94  | 791.35  | 8-140          |
|                  | 9               | CBB109-ND         | 3.28 | 62.32  | 113.38 | 204.90 | 486.64  | 908.39  | 9-140          |
|                  | 10              | CBB110-ND         | 3.63 | 69.03  | 125.58 | 226.95 | 539.01  | 1006.15 | 10-140         |
|                  | 11              | CBB111-ND         | 4.13 | 78.43  | 142.68 | 257.85 | 612.39  | 1143.14 | 11-140         |
|                  | 12              | CBB112-ND         | 4.17 | 79.34  | 144.34 | 260.85 | 619.52  | 1156.44 | 12-140         |
| 11.13 mm         | 2               | CBB202-ND         | 1.02 | 19.35  | 35.19  | 63.60  | 151.05  | 281.96  | 2-141          |
|                  | 3               | CBB203-ND         | 1.80 | 34.22  | 62.25  | 112.50 | 267.19  | 498.75  | 3-141          |
|                  | 4               | CBB204-ND         | 1.80 | 34.22  | 62.25  | 112.50 | 267.19  | 498.75  | 4-141          |
|                  | 5               | CBB205-ND         | 2.04 | 38.74  | 70.47  | 127.35 | 302.46  | 564.59  | 5-141          |
|                  | 6               | CBB206-ND         | 2.33 | 44.30  | 80.59  | 145.65 | 345.92  | 645.72  | 6-141          |
|                  | 7               | CBB207-ND         | 2.87 | 54.57  | 99.27  | 179.40 | 426.08  | 795.34  | 7-141          |
|                  | 8               | CBB208-ND         | 3.01 | 57.31  | 104.25 | 188.40 | 447.45  | 835.24  | 8-141          |
|                  | 9               | CBB209-ND         | 3.41 | 64.74  | 117.78 | 212.85 | 505.52  | 943.64  | 9-141          |
|                  | 10              | CBB210-ND         | 3.56 | 67.62  | 123.01 | 222.30 | 527.96  | 985.53  | 10-141         |
|                  | 11              | CBB211-ND         | 3.89 | 73.91  | 134.46 | 243.00 | 577.13  | 1077.30 | 11-141         |
|                  | 12              | CBB212-ND         | 4.23 | 80.35  | 146.16 | 264.15 | 627.36  | 1171.07 | 12-141         |
| 14.30 mm         | 2               | CBB302-ND         | 1.67 | 31.71  | 57.69  | 104.25 | 247.59  | 462.18  | 2-142          |
|                  | 3               | CBB303-ND         | 2.00 | 38.01  | 69.14  | 124.95 | 296.76  | 553.95  | 3-142          |
|                  | 4               | CBB304-ND         | 2.30 | 43.75  | 79.60  | 143.85 | 341.64  | 637.74  | 4-142          |
|                  | 5               | CBB305-ND         | 3.33 | 63.33  | 115.20 | 208.20 | 494.48  | 923.02  | 5-142          |
|                  | 6               | CBB306-ND         | 4.77 | 90.70  | 165.00 | 298.20 | 708.23  | 1322.02 | 6-142          |
|                  | 7               | CBB307-ND         | 5.21 | 99.10  | 180.28 | 325.80 | 773.78  | 1444.38 | 7-142          |
|                  | 8               | CBB308-ND         | 5.44 | 103.43 | 188.16 | 340.05 | 807.62  | 1507.56 | 8-142          |
|                  | 9               | CBB309-ND         | 8.33 | 158.32 | 288.01 | 520.50 | 1236.19 | 2307.55 | 9-142          |
|                  | 10              | CBB310-ND         | 8.75 | 166.26 | 302.45 | 546.60 | 1298.18 | 2423.26 | 10-142         |
|                  | 11              | CBB311-ND         | 9.15 | 173.92 | 316.40 | 571.80 | 1358.03 | 2534.98 | 11-142         |
|                  | 12              | CBB312-ND         | 9.19 | 174.70 | 317.81 | 574.35 | 1364.08 | 2546.29 | 12-142         |

## W, 3/4W and Y Solder Terminals

| Series  | Type | Digi-Key Part No. | 1   | 25    | 50    | 100   | 250    | 500    | Cinch Part No. |
|---------|------|-------------------|-----|-------|-------|-------|--------|--------|----------------|
| 9.53mm  | Y    | CBB001-ND         | .40 | 7.67  | 13.94 | 25.20 | 59.85  | 111.72 | Y-140          |
|         | 3/4W | CBB002-ND         | .36 | 6.89  | 12.53 | 22.65 | 53.79  | 100.42 | 3/4W-140       |
|         | W    | CBB003-ND         | .40 | 7.67  | 13.94 | 25.20 | 59.85  | 111.72 | W-140          |
| 11.13mm | Y    | CBB004-ND         | .66 | 12.50 | 22.74 | 41.10 | 97.61  | 182.21 | Y-141          |
|         | 3/4W | CBB005-ND         | .50 | 9.54  | 17.35 | 31.35 | 74.46  | 138.99 | 3/4W-141       |
|         | W    | CBB006-ND         | .56 | 10.59 | 19.26 | 34.80 | 82.65  | 154.28 | W-141          |
| 14.30mm | Y    | CBB007-ND         | .76 | 14.51 | 26.39 | 47.70 | 113.29 | 211.47 | Y-142          |
|         | 3/4W | CBB008-ND         | .69 | 13.05 | 23.74 | 42.90 | 101.89 | 190.19 | 3/4W-142       |
|         | W    | CBB009-ND         | .76 | 14.51 | 26.39 | 47.70 | 113.29 | 211.47 | W-142          |

## AMP FLEXI-BLOCK® Terminal Block System



**Product Specifications:** • Blocks and End Stops: Nylon • Track: NORYL EN 265 • FASTON Tab and Jumper Tab: Tin plated brass • Screws: Nickel plated brass Ratings: • 6000 Breakdown voltage, rms line-to-line • 6000 Breakdown voltage, rms line-to-ground • Operating Temperature: 105°C Max.

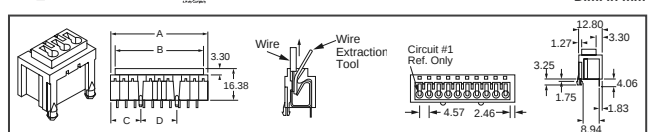
| Max. Size | Max. Amps | Volts | Wire Range | Dimensions (mm) |       |       |       |       |      |       |      |       |       |
|-----------|-----------|-------|------------|-----------------|-------|-------|-------|-------|------|-------|------|-------|-------|
| A         | B         | C     | D          | E               | F     | G     | H     | I     | J    |       |      |       |       |
| 6         | 15        | 300   | 22-14      | 28.58           | 19.05 | 10.72 | 11.13 | 8.71  | 5.56 | 14.30 | 4.34 | 11.10 | 24.38 |
| 8         | 30        | 600   | 22-10      | 33.32           | 22.23 | 12.70 | 14.30 | 11.10 | 7.14 | 16.66 | 5.16 | 14.15 | 29.21 |

| Size | Description                       | Digi-Key Part No. | 1                      | 10     | 100     | AMP Part No. |
|------|-----------------------------------|-------------------|------------------------|--------|---------|--------------|
| 6    | #6 Block Assembly, 100pcs/pkg     | A0130-ND          | 39.00/pkg (100pcs/pkg) | —      | —       | 1-604102-1   |
| 8    | #8 Block Assembly, 100pcs/pkg     | A0131-ND          | 44.20/pkg (100pcs/pkg) | —      | —       | 1-604152-1   |
| 6    | Track 36" long, 80 positions      | A0132-ND          | 5.38                   | 48.38  | 430.00  | 1-601805-1   |
| 8    | Track 36" long, 60 positions      | A0133-ND          | 4.98                   | 44.78  | 398.00  | 1-601806-1   |
| 6    | End Stop, 2 required per assembly | A0134-ND          | —                      | .73    | 6.52    | 604111-1     |
| 8    | End Stop, 2 required per assembly | A0135-ND          | —                      | .97    | 8.69    | 604161-1     |
| 6, 8 | Flat Tab                          | A0136-ND          | —                      | 5.78   | 51.98   | 601989-1     |
| 6, 8 | 45° Tab                           | A0137-ND          | —                      | 5.78   | 51.98   | 601989-2     |
| 6, 8 | 90° Tab                           | A0138-ND          | —                      | 5.78   | 51.98   | 601989-3     |
| 6    | Jumper Tab                        | A0139-ND          | —                      | 1.78   | 16.01   | 601985-2     |
| 8    | Jumper Tab                        | A0140-ND          | —                      | .86    | 7.60    | 604591-1     |
| 6    | #6 Terminal Block Kit             | A0150-ND*         | 75.20                  | 676.80 | 6016.00 | 601804-8     |
| 8    | #8 Terminal Block Kit             | A0151-ND*         | 99.98                  | 899.78 | 7998.00 | 604336-1     |
| 6, 8 | Cutting Tool (Track & Tape)       | A9958-ND          | 21.75                  | —      | —       | 604008-1     |

\*Kit consists of 1 ea. 100-block assembly, 25 end stops, 2 tracks

†Kit consists of 1 ea. 100-block assembly, 50 end stops, 8 tracks

## molex W Waldom Wire Trap - LITE



**FEATURES:** • Allows fast interconnect to PCB • Mounting pegs for PCB polarization • Wire insertion/extraction from vertical direction • Accommodates 16-20 AWG wire (see chart for wire types) • Can be robotically inserted into PCB

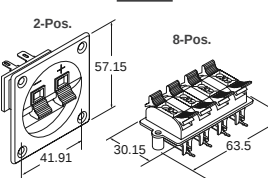
**SPECIFICATIONS:** **Physical:** • Terminal: Phosphor bronze • Plating: Tin • Housing: 94V-0 Polyester. **Mechanical:** • Temperature Rise: 30°C max. (per U.L. specifications) • Storage Temperature: -40°C to +105°C max. • Wire pullout force: 10 lbs. min (18 AWG wire) • Wire Insertion/Extraction cycles: 5 max. **Electrical:** • Voltage Rating: 600V (RMS) • Current Rating: 6.0 amperes per circuit (18 AWG wire) • Contact Resistance: 10 milliohm max. • Insulation Resistance: 1,000 Megohm min. • Dielectric Strength: 1,500VAC. **Agency Approvals:** UL file #: E29179, CSA File #: LR19980. **Wire Types:** • Conductor Diameter Range: .038" - .060" (.97mm - 1.52mm), Insulation Outside Dia. Range: .079" - .118" (2.01mm - 3.00mm). **Suggested Wire Types:** 16 AWG, 18 AWG solid or standard with top coat. 20 AWG stranded with top coat.

| Pos.                             | Dimension (mm) |       |       |       | Digi-Key Part No. | Pricing |       |        |        | Molex Part No. |
|----------------------------------|----------------|-------|-------|-------|-------------------|---------|-------|--------|--------|----------------|
| A                                | B              | C     | D     | 1     | 10                | 100     | 500   |        |        |                |
| 3                                | 18.14          | 13.21 | 1.70  | 14.73 | WM1272-ND         | 1.55    | 13.73 | 88.60  | 365.48 | 22-45-4036     |
| 4                                | 22.71          | 17.78 | 1.70  | 18.29 | WM1273-ND         | 2.54    | 22.54 | 145.40 | 599.78 | 22-45-4046     |
| 5                                | 27.28          | 20.32 | 6.27  | 18.29 | WM1274-ND         | 2.24    | 19.84 | 128.00 | 528.00 | 22-45-4056     |
| 6                                | 31.85          | 26.92 | 6.27  | 18.29 | WM1275-ND         | 2.48    | 21.98 | 141.80 | 584.93 | 22-45-4066     |
| 8                                | 41.00          | 36.07 | 10.85 | 18.29 | WM1276-ND         | 3.27    | 28.99 | 187.00 | 771.38 | 22-45-4086     |
| 10                               | 50.14          | 45.21 | 15.42 | 18.29 | WM1277-ND         | 3.85    | 34.13 | 220.20 | 908.33 | 22-45-4106     |
| Wire Trap LITE Extraction Tool** |                |       |       |       | WM1278-ND         | 43.92   | —     | —      | —      | 11-03-0040     |

\*\* The extraction tool allows the wires to be removed either one at a time or all at once.

**The power should be removed before servicing the product.**

## GC™ ELECTRONICS Spring Push Terminals



These terminals have spring loaded posts for easy connection with Red and Black color codes. Designed for various audio applications such as surround sound and speaker connections, amplifiers and more.

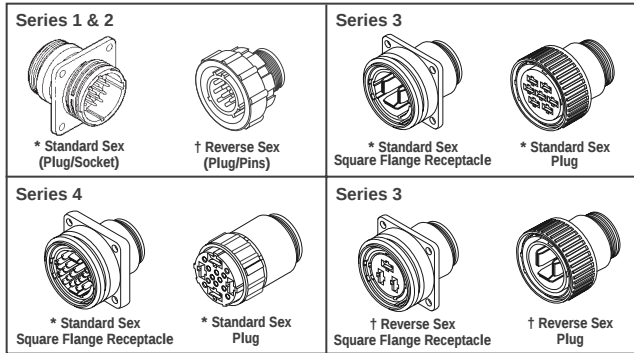
**GC399-ND** 2 Pos. for panel mounting to speakers, mounts in 2" (50.80mm) hole ..... **\$1.78**  
**GC400-ND** 4 Pos. for mounting directly to chassis or panels ... **\$1.92**  
**GC401-ND** 8 Pos. with right angle PCB terminals, with Mounting Ears ..... **\$2.90**

# AMP Circular Metal Shell Connectors

**Note: Shell Only. Material and Finish: Receptacle: Insert:** Black thermoplastic; **Outer Shell:** Aluminum alloy, zinc plated or unplated. **Plug: Insert:** Black thermoplastic; **Outer Shell and Coupling Ring:** Aluminum alloy, zinc plated; **Retainer Ring:** Stainless steel.

**Note: Contacts (pins and sockets) must be ordered separately.**

| Component Diameter         |                           |  |
|----------------------------|---------------------------|--|
| Arrangement/<br>Shell Size | Overall Dia.<br>Inch (mm) |  |
| 14                         | 1.225 (31.12)             |  |
| 22                         | 1.750 (44.45)             |  |
| 28                         | 2.170 (55.12)             |  |



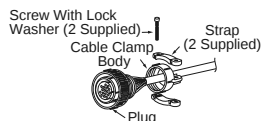
\* Standard Sex: Pin contacts in receptacle housings; socket contacts in plug housings.  
† Reverse Sex: Socket contacts in receptacle housings; pin contacts in plug housings.

| Arrangement No. | Sex      | Description (Shell Only)    | Digi-Key Part No.           | 1                     | Pricing 25        | 50                 | AMP Part No.         |
|-----------------|----------|-----------------------------|-----------------------------|-----------------------|-------------------|--------------------|----------------------|
| Series 1        |          |                             |                             |                       |                   |                    |                      |
| 14-5            | Std.     | Receptacle-Sq. Flanged Plug | A1600-ND<br>A1601-ND        | 16.93<br>40.65        | 392.35<br>941.93  | 685.58<br>1645.89  | 208719-1<br>208718-1 |
|                 | Rev.     | Receptacle-Sq. Flanged Plug | A1602-ND<br>A1603-ND        | 19.29<br>30.18        | 446.98<br>699.20  | 781.03<br>1221.76  | 208721-1<br>208720-1 |
|                 | 14-7     | Std.                        | Receptacle-Sq. Flanged Plug | A1604-ND<br>A1605-ND  | 17.67<br>28.21    | 409.45<br>653.60   | 715.46<br>1142.08    |
| Rev.            |          | Receptacle-Sq. Flanged Plug | A1606-ND<br>A1607-ND        | 17.67<br>27.59        | 409.45<br>639.35  | 715.46<br>1117.18  | 208717-1<br>208716-1 |
| 22-14           |          | Rev.                        | Receptacle-Sq. Flanged Plug | A1608-ND<br>A1609-ND  | 20.81<br>27.33    | 482.13<br>633.18   | 842.45<br>1106.39    |
| 22-16           | Std.     | Receptacle-Sq. Flanged Plug | A1610-ND<br>A1611-ND        | 23.23<br>26.30        | 538.18<br>609.43  | 940.39<br>1064.89  | 208489-1<br>208488-1 |
| 28-24           | Std.     | Receptacle-Sq. Flanged Plug | A1612-ND<br>A1613-ND        | 26.61<br>33.60        | 616.55<br>778.53  | 1077.34<br>1360.37 | 208459-1<br>208457-1 |
| 28-37           | Std.     | Receptacle-Sq. Flanged Plug | A1614-ND<br>A1615-ND        | 26.59<br>33.60        | 616.08<br>778.53  | 1076.51<br>1360.37 | 208471-1<br>208470-1 |
|                 | Rev.     | Receptacle-Sq. Flanged Plug | A1616-ND<br>A1617-ND        | 26.59<br>32.21        | 616.08<br>746.23  | 1076.51<br>1303.93 | 208473-1<br>208472-1 |
|                 | Series 2 |                             |                             |                       |                   |                    |                      |
| 22-28           | Std.     | Receptacle-Sq. Flanged Plug | A1618-ND#<br>A1619-ND       | 19.29<br>64.37        | 446.98<br>1491.50 | 781.03<br>2606.20  | 208491-1<br>208490-1 |
|                 | Rev.     | Receptacle-Sq. Flanged Plug | A1620-ND#<br>A1621-ND       | 18.57<br>81.73        | 430.35<br>1893.83 | 751.98<br>3309.21  | 208493-1<br>208492-1 |
|                 | 28-57    | Rev.                        | Receptacle-Sq. Flanged Plug | A1622-ND#<br>A1623-ND | 28.37<br>95.49    | 657.40<br>2212.55  | 1148.72<br>3866.14   |
| 28-63           | Std.     | Receptacle-Sq. Flanged Plug | A1624-ND#<br>A1625-ND       | 28.37<br>89.67        | 657.40<br>2077.65 | 1148.72<br>3630.42 | 208477-1<br>208476-1 |
| Series 3        |          |                             |                             |                       |                   |                    |                      |
| 22-3            | Std.     | Receptacle-Sq. Flanged Plug | A16070-ND<br>A16071-ND      | 23.10<br>31.88        | 535.33<br>738.63  | 935.41<br>1290.65  | 208495-1<br>208494-1 |
| 28-7            | Std.     | Receptacle-Sq. Flanged Plug | A16072-ND<br>A16073-ND      | 25.24<br>37.37        | 584.73<br>865.93  | 1021.73<br>1513.09 | 208483-1<br>208482-1 |
| 28-7            | Rev.     | Receptacle-Sq. Flanged Plug | A16074-ND<br>A16075-ND      | 25.22<br>32.74        | 584.25<br>758.58  | 1020.90<br>1325.51 | 208485-1<br>208484-1 |
| Series 4        |          |                             |                             |                       |                   |                    |                      |
| 28-16           | Std.     | Receptacle-Sq. Flanged Plug | A16076-ND<br>A16077-ND      | 25.87<br>37.39        | 599.45<br>866.40  | 1047.46<br>1513.92 | 208479-1<br>208478-1 |
| 28-22           | Std.     | Receptacle-Sq. Flanged Plug | A16078-ND<br>A16079-ND      | 25.87<br>35.71        | 599.45<br>827.45  | 1047.46<br>1445.86 | 208481-1<br>208480-1 |

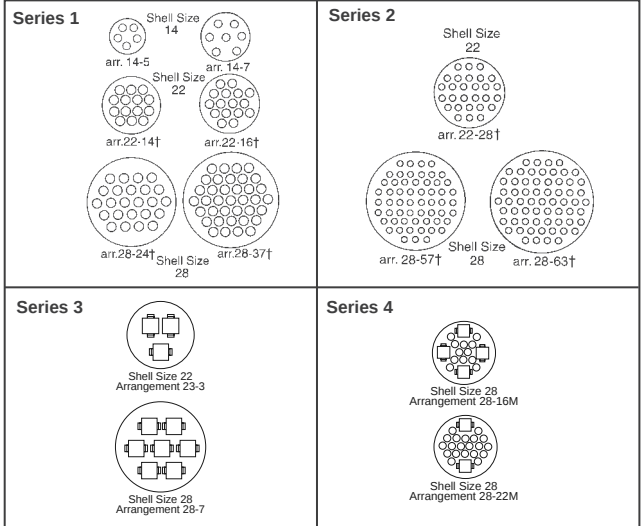
# Aluminum alloy, unplated.

## Cable Clamps – Metal Shell

Cable clamps are used to prevent excessive strain on cable or wire from being transmitted to the contacts inside the connector housings.

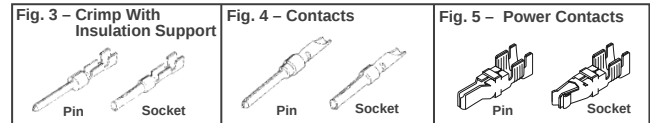
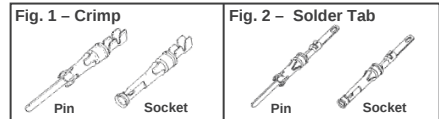


| Shell Size | Type, Cable    | Digi-Key Part No. | 1     | 25     | Pricing 50 | 100     | 500     | AMP Part No. |
|------------|----------------|-------------------|-------|--------|------------|---------|---------|--------------|
| 14         | Metal Shell    | A1626-ND          | 7.56  | 179.10 | 338.30     | 628.84  | 2686.50 | 208945-5     |
| 22         | Metal Shell    | A1627-ND          | 11.59 | 274.50 | 518.50     | 963.80  | 4117.50 | 208945-7     |
| 28         | Metal Shell    | A1628-ND          | 15.33 | 363.15 | 685.95     | 1275.06 | 5447.25 | 208945-8     |
| 22         | Protective Cap | A1633-ND          | 21.93 | 519.30 | 990.90     | 1823.32 | 7789.50 | 211903-1     |
| 28         | Protective Cap | A1634-ND          | 23.52 | 557.10 | 1052.30    | 1956.04 | 8356.50 | 211904-1     |



## Contacts (Pins and Sockets)

Series 4 requires a combination of Fig. 1 & 5.



| Fig.                                    | Desc.                                   | Type   | Wire Size<br>AWG | Contact<br>Finish | Digi-Key<br>Part No. | 10    | Pricing<br>100 | 1,000   | AMP<br>Part No. |
|-----------------------------------------|-----------------------------------------|--------|------------------|-------------------|----------------------|-------|----------------|---------|-----------------|
| Series 1                                |                                         |        |                  |                   |                      |       |                |         |                 |
| 1                                       | Pin<br>Pin<br>Socket<br>Socket          | Crimp  | 18-14            | Tin               | A1320-ND             | 3.12  | 21.77          | 153.44  | 66361-2         |
|                                         |                                         | Crimp  | 18-14            | SG+               | A1340-ND             | 4.76  | 32.26          | 234.45  | 66099-4         |
|                                         |                                         | Crimp  | 18-14            | Tin               | A1321-ND             | 3.67  | 25.61          | 180.51  | 66360-2         |
|                                         |                                         | Crimp  | 18-14            | SG+               | A1341-ND             | 7.11  | 49.66          | 350.03  | 66360-4         |
| 1                                       | Pin<br>Pin<br>Socket<br>Socket          | Crimp  | 24-20            | Tin               | A1322-ND             | 3.15  | 21.98          | 154.94  | 66103-2         |
|                                         |                                         | Crimp  | 24-20            | SG+               | A1342-ND             | 4.76  | 32.23          | 234.19  | 66103-4         |
|                                         |                                         | Crimp  | 24-20            | Tin               | A1323-ND             | 3.73  | 26.04          | 183.54  | 66105-2         |
|                                         |                                         | Crimp  | 24-20            | SG+               | A1343-ND             | 5.69  | 39.71          | 279.89  | 66105-4         |
| 1                                       | Pin<br>Pin<br>Socket<br>Socket          | Crimp  | 28-24            | Tin               | A1324-ND             | 2.60  | 18.16          | 128.03  | 66107-2         |
|                                         |                                         | Crimp  | 28-24            | SG+               | A1344-ND             | 4.75  | 32.20          | 233.98  | 66107-4         |
|                                         |                                         | Crimp  | 28-24            | SG+               | A1345-ND             | 5.68  | 39.68          | 279.71  | 66109-4         |
|                                         |                                         | Crimp  | 28-24            | SG+               | A1346-ND             | 5.68  | 39.68          | 279.71  | 66109-4         |
| 2                                       | Pin<br>Socket                           | Solder | —                | Tin               | A1629-ND             | 7.16  | 50.04          | 352.74  | 202236-2        |
|                                         |                                         | Solder | —                | Tin               | A1631-ND             | 7.85  | 54.82          | 386.37  | 202237-2        |
| 2                                       | Pin<br>Socket                           | Solder | —                | Duplex†           | A16081-ND            | 12.69 | 88.63          | 624.69  | 202236-1        |
|                                         |                                         | Solder | —                | Duplex†           | A1668-ND             | 14.13 | 98.67          | 695.50  | 202237-1        |
| Series 2                                |                                         |        |                  |                   |                      |       |                |         |                 |
| 3                                       | Pin<br>Socket                           | Crimp  | 28-24            | SG+               | A1630-ND             | 2.99  | 20.87          | 147.09  | 66507-9         |
|                                         |                                         | Crimp  | 28-24            | SG+               | A1632-ND             | 3.20  | 22.33          | 157.39  | 66505-9         |
| 3                                       | Pin<br>Socket                           | Crimp  | 24-20            | SG*               | A1008-ND             | 1.79  | 11.04          | 88.35   | 1-66508-0       |
|                                         |                                         | Crimp  | 24-20            | SG*               | A1009-ND             | 1.90  | 11.69          | 93.55   | 1-66504-0       |
| 4                                       | Pin<br>Socket                           | Solder | 24-20            | SG†               | A1028-ND             | 2.42  | 14.91          | 119.25  | 66570-3         |
|                                         |                                         | Solder | 24-20            | SG†               | A1029-ND             | 2.91  | 17.93          | 143.46  | 66569-3         |
| Series 3                                |                                         |        |                  |                   |                      |       |                |         |                 |
| 5                                       | Pin<br>Socket<br>Crimp<br>Pin<br>Socket | Crimp  | 16 & 14-12       | Tin               | A16021-ND            | 17.19 | 120.04         | 846.11  | 66261-1         |
|                                         |                                         | Crimp  | 16 & 14-12       | Tin               | A16025-ND            | 31.24 | 218.21         | 1538.02 | 66740-8         |
|                                         |                                         | Crimp  | 16 & 14-12       | SG†               | A16022-ND            | 43.10 | 301.01         | 2121.65 | 66261-2         |
|                                         |                                         | Crimp  | 16 & 14-12       | SG†               | A16026-ND            | 53.26 | 372.03         | 2622.27 | 66740-6         |
| 5                                       | Pin<br>Socket<br>Crimp<br>Pin<br>Socket | Crimp  | 10               | Tin               | A16023-ND            | 17.19 | 120.04         | 846.11  | 66259-1         |
|                                         |                                         | Crimp  | 10               | Tin               | A16027-ND            | 40.62 | 283.74         | 1999.94 | 66741-8         |
|                                         |                                         | Crimp  | 10               | SG†               | A16024-ND            | 44.30 | 309.45         | 2181.14 | 66259-2         |
|                                         |                                         | Crimp  | 10               | SG†               | A16028-ND            | 59.00 | 412.08         | 2904.53 | 66741-6         |
| Series 4 is a combination of Fig. 1 & 5 |                                         |        |                  |                   |                      |       |                |         |                 |

† Selective gold. Gold flash over .000050 nickel on entire contact, with .000030 gold on electrical engagement area.  
\* Duplex plated. .000030 gold in mating area over .000050 nickel on contact body; bright tin-lead on solder tab.  
† Gold flash over nickel on entire contact.

## Tools

| Description                                                        | Digi-Key Part No. | Price Each |
|--------------------------------------------------------------------|-------------------|------------|
| Contact Extraction Tool (for use with Series 1 Contacts)           | A1329-ND          | 16.80      |
| Contact Insertion/Extraction Tool (for use with Series 2 Contacts) | A1010-ND          | 5.02       |
| Crimp Tool, ProCrimper II w/Dies (for use with Series 1 Contacts)  | A9920-ND          | 117.04     |
| Hand Tool, ProCrimper, Handle Only, w/o Dies                       | A9996-ND          | 63.75      |
| Die Set CPC Conn (for use with Series 1)                           | A9919-ND          | 78.00      |
| Crimp Tool, 18-14 AWG Certi. - Crimp (for use with Series 1)       | A9913-ND          | 451.54     |
| Crimp Tool, 24-20 AWG Certi. - Crimp (for use with Series 1)       | A9917-ND          | 397.67     |
| Crimp Tool, 30-26 AWG Certi. - Crimp (for use with Series 1)       | A9918-ND          | 371.07     |
| Contact Extraction Tool (for use with Series 3 Contacts)           | A9912-ND          | 107.17     |
| Crimp Tool, 10 AWG (for use with Series 3 Contacts)                | A9910-ND          | 597.17     |
| Crimp Tool, 12-16 AWG (for use with Series 3 Contacts)             | A9911-ND          | 597.17     |
| Universal Crimp Tool (Crimps all Series Contacts)                  | A9999-ND          | 16.54      |

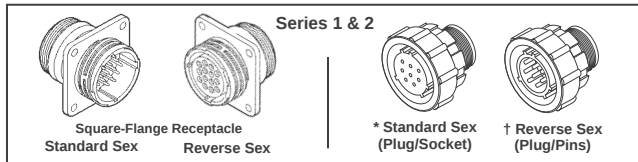
# 1-800-344-4539

218-681-6674 • FAX: 218-681-3380 • www.digikey.com

# Circular Plastic Connectors

• Lightweight, all-plastic connectors • CPC connectors made of UL recognized, high-grade black thermoplastic material • 94V-1 rated, heat-stabilized, fire-resistant, self-extinguishing • Two connector series for different connection needs: • Series 1 — Standard density applications with Multimate contacts • Series 2 — High-density applications with size 20 DM and 20 DF contacts, .040" (1.02 mm) dia. • Available in panel-mount, chassis-mount and free hanging versions. • Quick-connect/disconnect capability with thread assist, positive detent coupling. • Built-in pin and socket protection. Plug or socket half can be "hot", depending on connector sex. • 5-key polarization for proper mating of connector halves • Full complement of optional accessories

**Note:** Contacts (pins and sockets) must be ordered separately.



\* Standard Sex: Pin contacts in receptacle housings; socket contacts in plug housings.

† Reverse Sex: Socket contacts in receptacle housings; pin contacts in plug housings.

## Circular Plastic Connectors – Series 1 (Shell Only)

| Arrangement No. | Sex  | Description (Shell Only) | Digi-Key Part No. | 1    | Pricing 25 | 50     | 100    | AMP Part No. |
|-----------------|------|--------------------------|-------------------|------|------------|--------|--------|--------------|
| <b>Series 1</b> |      |                          |                   |      |            |        |        |              |
| 11-4            | Rev. | Receptacle-Sq. Flanged   | A1360-ND          | 1.33 | 30.88      | 53.95  | 95.55  | 206430-1     |
|                 |      | Receptacle-Free Hanging  | A1361-ND          | 1.33 | 30.88      | 53.95  | 95.55  | 206430-2     |
|                 | Std. | Plug                     | A1357-ND          | 1.64 | 38.00      | 66.40  | 117.60 | 206429-1     |
|                 |      | Plug                     | A1301-ND          | 1.27 | —          | —      | 91.14  | 206061-1     |
| 13-9            | Std. | Receptacle-Sq. Flanged   | A1351-ND          | 1.33 | 30.88      | 53.95  | 95.55  | 206153-1     |
|                 |      | Receptacle-Free Hanging  | A1300-ND          | 1.62 | 37.53      | 65.57  | 116.13 | 206060-1     |
|                 | Rev. | Plug                     | A1303-ND          | 1.39 | 32.30      | 56.44  | 99.96  | 206705-1     |
|                 |      | Plug                     | A1352-ND          | 1.44 | 33.25      | 58.10  | 102.90 | 206705-2     |
| 17-14           | Std. | Receptacle-Sq. Flanged   | A1302-ND          | 1.78 | 41.33      | 72.21  | 127.89 | 206708-1     |
|                 |      | Receptacle-Free Hanging  | A1362-ND          | 1.48 | 34.20      | 59.76  | 105.84 | 206043-1     |
|                 | Rev. | Plug                     | A1363-ND          | 1.89 | 43.70      | 76.36  | 135.24 | 206043-2     |
|                 |      | Plug                     | A1358-ND          | 1.85 | 42.75      | 74.70  | 132.30 | 206044-1     |
| 17-16           | Std. | Receptacle-Sq. Flanged   | A1305-ND          | 1.48 | 34.20      | 59.76  | 105.84 | 206036-1     |
|                 |      | Receptacle-Free Hanging  | A1353-ND          | 1.48 | 34.20      | 59.76  | 105.84 | 206036-3     |
|                 | Rev. | Plug                     | A1304-ND          | 1.85 | 42.75      | 74.70  | 132.30 | 206037-1     |
|                 |      | Plug                     | A1354-ND          | 1.85 | 42.75      | 74.70  | 132.30 | 206838-1     |
| 23-24           | Std. | Receptacle-Sq. Flanged   | A1355-ND          | 2.50 | 57.95      | 101.26 | 179.34 | 206838-2     |
|                 |      | Receptacle-Free Hanging  | A1350-ND          | 2.38 | 55.10      | 96.28  | 170.52 | 206837-1     |
|                 | Rev. | Plug                     | A1364-ND          | 1.68 | 38.95      | 68.06  | 120.54 | 206306-1     |
|                 |      | Plug                     | A1365-ND          | 2.34 | 54.15      | 94.62  | 167.58 | 206306-2     |
| 23-37           | Std. | Receptacle-Sq. Flanged   | A1359-ND          | 2.11 | 48.93      | 85.49  | 151.41 | 206305-1     |
|                 |      | Receptacle-Free Hanging  | A1307-ND          | 1.68 | 38.95      | 68.06  | 120.54 | 206151-1     |
|                 | Rev. | Plug                     | A1356-ND          | 1.87 | 43.23      | 75.53  | 133.77 | 206151-2     |
|                 |      | Plug                     | A1306-ND          | 2.11 | 48.93      | 85.49  | 151.41 | 206150-1     |

## VDE Tested Connectors – Series 1 (Shell Only)

Designed to meet requirements of VDE as shown in DIN Specification 57627. Recognized under the Component Program of Underwriters Laboratories Inc. for 600 VAC and 600 VDC service, File No. E28476. Certified by Canadian Standards Association, File No. LR7189.

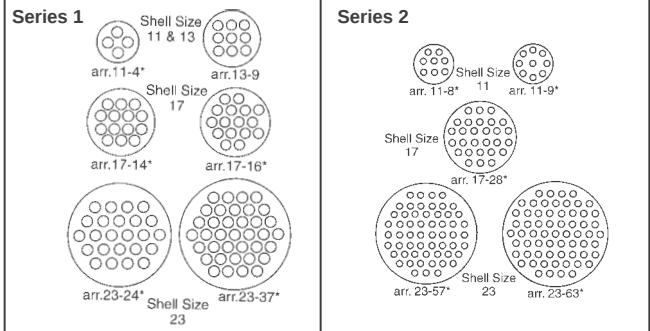
| Arrangement No. | Sex  | Description (Shell Only) | Digi-Key Part No. | 1    | Pricing 25 | 50     | 100    | AMP Part No. |
|-----------------|------|--------------------------|-------------------|------|------------|--------|--------|--------------|
| <b>Series 1</b> |      |                          |                   |      |            |        |        |              |
| 13-7            | Std. | Receptacle-Sq. Flanged   | A1635-ND          | 2.40 | 55.58      | 97.11  | 171.99 | 211401-1     |
|                 |      | Receptacle-Free Hanging  | A1638-ND          | 2.15 | 49.88      | 87.15  | 154.35 | 211399-1     |
|                 | Rev. | Plug                     | A1641-ND          | 2.09 | 48.45      | 84.66  | 149.94 | 211398-1     |
|                 |      | Plug                     | A1644-ND          | 2.50 | 57.95      | 101.26 | 179.34 | 211400-1     |
| 17-9            | Std. | Receptacle-Sq. Flanged   | A1636-ND          | 2.32 | 53.68      | 93.79  | 166.11 | 211767-1     |
|                 |      | Receptacle-Free Hanging  | A1639-ND          | 2.05 | 50.78      | 87.23  | 159.03 | 211766-1     |
|                 | Rev. | Plug                     | A1642-ND          | 2.58 | 59.85      | 104.58 | 185.22 | 211769-1     |
|                 |      | Plug                     | A1645-ND          | 2.58 | 59.85      | 104.58 | 185.22 | 211768-1     |
| 23-19           | Std. | Receptacle-Sq. Flanged   | A1637-ND          | 2.85 | 66.03      | 115.37 | 204.32 | 211771-1     |
|                 |      | Receptacle-Free Hanging  | A1640-ND          | 3.49 | 80.75      | 141.90 | 249.90 | 211770-2     |
|                 | Rev. | Plug                     | A1643-ND          | 2.42 | 56.05      | 97.14  | 173.46 | 211773-1     |
|                 |      | Plug                     | A1646-ND          | 2.91 | 67.45      | 117.86 | 208.74 | 211772-1     |

## Sealed Connectors – Series 1 (Shell Only)

Sealed CPC connectors are designed to meet the requirements of UL, CSA, and VDE for environmentally sealed connectors used in industrial applications.

**Operating Temperature Range:** -50°C - 125°C. **Voltage Rating:** 600 V (AC or DC). **Contacts:** 13 amps, single contact rating at 30°C T-Rise. **Flammability Rating:** UL 94V-0 rated. **Sealing Capability:** Per IP 66 and IP 67. **Housing Material:** Black, high strength, impact resistant thermoplastic. **Seal:** Gray Elastomer. **Fluid Resistance:** Diesel fuel, gear and engine fuel, gasoline, anti-freeze, hydraulic fluid, water.

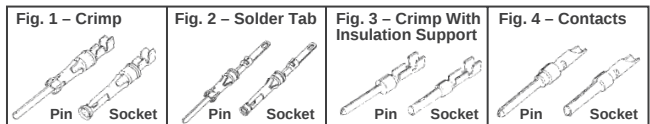
| Arrangement No. | Sex  | Description (Shell Only)   | Digi-Key Part No. | 1    | Pricing 25 | 50     | 100    | AMP Part No. |
|-----------------|------|----------------------------|-------------------|------|------------|--------|--------|--------------|
| <b>Series 1</b> |      |                            |                   |      |            |        |        |              |
| 11-4            | Rev. | Square Flange Free-Hanging | A1675-ND          | 1.95 | 45.13      | 78.85  | 139.65 | 206430-3     |
|                 |      | Free-Hanging               | A1676-ND          | 4.98 | 115.43     | 201.69 | 357.21 | 206430-4     |
| 13-9            | Std. | Square Flange Free-Hanging | A1669-ND          | 2.50 | 57.95      | 101.26 | 179.34 | 206705-3     |
|                 |      | Free-Hanging               | A1670-ND          | 2.54 | 58.90      | 102.92 | 182.28 | 206705-4     |
| 17-14           | Rev. | Square Flange Free-Hanging | A1677-ND          | 2.09 | 48.45      | 84.66  | 149.94 | 206043-4     |
|                 |      | Free-Hanging               | A1678-ND          | 3.12 | 72.20      | 126.16 | 223.44 | 206043-5     |
| 17-16           | Std. | Square Flange Free-Hanging | A1671-ND          | 3.01 | 69.83      | 122.01 | 216.09 | 206036-4     |
|                 |      | Free-Hanging               | A1672-ND          | 2.60 | 60.33      | 105.41 | 186.69 | 206036-5     |
| 23-24           | Std. | Square Flange Free-Hanging | A1673-ND          | 3.08 | 71.25      | 124.50 | 220.50 | 206838-3     |
|                 |      | Free-Hanging               | A1674-ND          | 3.12 | 72.20      | 126.16 | 223.44 | 206838-4     |



## Circular Plastic Connectors – Series 2 (Shell Only)

| Arrangement No. | Sex  | Description (Shell Only) | Digi-Key Part No. | 1    | Pricing 25 | 50     | 100    | AMP Part No. |
|-----------------|------|--------------------------|-------------------|------|------------|--------|--------|--------------|
| <b>Series 2</b> |      |                          |                   |      |            |        |        |              |
| 11-8            | Std. | Receptacle-Sq. Flanged   | A1366-ND          | 2.44 | 56.53      | 98.77  | 174.93 | 205841-1     |
|                 |      | Receptacle-Free Hanging  | A1367-ND          | 2.42 | 56.05      | 97.94  | 173.46 | 205841-2     |
|                 | Rev. | Plug                     | A1368-ND          | 2.93 | 67.93      | 118.69 | 210.21 | 205838-1     |
|                 |      | Plug                     | A1369-ND          | 2.48 | 57.48      | 100.43 | 177.87 | 206433-1     |
| 11-9            | Std. | Receptacle-Sq. Flanged   | A1370-ND          | 2.48 | 57.48      | 100.43 | 177.87 | 206433-2     |
|                 |      | Receptacle-Free Hanging  | A1371-ND          | 2.93 | 67.93      | 118.69 | 210.21 | 206434-1     |
|                 | Rev. | Plug                     | A1372-ND          | 2.40 | 55.58      | 97.11  | 171.99 | 206486-1     |
|                 |      | Plug                     | A1373-ND          | 2.48 | 57.48      | 100.43 | 177.87 | 206486-2     |
| 17-28           | Std. | Receptacle-Sq. Flanged   | A1374-ND          | 2.87 | 66.50      | 116.20 | 205.80 | 206485-1     |
|                 |      | Receptacle-Free Hanging  | A1375-ND          | 2.67 | 61.75      | 107.90 | 191.10 | 205840-3     |
|                 | Rev. | Plug                     | A1376-ND          | 3.90 | 90.25      | 157.70 | 279.30 | 206152-1     |
|                 |      | Plug                     | A1377-ND          | 3.12 | 72.20      | 126.16 | 223.44 | 205839-3     |
| 23-57           | Std. | Receptacle-Sq. Flanged   | A1378-ND          | 2.58 | 59.85      | 104.58 | 185.22 | 206038-1     |
|                 |      | Receptacle-Free Hanging  | A1379-ND          | 3.16 | 73.15      | 127.82 | 226.38 | 206038-2     |
|                 | Rev. | Plug                     | A1380-ND          | 3.05 | 70.78      | 123.67 | 219.03 | 206039-1     |
|                 |      | Plug                     | A1381-ND          | 4.06 | 94.05      | 164.34 | 291.06 | 206438-1     |
| 23-63           | Std. | Receptacle-Sq. Flanged   | A1382-ND          | 6.52 | 151.05     | 263.94 | 467.46 | 206438-2     |
|                 |      | Receptacle-Free Hanging  | A1383-ND          | 4.20 | 97.38      | 170.15 | 301.35 | 206437-1     |
|                 | Rev. | Plug                     | A1384-ND          | 3.90 | 90.25      | 157.70 | 279.30 | 205843-1     |
|                 |      | Plug                     | A1385-ND          | 5.00 | 115.90     | 202.52 | 358.68 | 205843-2     |
| 23-63           | Std. | Receptacle-Sq. Flanged   | A1386-ND          | 4.16 | 96.43      | 168.49 | 298.41 | 205842-1     |
|                 |      | Receptacle-Free Hanging  | A1386-ND          | 4.16 | 96.43      | 168.49 | 298.41 | 205842-1     |

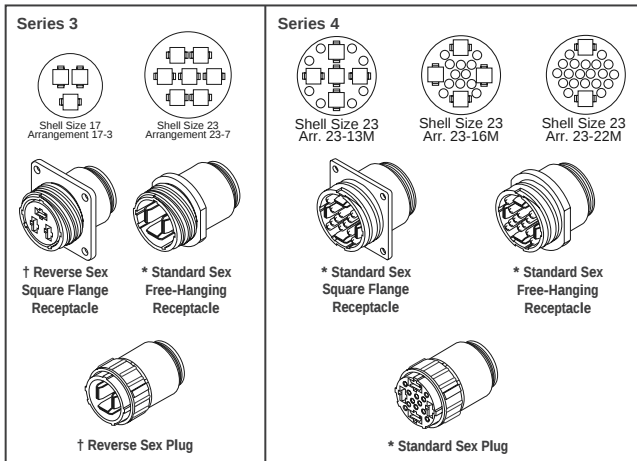
## Contacts (Pins and Sockets) – Series 1 and Series 2



| Fig.                             | Desc.  | Type   | Wire Size AWG | Contact Finish | Digi-Key Part No. | 10    | Pricing 1,000 | 5,000  | AMP Part No. |
|----------------------------------|--------|--------|---------------|----------------|-------------------|-------|---------------|--------|--------------|
| <b>Series 1</b>                  |        |        |               |                |                   |       |               |        |              |
| 1                                | Pin    | Crimp  | 18-14         | Tin            | A1320-ND          | 3.12  | 21.77         | 153.44 | 124.67/M     |
|                                  | Pin    | Crimp  | 18-14         | Tin            | A1321-ND          | 3.67  | 25.61         | 180.51 | 146.67/M     |
|                                  | Socket | Crimp  | 18-14         | SG†            | A1341-ND          | 7.11  | 49.66         | 350.03 | 284.41/M     |
|                                  | Pin    | Crimp  | 18-14         | SG†            | A1650-ND          | 4.80  | 33.54         | 236.43 | 192.11/M     |
| 1                                | Pin    | Crimp  | 18-16         | SG†            | A1340-ND          | 4.76  | 33.26         | 234.45 | 190.49/M     |
|                                  | Pin    | Crimp  | 18-16         | SG†            | A1680-ND          | 5.69  | 39.75         | 280.18 | 227.65/M     |
|                                  | Pin    | Crimp  | 18-16         | Tin            | A1649-ND          | 3.15  | 21.98         | 154.94 | 125.90/M     |
|                                  | Socket | Crimp  | 18-16         | SG†            | A1665-ND          | 3.73  | 26.04         | 183.54 | 149.13/M     |
| 1                                | Pin    | Crimp  | 24-20         | SG†            | A1648-ND          | 4.76  | 33.26         | 234.45 | 190.49/M     |
|                                  | Pin    | Crimp  | 24-20         | SG†            | A1661-ND          | 5.69  | 39.71         | 279.89 | 227.41/M     |
|                                  | Pin    | Crimp  | 24-20         | Tin            | A1647-ND          | 3.15  | 21.98         | 154.94 | 125.90/M     |
|                                  | Socket | Crimp  | 24-20         | Tin            | A1656-ND          | 3.73  | 26.04         | 183.54 | 149.13/M     |
| 1                                | Pin    | Crimp  | 24-20         | Tin            | A1322-ND          | 3.15  | 21.98         | 154.94 | 125.90/M     |
|                                  | Pin    | Crimp  | 24-20         | Tin            | A1323-ND          | 3.73  | 26.04         | 183.54 | 149.13/M     |
|                                  | Pin    | Crimp  | 24-20         | SG†            | A1342-ND          | 4.76  | 33.23         | 234.19 | 190.29/M     |
|                                  | Socket | Crimp  | 24-20         | SG†            | A1343-ND          | 5.69  | 39.71         | 279.89 | 227.41/M     |
| 1                                | Pin    | Crimp  | 26-24         | Tin            | A1324-ND          | 2.60  | 18.16         | 128.03 | 104.03/M     |
|                                  | Pin    | Crimp  | 26-24         | Tin            | A1654-ND          | 5.74  | 40.12         | 282.80 | 229.78/M     |
|                                  | Pin    | Crimp  | 26-24         | SG†            | A1344-ND          | 4.75  | 33.20         | 233.98 | 190.12/M     |
|                                  | Socket | Crimp  | 26-24         | SG†            | A1345-ND          | 5.68  | 39.68         | 279.71 | 227.27/M     |
| 2                                | Pin    | Solder | —             | Tin            | A1629-ND          | 7.16  | 50.04         | 352.74 | 286.60/M     |
|                                  | Pin    | Solder | —             | Tin            | A1631-ND          | 7.85  | 54.82         | 386.37 | 313.93/M     |
|                                  | Pin    | Solder | —             | Duplex†        | A16081-ND         | 12.69 | 88.63         | 624.69 | 507.56/M     |
|                                  | Socket | Solder | —             | Duplex†        | A1668-ND          | 14.13 | 98.67         | 695.50 | 565.10/M     |
| <b>Signal Contact – Series 2</b> |        |        |               |                |                   |       |               |        |              |
| 3                                | Pin    | Crimp  | 24-20         | SG*            | A1008-ND          | 1.79  | 11.04         | 88.35  | 71.79/M      |
|                                  | Pin    | Crimp  | 24-20         | SG*            | A1009-ND          | 1.90  | 11.69         | 93.55  | 76.02/M      |
| 3                                | Pin    | Crimp  | 24-20         | SG†            | A1679-ND          | 1.79  | 12.53         | 88.35  | 71.79/M      |
|                                  | Pin    | Crimp  | 24-20         | SG†            | A1680-ND          | 1.90  | 12.57         | 93.55  | 76.02/M      |
| 4                                | Pin    | Solder | 24-20         | SG†            | A1028-ND          | 2.42  | 14.91         | 119.25 | 96.89/M      |
|                                  | Pin    | Solder | 24-20         | SG†            | A1029-ND          | 2.91  | 17.93         | 143.46 | 116.56/M     |

## Circular Plastic Connectors – Series 3 (Shell Only)

Note: Contacts (pins and sockets) must be ordered separately.

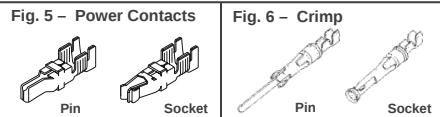


\* Standard Sex: Pin contacts in receptacle housings; socket contacts in plug housings.  
† Reverse Sex: Socket contacts in receptacle housings; pin contacts in plug housings.

| Arrangement No.         | Sex  | Description (Shell Only) | Digi-Key Part No. | 1     | Pricing 25 | 50     | 100      | AMP Part No. |
|-------------------------|------|--------------------------|-------------------|-------|------------|--------|----------|--------------|
| Series 3                |      |                          |                   |       |            |        |          |              |
| 17-3                    | Std. | Receptacle-Sq. Flanged   | A1681-ND          | 2.09  | 48.45      | 84.66  | 149.94   | 206036-2     |
|                         |      | Receptacle-Free Hanging  | A1683-ND          | 2.09  | 48.45      | 84.66  | 149.94   | 206207-1     |
|                         |      | Plug                     | A1685-ND          | 2.69  | 62.23      | 108.73 | 192.57   | 206037-2     |
|                         | Rev. | Receptacle-Sq. Flanged   | A16015-ND         | 2.09  | 48.45      | 84.66  | 149.94   | 206425-1     |
| Receptacle-Free Hanging |      | A16017-ND                | 2.81              | 65.08 | 113.71     | 201.39 | 206425-2 |              |
| 23-7                    | Std. | Plug                     | A16019-ND         | 3.71  | 85.98      | 150.23 | 266.07   | 206426-1     |
|                         |      | Receptacle-Sq. Flanged   | A1682-ND          | 3.22  | 74.58      | 130.31 | 230.79   | 206137-1     |
|                         |      | Receptacle-Free Hanging  | A1684-ND          | 3.30  | 76.48      | 133.63 | 236.67   | 206137-2     |
|                         | Rev. | Plug                     | A1686-ND          | 2.95  | 68.40      | 119.52 | 211.68   | 206136-1     |
|                         |      | Receptacle-Sq. Flanged   | A16016-ND         | 2.56  | 59.38      | 103.75 | 183.75   | 206227-1     |
|                         |      | Receptacle-Free Hanging  | A16018-ND         | 3.57  | 82.65      | 144.42 | 255.78   | 206227-2     |
|                         |      | Plug                     | A16020-ND         | 3.01  | 69.83      | 122.01 | 216.09   | 206226-1     |
| Series 4                |      |                          |                   |       |            |        |          |              |
| 23-13                   | Std. | Receptacle-Sq. Flanged   | A16029-ND         | 3.81  | 88.35      | 154.38 | 273.42   | 211825-1     |
|                         |      | Receptacle-Free Hanging  | A16032-ND         | 2.81  | 65.08      | 113.71 | 201.39   | 211825-2     |
|                         |      | Plug                     | A16035-ND         | 4.04  | 93.58      | 163.51 | 289.59   | 211824-1     |
| 23-16                   | Std. | Receptacle-Sq. Flanged   | A16030-ND         | 2.50  | 57.95      | 101.26 | 179.34   | 207486-1     |
|                         |      | Receptacle-Free Hanging  | A16033-ND         | 3.57  | 82.65      | 144.42 | 255.78   | 207486-2     |
|                         |      | Plug                     | A16036-ND         | 2.89  | 66.98      | 117.03 | 207.27   | 207485-1     |
| 23-22                   | Std. | Receptacle-Sq. Flanged   | A16031-ND         | 2.44  | 56.53      | 98.77  | 174.93   | 206613-1     |
|                         |      | Receptacle-Free Hanging  | A16034-ND         | 3.32  | 76.95      | 134.46 | 238.14   | 206613-2     |
|                         |      | Plug                     | A16037-ND         | 3.46  | 80.28      | 140.27 | 248.43   | 206612-1     |

## Contacts – Series 3 and 4

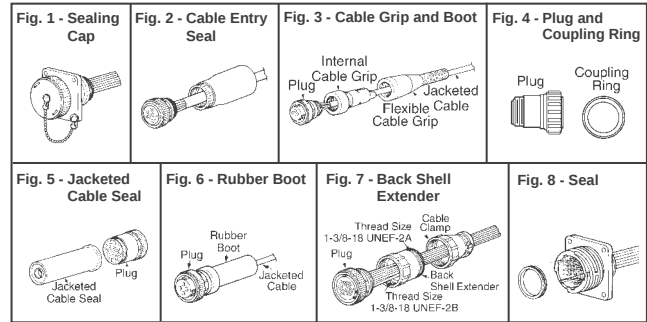
Series 4 requires a combination of Fig. 5 & 6.



| Fig.                                                      | Desc.  | Type  | Wire Size AWG | Contact Finish | Digi-Key Part No. | 10    | 25     | 50      | 1,000   | AMP Part No. |
|-----------------------------------------------------------|--------|-------|---------------|----------------|-------------------|-------|--------|---------|---------|--------------|
| <b>Series 3</b>                                           |        |       |               |                |                   |       |        |         |         |              |
| 5                                                         | Pin    | Crimp | 16 & 14-12    | Tin            | A16021-ND         | 17.19 | 120.04 | 846.11  | 66261-1 |              |
|                                                           | Socket | Crimp | 16 & 14-12    | Tin            | A16025-ND         | 31.24 | 218.21 | 1538.02 | 66740-8 |              |
|                                                           | Pin    | Crimp | 16 & 14-12    | SGT            | A16022-ND         | 43.10 | 301.01 | 2121.65 | 66261-2 |              |
|                                                           | Socket | Crimp | 16 & 14-12    | SGT            | A16026-ND         | 53.26 | 372.03 | 2622.27 | 66740-9 |              |
| 5                                                         | Pin    | Crimp | 10            | Tin            | A16023-ND         | 17.19 | 120.04 | 846.11  | 66259-1 |              |
|                                                           | Socket | Crimp | 10            | Tin            | A16027-ND         | 40.62 | 283.74 | 1999.94 | 66741-8 |              |
|                                                           | Pin    | Crimp | 10            | SGT            | A16024-ND         | 44.30 | 309.45 | 2181.14 | 66259-2 |              |
|                                                           | Socket | Crimp | 10            | SGT            | A16028-ND         | 59.00 | 412.08 | 2904.53 | 66741-6 |              |
| <b>Series 4 requires a combination of Fig. 5 &amp; 6.</b> |        |       |               |                |                   |       |        |         |         |              |
| 6                                                         | Pin    | Crimp | 18-14         | Tin            | A1320-ND          | 3.12  | 21.77  | 153.44  | 66361-2 |              |
|                                                           | Pin    | Crimp | 18-14         | SGT            | A1340-ND          | 4.76  | 33.26  | 234.45  | 66099-4 |              |
|                                                           | Socket | Crimp | 18-14         | Tin            | A1321-ND          | 3.67  | 25.61  | 180.51  | 66360-2 |              |
|                                                           | Socket | Crimp | 18-14         | SGT            | A1341-ND          | 7.11  | 49.66  | 350.03  | 66360-4 |              |
| 6                                                         | Pin    | Crimp | 18-14         | SGT            | A1650-ND          | 4.80  | 33.54  | 236.43  | 66361-4 |              |
|                                                           | Socket | Crimp | 18-16         | SGT            | A16080-ND         | 5.69  | 39.75  | 280.18  | 66101-4 |              |
|                                                           | Pin    | Crimp | 18-16         | Tin            | A1649-ND          | 3.15  | 21.98  | 154.94  | 66099-2 |              |
|                                                           | Socket | Crimp | 18-16         | Tin            | A1665-ND          | 3.73  | 26.04  | 183.54  | 66101-2 |              |
| 6                                                         | Pin    | Crimp | 24-20         | SGT            | A1648-ND          | 4.76  | 33.26  | 234.45  | 66400-4 |              |
|                                                           | Pin    | Crimp | 24-20         | SGT            | A1661-ND          | 5.69  | 39.71  | 279.89  | 66399-4 |              |
|                                                           | Pin    | Crimp | 24-20         | Tin            | A1647-ND          | 3.15  | 21.98  | 154.94  | 66400-1 |              |
|                                                           | Pin    | Crimp | 24-20         | Tin            | A1656-ND          | 3.73  | 26.04  | 183.54  | 66399-1 |              |
| 6                                                         | Pin    | Crimp | 26-24         | Tin            | A1654-ND          | 5.74  | 40.12  | 282.80  | 66109-2 |              |
|                                                           | Pin    | Crimp | 24-20         | Tin            | A1322-ND          | 3.15  | 21.98  | 154.94  | 66103-2 |              |
|                                                           | Pin    | Crimp | 24-20         | SGT            | A1342-ND          | 4.76  | 33.23  | 234.19  | 66103-4 |              |
|                                                           | Pin    | Crimp | 24-20         | Tin            | A1323-ND          | 3.73  | 26.04  | 183.54  | 66105-2 |              |
| 6                                                         | Pin    | Crimp | 24-20         | SGT            | A1343-ND          | 5.69  | 39.71  | 279.89  | 66105-4 |              |
|                                                           | Pin    | Crimp | 28-24         | Tin            | A1324-ND          | 2.60  | 18.16  | 128.03  | 66107-2 |              |
|                                                           | Pin    | Crimp | 28-24         | SGT            | A1344-ND          | 4.75  | 33.20  | 233.98  | 66107-4 |              |
|                                                           | Pin    | Crimp | 28-24         | SGT            | A1345-ND          | 5.68  | 39.68  | 279.71  | 66109-4 |              |

† Selective gold. .000030 selective gold over .000030 nickel.

## AMP Circular Plastic Connector Sealing Accessories

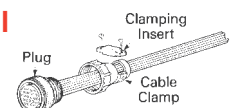


| Fig.                                               | Description                              | Shell Size | Digi-Key Part No. | 1     | 25     | 50     | AMP Part No. |
|----------------------------------------------------|------------------------------------------|------------|-------------------|-------|--------|--------|--------------|
| <b>Sealing Caps (For Receptacles Only)</b>         |                                          |            |                   |       |        |        |              |
| 1                                                  | Plastic Strap                            | 11         | A16038-ND         | 2.50  | 57.95  | 101.26 | 206903-1     |
|                                                    | Plastic Strap                            | 13         | A16039-ND         | 2.28  | 52.73  | 92.13  | 211870-1     |
|                                                    | Plastic Strap                            | 17         | A16040-ND         | 2.67  | 61.75  | 107.90 | 207445-1     |
|                                                    | Plastic Strap                            | 23         | A16041-ND         | 3.10  | 71.73  | 125.33 | 207446-1     |
| 1                                                  | Metal Bead Chain                         | 11         | A16042-ND         | 4.16  | 96.43  | 168.49 | 208800-1     |
|                                                    | Metal Bead Chain                         | 13         | A16043-ND         | 4.92  | 114.00 | 199.20 | 213485-1     |
|                                                    | Metal Bead Chain                         | 17         | A16044-ND         | 4.00  | 92.63  | 161.85 | 208652-1     |
|                                                    | Metal Bead Chain                         | 23         | A16045-ND         | 4.80  | 111.15 | 194.22 | 208680-1     |
| <b>Cable Entry Seals</b>                           |                                          |            |                   |       |        |        |              |
| 2                                                  | Heat Shrinkable Sealing Boots            | 11         | A16046-ND         | 5.66  | 131.10 | 229.08 | 54010-1      |
|                                                    | Heat Shrinkable Sealing Boots            | 13         | A16047-ND         | 6.27  | 145.35 | 253.98 | 54123-1      |
|                                                    | Heat Shrinkable Sealing Boots            | 17         | A16048-ND         | 6.17  | 142.98 | 249.83 | 54011-1      |
|                                                    | Heat Shrinkable Sealing Boots            | 23         | A16049-ND         | 6.91  | 160.08 | 279.71 | 54012-1      |
| <b>Flexible Cable Boot and Internal Cable Grip</b> |                                          |            |                   |       |        |        |              |
| 3                                                  | Cable Boot, Black Thermoplastic          | 11         | A16050-ND         | 1.62  | 37.53  | 65.57  | 207489-1     |
|                                                    | Cable Boot, Black Thermoplastic          | 17         | A16052-ND         | 2.95  | 68.40  | 119.52 | 207241-1     |
| 3                                                  | Cable Grip, Black Thermoplastic          | 11         | A16051-ND         | 1.76  | 40.85  | 71.38  | 207490-1     |
|                                                    | Cable Grip, Blk. Thermoplastic 8.25mm    | 17         | A16053-ND         | 2.48  | 57.48  | 100.43 | 207387-1     |
|                                                    | Cable Grip, Blk. Thermoplastic 9.78mm    | 17         | A16054-ND         | 2.40  | 55.58  | 97.11  | 207387-2     |
| <b>Replacement Coupling Rings</b>                  |                                          |            |                   |       |        |        |              |
| 4                                                  | Replacement Coupling Ring                | 11         | A16055-ND         | .70   | 16.11  | 28.16  | 213811-1     |
|                                                    | Replacement Coupling Ring                | 13         | A16056-ND         | .98   | 22.67  | 39.61  | 213813-1     |
|                                                    | Replacement Coupling Ring                | 17         | A16057-ND         | .78   | 18.10  | 31.63  | 213810-1     |
|                                                    | Replacement Coupling Ring                | 23         | A16059-ND         | 1.25  | 28.96  | 50.60  | 213812-1     |
| 5                                                  | Jacketed Cable Seals, Cable Dia. 7.62mm  | 23         | A16063-ND         | 12.14 | 281.20 | 491.36 | 207052-1     |
|                                                    | Jacketed Cable Seals, Cable Dia. 11.43mm | 23         | A16064-ND         | 16.17 | 374.78 | 654.87 | 207052-2     |
|                                                    | Jacketed Cable Seals, Cable Dia. 15.24mm | 23         | A16065-ND         | 9.02  | 209.00 | 365.20 | 207052-3     |
| 6                                                  | Rubber Boots*                            | 11         | A16059-ND         | 3.17  | 73.53  | 128.49 | 206304-1     |
| 7                                                  | Back Shell Extenders                     | 23         | A16062-ND         | 2.95  | 68.40  | 119.52 | 207055-1     |
| <b>Peripheral Seals</b>                            |                                          |            |                   |       |        |        |              |
| 8                                                  | For Receptacles Only                     | 11         | A1335-ND          | .54   | 10.73  | 17.82  | 206403-1     |
|                                                    | For Receptacles Only                     | 13         | A1336-ND          | .79   | 15.86  | 26.32  | 206403-4     |
|                                                    | For Receptacles Only                     | 17         | A1337-ND          | .61   | 12.18  | 20.22  | 206403-2     |
|                                                    | For Receptacles Only                     | 23         | A1338-ND          | 1.11  | 22.15  | 36.77  | 206403-3     |
| <b>Keying Plugs</b>                                |                                          |            |                   |       |        |        |              |
| Series 1 & 4                                       |                                          |            | A16066-ND         | .13   | 3.12   | 5.45   | 200821-1     |
| Series 2                                           |                                          |            | A16067-ND         | .34   | 7.90   | 13.80  | 206509-1     |
| Series 3 & 4 (Socket Cavities)                     |                                          |            | A16068-ND         | .50   | 11.67  | 20.39  | 206508-1     |
| Series 3 & 4 (Pin Cavities)                        |                                          |            | A16069-ND         | 1.35  | 31.36  | 54.79  | 207597-1     |

\* Rubber Boots are used with jacketed cable to provide splashproof connections for Series 1 and Series 3 connectors. Black neoprene.

## Cable Clamps – Plastic Shell

Cable clamps are used to prevent excessive strain on cable or wire from being transmitted to the contacts inside the connector housings.



| Shell Size | Type, Cable O.D.       | Digi-Key Part No. | 1    | 25    | Pricing 50 | 100    | 500     | AMP Part No. |
|------------|------------------------|-------------------|------|-------|------------|--------|---------|--------------|
| 11         | Plastic Shell, 8.36mm  | A1330-ND          | 2.22 | 52.65 | 99.45      | 184.86 | 789.75  | 206062-1     |
| 13         | Plastic Shell, 11.51mm | A1331-ND          | 2.24 | 53.10 | 100.30     | 186.44 | 796.50  | 206966-1     |
| 17         | Plastic Shell, 11.51mm | A1332-ND          | 2.24 | 53.10 | 100.30     | 186.44 | 796.50  | 206070-1     |
| 23         | Plastic Shell, 17.86mm | A1334-ND          | 2.32 | 54.90 | 103.70     | 192.76 | 823.50  | 206138-1     |
| 11         | Plastic Shell, 11.51mm | A1687-ND          | 2.22 | 52.65 | 99.45      | 184.86 | 789.75  | 206358-1     |
| 13         | Plastic Shell, 17.86mm | A1688-ND          | 2.34 | 55.35 | 104.55     | 194.34 | 830.25  | 207008-1     |
| 17         | Plastic Shell, 17.86mm | A1689-ND          | 2.47 | 58.50 | 110.50     | 205.40 | 877.50  | 206322-1     |
| 23         | Plastic Shell, 28.58mm | A1690-ND          | 2.93 | 69.30 | 130.90     | 243.32 | 1039.50 | 206512-1     |
| 23         | Plastic Shell, 28.58mm | A16061-ND*        | 3.65 | 84.55 | 147.74     | 261.66 | 1201.50 | 207774-1     |

\* Self-Centering

1-800-344-4539

218-681-6674 • FAX: 218-681-3380 • www.digikey.com

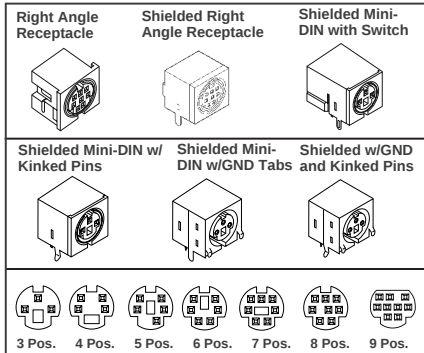
**CUI STACK**

## Miniature DIN Connector

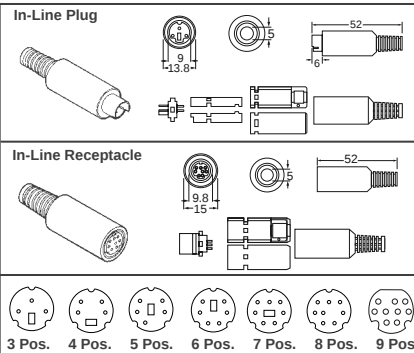
**APPLICATIONS:** Because of their compact size and durable design, mini-DIN connectors are ideal for signal applications where space is at a premium. A variety of configurations including vertical, horizontal and in-line models allows for most requirements. Their concentric, cylindrical ground shell make these connectors an excellent choice where EMI/RFI is a concern. Typical applications include computers, peripheral devices, office, audio and video equipment.

**GENERAL SPECIFICATIONS:**

- **Rating:** 100V AC 1A MAX, 12V DC 2A MAX
- **Insulation Resistance:** MIN 50 MEGΩ @ 250V DC
- **Voltage Withstand:** 250V AC, 1 minute
- **Contact Resistance:** Pins - 30 mΩ MAX, Shell - 50 mΩ MAX (All accessories included)

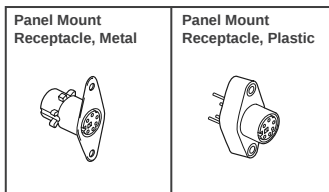


| No. of Pos.                                      | Digi-Key Part No. | Pricing<br>1 10 100 | CUI Stack Part No. |
|--------------------------------------------------|-------------------|---------------------|--------------------|
| <b>Shielded Right Angle Receptacles</b>          |                   |                     |                    |
| 3-Pos.                                           | CP-2230-ND        | .99 8.58 66.00      | MD-30SM            |
| 4-Pos.                                           | CP-2240-ND        | 1.02 8.84 68.00     | MD-40SM            |
| 5-Pos.                                           | CP-2250-ND        | 1.05 9.10 70.00     | MD-50SM            |
| 6-Pos.                                           | CP-2260-ND        | 1.11 9.62 74.00     | MD-60SM            |
| 7-Pos.                                           | CP-2270-ND        | 1.23 10.66 82.00    | MD-70SM            |
| 8-Pos.                                           | CP-2280-ND        | 1.32 11.44 88.00    | MD-80SM            |
| 9-Pos.                                           | CP-2290-ND        | 1.65 14.30 110.00   | MD-90SM            |
| <b>Right Angle PCB Mount Receptacles</b>         |                   |                     |                    |
| 3-Pos.                                           | CP-2430-ND        | .78 6.76 52.00      | MD-30S             |
| 4-Pos.                                           | CP-2440-ND        | .81 7.02 54.00      | MD-40S             |
| 5-Pos.                                           | CP-2450-ND        | .86 7.41 57.00      | MD-50S             |
| 6-Pos.                                           | CP-2460-ND        | .90 7.80 60.00      | MD-60S             |
| 7-Pos.                                           | CP-2470-ND        | 1.02 8.84 68.00     | MD-70S             |
| 8-Pos.                                           | CP-2480-ND        | 1.11 9.62 74.00     | MD-80S             |
| 9-Pos.                                           | CP-2490-ND        | 1.53 13.26 102.00   | MD-90S             |
| <b>Shielded Female Mini-DIN with Switch</b>      |                   |                     |                    |
| 3-Pos.                                           | CP-3030-ND        | 2.01 17.42 134.00   | MD-30SMW           |
| 4-Pos.                                           | CP-3040-ND        | 2.10 18.20 140.00   | MD-40SMW           |
| 5-Pos.                                           | CP-3050-ND        | 2.19 18.98 146.00   | MD-50SMW           |
| 6-Pos.                                           | CP-3060-ND        | 2.31 20.02 154.00   | MD-60SMW           |
| 7-Pos.                                           | CP-3070-ND        | 2.40 20.80 160.00   | MD-70SMW           |
| 8-Pos.                                           | CP-3080-ND        | 2.46 21.32 164.00   | MD-80SMW           |
| <b>Shielded Female Mini-DIN with Kinked Pins</b> |                   |                     |                    |
| 3-Pos.                                           | CP-4030-ND        | .99 8.58 66.00      | MD-30SMK           |
| 4-Pos.                                           | CP-4040-ND        | 1.02 8.84 68.00     | MD-40SMK           |
| 5-Pos.                                           | CP-4050-ND        | 1.05 9.10 70.00     | MD-50SMK           |
| 6-Pos.                                           | CP-4060-ND        | 1.11 9.62 74.00     | MD-60SMK           |
| 7-Pos.                                           | CP-4070-ND        | 1.23 10.66 82.00    | MD-70SMK           |
| 8-Pos.                                           | CP-4080-ND        | 1.32 11.44 88.00    | MD-80SMK           |



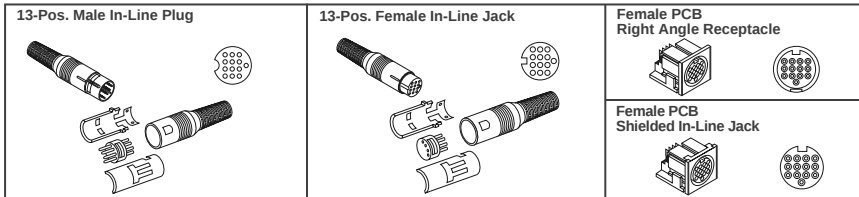
| No. of Pos.                                                 | Digi-Key Part No. | Pricing<br>1 10 100 | CUI Stack Part No. |
|-------------------------------------------------------------|-------------------|---------------------|--------------------|
| <b>Shielded Miniature DIN with GND Tabs</b>                 |                   |                     |                    |
| 3-Pos.                                                      | CP-5030-ND        | 1.17 10.14 78.00    | MD-30SG            |
| 4-Pos.                                                      | CP-5040-ND        | 1.20 10.40 80.00    | MD-40SG            |
| 5-Pos.                                                      | CP-5050-ND        | 1.23 10.66 82.00    | MD-50SG            |
| 6-Pos.                                                      | CP-5060-ND        | 1.29 11.18 86.00    | MD-60SG            |
| 8-Pos.                                                      | CP-5080-ND        | 1.50 13.00 100.00   | MD-80SG            |
| <b>Shielded Miniature DIN with GND Tabs and Kinked Pins</b> |                   |                     |                    |
| 3-Pos.                                                      | CP-6030-ND        | 1.17 10.14 78.00    | MD-30SGK           |
| 4-Pos.                                                      | CP-6040-ND        | 1.20 10.40 80.00    | MD-40SGK           |
| 5-Pos.                                                      | CP-6050-ND        | 1.23 10.66 82.00    | MD-50SGK           |
| 6-Pos.                                                      | CP-6060-ND        | 1.29 11.18 86.00    | MD-60SGK           |
| 8-Pos.                                                      | CP-6080-ND        | 1.50 13.00 100.00   | MD-80SGK           |
| <b>In-Line Plug</b>                                         |                   |                     |                    |
| 3-Pos.                                                      | CP-2030-ND        | .87 7.54 58.00      | MD-30              |
| 4-Pos.                                                      | CP-2040-ND        | .93 8.06 62.00      | MD-40              |
| 5-Pos.                                                      | CP-2050-ND        | .99 8.58 66.00      | MD-50              |
| 6-Pos.                                                      | CP-2060-ND        | 1.05 9.10 70.00     | MD-60              |
| 7-Pos.                                                      | CP-2070-ND        | 1.11 9.62 74.00     | MD-70              |
| 8-Pos.                                                      | CP-2080-ND        | 1.17 10.14 78.00    | MD-80              |
| 9-Pos.                                                      | CP-2090-ND        | 1.56 13.52 104.00   | MD-90              |
| <b>In-Line Receptacle</b>                                   |                   |                     |                    |
| 3-Pos.                                                      | CP-2130-ND        | 1.08 9.36 72.00     | MD-30J             |
| 4-Pos.                                                      | CP-2140-ND        | 1.14 9.88 76.00     | MD-40J             |
| 5-Pos.                                                      | CP-2150-ND        | 1.20 10.40 80.00    | MD-50J             |
| 6-Pos.                                                      | CP-2160-ND        | 1.26 10.92 84.00    | MD-60J             |
| 7-Pos.                                                      | CP-2170-ND        | 1.32 11.44 88.00    | MD-70J             |
| 8-Pos.                                                      | CP-2180-ND        | 1.38 11.96 92.00    | MD-80J             |
| 9-Pos.                                                      | CP-2190-ND        | 1.83 15.86 122.00   | MD-90J             |
| Crimp Pin                                                   | CP-9999-ND        | — .85 4.68          | T-0006             |

## Mini-DIN Panel Mount Connectors



| Description                                      | Digi-Key Part No. | Pricing<br>1 10 100 | CUI Stack Part No. |
|--------------------------------------------------|-------------------|---------------------|--------------------|
| <b>Panel Mount Mini-DIN Connectors — Metal</b>   |                   |                     |                    |
| 3 Position                                       | CP-2530-ND        | 1.02 8.84 68.00     | MD-30SN            |
| 4 Position                                       | CP-2540-ND        | 1.08 9.36 72.00     | MD-40SN            |
| 5 Position                                       | CP-2550-ND        | 1.17 10.14 78.00    | MD-50SN            |
| 6 Position                                       | CP-2560-ND        | 1.29 11.18 86.00    | MD-60SN            |
| 7 Position                                       | CP-2570-ND        | 1.35 11.70 90.00    | MD-70SN            |
| 8 Position                                       | CP-2580-ND        | 1.38 11.96 92.00    | MD-80SN            |
| <b>Panel Mount Mini-DIN Connectors — Plastic</b> |                   |                     |                    |
| 3 Position                                       | CP-2630-ND        | 1.08 9.36 72.00     | MD-30SP            |
| 4 Position                                       | CP-2640-ND        | 1.17 10.37 78.00    | MD-40SP            |
| 5 Position                                       | CP-2650-ND        | 1.23 10.66 82.00    | MD-50SP            |
| 6 Position                                       | CP-2660-ND        | 1.38 11.96 92.00    | MD-60SP            |
| 7 Position                                       | CP-2670-ND        | 1.44 12.77 96.00    | MD-70SP            |
| 8 Position                                       | CP-2680-ND        | 1.53 13.26 102.00   | MD-80SP            |

## 13-Position DIN Connectors



| Description                             | Digi-Key Part No. | Pricing<br>1 10 100 | CUI Stack Part No. |
|-----------------------------------------|-------------------|---------------------|--------------------|
| 13-Pos. Male In-Line Plug               | CP-1013-ND        | 1.65 14.30 110.00   | SD-130             |
| 13-Pos. Female In-Line Jack             | CP-1113-ND        | 3.75 32.50 250.00   | SD130J             |
| 13-Pos. Female PCB Rt. Angle Receptacle | CP-2313-ND        | 3.03 26.26 202.00   | SDD-130J           |
| 13-Pos. Female PCB Shielded             | CP-3313-ND        | 3.15 27.30 210.00   | SDF-130J           |

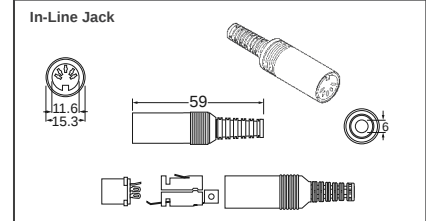
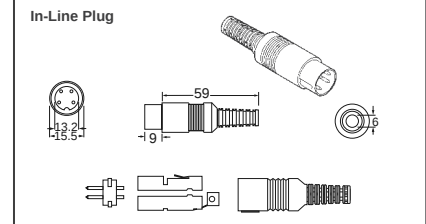
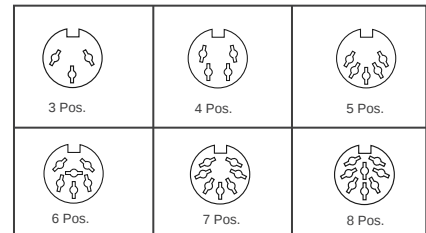
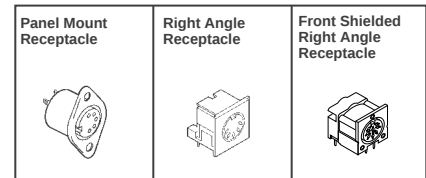
## Circular DIN Connectors

**APPLICATIONS:**

Circular DIN connectors combine low contact resistance with relatively high ampacity which make them an excellent choice for signal or power applications. Ideal for use with computers, peripheral devices, office equipment, power supplies, etc., their low cost and compact, durable design have made them a proven value.

**GENERAL SPECIFICATIONS:**

- **Rating:** 100V AC 2A MAX • **Insulation Resistance:** MIN 100 MEGΩ @ 500V DC • **Voltage Withstand:** 1000V AC, 1 minute
- **Contact Resistance:** Pins - 10 mΩ @ MAX, Shell - 50 mΩ MAX (All accessories included)



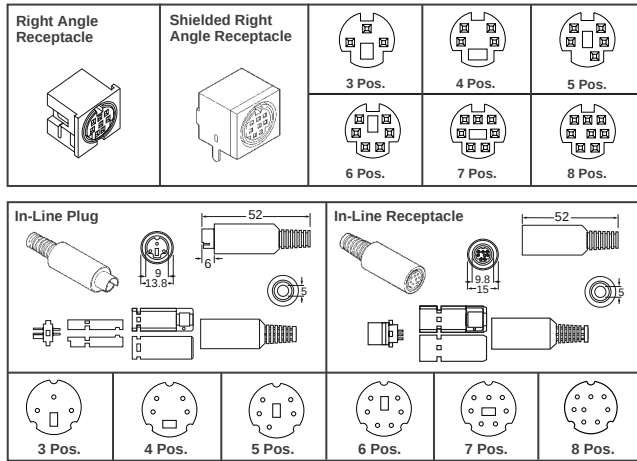
| No. of Pos.                                   | Digi-Key Part No. | Pricing<br>1 10 100 | CUI Stack Part No. |
|-----------------------------------------------|-------------------|---------------------|--------------------|
| <b>Panel Mount Receptacles</b>                |                   |                     |                    |
| 3-Pos.                                        | CP-1230-ND        | .62 5.33 41.00      | SD-30SN            |
| 4-Pos.                                        | CP-1240-ND        | .65 5.59 43.00      | SD-40SN            |
| 5-Pos.                                        | CP-1250-ND        | .70 6.03 46.40      | SD-50SN            |
| 6-Pos.                                        | CP-1260-ND        | .74 6.37 49.00      | SD-60SN            |
| 7-Pos.                                        | CP-1270-ND        | .80 6.92 53.20      | SD-70SN            |
| 8-Pos.                                        | CP-1280-ND        | .86 7.49 57.60      | SD-80SN            |
| <b>Right Angle Receptacles</b>                |                   |                     |                    |
| 3-Pos.                                        | CP-2330-ND        | .86 7.49 57.60      | SDS-30J            |
| 4-Pos.                                        | CP-2340-ND        | .92 7.96 61.20      | SDS-40J            |
| 5-Pos.                                        | CP-2350-ND        | .92 7.96 61.20      | SDS-50J            |
| 6-Pos.                                        | CP-2360-ND        | 1.24 10.76 82.80    | SDS-60J            |
| 7-Pos.                                        | CP-2370-ND        | 1.40 12.17 93.60    | SDS-70J            |
| 8-Pos.                                        | CP-2380-ND        | 1.51 13.10 100.80   | SDS-80J            |
| <b>Right Angle Front Shielded Receptacles</b> |                   |                     |                    |
| 3-Pos.                                        | CP-7030-ND        | 1.00 8.63 66.40     | SDF-30J            |
| 4-Pos.                                        | CP-7040-ND        | 1.05 9.10 70.00     | SDF-40J            |
| 5-Pos.                                        | CP-7050-ND        | 1.05 9.10 70.00     | SDF-50J            |
| 6-Pos.                                        | CP-7060-ND        | 1.37 11.91 91.60    | SDF-60J            |
| 7-Pos.                                        | CP-7070-ND        | 1.54 13.31 102.40   | SDF-70J            |
| 8-Pos.                                        | CP-7080-ND        | 1.64 14.25 109.60   | SDF-80J            |
| <b>In-Line Plug</b>                           |                   |                     |                    |
| 3-Pos.                                        | CP-1030-ND        | .53 4.55 35.00      | SD-30              |
| 4-Pos.                                        | CP-1040-ND        | .54 4.68 36.00      | SD-40              |
| 5-Pos.                                        | CP-1050-ND        | .61 5.25 40.40      | SD-50              |
| 6-Pos.                                        | CP-1060-ND        | .64 5.56 42.80      | SD-60              |
| 7-Pos.                                        | CP-1070-ND        | .72 6.27 48.20      | SD-70              |
| 8-Pos.                                        | CP-1080-ND        | .76 6.60 50.80      | SD-80              |
| <b>In-Line Jack</b>                           |                   |                     |                    |
| 3-Pos.                                        | CP-1130-ND        | .65 5.59 43.00      | SD-30J             |
| 4-Pos.                                        | CP-1140-ND        | .71 6.11 47.00      | SD-40J             |
| 5-Pos.                                        | CP-1150-ND        | .73 6.29 48.40      | SD-50J             |
| 6-Pos.                                        | CP-1160-ND        | .77 6.63 51.00      | SD-60J             |
| 7-Pos.                                        | CP-1170-ND        | .83 7.18 55.20      | SD-70J             |
| 8-Pos.                                        | CP-1180-ND        | .89 7.75 59.60      | SD-80J             |



## Mini DIN Connectors

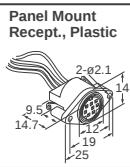
**APPLICATIONS:** Because of their compact size and durable design, mini-DIN connectors are ideal for signal applications where space is at a premium. A variety of configurations including vertical, horizontal and in-line models allows for most requirements. Their concentric, cylindrical ground shell make these connectors an excellent choice where EMI/RFI is a concern. Typical applications include computers, peripheral devices, office, audio and video equipment.

**GENERAL SPECIFICATIONS:** • **Rating:** 100V AC 1A MAX, 12V DC 2A MAX. • **Insulation Resistance:** MIN 50 MEGΩ @ 250V DC • **Voltage Withstand:** 250V AC, 1 minute • **Contact Resistance:** Pins - 30 mΩ MAX, Shell - 50 mΩ MAX (All accessories included)



| Description                                     | Digi-Key Part No. | 1    | Pricing 10 100 | Singatron Part No. |
|-------------------------------------------------|-------------------|------|----------------|--------------------|
| <b>Right Angle Mini-DIN Receptacle</b>          |                   |      |                |                    |
| 3-Pos. Right Angle Receptacle.....              | 275-1040-ND       | .81  | 7.02 54.60     | MDJ-001-3P         |
| 4-Pos. Right Angle Receptacle.....              | 275-1041-ND       | .84  | 7.29 56.70     | MDJ-002-4P         |
| 5-Pos. Right Angle Receptacle.....              | 275-1042-ND       | .88  | 7.70 59.85     | MDJ-003-5P         |
| 6-Pos. Right Angle Receptacle.....              | 275-1043-ND       | .93  | 8.10 63.00     | MDJ-004-6P         |
| 7-Pos. Right Angle Receptacle.....              | 275-1044-ND       | 1.05 | 9.18 71.40     | MDJ-005-7P         |
| 8-Pos. Right Angle Receptacle.....              | 275-1045-ND       | 1.15 | 9.99 77.70     | MDJ-006-8P         |
| <b>Right Angle Shielded Mini-DIN Receptacle</b> |                   |      |                |                    |
| 3-Pos. Right Angle Receptacle.....              | 275-1046-ND       | 1.02 | 8.91 69.30     | MDJ-101-3PS        |
| 4-Pos. Right Angle Receptacle.....              | 275-1047-ND       | 1.05 | 9.18 71.40     | MDJ-102-4PS        |
| 5-Pos. Right Angle Receptacle.....              | 275-1048-ND       | 1.09 | 9.45 73.50     | MDJ-103-5PS        |
| 6-Pos. Right Angle Receptacle.....              | 275-1049-ND       | 1.15 | 9.99 77.70     | MDJ-104-6PS        |
| 7-Pos. Right Angle Receptacle.....              | 275-1050-ND       | 1.27 | 11.07 86.10    | MDJ-105-7PS        |
| 8-Pos. Right Angle Receptacle.....              | 275-1051-ND       | 1.36 | 11.88 92.40    | MDJ-106-8PS        |
| <b>Miniature In-Line Plug</b>                   |                   |      |                |                    |
| 3-Pos. In-Line Plug.....                        | 275-1028-ND       | .93  | 8.10 63.00     | 62000-3P           |
| 4-Pos. In-Line Plug.....                        | 275-1029-ND       | .99  | 8.64 67.20     | 62000-4P           |
| 5-Pos. In-Line Plug.....                        | 275-1030-ND       | 1.05 | 9.18 71.40     | 62000-5P           |
| 6-Pos. In-Line Plug.....                        | 275-1031-ND       | 1.12 | 9.72 75.60     | 62000-6P           |
| 7-Pos. In-Line Plug.....                        | 275-1032-ND       | 1.18 | 10.26 79.80    | 62000-7P           |
| 8-Pos. In-Line Plug.....                        | 275-1033-ND       | 1.24 | 10.80 84.00    | 62000-8P           |
| <b>Miniature In-Line Receptacle</b>             |                   |      |                |                    |
| 3-Pos. In-Line Jack.....                        | 275-1034-ND       | 1.15 | 9.99 77.70     | 63000-3P           |
| 4-Pos. In-Line Jack.....                        | 275-1035-ND       | 1.21 | 10.53 81.90    | 63000-4P           |
| 5-Pos. In-Line Jack.....                        | 275-1036-ND       | 1.27 | 11.07 86.10    | 63000-5P           |
| 6-Pos. In-Line Jack.....                        | 275-1037-ND       | 1.33 | 11.61 90.30    | 63000-6P           |
| 7-Pos. In-Line Jack.....                        | 275-1038-ND       | 1.40 | 12.15 94.50    | 63000-7P           |
| 8-Pos. In-Line Jack.....                        | 275-1039-ND       | 1.46 | 12.69 98.70    | 63000-8P           |

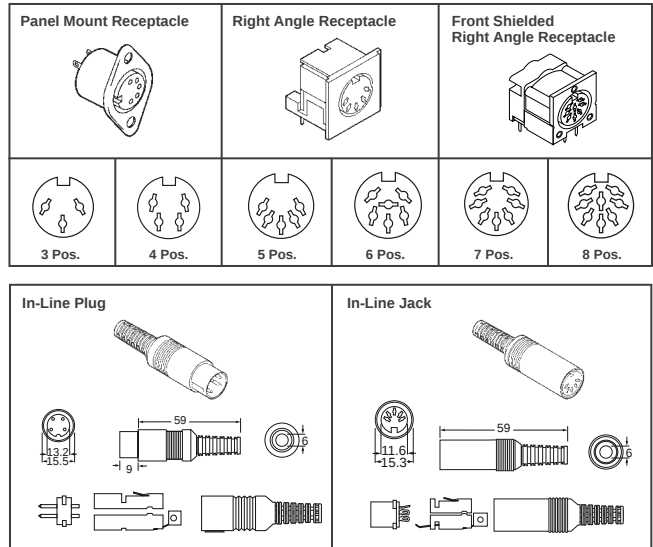
| Description                                                                | Digi-Key Part No. | 1    | Pricing 10 100 | Singatron Part No.  |
|----------------------------------------------------------------------------|-------------------|------|----------------|---------------------|
| <b>Panel Mount Mini-DIN Connectors With 6" (15.24cm) Lead Wire (26AWG)</b> |                   |      |                |                     |
| 3-Pos. Recept. ....                                                        | 275-1100-ND       | 1.71 | 14.85 115.50   | MDJ-1201-3P-0160-00 |
| 4-Pos. Recept. ....                                                        | 275-1101-ND       | 1.95 | 17.01 132.30   | MDJ-1202-4P-0160-00 |
| 5-Pos. Recept. ....                                                        | 275-1102-ND       | 2.14 | 18.63 144.90   | MDJ-1203-5P-0160-00 |
| 6-Pos. Recept. ....                                                        | 275-1103-ND       | 2.33 | 20.25 157.50   | MDJ-1204-6P-0160-00 |
| 7-Pos. Recept. ....                                                        | 275-1104-ND       | 2.42 | 21.06 163.80   | MDJ-1205-7P-0160-00 |
| 8-Pos. Recept. ....                                                        | 275-1105-ND       | 2.42 | 21.06 163.80   | MDJ-1206-8P-0160-00 |



## Circular DIN Connectors

**APPLICATIONS:** Circular DIN connectors combine low contact resistance with relatively high ampacity which make them an excellent choice for signal or power applications. Ideal for use with computers, peripheral devices, office equipment, power supplies, etc., their low cost and compact, durable design have made them a proven value.

**GENERAL SPECIFICATIONS:** • **Rating:** 100V AC 2A MAX • **Insulation Resistance:** MIN 100 MEGΩ @ 500V DC • **Voltage Withstand:** 1000V AC, 1 minute • **Contact Resistance:** Pins - 10 mΩ @ MAX, Shell - 50 mΩ MAX (All accessories included)



| Description                                   | Digi-Key Part No. | 1    | Pricing 10 100 | Singatron Part No. |
|-----------------------------------------------|-------------------|------|----------------|--------------------|
| <b>Panel Mount Receptacles</b>                |                   |      |                |                    |
| 3-Pos. Panel Mount Receptacle.....            | 275-1012-ND       | .64  | 5.54 43.05     | YE-1363            |
| 4-Pos. Panel Mount Receptacle.....            | 275-1013-ND       | .67  | 5.81 45.15     | YE-1364            |
| 5-Pos. Panel Mount Receptacle.....            | 275-1014-ND       | .72  | 6.26 48.72     | YE-1365A           |
| 6-Pos. Panel Mount Receptacle.....            | 275-1015-ND       | .76  | 6.62 51.45     | YE-1366            |
| 7-Pos. Panel Mount Receptacle.....            | 275-1016-ND       | .82  | 7.16 55.65     | YE-1367            |
| 8-Pos. Panel Mount Receptacle.....            | 275-1017-ND       | .88  | 7.70 59.85     | YE-1368A           |
| <b>Right Angle Receptacles</b>                |                   |      |                |                    |
| 4-Pos. Right Angle Receptacle.....            | 275-1018-ND       | .93  | 8.10 63.00     | DJ-037-4P(A)       |
| 5-Pos. Right Angle Receptacle.....            | 275-1019-ND       | .78  | 6.75 52.50     | DJ-006-5P          |
| 6-Pos. Right Angle Receptacle.....            | 275-1020-ND       | 1.24 | 10.80 84.00    | DJ-019-6P(A)       |
| 7-Pos. Right Angle Receptacle.....            | 275-1021-ND       | 1.33 | 11.61 90.30    | DJ-007-7P(A)       |
| 8-Pos. Right Angle Receptacle.....            | 275-1022-ND       | 1.43 | 12.42 96.60    | DJ-010-8P(A)       |
| <b>Right Angle Front Shielded Receptacles</b> |                   |      |                |                    |
| 4-Pos. Right Angle Front Shielded.....        | 275-1023-ND       | 1.24 | 10.80 84.00    | DJ-037-4PS(A)      |
| 5-Pos. Right Angle Front Shielded.....        | 275-1024-ND       | 1.09 | 9.45 73.50     | DJ-006-5PS(A)      |
| 6-Pos. Right Angle Front Shielded.....        | 275-1025-ND       | 1.43 | 12.42 96.60    | DJ-019-6PS(A)      |
| 7-Pos. Right Angle Front Shielded.....        | 275-1026-ND       | 1.52 | 13.23 102.90   | DJ-007-7PS(A)      |
| 8-Pos. Right Angle Front Shielded.....        | 275-1027-ND       | 1.71 | 14.85 115.50   | DJ-010-8PS(A)      |
| <b>In-Line Plug</b>                           |                   |      |                |                    |
| 3-Pos. In-Line Plug.....                      | 275-1000-ND       | .53  | 4.59 35.70     | YE-1153            |
| 4-Pos. In-Line Plug.....                      | 275-1001-ND       | .56  | 4.86 37.80     | YE-1154            |
| 5-Pos. In-Line Plug.....                      | 275-1002-ND       | .59  | 5.13 39.90     | YE-1155A           |
| 6-Pos. In-Line Plug.....                      | 275-1003-ND       | .62  | 5.40 42.00     | YE-1156            |
| 7-Pos. In-Line Plug.....                      | 275-1004-ND       | .68  | 5.94 46.20     | YE-1157            |
| 8-Pos. In-Line Plug.....                      | 275-1005-ND       | .74  | 6.48 50.40     | YE-1158A           |
| <b>In-Line Jack</b>                           |                   |      |                |                    |
| 3-Pos. In-Line Jack.....                      | 275-1006-ND       | .67  | 5.81 45.15     | YE-1333            |
| 4-Pos. In-Line Jack.....                      | 275-1007-ND       | .73  | 6.35 49.35     | YE-1334            |
| 5-Pos. In-Line Jack.....                      | 275-1008-ND       | .74  | 6.38 50.40     | YE-1335A           |
| 6-Pos. In-Line Jack.....                      | 275-1009-ND       | .79  | 6.89 53.55     | YE-1336            |
| 7-Pos. In-Line Jack.....                      | 275-1010-ND       | .85  | 7.43 57.75     | YE-1337            |
| 8-Pos. In-Line Jack.....                      | 275-1011-ND       | .91  | 7.97 61.95     | YE-1338A           |



## Shielded DIN Connectors

### Features:

Crimp, snap-in contacts; Designed for ease of post molding; Pre-molded cord guard; Tin plated brass contacts; Ferrule crimps onto shield for reliable termination; Meets or exceeds DIN specification 41524 for 4-and-8-position plugs; 45322; UL recognized under the Component Program. File No E28476; CSA certified, File No. LR-35510.

### Housings:

Black nylon 94V-O.

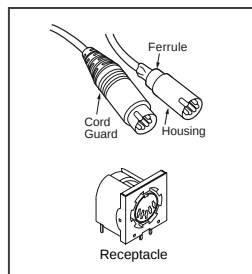
**Ferrule and Shield:** Brass, tin plated.

**Cord Guard:** Thermoplastic polymer, black.

**Contacts:** Brass, tin plated.

**Pin Contacts:** Copper alloy;

.00050" tin over .000100" nickel plating.



| Description                               | Digi-Key Part No. | 1       | Pricing 25 100 500   | AMP Part No. |
|-------------------------------------------|-------------------|---------|----------------------|--------------|
| 4-Pos. Housing.....                       | A1651-ND          | 2.81    | 66.50 243.20 1010.80 | 212437-2     |
| 5-Pos. Housing.....                       | A1652-ND          | 1.52    | 35.88 131.20 545.30  | 212437-3     |
| 6-Pos. Housing.....                       | A1653-ND          | 1.52    | 35.88 131.20 545.30  | 212437-4     |
| 8-Pos. Housing.....                       | A1655-ND          | 1.67    | 39.38 144.00 598.50  | 212437-6     |
| Ferrule, 5.08mm-6.35mm Cable Dia. ....    | A1657-ND          | 1.08    | 21.50 67.94 290.25   | 212435-8     |
| Cord Guard, 4.19mm-6.35mm Cable Dia. .... | A1659-ND          | 1.70    | 34.00 107.44 459.00  | 212800-1     |
| 5-Pos. Receptacle.....                    | A1663-ND          | 2.29    | 54.25 198.40 824.60  | 212044-1     |
| 6-Pos. Receptacle.....                    | A1664-ND          | 2.83    | 66.94 244.80 1017.45 | 212045-1     |
| 8-Pos. Receptacle.....                    | A1666-ND          | 3.05    | 72.19 264.00 1097.25 | 212047-1     |
| Pin Contact, 28-22 AWG.....               | A1667-ND          | 4.62/10 | 32.25 142.08 66728-5 |              |
| Contact Insertion Tool.....               | A9998-ND          | 11.95   | — — —                | 91002-1      |
| Contact Extraction Tool.....              | A9997-ND          | 165.25  | — — —                | 91144-1      |
| Universal Crimp Tool.....                 | A9999-ND          | 16.54   | — — —                | 601884-1     |

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### HR10 Series

7mm Push-Pull Connectors

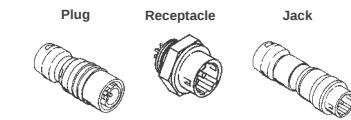
#### GOLD PLATED CONTACTS

##### Features:

The most compact HR10 series with well-balanced, simplified layout in limited space; Easy "Push-Pull" Operation; Polarization – Five-key system permits only one way of coupling.

##### Electrical Specifications:

• Current Rating: 2A • Insulation Resistance: 1000MΩ or more at DC100V • Contact Resistance: 10mΩ or less at DC1A.



| No. of Pins | Digi-Key Part No. | Dim. (mm) | A     | B |
|-------------|-------------------|-----------|-------|---|
| 4           | HR200, HR203      | 14.00     | 8.89  |   |
| 6           | HR201, HR204      | 14.00     | 8.89  |   |
| 12          | HR202, HR205      | 16.00     | 11.91 |   |

| No. of Pins | Digi-Key Part No. | Dimensions (mm) | A     | B    | C    | D |
|-------------|-------------------|-----------------|-------|------|------|---|
| 4           | HR100, HR103      | 28.50           | 11.00 | 7.01 | 5.21 |   |
| 6           | HR101, HR104      | 28.50           | 11.00 | 7.01 | 5.21 |   |
| 12          | HR102, HR105      | 32.51           | 14.00 | 9.50 | 7.19 |   |

### KMC Series

9mm Bayonet Lock Connectors

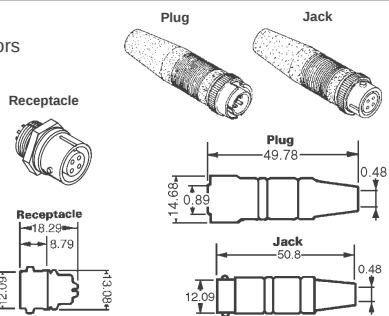
#### WATER RESISTANT

##### Features:

Five-key mechanism between two metal shells assures error-free polarization in coupling • Bayonet lock offers easier coupling with higher reliability than thread lock.

##### Electrical Specifications:

• Current Rating: 2A • Insulation Resistance: min. 2000MΩ at DC100V • Contact Resistance: max. 10mΩ at DC1A.



### HR10A Series

"Snap-In" Connectors

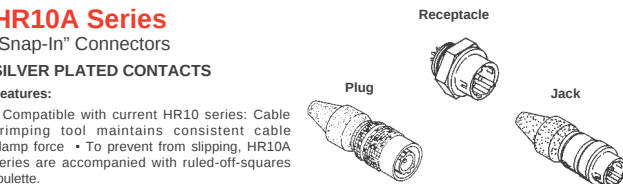
#### SILVER PLATED CONTACTS

##### Features:

• Compatible with current HR10 series: Cable crimping tool maintains consistent cable clamp force • To prevent from slipping, HR10A series are accompanied with ruled-off-squares roulette.

##### Electrical Specifications:

• Current Rating: 2A • Insulation Resistance: min. 1,000MΩ • Contact Resistance: max. 10mΩ.



| No. of Pins | Digi-Key Part No. | Dim. (mm) | A     | B |
|-------------|-------------------|-----------|-------|---|
| 4           | HR210, HR213      | 14.00     | 8.89  |   |
|             | HR232             | 12.19     | 8.89  |   |
|             | HR237             | 11.99     | 8.89  |   |
| 5           | HR218, HR219      | 14.00     | 8.89  |   |
| 6           | HR211, HR214      | 14.00     | 8.89  |   |
|             | HR233             | 12.19     | 8.89  |   |
|             | HR238             | 11.99     | 8.89  |   |
| 10          | HR216, HR217      | 16.00     | 14.00 |   |
|             | HR234             | 12.19     | 11.91 |   |
|             | HR239             | 11.99     | 11.91 |   |
| 12          | HR212, HR215      | 16.00     | 11.89 |   |
|             | HR235             | 12.19     | 11.91 |   |
|             | HR240             | 11.99     | 11.91 |   |
| 20          | HR236, HR241      | 14.99     | 15.39 |   |

| No. of Pins | Digi-Key Part No. | Dimensions (mm) | A     | B    | C |
|-------------|-------------------|-----------------|-------|------|---|
| 4           | HR310, HR313      | 34.98           | 8.89  | 4.98 |   |
|             | HR332, HR337      |                 |       |      |   |
| 6           | HR311, HR314      | 34.98           | 8.89  | 4.98 |   |
|             | HR333, HR338      |                 |       |      |   |
| 10          | HR316, HR317      | 43.00           | 11.91 | 7.01 |   |
|             | HR334, HR339      |                 |       |      |   |
| 12          | HR312, HR315      | 42.98           | 11.91 | 7.01 |   |
|             | HR335, HR340      |                 |       |      |   |
| 20          | HR336, HR341      | 58.50           | 15.39 | 7.01 |   |

| Contacts                                                   | Description                         | Digi-Key Part No. | 1      | Pricing 10 | 100     | Hirose Part No. |
|------------------------------------------------------------|-------------------------------------|-------------------|--------|------------|---------|-----------------|
| <b>HR10A Series, Crimp Type (contacts sold separately)</b> |                                     |                   |        |            |         |                 |
| 4                                                          | Plug w/pin insert, Crimp Type       | HR160-ND          | 14.82  | 138.32     | 988.00  | HR10A-7P-4PC    |
| 6                                                          | Plug w/pin insert, Crimp Type       | HR161-ND          | 14.82  | 138.32     | 988.00  | HR10A-7P-6PC    |
| 10                                                         | Plug w/pin insert, Crimp Type       | HR162-ND          | 19.11  | 178.36     | 1274.00 | HR10A-10P-10PC  |
| 12                                                         | Plug w/pin insert, Crimp Type       | HR163-ND          | 19.11  | 178.36     | 1274.00 | HR10A-10P-12PC  |
| 20                                                         | Plug w/pin insert, Crimp Type       | HR164-ND          | 47.04  | 439.04     | 3136.00 | HR10A-13P-20PC  |
| 4                                                          | Plug w/socket insert, Crimp Type    | HR165-ND          | 15.06  | 140.56     | 1004.00 | HR10A-7P-4SC    |
| 6                                                          | Plug w/socket insert, Crimp Type    | HR166-ND          | 15.06  | 140.56     | 1004.00 | HR10A-7P-6SC    |
| 10                                                         | Plug w/socket insert, Crimp Type    | HR167-ND          | 19.50  | 182.00     | 1300.00 | HR10A-10P-10SC  |
| 12                                                         | Plug w/socket insert, Crimp Type    | HR168-ND          | 19.50  | 182.00     | 1300.00 | HR10A-10P-12SC  |
| 20                                                         | Plug w/socket insert, Crimp Type    | HR169-ND          | 47.04  | 439.04     | 3136.00 | HR10A-13P-20SC  |
| 4                                                          | Recept. w/pin insert, Crimp Type    | HR232-ND          | 6.93   | 64.68      | 462.00  | HR10A-7R-4PC    |
| 6                                                          | Recept. w/pin insert, Crimp Type    | HR233-ND          | 6.93   | 64.68      | 462.00  | HR10A-7R-6PC    |
| 10                                                         | Recept. w/pin insert, Crimp Type    | HR234-ND          | 9.57   | 89.32      | 638.00  | HR10A-10R-10PC  |
| 12                                                         | Recept. w/pin insert, Crimp Type    | HR235-ND          | 9.57   | 89.32      | 638.00  | HR10A-10R-12PC  |
| 20                                                         | Recept. w/pin insert, Crimp Type    | HR236-ND          | 25.38  | 236.88     | 1692.00 | HR10A-13R-20PC  |
| 4                                                          | Recept. w/socket insert, Crimp Type | HR237-ND          | 7.11   | 66.36      | 474.00  | HR10A-7R-4SC    |
| 6                                                          | Recept. w/socket insert, Crimp Type | HR238-ND          | 7.11   | 66.36      | 474.00  | HR10A-7R-6SC    |
| 10                                                         | Recept. w/socket insert, Crimp Type | HR239-ND          | 9.96   | 92.96      | 664.00  | HR10A-10R-10SC  |
| 12                                                         | Recept. w/socket insert, Crimp Type | HR240-ND          | 9.96   | 92.96      | 664.00  | HR10A-10R-12SC  |
| 20                                                         | Recept. w/socket insert, Crimp Type | HR241-ND          | 25.38  | 236.88     | 1692.00 | HR10A-13R-20SC  |
| 4                                                          | Jack w/pin insert, Crimp Type       | HR332-ND          | 13.77  | 128.52     | 918.00  | HR10A-7J-4PC    |
| 6                                                          | Jack w/pin insert, Crimp Type       | HR333-ND          | 13.77  | 128.52     | 918.00  | HR10A-7J-6PC    |
| 10                                                         | Jack w/pin insert, Crimp Type       | HR334-ND          | 19.38  | 180.88     | 1292.00 | HR10A-10J-10PC  |
| 12                                                         | Jack w/pin insert, Crimp Type       | HR335-ND          | 19.38  | 180.88     | 1292.00 | HR10A-10J-12PC  |
| 20                                                         | Jack w/pin insert, Crimp Type       | HR336-ND          | 47.67  | 444.92     | 3178.00 | HR10A-13J-20PC  |
| 4                                                          | Jack w/socket insert, Crimp Type    | HR337-ND          | 13.95  | 130.20     | 930.00  | HR10A-7J-4SC    |
| 6                                                          | Jack w/socket insert, Crimp Type    | HR338-ND          | 13.95  | 130.20     | 930.00  | HR10A-7J-6SC    |
| 10                                                         | Jack w/socket insert, Crimp Type    | HR339-ND          | 19.77  | 184.52     | 1318.00 | HR10A-10J-10SC  |
| 12                                                         | Jack w/socket insert, Crimp Type    | HR340-ND          | 19.77  | 184.52     | 1318.00 | HR10A-10J-12SC  |
| 20                                                         | Jack w/socket insert, Crimp Type    | HR341-ND          | 47.67  | 444.92     | 3178.00 | HR10A-13J-20SC  |
| —                                                          | Male pin, Crimped, Gold             | HR450-ND          | —      | 2.63       | 15.77   | HR10-PC-111     |
| —                                                          | Female socket, Crimped, Gold        | HR452-ND          | —      | 2.63       | 15.77   | HR12-SC-111     |
| —                                                          | Male pin, Crimped, Silver           | HR451-ND          | —      | 2.10       | 12.60   | HR10-PC-112     |
| —                                                          | Female socket, Crimped, Silver      | HR453-ND          | —      | 2.10       | 12.60   | HR12-SC-112     |
| —                                                          | Hand crimp tool for HR10A Series    | HR497-ND          | 479.90 | —          | —       | HR12-SC-TC      |
| —                                                          | Extraction tool for female sockets  | HR498-ND          | 9.30   | —          | —       | HR12-SC-TP      |
| —                                                          | Extraction tool for male pins       | HR499-ND          | 5.65   | —          | —       | RP6-SC-TP       |
| <b>KMC Series</b>                                          |                                     |                   |        |            |         |                 |
| 4                                                          | Plug w/pin insert                   | HR400-ND          | 22.80  | 212.80     | 1520.00 | KMC-9BPD-4P     |
| 6                                                          | Plug w/pin insert                   | HR401-ND          | 27.27  | 254.52     | 1818.00 | KMC-9BPD-6P     |
| 4                                                          | Receptacle w/socket insert          | HR402-ND          | 13.77  | 128.52     | 918.00  | KMC-9BRD-4S     |
| 6                                                          | Receptacle w/socket insert          | HR403-ND          | 18.57  | 173.32     | 1238.00 | KMC-9BRD-6S     |
| 6                                                          | Jack w/socket insert                | HR405-ND          | 38.91  | 363.16     | 2594.00 | KMC-9BJD-6S     |

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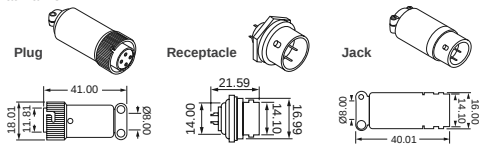
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## RM Series 12mm Video Connectors

Does not have rubber boot.

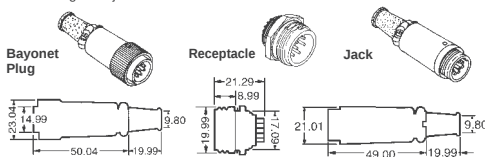
**Features:** • Pipe shaped socket contact for long life reliable operation • UL94V-0 diallyl phthalate molding material for excellent electrical & mechanical characteristics • Sleek design with grainy matte finish • Bayonet type coupling for easy operation • Reversible pin & socket insert • 2, 3, 4, 5, 6, & 7 pin available in the common diecasting body • Jack available for cable extension program

**Specifications:** • Operating Voltage: AC600V (2 pin) AC500V (3 & 4 pin) AC350V (5, 6 & 7 pin) • Current rating: 5 amps • Insulation resistance: min. 1,000MΩ at DC500V • Contact resistance: max. 4mΩ • Solder cup diameter: 1.1mm (.043") • Temp. cycling: -55°C to +85°C • Contact durability: 2000 times at max. 8mΩ



## RM Series 15mm Video Connectors

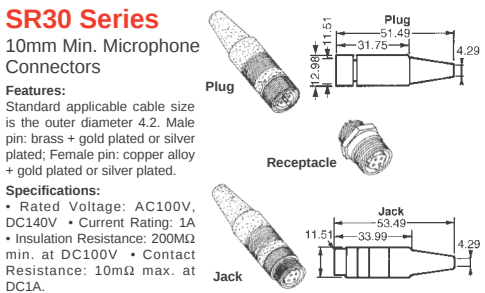
**Specifications:** • Operating Voltage: AC350V, DC490V • Current Rating: 5A • Insulation Resistance: 1000MΩ min. at DC500V • Contact Resistance: 14mΩ max. at DC1A • Temp. Cycling: -55°C to +85°C • Applicable Cable Dia.: 8mm max. • Plugs and jacks include rubber boot.



## SR30 Series 10mm Min. Microphone Connectors

**Features:** Standard applicable cable size is the outer diameter 4.2. Male pin: brass + gold plated or silver plated; Female pin: copper alloy + gold plated or silver plated.

**Specifications:** • Rated Voltage: AC100V, DC140V • Current Rating: 1A • Insulation Resistance: 200MΩ min. at DC100V • Contact Resistance: 10mΩ max. at DC1A.

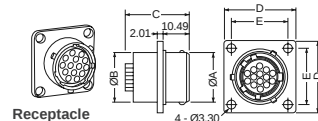
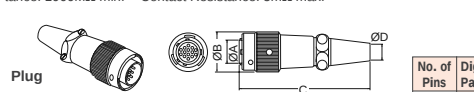


## JR Series Video Connectors

Aluminum

**Features:** JR series connectors offer you excellent performances both electrically and mechanically, having five keys in the fitting section to assure quite smooth coupling.

**Specifications:** • Withstand Voltage: AC1000V a minute • Insulation Resistance: 1000MΩ min. • Contact Resistance: 5mΩ max.



| No. of Pins | Digi-Key Part No.  | Dimensions (mm) |       |       |       |
|-------------|--------------------|-----------------|-------|-------|-------|
|             |                    | A               | B     | C     | D     |
| 7           | HR138-ND, HR139-ND | 16.31           | 26.97 | 78.49 | 11.00 |
| 10          | HR140-ND, HR141-ND | 16.31           | 26.97 | 78.49 | 11.00 |
| 14          | HR142-ND, HR143-ND | 16.31           | 26.97 | 78.49 | 11.00 |
| 26          | HR144-ND, HR145-ND | 20.50           | 30.99 | 97.99 | 12.19 |

| No. of Pins | Digi-Key Part No.  | Dimensions (mm) |       |       |       |       |
|-------------|--------------------|-----------------|-------|-------|-------|-------|
|             |                    | A               | B     | C     | D     | E     |
| 7           | HR146-ND           | 22.00           | 19.99 | 26.49 | 29.01 | 23.01 |
| 7           | HR147-ND           | 22.00           | 19.99 | 27.69 | 29.01 | 23.01 |
| 10          | HR148-ND, HR149-ND | 22.00           | 19.99 | 26.49 | 29.01 | 23.01 |
| 14          | HR150-ND           | 22.00           | 19.99 | 26.59 | 29.01 | 23.01 |
| 14          | HR151-ND           | 22.00           | 19.99 | 25.78 | 29.01 | 23.01 |
| 26          | HR152-ND           | 25.81           | 23.90 | 26.80 | 31.98 | 26.01 |
| 26          | HR153-ND           | 25.81           | 23.90 | 27.99 | 31.98 | 26.01 |

## RP Series Plastic Connectors

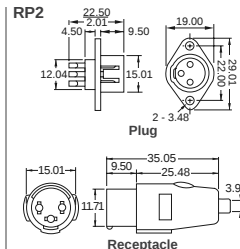
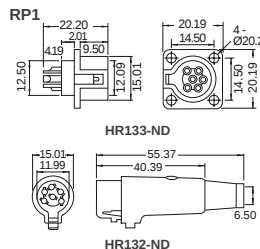
12mm Connectors Panel Mount

**Specifications:**

• Operating Voltage: AC150V (6, 7 pin), AC250V (3 pin) • Current Rating: 5A • Contact Resistance: 5mΩ max. at DC1A

**Materials:**

• Male Pin: Brass and silver plating • Female Pin: Phosphor bronze and silver plating

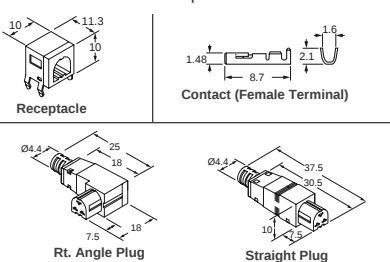


## NEW! RP34 Series Compact Plastic Connector for AC Adapter

A compact, lightweight, 3-pole plastic connector specially designed for the AC adapter interface for notebook type personal computers. Plug is available in either straight type or right-angle type. Receptacle is very compact with a 10mm sq. mating surface and 11.3mm depth. • Snap-lock locking and D-shaped mating section for easy insertion and disconnection • One of the three poles is designed for grounding terminal • Snap-fit assembling method for plug eliminates use of screws • External appearance is simplified cubical shape and fits well to any equipment.

**Materials:**

• Main Frame and Insulator: Polycarbonate resin containing glass, and PBT resin UL94V-0, black • Male Terminal: Brass with silver plating • Female Terminal: Phosphor bronze with silver plating



| Con-<br>tacts   | Description                      | Digi-Key<br>Part No. | 1     | Pricing<br>10 | 100     | Hirose<br>Part No. |
|-----------------|----------------------------------|----------------------|-------|---------------|---------|--------------------|
| RM Series, 12mm |                                  |                      |       |               |         |                    |
| 2               | Plug w/pin insert.....           | HR120-ND             | 9.93  | 92.68         | 662.00  | RM12BPG-2PH        |
| 3               | Plug w/pin insert.....           | HR122-ND             | 10.14 | 94.64         | 676.00  | RM12BPG-3PH        |
| 4               | Plug w/pin insert.....           | HR124-ND             | 10.35 | 96.60         | 690.00  | RM12BPG-4PH        |
| 5               | Plug w/pin insert.....           | HR126-ND             | 10.65 | 99.40         | 710.00  | RM12BPG-5PH        |
| 6               | Plug w/pin insert.....           | HR128-ND             | 11.04 | 103.04        | 736.00  | RM12BPG-6PH        |
| 7               | Plug w/pin insert.....           | HR130-ND             | 11.40 | 106.40        | 760.00  | RM12BPG-7PH        |
| 2               | Plug w/socket insert.....        | HR121-ND             | 10.95 | 102.20        | 730.00  | RM12BPG-2S         |
| 3               | Plug w/socket insert.....        | HR123-ND             | 11.22 | 104.72        | 748.00  | RM12BPG-3S         |
| 4               | Plug w/socket insert.....        | HR125-ND             | 11.52 | 107.52        | 768.00  | RM12BPG-4S(07)     |
| 5               | Plug w/socket insert.....        | HR127-ND             | 12.21 | 113.96        | 814.00  | RM12BPG-5S         |
| 6               | Plug w/socket insert.....        | HR129-ND             | 12.51 | 116.76        | 834.00  | RM12BPG-6S         |
| 7               | Plug w/socket insert.....        | HR131-ND             | 13.05 | 121.80        | 870.00  | RM12BPG-7S         |
| 2               | Receptacle w/pin insert.....     | HR221-ND             | 4.59  | 42.84         | 306.00  | RM12BRD-2PH        |
| 3               | Receptacle w/pin insert.....     | HR223-ND             | 4.68  | 43.68         | 312.00  | RM12BRD-3PH        |
| 4               | Receptacle w/pin insert.....     | HR225-ND             | 4.86  | 45.36         | 324.00  | RM12BRD-4PH        |
| 5               | Receptacle w/pin insert.....     | HR227-ND             | 5.13  | 47.88         | 342.00  | RM12BRD-5PH        |
| 6               | Receptacle w/pin insert.....     | HR229-ND             | 5.40  | 50.40         | 360.00  | RM12BRD-6PH        |
| 7               | Receptacle w/pin insert.....     | HR231-ND             | 5.79  | 54.04         | 386.00  | RM12BRD-7PH        |
| 2               | Receptacle w/socket insert.....  | HR220-ND             | 5.52  | 51.52         | 368.00  | RM12BRD-2S         |
| 3               | Receptacle w/socket insert.....  | HR222-ND             | 5.76  | 53.76         | 384.00  | RM12BRD-3S         |
| 4               | Receptacle w/socket insert.....  | HR224-ND             | 6.03  | 56.28         | 402.00  | RM12BRD-4S         |
| 5               | Receptacle w/socket insert.....  | HR226-ND             | 6.69  | 62.44         | 446.00  | RM12BRD-5S         |
| 6               | Receptacle w/socket insert.....  | HR228-ND             | 6.90  | 64.40         | 460.00  | RM12BRD-6S         |
| 7               | Receptacle w/socket insert.....  | HR230-ND             | 7.47  | 69.72         | 498.00  | RM12BRD-7S         |
| 2               | Jack w/pin insert.....           | HR321-ND             | 7.23  | 67.48         | 482.00  | RM12BJB-2PH        |
| 3               | Jack w/pin insert.....           | HR323-ND             | 7.50  | 70.00         | 500.00  | RM12BJB-3PH        |
| 4               | Jack w/pin insert.....           | HR325-ND             | 7.59  | 70.84         | 506.00  | RM12BJB-4PH        |
| 5               | Jack w/pin insert.....           | HR327-ND             | 7.71  | 71.96         | 514.00  | RM12BJB-5PH        |
| 6               | Jack w/pin insert.....           | HR329-ND             | 7.89  | 73.64         | 526.00  | RM12BJB-6PH        |
| 7               | Jack w/pin insert.....           | HR331-ND             | 8.19  | 76.44         | 546.00  | RM12BJB-7PH        |
| 2               | Jack w/socket insert.....        | HR320-ND             | 10.77 | 100.52        | 718.00  | RM12BJB-2S         |
| 3               | Jack w/socket insert.....        | HR322-ND             | 11.16 | 104.16        | 744.00  | RM12BJB-3S         |
| 4               | Jack w/socket insert.....        | HR324-ND             | 11.61 | 108.36        | 774.00  | RM12BJB-4S         |
| 5               | Jack w/socket insert.....        | HR326-ND             | 12.03 | 112.28        | 802.00  | RM12BJB-5S         |
| 6               | Jack w/socket insert.....        | HR328-ND             | 12.51 | 116.76        | 834.00  | RM12BJB-6S         |
| 7               | Jack w/socket insert.....        | HR330-ND             | 12.87 | 120.12        | 858.00  | RM12BJB-7S         |
| RM Series, 15mm |                                  |                      |       |               |         |                    |
| 10              | Plug w/pin insert.....           | HR106-ND             | 12.66 | 118.16        | 844.00  | RM15TPD-10P        |
| 12              | Plug w/pin insert.....           | HR107-ND             | 13.35 | 124.60        | 890.00  | RM15TPD-12P        |
| 10              | Plug w/socket insert.....        | HR108-ND             | 14.34 | 133.84        | 956.00  | RM15TPD-10S        |
| 12              | Plug w/socket insert.....        | HR109-ND             | 15.06 | 140.56        | 1004.00 | RM15TPD-12S        |
| 10              | Receptacle w/pin insert.....     | HR206-ND             | 8.31  | 77.56         | 554.00  | RM15TRD-10P        |
| 12              | Receptacle w/pin insert.....     | HR207-ND             | 8.88  | 82.88         | 592.00  | RM15TRD-12P        |
| 10              | Receptacle w/socket insert.....  | HR208-ND             | 7.65  | 71.40         | 510.00  | RM15TRD-10S        |
| 12              | Receptacle w/socket insert.....  | HR209-ND             | 8.04  | 75.04         | 536.00  | RM15TRD-12S        |
| 10              | Jack Extension w/pin insert..... | HR306-ND             | 11.91 | 111.16        | 794.00  | RM15TDJ-10P        |
| 12              | Jack Extension w/pin insert..... | HR307-ND             | 12.54 | 117.04        | 836.00  | RM15TDJ-12P        |

| Con-<br>tacts    | Description                                 | Digi-Key<br>Part No. | 1     | Pricing<br>10 | 100     | Hirose<br>Part No. |
|------------------|---------------------------------------------|----------------------|-------|---------------|---------|--------------------|
| 10               | Jack Extension w/socket insert .....        | HR308-ND             | 11.43 | 106.68        | 762.00  | RM15TDJ-10S        |
| 12               | Jack Extension w/socket insert .....        | HR309-ND             | 11.70 | 109.20        | 780.00  | RM15TDJ-12S        |
| SR30 Series      |                                             |                      |       |               |         |                    |
| 4                | Plug w/pin insert.....                      | HR500-ND             | 9.69  | 90.44         | 646.00  | SR30-10PE-4P       |
| 6                | Plug w/pin insert.....                      | HR501-ND             | 9.66  | 90.16         | 644.00  | SR30-10PE-6P       |
| 7                | Plug w/pin insert.....                      | HR510-ND             | 10.44 | 97.44         | 696.00  | SR30-10PF-7P       |
| 4                | Receptacle w/socket insert.....             | HR503-ND             | 7.89  | 73.64         | 526.00  | SR30-10R-4S        |
| 6                | Receptacle w/socket insert.....             | HR504-ND             | 8.16  | 76.16         | 544.00  | SR30-10R-6S        |
| 7                | Receptacle w/socket insert.....             | HR505-ND             | 6.21  | 57.96         | 414.00  | SR30-10R-7S        |
| 4                | Jack w/socket insert.....                   | HR506-ND             | 13.74 | 128.24        | 916.00  | SR30-10JE-4S       |
| 6                | Jack w/socket insert.....                   | HR507-ND             | 13.74 | 128.24        | 916.00  | SR30-10JE-6S       |
| 7                | Jack w/socket insert.....                   | HR508-ND             | 12.99 | 121.24        | 866.00  | SR30-10JF-7S       |
| —                | Cable Clamp for SR30 Series.....            | HR509-ND             | .27   | 2.52          | 18.00   | SR30-P             |
| JR Series        |                                             |                      |       |               |         |                    |
| 7                | Plug w/pin insert.....                      | HR138-ND             | 28.80 | 268.80        | 1920.00 | JRC16BP-7P         |
| 10               | Plug w/pin insert.....                      | HR140-ND             | 29.07 | 271.32        | 1938.00 | JRC16BP-10P        |
| 14               | Plug w/pin insert.....                      | HR142-ND             | 27.06 | 252.56        | 1804.00 | JRC16BP-14P        |
| 26               | Plug w/pin insert.....                      | HR144-ND             | 48.45 | 452.20        | 3230.00 | JRC21BPA-26P       |
| 7                | Plug w/socket insert.....                   | HR139-ND             | 28.23 | 263.48        | 1882.00 | JRC16BP-7S         |
| 10               | Plug w/socket insert.....                   | HR141-ND             | 32.52 | 303.52        | 2168.00 | JRC16BP-10S        |
| 14               | Plug w/socket insert.....                   | HR143-ND             | 26.40 | 246.40        | 1760.00 | JRC16BP-14S        |
| 26               | Plug w/socket insert.....                   | HR145-ND             | 43.11 | 402.36        | 2874.00 | JRC21BP-26S        |
| 7                | Receptacle w/pin insert.....                | HR146-ND             | 13.23 | 123.48        | 882.00  | JRC16BR-7P         |
| 10               | Receptacle w/pin insert.....                | HR148-ND             | 13.59 | 126.84        | 906.00  | JRC16BR-10P        |
| 14               | Receptacle w/pin insert.....                | HR150-ND             | 13.68 | 127.68        | 912.00  | JRC16BR-14P        |
| 26               | Receptacle w/pin insert.....                | HR152-ND             | 19.86 | 185.36        | 1324.00 | JRC21BR-26P        |
| 7                | Receptacle w/socket insert.....             | HR147-ND             | 12.99 | 121.24        | 866.00  | JRC16BR-7S         |
| 10               | Receptacle w/socket insert.....             | HR149-ND             | 17.52 | 163.52        | 1168.00 | JRC16BR-10S        |
| 14               | Receptacle w/socket insert.....             | HR151-ND             | 13.20 | 123.20        | 880.00  | JRC16BR-14S        |
| 26               | Receptacle w/socket insert.....             | HR153-ND             | 18.12 | 169.12        | 1208.00 | JRC21BRA-26S       |
| RP1 Series, 12mm |                                             |                      |       |               |         |                    |
| 6                | Plug w/pin insert.....                      | HR133-ND             | 2.37  | 22.12         | 158.00  | RPC1-12RB-6P       |
| 6                | Receptacle w/socket insert.....             | HR132-ND             | 5.40  | 50.40         | 360.00  | RPC1-12P-6S(03)    |
| RP2 Series, 12mm |                                             |                      |       |               |         |                    |
| 3                | Plug w/pin insert.....                      | HR135-ND             | 1.50  | 14.00         | 100.00  | RPC2-12RB-3P(01)   |
| 7                | Plug w/pin insert.....                      | HR137-ND             | 2.67  | 24.92         | 178.00  | RPC2-12RB-7P(01)   |
| 3                | Receptacle w/socket insert.....             | HR134-ND             | 2.67  | 24.92         | 178.00  | RPC2-12P-3S        |
| 7                | Receptacle w/socket insert.....             | HR136-ND             | 4.05  | 37.80         | 270.00  | RPC2-12P-7S        |
| RP34 Series      |                                             |                      |       |               |         |                    |
| 3                | Plug with socket, straight.....             | HR170-NDT NEW!       | 2.22  | 20.72         | 148.00  | RP34-8SP-3SC       |
| 4                | Plug with socket, straight.....             | HR171-NDT NEW!       | 1.95  | 18.20         | 130.00  | RP34-8SP-4SC       |
| 3                | Plug with socket, right angle.....          | HR172-NDT NEW!       | 2.22  | 20.72         | 148.00  | RP34-8P-3SC        |
| 3                | Receptacle w/pin, PC mount.....             | HR173-ND NEW!        | 2.88  | 26.88         | 192.00  | RP34-8R-3PDL       |
| 4                | Receptacle w/pin, PC mount.....             | HR174-ND NEW!        | 1.62  | 15.12         | 108.00  | RP34-8R-4PDL       |
| —                | Contact, Female terminal, crimped, tin..... | HR175-ND NEW!        | .45   | 4.21          | 30.10   | RP34-SC-112        |

† Contact not included and must be ordered separately (Digi-Key Part No. HR175-ND).

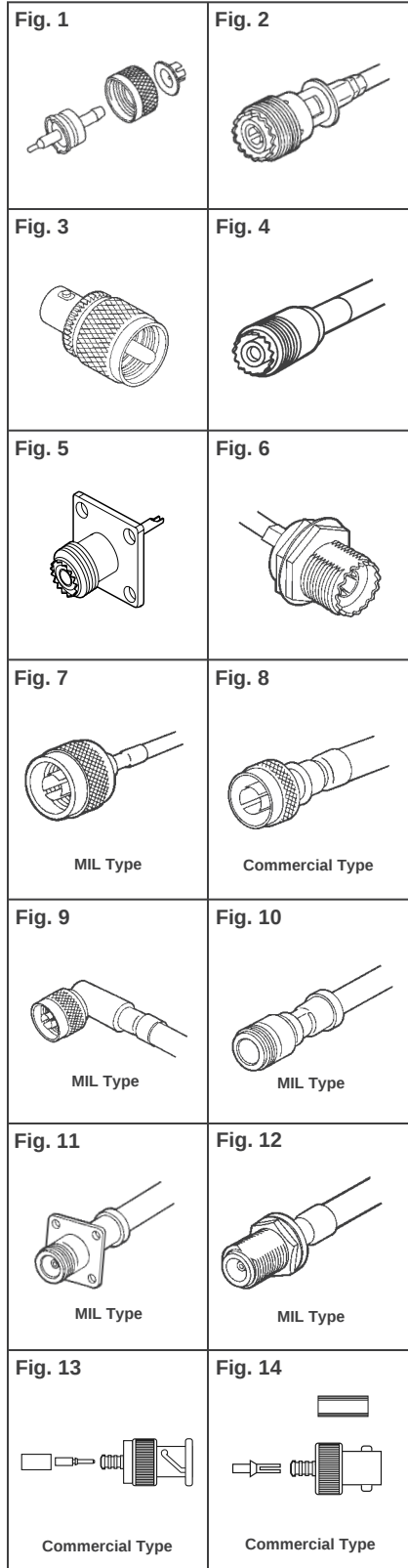
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# AMP

## RF Connectors

A



## UHF Connectors

| Fig.                            | Description                     | Cable Group<br>RG/U | Digi-Key<br>Part No. | Pricing |        |        |        | AMP<br>Part No. |
|---------------------------------|---------------------------------|---------------------|----------------------|---------|--------|--------|--------|-----------------|
|                                 |                                 |                     |                      | 1       | 25     | 50     | 100    |                 |
| <i>Standard UHF Connectors</i>  |                                 |                     |                      |         |        |        |        |                 |
| 1                               | Plug (Single Crimp), Tin Plated | 58, 58A, 58B, 58C   | A1107-ND             | 2.53    | 54.29  | 95.95  | 171.70 | 226279-1        |
| 1                               | Plug (Single Crimp), Tin Plated | 59, 59A, 59B        | A1106-ND             | 3.08    | 66.11  | 116.85 | 209.10 | 226279-3        |
| 2                               | Jack (Single Crimp), Tin Plated | 58, 58A, 58B, 58C   | A1132-ND             | 6.15    | 132.23 | 233.70 | 418.20 | 226694-1        |
| 3                               | Adapter, UHF Plug to BNC Jack   | —                   | A1135-ND             | 12.15   | 261.23 | 461.70 | 826.20 | 222320-1        |
| <i>Miniature UHF Connectors</i> |                                 |                     |                      |         |        |        |        |                 |
| 4                               | Jack (Crimp)                    | 58, 58A, 58B, 58C   | A1104-ND             | 2.92    | 62.86  | 111.10 | 198.81 | 226602-1        |
| 5                               | Panel Solder Jack               | —                   | A1131-ND             | 2.60    | 55.90  | 98.80  | 176.80 | 226601-1        |
| 6                               | Bulkhead Jack (Crimp)           | 58, 58A, 58B, 58C   | A1105-ND             | 2.65    | 56.98  | 100.70 | 180.20 | 414045-1        |

## Type N Dual Crimp Connectors

| Fig. | Description                              | Cable Group<br>RG/U    | Digi-Key<br>Part No. | Pricing |        |         |         | AMP<br>Part No. |
|------|------------------------------------------|------------------------|----------------------|---------|--------|---------|---------|-----------------|
|      |                                          |                        |                      | 1       | 25     | 50      | 100     |                 |
| 7    | Plug (Nickel)                            | 58, 58A                | A1147-ND             | 11.33   | 243.49 | 430.35  | 770.10  | 1-225661-2      |
| 7    | Plug (Silver)                            | 58, 58A                | A1148-ND             | 16.75   | 360.13 | 636.50  | 1139.00 | 225361-1        |
| 7    | Plug (Nickel)                            | 223, 55A               | A1149-ND             | 11.33   | 243.49 | 430.35  | 770.10  | 1-225661-3      |
| 7    | Plug (Nickel)                            | 142, 142A, 142B, 400   | A1150-ND             | 11.33   | 243.49 | 430.35  | 770.10  | 1-225661-5      |
| 7    | Plug (Silver)                            | 142, 142A, 142B, 400   | A1151-ND             | 16.75   | 360.13 | 636.50  | 1139.00 | 225361-4        |
| 7    | Plug (Nickel)                            | 8, 8A, 213             | A1152-ND             | 11.33   | 243.49 | 430.35  | 770.10  | 225661-2        |
| 7    | Plug (Silver)                            | 8, 8A, 213             | A1153-ND             | 15.33   | 329.49 | 582.35  | 1042.10 | 51692-2         |
| 7    | Plug (Nickel – Weatherproof)             | 8, 8A, 213             | A1154-ND             | 12.73   | 273.59 | 483.55  | 865.30  | 225662-2        |
| 7    | Plug (Silver – Weatherproof)             | 8, 8A, 213             | A1155-ND             | 17.75   | 381.63 | 674.50  | 1207.00 | 225092-2        |
| 7    | Plug (Nickel)                            | 393, Belden 89292,     | A1156-ND             | 12.73   | 273.59 | 483.55  | 865.30  | 1-225662-1      |
| 7    | Plug (Silver)                            | 8213, 9292, Alpha 9847 | A1157-ND             | 17.73   | 381.09 | 673.55  | 1205.30 | 1-225092-1      |
| 7    | Plug (Nickel)                            | 9, 9A, 9B, 214         | A1158-ND             | 11.33   | 243.49 | 430.35  | 770.10  | 225661-1        |
| 7    | Plug (Silver)                            | 9, 9A, 9B, 214         | A1159-ND             | 15.33   | 329.49 | 582.35  | 1042.10 | 51692-1         |
| 7    | Plug (Nickel – Weatherproof)             | 9, 9A, 9B, 214         | A1160-ND             | 12.73   | 273.59 | 483.55  | 865.30  | 225662-1        |
| 7    | Plug (Silver – Weatherproof)             | 9, 9A, 9B, 214         | A1161-ND             | 17.73   | 381.09 | 673.55  | 1205.30 | 225092-1        |
| 8    | Plug (Nickel)                            | 8, 8A, 213             | A1162-ND             | 6.13    | 131.69 | 232.75  | 416.50  | 1-227086-0      |
| 8    | Plug (Nickel)                            | 9, 9A, 9B, 214         | A1163-ND             | 6.13    | 131.69 | 232.75  | 416.50  | 1-227086-1      |
| 9    | Right Angle Plug (Silver)                | 8, 8A, 213             | A1137-ND             | 41.08   | 883.11 | 1560.85 | 2793.10 | 225014-2        |
| 9    | Right Angle Plug (Silver – Weatherproof) | 8, 8A, 213             | A1138-ND             | 41.08   | 883.11 | 1560.85 | 2793.10 | 225389-2        |
| 9    | Right Angle Plug (Nickel)                | 9, 9A, 9B, 214         | A1139-ND             | 30.93   | 664.89 | 1175.15 | 2102.90 | 225669-1        |
| 9    | Right Angle Plug (Silver)                | 9, 9A, 9B, 214         | A1140-ND             | 41.08   | 883.11 | 1560.85 | 2793.10 | 225014-3        |
| 9    | Right Angle Plug (Silver – Weatherproof) | 9, 9A, 9B, 214         | A1141-ND             | 41.08   | 883.11 | 1560.85 | 2793.10 | 225389-4        |
| 10   | Jack (Silver)                            | 8, 8A, 213             | A1142-ND             | 28.05   | 603.08 | 1065.90 | 1907.40 | 225093-2        |
| 11   | Panel Jack (Silver-Weatherproof)         | 8, 8A, 213             | A1143-ND             | 31.90   | 685.85 | 1212.20 | 2169.20 | 225089-2        |
| 11   | Panel Jack (Silver-Weatherproof)         | 9, 9A, 9B, 214         | A1144-ND             | 31.90   | 685.85 | 1212.20 | 2169.20 | 225089-1        |
| 12   | Bulkhead Jack (Silver-Weatherproof)      | 223, 55, 55A, 55B      | A1145-ND             | 30.90   | 664.35 | 1174.20 | 2101.20 | 225393-1        |
| 12   | Bulkhead Jack (Silver-Weatherproof)      | 9, 9A, 9B, 214         | A1146-ND             | 26.78   | 575.66 | 1017.45 | 1820.70 | 225094-1        |

## BNC Hex Crimp Connectors 50 Ohm

Collar & outer contacts - nickel plated. Center contacts - gold MIL-G-45204

| Fig. | Description       | Cable Group<br>RG/U   | Digi-Key<br>Part No. | Pricing |        |        |        | AMP<br>Part No. |
|------|-------------------|-----------------------|----------------------|---------|--------|--------|--------|-----------------|
|      |                   |                       |                      | 1       | 25     | 50     | 100    |                 |
| 13   | Plug              | 58                    | A1164-ND             | 1.92    | 41.21  | 72.83  | 130.33 | 1-221128-0      |
| 13   | Plug              | 59, 62                | A1165-ND             | 1.92    | 41.21  | 72.83  | 130.33 | 1-221128-1      |
| 13   | Plug              | 174, 188, 316         | A1166-ND             | 2.55    | 54.83  | 96.90  | 173.40 | 2-221128-1      |
| 13   | Plug              | 179, 187, Belden 9221 | A1167-ND             | 2.55    | 54.83  | 96.90  | 173.40 | 2-221128-3      |
| 13   | Plug              | 180, 195              | A1168-ND             | 2.55    | 54.83  | 96.90  | 173.40 | 2-221128-5      |
| 13   | Plug              | Belden 9907, 89907    | A1169-ND             | 2.55    | 54.83  | 96.90  | 173.40 | 2-221128-7      |
| 13   | Plug              | 174, 188, 316 DB*     | A1172-ND             | 2.38    | 51.06  | 90.25  | 161.50 | 2-221128-9      |
| 13   | Plug              | Belden 8281, 9231     | A1170-ND             | 2.55    | 54.83  | 96.90  | 173.40 | 1-221128-2      |
| 13   | Plug              | Belden 9266, 9259     | A1171-ND             | 2.55    | 54.83  | 96.90  | 173.40 | 1-221128-7      |
| 14   | Cable Jack        | 58                    | A1801-ND             | 3.08    | 66.11  | 116.85 | 209.10 | 413779-1        |
| 14   | Cable Jack        | 59, 62                | A1802-ND             | 3.08    | 66.11  | 116.85 | 209.10 | 413779-2        |
| 14   | Cable Jack        | 174, 188, 316         | A1803-ND             | 3.08    | 66.11  | 116.85 | 209.10 | 413779-3        |
| 14   | Cable Jack        | 179, 187              | A1804-ND             | 3.08    | 66.11  | 116.85 | 209.10 | 413779-4        |
| 14   | Cable Jack        | 180, 195              | A1805-ND             | 3.08    | 66.11  | 116.85 | 209.10 | 413779-5        |
| 14   | Cable Jack        | Belden 9907, 89907    | A1806-ND             | 3.08    | 66.11  | 116.85 | 209.10 | 413779-6        |
| 15   | Bulkhead Jack     | 58                    | A1811-ND             | 3.88    | 83.31  | 147.25 | 263.50 | 413771-1        |
| 15   | Bulkhead Jack     | 59, 62                | A1812-ND             | 3.88    | 83.31  | 147.25 | 263.50 | 413771-2        |
| 15   | Bulkhead Jack     | 174, 188, 316         | A1813-ND             | 3.88    | 83.31  | 147.25 | 263.50 | 413771-3        |
| 15   | Bulkhead Jack     | 179, 187              | A1814-ND             | 3.88    | 83.31  | 147.25 | 263.50 | 413771-4        |
| 15   | Bulkhead Jack     | 180, 195              | A1815-ND             | 3.88    | 83.31  | 147.25 | 263.50 | 413771-5        |
| 15   | Bulkhead Jack     | Belden 9907, 89907    | A1816-ND             | 3.88    | 83.31  | 147.25 | 263.50 | 413771-6        |
| 16   | Plug, Right Angle | 58                    | A1181-ND             | 9.30    | 199.95 | 353.40 | 632.40 | 413959-1        |
| 16   | Plug, Right Angle | 59, 62                | A1182-ND             | 10.45   | 224.68 | 397.10 | 710.60 | 413959-2        |
| 16   | Plug, Right Angle | 174, 188, 316         | A1183-ND             | 10.45   | 224.68 | 397.10 | 710.60 | 413959-3        |
| 16   | Plug, Right Angle | 179, 187              | A1184-ND             | 10.45   | 224.68 | 397.10 | 710.60 | 413959-4        |
| 16   | Plug, Right Angle | 180, 195              | A1185-ND             | 10.45   | 224.68 | 397.10 | 710.60 | 413959-5        |
| 16   | Plug, Right Angle | Belden 9907, 89907    | A1186-ND             | 10.45   | 224.68 | 397.10 | 710.60 | 413959-6        |
| 16   | Plug, Right Angle | 188, 174, 316 DB*     | A1187-ND             | 10.28   | 220.91 | 390.45 | 698.70 | 413959-7        |

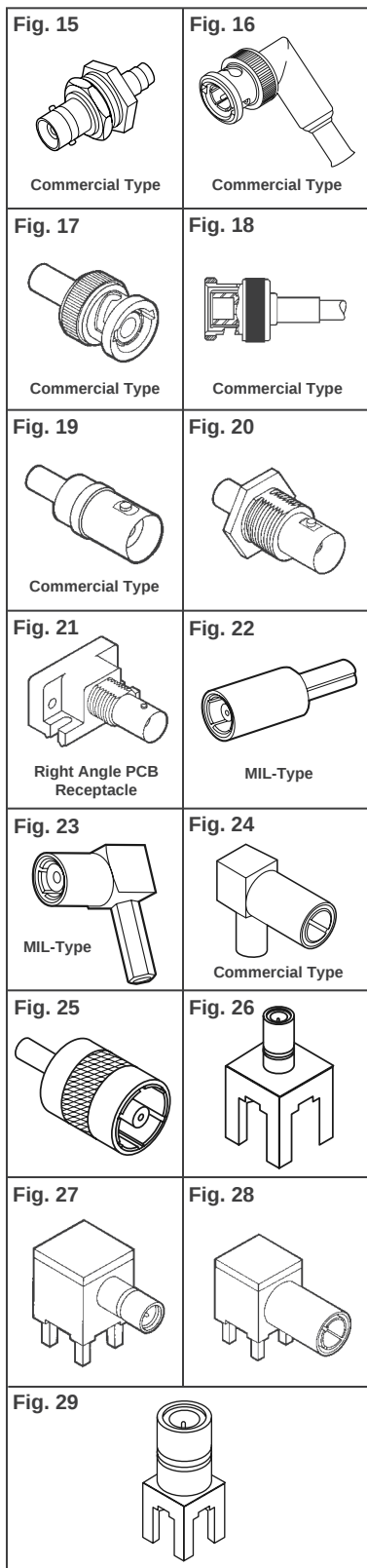
\* Double Braid

# AMP

## RF Connectors

## BNC Hex Crimp Connectors 75 Ohm

Collar & outer contacts - nickel plated Center contacts - gold MIL-G-45204



| Fig. | Description       | Cable Group RG/U  | Digi-Key Part No. | 1     | 25     | Pricing 50 | 100    | AMP Part No. |
|------|-------------------|-------------------|-------------------|-------|--------|------------|--------|--------------|
| 13   | Plug              | AT&T 735A         | A1820-ND          | 3.43  | 73.64  | 130.15     | 232.90 | 1-413589-0   |
| 13   | Plug              | Belden 88241      | A1821-ND          | 3.43  | 73.64  | 130.15     | 232.90 | 413589-1     |
| 13   | Plug              | 59, 62            | A1822-ND          | 3.43  | 73.64  | 130.15     | 232.90 | 413589-2     |
| 13   | Plug              | Belden 8218       | A1823-ND          | 3.43  | 73.64  | 130.15     | 232.90 | 413589-3     |
| 13   | Plug              | AT&T KS Cable     | A1824-ND          | 3.43  | 73.64  | 130.15     | 232.90 | 413589-4     |
| 13   | Plug              | Belden 8281       | A1825-ND          | 3.43  | 73.64  | 130.15     | 232.90 | 413589-5     |
| 13   | Plug              | 59 DB*            | A1826-ND          | 3.43  | 73.64  | 130.15     | 232.90 | 413589-6     |
| 13   | Plug              | AT&T 734A         | A1827-ND          | 3.43  | 73.64  | 130.15     | 232.90 | 413589-7     |
| 13   | Plug              | 179, 187          | A1828-ND          | 3.43  | 73.64  | 130.15     | 232.90 | 413589-8     |
| 13   | Plug              | Belden 9266, 9259 | A1829-ND          | 3.43  | 73.64  | 130.15     | 232.90 | 413589-9     |
| 14   | Cable Jack        | Belden 88241      | A1831-ND          | 4.43  | 95.14  | 168.15     | 300.90 | 413760-1     |
| 14   | Cable Jack        | 59, 62            | A1832-ND          | 4.43  | 95.14  | 168.15     | 300.90 | 413760-2     |
| 14   | Cable Jack        | Belden 8218       | A1833-ND          | 4.43  | 95.14  | 168.15     | 300.90 | 413760-3     |
| 14   | Cable Jack        | AT&T KS Cable     | A1834-ND          | 4.43  | 95.14  | 168.15     | 300.90 | 413760-4     |
| 14   | Cable Jack        | Belden 8281       | A1835-ND          | 4.43  | 95.14  | 168.15     | 300.90 | 413760-5     |
| 14   | Cable Jack        | 59 DB*            | A1836-ND          | 4.43  | 95.14  | 168.15     | 300.90 | 413760-6     |
| 14   | Cable Jack        | AT&T 734A         | A1837-ND          | 4.43  | 95.14  | 168.15     | 300.90 | 413760-7     |
| 14   | Cable Jack        | 179, 187          | A1838-ND          | 4.43  | 95.14  | 168.15     | 300.90 | 413760-8     |
| 14   | Cable Jack        | Belden 9266, 9259 | A1839-ND          | 4.43  | 95.14  | 168.15     | 300.90 | 413760-9     |
| 15   | Bulkhead Jack     | Belden 88241      | A1841-ND          | 4.95  | 106.43 | 188.10     | 336.60 | 413590-1     |
| 15   | Bulkhead Jack     | 59, 62            | A1842-ND          | 4.95  | 106.43 | 188.10     | 336.60 | 413590-2     |
| 15   | Bulkhead Jack     | Belden 8218       | A1843-ND          | 4.95  | 106.43 | 188.10     | 336.60 | 413590-3     |
| 15   | Bulkhead Jack     | AT&T KS Cable     | A1844-ND          | 4.95  | 106.43 | 188.10     | 336.60 | 413590-4     |
| 15   | Bulkhead Jack     | Belden 8281       | A1845-ND          | 3.95  | 84.93  | 150.10     | 268.60 | 413590-5     |
| 15   | Bulkhead Jack     | 59 DB*            | A1846-ND          | 4.95  | 106.43 | 188.10     | 336.60 | 413590-6     |
| 15   | Bulkhead Jack     | AT&T 734A         | A1847-ND          | 5.65  | 121.48 | 214.70     | 384.20 | 413590-7     |
| 15   | Bulkhead Jack     | 179, 187          | A1848-ND          | 4.95  | 106.43 | 188.10     | 336.60 | 413590-8     |
| 15   | Bulkhead Jack     | Belden 9266, 9259 | A1849-ND          | 4.95  | 106.43 | 188.10     | 336.60 | 413590-9     |
| 16   | Plug, Right Angle | 59, 62            | A1872-ND          | 13.50 | 290.25 | 513.00     | 918.00 | 413588-2     |
| 16   | Plug, Right Angle | 179               | A1873-ND          | 13.50 | 290.25 | 513.00     | 918.00 | 413588-3     |
| 16   | Plug, Right Angle | Belden 88241      | A1874-ND          | 13.50 | 290.25 | 513.00     | 918.00 | 413588-4     |
| 16   | Plug, Right Angle | Belden 8218       | A1875-ND          | 13.50 | 290.25 | 513.00     | 918.00 | 413588-5     |
| 16   | Plug, Right Angle | AT&T KS Cable     | A1876-ND          | 13.50 | 290.25 | 513.00     | 918.00 | 413588-6     |
| 16   | Plug, Right Angle | Belden 8281       | A1877-ND          | 13.50 | 290.25 | 513.00     | 918.00 | 413588-7     |
| 16   | Plug, Right Angle | 59 DB*            | A1878-ND          | 13.50 | 290.25 | 513.00     | 918.00 | 413588-8     |
| 16   | Plug, Right Angle | AT&T 734A         | A1879-ND          | 13.50 | 290.25 | 513.00     | 918.00 | 413588-9     |
| 16   | Plug, Right Angle | Belden 9266       | A1880-ND          | 13.50 | 290.25 | 513.00     | 918.00 | 413588-10    |
| 16   | Plug, Right Angle | AT&T 735A         | A1881-ND          | 13.50 | 290.25 | 513.00     | 918.00 | 1-413588-0   |

\* Double Braided

## BNC Coaxial Connectors Dual Crimp MIL-C-39012 Class II - Cat. B

| Fig. | Description             | Cable Group RG/U | Digi-Key Part No. | 1      | 25     | Pricing 50 | 100    | AMP Part No. |
|------|-------------------------|------------------|-------------------|--------|--------|------------|--------|--------------|
| 17   | Plug                    | 58               | A1100-ND          | 2.76   | 59.37  | 104.93     | 187.76 | 225395-1     |
| 17   | Plug                    | 59, 62           | A1101-ND          | 2.73   | 58.67  | 103.69     | 185.56 | 225395-2     |
| 18   | Plug, Tin               | 58               | A1117-ND          | 2.25   | 48.38  | 85.50      | 153.00 | 227079-1     |
| 18   | Plug, Silver            | 58               | A1118-ND          | 2.25   | 48.38  | 85.50      | 153.00 | 227079-2     |
| 18   | Plug, Gold              | 59               | A1119-ND          | 1.59   | 34.22  | 60.49      | 108.24 | 227079-3     |
| 18   | Plug, Tin               | 59, 62           | A1120-ND          | 2.25   | 48.38  | 85.50      | 153.00 | 227079-4     |
| 18   | Plug, Silver            | 59, 62           | A1121-ND          | 1.59   | 34.22  | 60.49      | 108.24 | 1-227079-1   |
| 18   | Plug, Gold              | 59, 62           | A1122-ND          | 1.59   | 34.22  | 60.49      | 108.24 | 227079-5     |
| 19   | Cable Jack              | 58               | A1102-ND          | 5.18   | 111.26 | 196.65     | 351.90 | 225396-1     |
| 19   | Cable Jack              | 59, 62           | A1103-ND          | 5.18   | 111.26 | 196.65     | 351.90 | 225396-2     |
| 20   | Bulkhead Jack           | 58               | A1111-ND          | 5.25   | 112.88 | 199.50     | 357.00 | 225398-1     |
| 20   | Bulkhead Jack           | 59, 62           | A1112-ND          | 5.25   | 112.88 | 199.50     | 357.00 | 225398-2     |
| 21   | Receptacle, Tin         | 50 Ohm           | A1123-ND          | 4.80   | 103.20 | 182.40     | 326.40 | 226978-1     |
| —    | Hex Nut for A1123-ND    | —                | A1128-ND          | .16    | 3.49   | 6.17       | 11.04  | 1-329631-2   |
| —    | Lockwasher for A1123-ND | —                | A1129-ND          | .14    | 3.00   | 5.31       | 9.50   | 1-329632-2   |
| —    | BNC Premises Wire Kit   | —                | A9822-ND          | 120.75 | —      | —          | —      | 58477-1      |

## SMB Connectors

| Fig. | Description                              | Cable Group RG/U  | Digi-Key Part No. | 1      | 25     | Pricing 50 | 100    | AMP Part No. |
|------|------------------------------------------|-------------------|-------------------|--------|--------|------------|--------|--------------|
| 22   | Plug, Gold                               | 178, 196          | A4020-ND          | 6.40   | 137.60 | 243.20     | 435.20 | 413985-5     |
| 22   | Plug, Nickel                             | 178, 196          | A4021-ND          | 5.13   | 110.19 | 194.75     | 348.50 | 413985-6     |
| 22   | Plug, Gold                               | 174, 188, 316     | A4026-ND          | 6.10   | 131.15 | 231.80     | 414.80 | 413985-1     |
| 22   | Plug, Nickel                             | 174, 188, 316     | A4027-ND          | 4.88   | 104.81 | 185.25     | 331.50 | 413985-3     |
| 22   | Plug, Gold                               | 179, 161, 187     | A4031-ND          | 6.10   | 131.15 | 231.80     | 414.80 | 1-413985-0   |
| 22   | Plug, Nickel                             | 179, 161, 187     | A4032-ND          | 4.88   | 104.81 | 185.25     | 331.50 | 1-413985-1   |
| 22   | Plug, Gold                               | 188, 316 DB*      | A4034-ND          | 6.10   | 131.15 | 231.80     | 414.80 | 413985-2     |
| 22   | Plug, Nickel                             | 188, 316 DB*      | A4035-ND          | 4.88   | 104.81 | 185.25     | 331.50 | 413985-4     |
| 23   | Plug, Right Angle, Gold                  | 178, 196          | A4022-ND          | 8.13   | 174.69 | 308.75     | 552.50 | 414002-7     |
| 23   | Plug, Right Angle, Nickel                | 178, 196          | A4023-ND          | 6.50   | 139.75 | 247.00     | 442.00 | 414002-8     |
| 23   | Plug, Right Angle, Gold                  | 174, 188, 316     | A4028-ND          | 5.58   | 119.86 | 211.85     | 379.10 | 414002-1     |
| 23   | Plug, Right Angle, Nickel                | 174, 188, 316     | A4029-ND          | 6.20   | 133.30 | 235.60     | 421.60 | 414002-3     |
| 23   | Plug, Right Angle, Gold                  | 188, 316 DB*      | A4036-ND          | 7.75   | 166.63 | 294.50     | 527.00 | 414002-2     |
| 23   | Plug, Right Angle, Nickel                | 188, 316 DB*      | A4037-ND          | 6.20   | 133.30 | 235.60     | 421.60 | 414002-4     |
| 24   | Plug, Right Angle, Gold, Zinc Die Cast   | 178, 196          | A4024-ND          | 4.35   | 93.53  | 165.30     | 295.80 | 414363-8     |
| 24   | Plug, Right Angle, Nickel, Zinc Die Cast | 178, 196          | A4025-ND          | 4.23   | 90.84  | 160.55     | 287.30 | 414363-9     |
| 24   | Plug, Right Angle, Gold, Zinc Die Cast   | 174, 188, 316     | A4030-ND          | 4.15   | 89.23  | 157.70     | 282.20 | 414363-3     |
| 24   | Plug, Right Angle, Nickel, Zinc Die Cast | 174, 188, 316     | A4033-ND          | 4.03   | 86.54  | 152.95     | 273.70 | 414363-5     |
| 24   | Plug, Right Angle, Gold, Zinc Die Cast   | 174, 188, 316 DB* | A4038-ND          | 2.27   | 48.89  | 86.41      | 154.63 | 414363-4     |
| 24   | Plug, Right Angle, Nickel, Zinc Die Cast | 174, 188, 316 DB* | A4039-ND          | 4.03   | 86.54  | 152.95     | 273.70 | 414363-6     |
| 25   | Plug, Nickel                             | 179, 187          | A4040-ND          | 8.98   | 192.96 | 341.05     | 610.30 | 414618-2     |
| —    | Crimp Tool, SMB w/Die Set                | 174, 188, 179     | A9808-ND          | 105.75 | —      | —          | —      | 58500-1      |
| —    | Die Set, SMB Hex/Comm, use w/A9996       | 174, 179, 187     | A9809-ND          | 50.25  | —      | —          | —      | 58489-1      |
| —    | Die Set, SMB Hex/Comm, use w/A9996       | 178, 196, 316     | A9810-ND          | 288.00 | —      | —          | —      | 58046-1      |
| —    | Pro Crimper II Hand Tool w/o Die         | —                 | A9996-ND          | 63.75  | —      | —          | —      | 354940-1     |
| —    | Die Set, Mil Type Crimp                  | —                 | A9968-ND          | 47.25  | —      | —          | —      | 58483-1      |
| 26   | Jack, Vertical, Gold                     | —                 | A4041-ND          | 3.88   | 83.31  | 147.25     | 263.50 | 413990-1     |
| 26   | Jack, Vertical, Nickel                   | —                 | A4042-ND          | 3.10   | 66.65  | 117.80     | 210.80 | 413990-2     |
| 27   | Jack, Right Angle, Gold, Low Profile     | —                 | A4043-ND          | 8.30   | 178.45 | 315.40     | 564.40 | 413996-2     |
| 27   | Jack, Right Angle, Nickel, Low Profile   | —                 | A4044-ND          | 4.80   | 103.20 | 182.40     | 326.40 | 414026-3     |
| 27   | Jack, Right Angle, Gold, Zinc Die Cast   | —                 | A4045-ND          | 4.10   | 88.15  | 155.80     | 278.80 | 414337-1     |
| 28   | Plug, Right Angle, Gold, Zinc Die Cast   | —                 | A4046-ND          | 5.35   | 115.03 | 203.30     | 363.80 | 414338-1     |
| 29   | Jack, Vert., Gold, Zinc Die Cast, 75Ohms | —                 | A4047-ND          | 5.80   | 124.70 | 220.40     | 394.40 | 414244-1     |
| 29   | Jack, Vert., Tin, Zinc Die Cast, 75Ohms  | —                 | A4050-ND          | 4.65   | 99.98  | 176.70     | 316.20 | 414244-4     |

1-800-344-4539

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## SMA Connectors

| Fig. | Description                                                             | Die Set | Locator Plug | Cable Group RG/U | Digi-Key Part No. | Pricing |        |        |         | AMP Part No. |
|------|-------------------------------------------------------------------------|---------|--------------|------------------|-------------------|---------|--------|--------|---------|--------------|
|      |                                                                         |         |              |                  |                   | 1       | 25     | 50     | 100     |              |
| 1    | Plug, Hex Crimp Plug, Hex Crimp                                         | —       | —            | 142              | A4010-ND          | 3.75    | 80.63  | 142.50 | 255.00  | 447647-2     |
| 1    | Plug, Hex Crimp Plug, Hex Crimp                                         | —       | —            | 174, 188, 316    | A4011-ND          | 3.95    | 84.93  | 150.10 | 268.60  | 447647-3     |
| 2    | Jack, Hex Crimp Jack, Hex Crimp                                         | —       | —            | 142              | A4006-ND          | 12.68   | 272.51 | 481.65 | 861.90  | 447648-2     |
| 2    | Jack, Hex Crimp Jack, Hex Crimp                                         | —       | —            | 174, 188, 316    | A4007-ND          | 5.85    | 125.78 | 222.30 | 397.80  | 447648-3     |
| 3    | Bulkhead Jack, Crimp Bulkhead Jack, Crimp                               | —       | —            | 142              | A4008-ND          | 17.08   | 367.11 | 648.85 | 1161.10 | 447650-2     |
| 3    | Bulkhead Jack, Crimp Bulkhead Jack, Crimp                               | —       | —            | 174, 188, 316    | A4009-ND          | 16.80   | 361.20 | 638.40 | 1142.40 | 447650-3     |
| 4    | Solderless Plug, w/ Center Contact Solderless Plug, w/ Center Contact   | A9964   | A9961        | 405 (.086)       | A4012-ND          | 8.15    | 175.23 | 309.70 | 554.20  | 227868-1     |
| 4    | Solderless Plug, w/ Center Contact Solderless Plug, w/ Center Contact   | A9964   | A9961        | 405 (.086)       | A4013-ND          | 8.95    | 192.43 | 340.10 | 608.60  | 228639-1     |
| 5    | Solderless Plug, w/ Center Contact Solderless Plug, w/ Center Contact   | A9965   | A9961        | 402 (.141)       | A4014-ND          | 10.88   | 233.81 | 413.25 | 739.50  | 227743-1     |
| 5    | Solderless Plug, w/ Center Contact Solderless Plug, w/ Center Contact   | A9965   | A9961        | 402 (.141)       | A4015-ND          | 10.95   | 235.43 | 416.10 | 744.60  | 228634-1     |
| 5    | Solderless Plug, w/o Center Contact Solderless Plug, w/o Center Contact | A9965   | A9962        | 402 (.141)       | A4017-ND          | 2.95    | 63.43  | 112.10 | 200.60  | 228635-1     |
| 6    | Plug, Retractable Collar                                                | A9963   | A9962        | 402 (.141)       | A4018-ND          | 3.65    | 78.48  | 138.70 | 248.20  | 227531-5     |
| —    | Crimp Tool, w/o Dies                                                    | —       | —            | —                | A9966-ND          | 612.75  | —      | —      | —       | 59980-1      |
| —    | Die Set                                                                 | —       | —            | 402              | A9965-ND          | 108.00  | —      | —      | —       | 312253-1     |
| —    | Die Set                                                                 | —       | —            | 405              | A9964-ND          | 116.25  | —      | —      | —       | 312253-2     |
| —    | Die Set                                                                 | —       | —            | 402              | A9963-ND          | 235.50  | —      | —      | —       | 312962-1     |
| —    | Locator Plug w/o Contact* Locator Plug w/ Contact*                      | —       | —            | —                | A9962-ND          | 79.50   | —      | —      | —       | 220220-2     |
| —    | Locator Plug w/o Contact* Locator Plug w/ Contact*                      | —       | —            | —                | A9961-ND          | 55.50   | —      | —      | —       | 220221-2     |

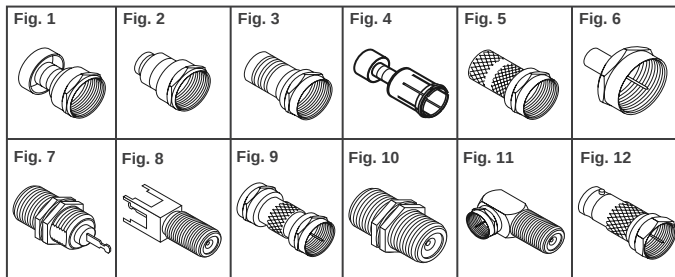
\*Must use a locator with the die set

## Hand Tool &amp; Die Sets

| Description                            | Cable Group RG/U              | Digi-Key Part No. | Price Each | AMP Part No. |
|----------------------------------------|-------------------------------|-------------------|------------|--------------|
| Crimp Tool, 50 Ohm BNC W/Die           | RG/58, 59, 62                 | A9802-ND          | 72.00      | 58433-2      |
| Crimp Tool, 75 BNC W/Die               | RG/179, 161, 187              | A9803-ND          | 81.75      | 58531-2      |
| Crimp Tool, 75 BNC W/Die               | RG/59, 62                     | A9804-ND          | 81.75      | 58531-1      |
| Crimp Tool, 75 Ohm BNC W/Die           | BELDEN 8281 DB59, 9141        | A9805-ND          | 81.75      | 58531-3      |
| Pro Crimper Hand Tool                  | —                             | A9996-ND          | 63.75      | 354940-1     |
| BNC 50 Ohm Hex Crimp Die Set           | RG/U Cable 174, 179, 180, 195 | A9995-ND          | 35.25      | 58436-3      |
| BNC 50 Ohm Hex Crimp Die Set           | RG/U Cable 58, 62, 59         | A9994-ND          | 35.25      | 58436-1      |
| BNC 75 Ohm Hex Crimp Die Set           | RG/U Cable 179, 161, 187      | A9993-ND          | 33.75      | 58425-2      |
| BNC 75 Ohm Hex Crimp Die Set           | RG/U Cable 62, 59             | A9992-ND          | 33.75      | 58425-1      |
| Crimp Tool, N-Type W/Die               | RG/8, 213, 11, 216, 9, 214    | A9807-ND          | 97.50      | 58501-1      |
| N-Type, Hex Crimp Die Set, use w/A9996 | —                             | A9975-ND          | 43.50      | 58485-1      |
| 50 Ohm Die Set                         | Belden 8281                   | A9960-ND          | 35.25      | 58436-2      |
| 50 Ohm Die Set                         | RG/59 DB                      | A9959-ND          | 33.75      | 58425-3      |
| 50 Ohm, Jack Die Set                   | RG/58                         | A9972-ND          | 35.25      | 58465-1      |
| 75 Ohm, Conn. Die Set                  | AT&T 735A                     | A9971-ND          | 33.00      | 852922-2     |
| 75 Ohm, Conn. Die Set                  | RG/59 DB                      | A9969-ND          | 33.75      | 852922-3     |
| Crimping Tool                          | RG/58                         | A1108-ND          | 18.68      | 220146-1     |
| BNC Crimp Tool, Super Champ            | RG/58, 59                     | A9934-ND          | 16.88      | 220148-1     |
| Crimp Tool, General                    | RG/58, 166                    | A9933-ND          | 16.88      | 58124-1      |
| Cable Stripping Tool                   | RG/58, 59                     | A1110-ND          | 60.92      | 603995-1     |



## F Connectors



| Fig. | Description                                       | Digi-Key Part No. | Pricing |       |        |         |
|------|---------------------------------------------------|-------------------|---------|-------|--------|---------|
|      |                                                   |                   | 1       | 10    | 100    | 1,000   |
| 1    | Separated Crimp Ring, for RG-59 Cable             | CP-0010-ND        | .33     | 2.86  | 22.00  | 165.00  |
| 1    | Separated Crimp Ring, for RG-58 Cable             | CP-0030-ND        | .36     | 3.12  | 24.00  | 180.00  |
| 1    | Separated Crimp Ring, for RG-6 Cable              | CP-0060-ND        | .37     | 3.20  | 24.60  | 185.00  |
| 2    | Built-On Crimp Ring, for RG-59 Cable              | CP-0110-ND        | .51     | 4.39  | 33.80  | 254.00  |
| 2    | Built-On Crimp Ring, for RG-6 Cable               | CP-0160-ND        | .51     | 4.39  | 33.80  | 254.00  |
| 3    | Long Type Built-On Crimp Ring, for RG-59 Cable    | CP-0210-ND        | .48     | 4.19  | 32.20  | 242.00  |
| 3    | Long Type Built-On Crimp Ring, for RG-6 Cable     | CP-0260-ND        | .48     | 4.19  | 32.20  | 242.00  |
| 4    | Push-On, Crimp Type, for RG-59 Cable              | CP-0310-ND        | .71     | 6.11  | 47.00  | 353.00  |
| 4    | Push-On, Crimp Type, for RG-58 Cable              | CP-0330-ND        | .71     | 6.11  | 47.00  | 353.00  |
| 5    | Twist-On Type, for RG-59 Cable                    | CP-0410-ND        | .44     | 3.80  | 29.20  | 219.00  |
| 6    | Male Terminator, w/ Built-In 75 Ohm Resistor      | CP-0610-ND        | .41     | 3.59  | 27.60  | 207.00  |
| 7    | Female Bulkhead Receptacle, w/ Washer and Nut     | CP-1010-ND        | .53     | 4.55  | 35.00  | 263.00  |
| 8    | PCB Type, Full length 26mm                        | CP-1210-ND        | .77     | 6.66  | 51.20  | 384.00  |
| 9    | Adapter, Universal Male F to F Coupler            | CP-2010-ND        | 1.24    | 10.74 | 82.60  | 620.00  |
| 10   | Adapter, Female F to F Coupler, w/ Washer and Nut | CP-2110-ND        | .48     | 4.19  | 32.20  | 242.00  |
| 11   | Adapter, Right Angle F Male to F Female           | CP-2510-ND        | 1.62    | 14.04 | 108.00 | 810.00  |
| 12   | Adapter, F Male to BNC Female                     | CP-0130-ND        | 2.19    | 18.98 | 146.00 | 1095.00 |

## BNC Cables Male to Male



| Item                       | Description                | Cable Type    |               |               |
|----------------------------|----------------------------|---------------|---------------|---------------|
|                            |                            | RG58          | RG59          | RG62          |
| Conductor                  | Material                   | BC            | CCS           | CCS           |
|                            | No./mm                     | 1 / 0.813     | 1 / 0.643     | 1 / 0.643     |
| Insulation                 | Material                   | LDPE          | LDPE          | LDPE          |
|                            | Color                      | Natural       | Natural       | Natural       |
| Braided Shielding          | Diameter (mm)              | 2.95          | 3.71          | 3.71          |
|                            | Material                   | BC            | BC            | BC            |
| Jacket                     | No./mm                     | 16 / 7 / 0.12 | 16 / 7 / 0.12 | 16 / 7 / 0.12 |
|                            | Material                   | PVC           | PVC           | PVC           |
| General                    | Thickness (mm)             | 0.72          | 0.9           | 1             |
|                            | Color                      | Black         | Black         | Black         |
| Outer Diameter (mm)        |                            | 4.95 ± 0.15   | 6.0 ± 0.15    | 6.15 ± 0.15   |
|                            | Tensile Strength           | 1,500 psi     | 1,500 psi     | 1,500 psi     |
| Nominal Impedance (ohm)    |                            | 53.5          | 73            | 93            |
|                            | Nominal Capacitance (pF/m) | 93.5          | 68.9          | 44.3          |
| Attenuation 100MHz (db/km) |                            | 138           | 125           | 102           |
|                            | Voltage Rating             | 5.0kv         | 7.0kv         | 3.0kv         |
| UL Standard                |                            | 1354          | 1354          | 1354          |

BC = Bare Copper CCS = Copper Clad Steel

LDPE = Low Density PE

| Length Feet (Meter)                   | Digi-Key Part No. | Price Each | TPI Part No. | Length Feet (Meter)                   | Digi-Key Part No. | Price Each | TPI Part No. |
|---------------------------------------|-------------------|------------|--------------|---------------------------------------|-------------------|------------|--------------|
| RG58/U Molded Strain Relief Cable 50Ω |                   |            |              | RG62/U Molded Strain Relief Cable 93Ω |                   |            |              |
| 1 (30)                                | 290-1009-ND       | 7.91       | 58-012-1M    | 5 (1.52)                              | 290-1025-ND       | 10.31      | 59-060-1M    |
| 2 (61)                                | 290-1010-ND       | 8.39       | 58-024-1M    | 6 (1.83)                              | 290-1026-ND       | 10.79      | 59-072-1M    |
| 3 (91)                                | 290-1011-ND       | 8.79       | 58-036-1M    | 10 (3.05)                             | 290-1027-ND       | 13.16      | 59-120-1M    |
| 4 (1.22)                              | 290-1012-ND       | 9.43       | 58-048-1M    | 15 (4.57)                             | 290-1028-ND       | 16.89      | 59-180-1M    |
| 5 (1.52)                              | 290-1013-ND       | 9.98       | 58-060-1M    | 25 (7.62)                             | 290-1029-ND       | 21.49      | 59-300-1M    |
| 6 (1.83)                              | 290-1014-ND       | 10.46      | 58-072-1M    | 50 (15.24)                            | 290-1030-ND       | 34.49      | 59-600-1M    |
| 10 (3.05)                             | 290-1015-ND       | 12.54      | 58-120-1M    | 75 (22.86)                            | 290-1031-ND       | 47.00      | 59-900-1M    |
| 15 (4.57)                             | 290-1016-ND       | 15.18      | 58-180-1M    | 100 (30.48)                           | 290-1032-ND       | 59.95      | 59-1200-1M   |
| 20 (6.11)                             | 290-1017-ND       | 20.77      | 58-300-1M    | RG58/U Cable Assembly 50Ω             |                   |            |              |
| 25 (7.62)                             | 290-1018-ND       | 31.99      | 58-600-1M    | 2 (61)                                | 290-1033-ND       | 9.35       | 62-024-1A    |
| 50 (15.24)                            | 290-1019-ND       | 45.50      | 58-900-1M    | 3 (91)                                | 290-1034-ND       | 9.83       | 62-036-1M    |
| 75 (22.86)                            | 290-1020-ND       | 57.49      | 58-1200-1M   | 4 (1.22)                              | 290-1035-ND       | 10.31      | 62-048-1M    |
| 100 (30.48)                           | 290-1021-ND       | 8.39       | 59-012-1M    | 5 (1.52)                              | 290-1036-ND       | 10.79      | 62-060-1M    |
| RG58/U Molded Strain Relief Cable 75Ω |                   |            |              | RG58/U Cable Assembly 50Ω             |                   |            |              |
| 1 (30)                                | 290-1021-ND       | 8.39       | 59-012-1M    | 2 (61)                                | 290-1037-ND       | 8.89       | 58-024-1A    |
| 2 (61)                                | 290-1022-ND       | 8.87       | 59-024-1M    | 3 (91)                                | 290-1038-ND       | 9.32       | 58-036-1A    |
| 3 (91)                                | 290-1023-ND       | 9.35       | 59-036-1M    | 4 (1.22)                              | 290-1039-ND       | 9.99       | 58-048-1A    |
| 4 (1.22)                              | 290-1024-ND       | 9.83       | 59-048-1M    | 5 (1.52)                              | 290-1040-ND       | 10.58      | 58-060-1A    |

## Coax Adapter Connector Kit

Kit includes male and female connectors of all eight types. Any adapter can be created on the spot in just seconds. Simply screw any combination of 24 connectors to one of the six universal interfaces. • Gold plated contacts • Silver plated machined brass connector bodies with teflon insulation

290-1045-ND TPI Part No. TPI-3000A .....\$146.25

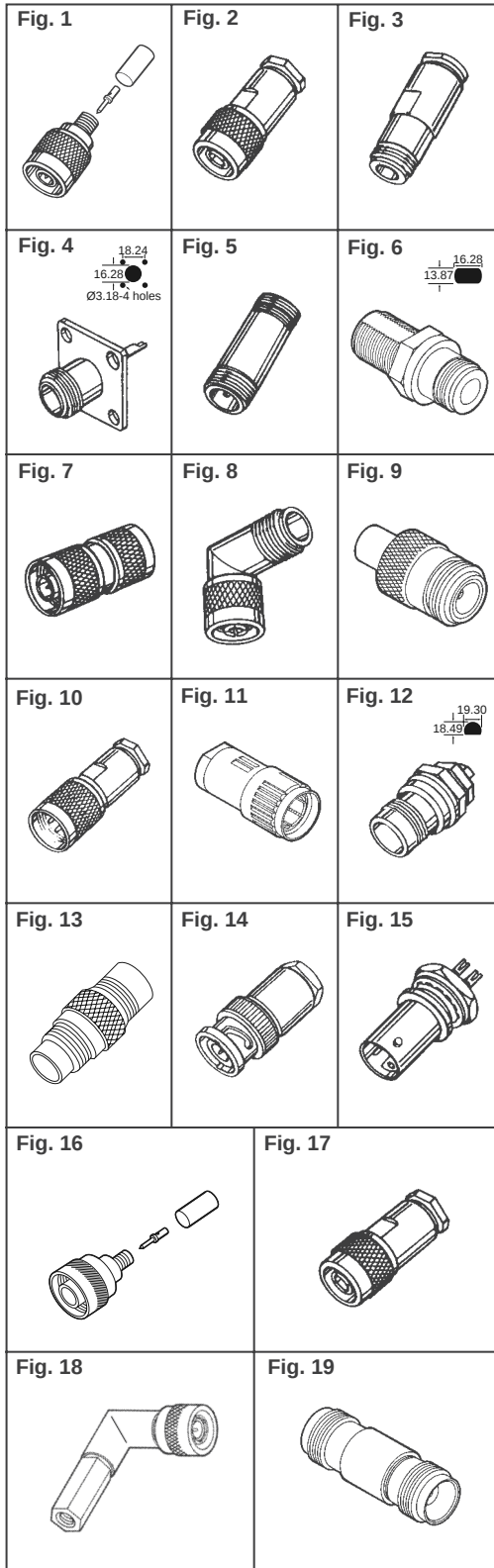


• Fully Ratcheting Cycle • Dies Fully Interchangeable • Manual Ratchet Release • Adjustable Crimp Tension • EZI-CHANGE™ Die Set Screws • Hardened Dies for Long Life

| Description             | Digi-Key Part No. | Price Each |
|-------------------------|-------------------|------------|
| Crimp Tool — Frame Only | PAL1302-ND        | 41.17      |
| RG59/6 CATV Die Set     | PAL2042-ND        | 19.48      |

1-800-344-4539

218-681-6674 • FAX: 218-681-3380 • www.digikey.com



### Type N Coaxial Connectors

| Fig. | Description             | Cable Group<br>RG/U                | Military<br>Part No. | Digi-Key<br>Part No. | 1     | Pricing<br>25 | 100     | Amphenol<br>Part No. |
|------|-------------------------|------------------------------------|----------------------|----------------------|-------|---------------|---------|----------------------|
| 1    | Plug (Crimp)†           | 8, 213                             | M39012/10B-0007      | ARF1013-ND           | 10.56 | 135.50        | 472.00  | 82-340               |
| 1    | Plug (Crimp)            | 9, 214                             | —                    | ARF1163-ND           | 11.31 | 145.25        | 506.00  | 82-332               |
| 1    | Plug (Crimp)            | 55, 142, 223                       | —                    | ARF1164-ND           | 8.12  | 103.75        | 362.00  | 82-5370              |
| 1    | Plug (Crimp)†           | 214, 225, 393                      | M39012/01-0501       | ARF1018-ND           | 12.02 | 154.25        | 536.00  | 82-4425              |
| 1    | Plug (Crimp)†           | Ethernet                           | —                    | ARF1019-ND           | 12.40 | 159.25        | 554.00  | 82-4426-1001         |
| 2    | Plug (Clamp)            | 8, 9, 144, 165, 213, 214, 216, 225 | UG-21D/U             | ARF1014-ND           | 7.55  | 96.75         | 337.00  | 82-202               |
| 2    | Plug (Clamp)            | 8, 9, 144, 165, 213, 214, 216, 225 | UG-1185              | ARF1161-ND           | 7.69  | 98.75         | 343.00  | 82-312               |
| 2    | Plug (Clamp)            | 58, 141, 142                       | UG-536B/U            | ARF1016-ND           | 8.57  | 110.00        | 382.00  | 34025                |
| 2    | Plug (Clamp)            | 58, 141, 142                       | UG-536B              | ARFX1016-ND*         | 5.77  | 74.00         | 263.00  | 34025-RFX            |
| 2    | Plug (Clamp)            | Belden 9913                        | —                    | ARF1020-ND           | 8.92  | 114.25        | 398.00  | 82-202-1006          |
| 2    | Plug (Clamp)            | 8, 9, 144, 165, 213, 214, 216, 225 | UG-21D               | ARFX1183-ND*         | 6.09  | 78.00         | 272.00  | 82-202-RFX           |
| 3    | Jack (Clamp)            | 8, 9, 87A, 144, 165,               | UG-23B/U             | ARF1021-ND           | 11.26 | 144.50        | 503.00  | 82-63                |
| 4    | Panel Receptacle        | —                                  | UG-58A/U             | ARF1023-ND           | 6.27  | 80.25         | 280.00  | 82-97                |
| 4    | Panel Receptacle        | —                                  | UG-58A               | ARFX1023-ND*         | 4.62  | 59.25         | 206.00  | 82-97-RFX            |
| 4    | Panel Receptacle        | —                                  | UG-58                | ARF1160-ND           | 6.40  | 82.25         | 285.00  | 82-24                |
| 5    | Straight/Jack-Jack      | —                                  | UG-29B/U             | ARF1025-ND           | 9.61  | 123.25        | 430.00  | 82-101               |
| 5    | Straight/Jack-Jack      | —                                  | UG-29B               | ARFX1025-ND*         | 4.78  | 61.25         | 231.00  | 82-101-RFX           |
| 6    | Bulkhead/Jack-Jack      | —                                  | UG-30/U              | ARF1026-ND           | 25.03 | 321.25        | 1119.00 | 82-66                |
| 7    | Straight/Plug-Plug      | —                                  | UG-57B/U             | ARF1027-ND           | 11.54 | 148.25        | 516.00  | 82-100               |
| 7    | Straight/Plug-Plug      | —                                  | UG-57B               | ARFX1027-ND*         | 7.81  | 101.00        | 351.00  | 82-100-RFX           |
| 8    | Angle/Jack-Plug         | —                                  | UG-27A               | ARF1028-ND           | 27.14 | 348.25        | 1212.00 | 82-64                |
| 9    | Female Terminator 49.9Ω | —                                  | —                    | ARF1030-ND           | 26.78 | 575.66        | 1820.70 | 82-5721-1000         |

\* RFX connectors.

† Crimp tools are listed within the RF & RFX Connectors section.

### Twinaxial Connectors

| Fig. | Description                 | Cable Group<br>RG/U            | Military<br>Part No. | Digi-Key<br>Part No. | 1     | Pricing<br>25 | 100     | Amphenol<br>Part No. |
|------|-----------------------------|--------------------------------|----------------------|----------------------|-------|---------------|---------|----------------------|
| 10   | Plug (Clamp)                | Times AA-6026,                 | —                    | ARF1031-ND           | 12.86 | 165.00        | 575.00  | 82-5589              |
| 10   | Plug (Clamp)                | AA-6076, AA-6079               | —                    | ARFX1031-ND*         | 6.62  | 85.25         | 316.00  | 82-5589-RFX1         |
| 11   | Plug (Clamp) Plastic Body   | Belden 8227, 9207, IBM 7362211 | —                    | ARF1033-ND           | 14.85 | 190.75        | 664.00  | 82-GB635-CR          |
| 12   | Receptacle                  | —                              | —                    | ARFX1035-ND*         | 6.14  | 84.00         | 271.00  | 82-5590-RFX          |
| 13   | Adapter/Jack-Jack           | —                              | —                    | ARF1036-ND           | 25.52 | 327.50        | 1140.00 | 82-5588              |
| 13   | Adapter/Jack-Jack           | IBM 7362230                    | —                    | ARFX1036-ND*         | 6.19  | 81.50         | 298.00  | 82-5588-RFX          |
| 14   | BNC Plug/Twinax - Noryl     | 108A                           | —                    | ARF1037-ND           | 10.50 | 134.75        | 469.00  | 31-224               |
| 14   | BNC Plug/Twinax - TFE       | 108A                           | —                    | ARF1133-ND           | 14.37 | 184.25        | 642.00  | 31-2226              |
| 15   | BNC Bulkhead/Twinax - Noryl | —                              | —                    | ARF1038-ND           | 19.95 | 256.00        | 891.00  | 31-223               |
| 15   | BNC Bulkhead/Twinax - TFE   | —                              | —                    | ARF1132-ND           | 18.48 | 237.25        | 825.00  | 31-2225              |

\* RFX connectors

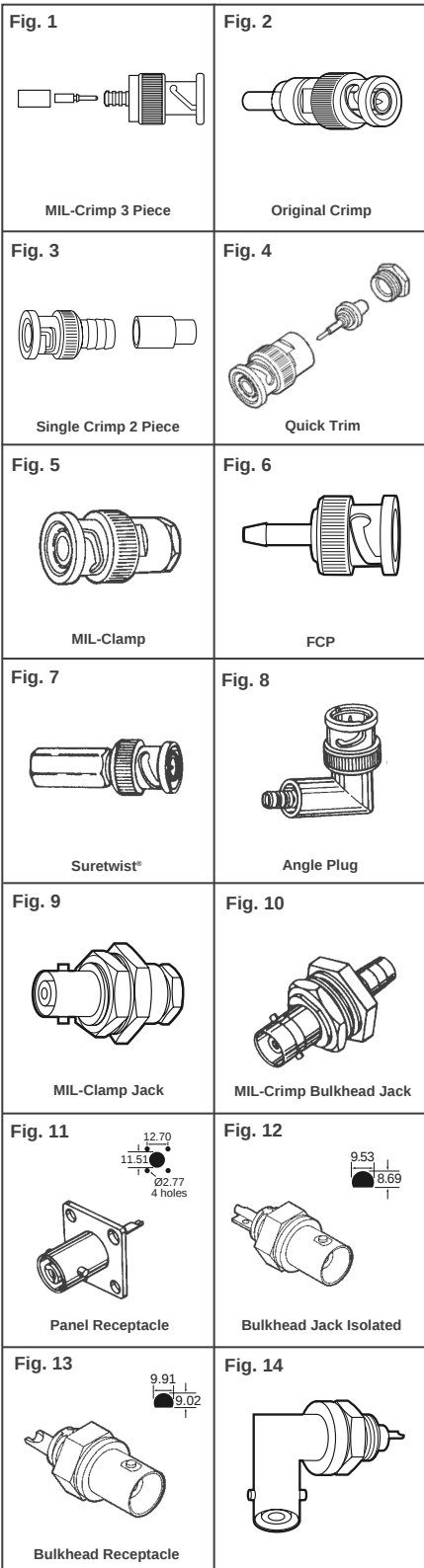
### TNC Coaxial Connectors

| Fig. | Description             | Cable Group<br>RG/U | Military<br>Part No. | Digi-Key<br>Part No. | 1     | Pricing<br>25 | 100    | Amphenol<br>Part No. |
|------|-------------------------|---------------------|----------------------|----------------------|-------|---------------|--------|----------------------|
| 16   | Plug (Quick Crimp)†     | —                   | —                    | ARF1081-ND           | 5.88  | 75.50         | 263.00 | 36825                |
| 16   | Plug (MIL-Crimp)        | 142, 223            | —                    | ARF1135-ND           | 5.71  | 73.50         | 255.00 | 31-2373              |
| 16   | Plug (Crimp)†           | 59, 62              | M23329/4-05          | ARF1084-ND           | 5.53  | 71.00         | 247.00 | 31-2368              |
| 17   | Plug (Clamp)            | 58, 141             | —                    | ARF1082-ND           | 8.46  | 108.50        | 378.00 | 79875                |
| 17   | Plug (Clamp)            | 58, 141, 142A       | —                    | ARFX1082-ND*         | 2.59  | 33.25         | 116.00 | 79875-RFX            |
| 18   | Angle Plug (Suretwist™) | —                   | —                    | ARF1083-ND           | 11.23 | 241.34        | 763.30 | 31-5242              |
| 19   | Straight/Jack-Jack      | —                   | —                    | ARF1090-ND           | 13.71 | 176.00        | 613.00 | 31-4791              |

† Crimp tools are listed within the RF & RFX Connectors section.

\*RFX™, is specifically designed for applications that do not require performance above 1 to 3 GHz. RFX™ connectors are not for use in military system applications. RFX™ connectors are generally less expensive than MIL-Spec and industry standard connectors.

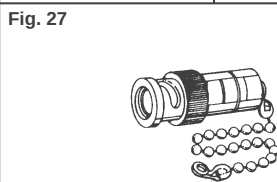
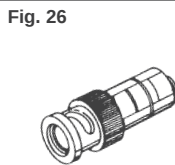
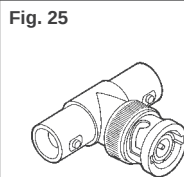
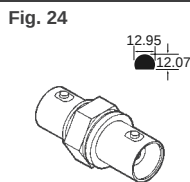
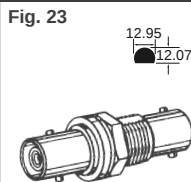
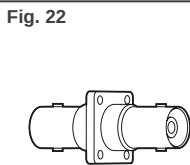
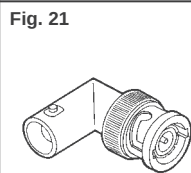
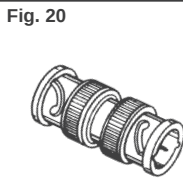
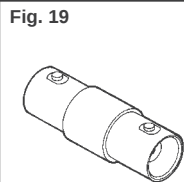
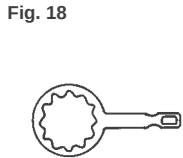
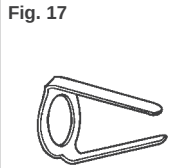
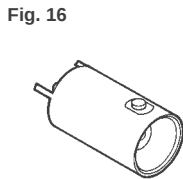
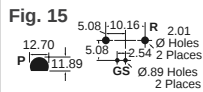
A



### BNC Coaxial Connectors

| Fig. | Description               | Cable Group<br>RG/U        | Crimp<br>Tool<br>Part No. | Digi-Key<br>Part No. | Pricing |        |         | Amphenol<br>Part No. |
|------|---------------------------|----------------------------|---------------------------|----------------------|---------|--------|---------|----------------------|
|      |                           |                            |                           |                      | 1       | 25     | 100     |                      |
| 1    | Plug (MIL-Crimp)          | 58, 141, 142               | CTL-1                     | ARF1039-ND           | 5.67    | 72.75  | 253.00  | 31-320               |
|      | Plug (MIL-Crimp)          | 58, 141, 142               | CTL-1                     | ARFX1039-ND*         | 1.76    | 25.25  | 82.00   | 31-320-RFX           |
|      | Plug (Quick-Crimp)        | Plenum 58                  | CTL-1                     | ARFX1041-ND*         | 1.64    | 21.00  | 74.00   | 36650-3RFX           |
|      | Plug (MIL-Crimp)          | 59, 62                     | CTL-1                     | ARF1042-ND           | 5.81    | 74.50  | 260.00  | 31-321               |
|      | Plug (MIL-Crimp)          | 59, 62                     | CTL-1                     | ARFX1042-ND*         | 1.76    | 25.25  | 82.00   | 31-321-RFX           |
|      | Plug (MIL-Crimp)          | 59, 62, 71, 140, 210, 302  | CTL-1                     | ARF1156-ND           | 5.28    | 67.75  | 236.00  | 68175                |
|      | Plug (MIL-Crimp)          | Belden 9259                | CTL-1                     | ARF1052-ND           | 5.38    | 69.00  | 240.00  | 68175-1003           |
|      | Plug (MIL-Crimp)          | 59 (20AWG Ctr. Cond.)      | CTL-1                     | ARF1046-ND           | 5.85    | 75.00  | 261.00  | 68175-1005           |
|      | Plug (MIL-Crimp)          | 59 (20AWG Ctr. Cond.)      | CTL-1                     | ARFX1046-ND*         | 1.76    | 25.25  | 82.00   | 68175-5RFX           |
|      | Plug (MIL-Crimp)          | Plenum 59, 62              | CTL-1                     | ARFX1047-ND*         | 1.73    | 24.50  | 79.00   | 68175-11RFX          |
|      | Plug (MIL-Crimp)          | 174, 188, 316              | CTL-2                     | ARF1049-ND           | 6.29    | 80.75  | 281.00  | 31-315               |
|      | Plug (MIL-Crimp)          | 174, 188, 316              | CTL-2                     | ARFX1049-ND*         | 2.27    | 29.00  | 101.00  | 31-315-RFX           |
|      | Plug (MIL-Crimp)          | 179, 187                   | CTL-2                     | ARF1050-ND           | 7.74    | 99.50  | 346.00  | 31-242               |
|      | Plug (MIL-Crimp)          | Belden 8281                | CTL-2                     | ARF1051-ND           | 6.62    | 85.00  | 296.00  | 31-321-1000          |
|      | Plug (MIL-Crimp)          | Belden 8281                | CTL-2                     | ARFX1051-ND*         | 2.30    | 29.75  | 104.00  | 31-321-10RFX         |
|      | Plug (MIL-Crimp)          | Belden 9907, 89907         | CTL-1                     | ARF1054-ND           | 5.38    | 69.00  | 240.00  | 31-320-1006          |
|      | Plug (MIL-Crimp)          | 59, 62                     | CTL-1                     | ARFX1123-ND*         | 1.76    | 25.25  | 82.00   | 31-71008-RFX         |
|      | Plug (MIL-Crimp), 75Ω     | 59, 62                     | CTL-1                     | ARF1175-ND           | 4.17    | 53.75  | 186.00  | 31-71008             |
|      | Plug (MIL-Crimp), 75Ω     | 59, 62 (20 GACC)           | CTL-1                     | ARF1176-ND           | 4.38    | 56.25  | 195.00  | 31-71008-1000        |
|      | Plug (MIL-Crimp), 75Ω     | 179, 187                   | CTL-2                     | ARF1174-ND           | 5.03    | 64.50  | 225.00  | 31-71013             |
|      | Plug (MIL-Crimp), 75Ω     | Belden 8218                | CTL-2                     | ARF1173-ND           | 4.17    | 53.75  | 186.00  | 31-71033             |
|      | Plug (MIL-Crimp), 75Ω     | Belden 8281, 88281         | CTL-2                     | ARF1172-ND           | 4.38    | 56.25  | 195.00  | 31-71032             |
|      | Plug (Thinnet/Ethernet)   | 58                         | CTL-1                     | ARF1181-ND           | 2.26    | 29.00  | 101.00  | 31-5800              |
|      | Plug (IBM/Arcnet)         | 59, 62                     | CTL-1                     | ARF1182-ND           | 2.30    | 29.25  | 103.00  | 31-5900              |
| 2    | Plug (Original Crimp)     | 174, 179, 187, 188, 316    | —                         | ARF1143-ND           | 15.72   | 201.50 | 702.00  | 31-371               |
| 3    | Plug (Single Crimp)       | 59, 62                     | CTL-2                     | ARFX1124-ND*         | 2.48    | 32.00  | 111.00  | 31-5556-RFX          |
| 4    | Plug (Quicktrim®)         | 59, 62                     | CTL-1                     | ARF1045-ND           | 7.19    | 92.50  | 321.00  | 31-4541              |
|      | Plug (Quicktrim®)         | 59, 62                     | CTL-1                     | ARFX1045-ND*         | 4.84    | 62.25  | 216.00  | 31-4541-RFX          |
|      | Plug (Quicktrim®)         | Belden 9268                | CTL-1                     | ARF1053-ND           | 8.55    | 109.75 | 382.00  | 31-4542              |
| 5    | Plug (MIL-Clamp)          | 58                         | —                         | ARF1040-ND           | 4.34    | 55.50  | 194.00  | 31-202               |
|      | Plug (MIL-Clamp)          | 59, 62                     | —                         | ARF1043-ND           | 4.46    | 57.25  | 200.00  | 31-212               |
|      | Plug (MIL-Clamp)          | 59, 62                     | —                         | ARFX1043-ND*         | 2.37    | 30.50  | 106.00  | 31-212-RFX           |
|      | Plug (Standard Clamp)     | 8, 9, 11, 213, 214         | —                         | ARF1155-ND           | 13.28   | 170.50 | 593.00  | 6775                 |
|      | Plug (Standard Clamp)     | 55, 58, 141, 142, 223, 400 | —                         | ARF1126-ND           | 4.60    | 59.00  | 205.00  | 31-2                 |
|      | Plug (Standard Clamp)     | 55, 58, 141, 142, 223, 400 | —                         | ARFX1119-ND*         | 2.26    | 29.00  | 106.00  | 31-2-RFX             |
|      | Plug (Standard Clamp)     | 59, 62, 71, 140, 210, 302  | —                         | ARF1123-ND           | 5.53    | 71.00  | 247.00  | 31-12                |
|      | Plug (MIL-Clamp)          | 174, 179, 187, 188, 316    | —                         | ARF1157-ND           | 8.66    | 111.25 | 387.00  | 69475                |
| 6    | Plug (Standard Clamp)     | 178, 196                   | —                         | ARF1120-ND           | 8.33    | 106.75 | 372.00  | 15875                |
|      | Plug (FCP)                | 58, 141                    | —                         | ARF1145-ND           | 6.57    | 84.25  | 294.00  | 31-4700              |
| 7    | Plug (FCP)                | 59                         | —                         | ARF1146-ND           | 6.10    | 78.25  | 273.00  | 31-4702              |
|      | Plug (Suretwist®)         | 59, 62                     | —                         | ARF1044-ND           | 5.15    | 66.25  | 230.00  | 31-5136              |
|      | Plug (Suretwist®)         | 59, 62                     | —                         | ARFX1044-ND*         | 2.37    | 30.50  | 106.00  | 31-5136-RFX          |
|      | Plug (Suretwist®)         | 58, 141, 142               | —                         | ARF1147-ND           | 7.25    | 93.00  | 323.00  | 31-5137              |
|      | Plug (Suretwist®)         | 58, 141, 142               | —                         | ARFX1147-ND*         | 2.37    | 30.50  | 106.00  | 31-5137-RFX          |
| 8    | Plug (Suretwist®)         | Plenum 59, 62              | —                         | ARF1048-ND           | 7.97    | 102.25 | 356.00  | 31-5369              |
|      | Angle Plug (MIL-Crimp)    | 58, 141, 142A              | CTL-1                     | ARF1055-ND           | 26.51   | 340.25 | 1185.00 | 31-335               |
|      | Angle Plug (MIL-Crimp)    | 58, 141, 142A              | CTL-1                     | ARFX1055-ND*         | 5.01    | 64.25  | 224.00  | 31-335-RFX           |
| 9    | Angle Plug (MIL-Crimp)    | 59, 62                     | CTL-1                     | ARF1056-ND           | 21.50   | 275.75 | 960.00  | 31-336               |
|      | Bulkhead Jack (Clamp)     | 55, 58, 141, 142, 223, 400 | —                         | ARF1127-ND           | 8.73    | 112.00 | 390.00  | 31-206               |
| 10   | Bulkhead Jack (MIL-Crimp) | 55, 58, 141, 142, 223, 400 | CTL-1                     | ARF1060-ND           | 8.04    | 103.25 | 359.00  | 31-342               |
|      | Bulkhead Jack (MIL-Crimp) | 55, 58, 141, 142, 223, 400 | CTL-1                     | ARFX1060-ND*         | 3.41    | 43.75  | 153.00  | 31-342-RFX           |
|      | Bulkhead Jack (MIL-Crimp) | 59, 62, 140, 210           | CTL-1                     | ARFX1061-ND*         | 3.41    | 43.75  | 153.00  | 31-343-RFX           |
|      | Bulkhead Jack (MIL-Crimp) | 174, 188, 316              | CTL-2                     | ARF1139-ND           | 11.54   | 148.25 | 516.00  | 31-318               |
|      | Bulkhead Jack (MIL-Crimp) | 174, 188, 316              | CTL-2                     | ARFX1139-ND*         | 4.69    | 60.25  | 183.00  | 31-318-RFX           |

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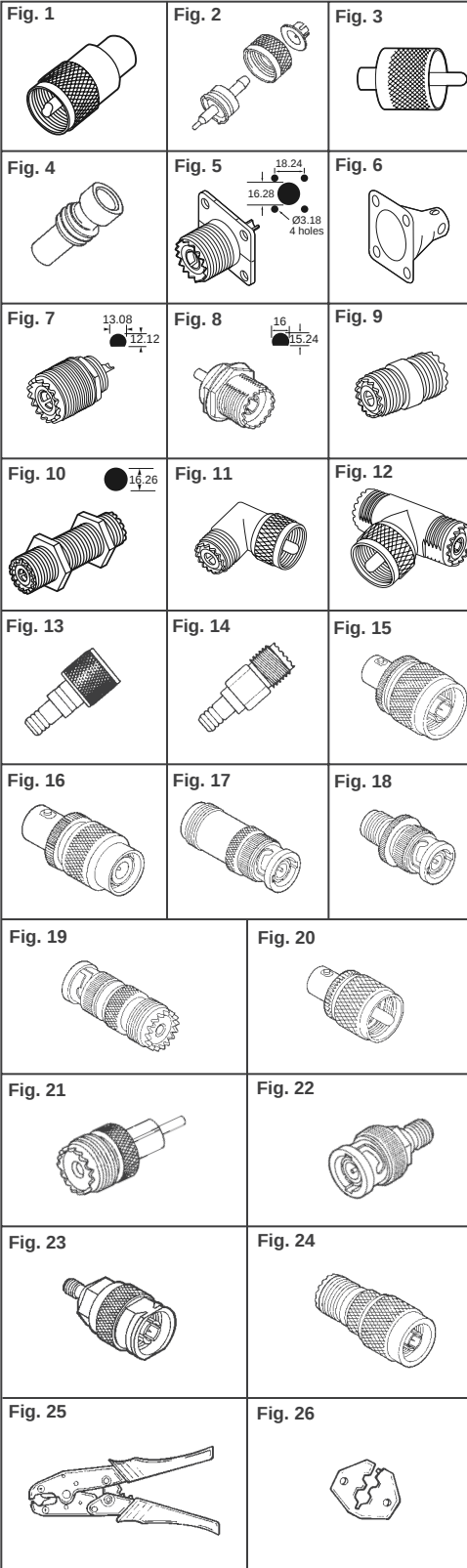
### BNC Coaxial Connectors

| Fig. | Description                             | Cable Group<br>RG/U | Crimp<br>Tool<br>Part No. | Digi-Key<br>Part No. | Pricing |        |         | Amphenol<br>Part No. |
|------|-----------------------------------------|---------------------|---------------------------|----------------------|---------|--------|---------|----------------------|
|      |                                         |                     |                           |                      | 1       | 25     | 100     |                      |
| 11   | Panel Receptacle (Solder)               | —                   | UG-290A                   | ARF1062-ND           | 7.38    | 94.75  | 330.00  | 31-203               |
|      | Panel Receptacle (Solder)               | —                   | —                         | ARFX1062-ND*         | 3.82    | 49.00  | 171.00  | 31-203-RFX           |
| 12   | Bulkhead Recept. Isolated (Solder)      | —                   | IBM 925390                | ARF1063-ND           | 5.81    | 74.50  | 260.00  | 31-10                |
|      | Bulkhead Recept. Isolated (Solder)      | —                   | —                         | ARFX1063-ND*         | 4.11    | 52.75  | 184.00  | 31-10-RFX            |
|      | Bulkhead Isolated Recept.               | —                   | —                         | ARF1121-ND           | 6.13    | 78.75  | 274.00  | 31-10-75             |
|      | Bulkhead Recept. Pressurized            | —                   | UG-625B                   | ARF1134-ND           | 2.99    | 38.25  | 133.00  | 31-236               |
|      | Bulkhead Recept.                        | —                   | UG-1094/U                 | ARF1064-ND           | 2.69    | 34.50  | 121.00  | 31-221               |
|      | Bulkhead Recept. (Solder)               | —                   | —                         | ARFX1064-ND*         | 1.62    | 21.00  | 75.00   | 31-221-RFX           |
| 13   | Bulkhead Recept.                        | —                   | UG-1094A                  | ARF1131-ND           | 3.18    | 41.00  | 142.00  | 31-2221              |
|      | Bulkhead Recept.                        | —                   | —                         | ARF1149-ND           | 7.61    | 97.50  | 340.00  | 31-70018             |
|      | Bulkhead Recept. Pressurized            | —                   | UG-657                    | ARF1122-ND           | 6.10    | 78.25  | 273.00  | 31-102               |
|      | Bulkhead Recept. Pressurized            | —                   | UG-912                    | ARF1136-ND           | 13.80   | 177.25 | 617.00  | 31-238               |
| 14   | Angle Bulkhead Recept.                  | —                   | UG-1098                   | ARF1130-ND           | 38.06   | 488.50 | 1701.00 | 31-222               |
|      | Rt. Angle Bulkhead Recept.              | —                   | —                         | ARF1065-ND           | 5.94    | 76.25  | 266.00  | 31-5431              |
|      | Rt. Ang. Bulkhead Recept. With Hardware | —                   | —                         | ARF1065NW-ND         | 7.58    | 96.75  | 336.00  | 31-5431-2010         |
| 15   | Rt. Angle Bulkhead Recept.              | 75Ω                 | —                         | ARF1177-ND           | 5.94    | 76.25  | 266.00  | 31-71047-1010        |
|      | Rt. Angle Bulkhead Recept.              | 50Ω                 | —                         | ARF1178-ND           | 6.20    | 79.50  | 277.00  | 31-5640-1010         |
|      | Rt. Angle Bulkhead Recept. Metal        | 75Ω                 | —                         | ARF1179-ND           | 6.20    | 79.50  | 277.00  | 31-71043-1010        |
|      | Rt. Angle Bulkhead Recept. Low Profile  | 50Ω                 | —                         | ARF1180-ND           | 5.94    | 76.25  | 266.00  | 31-5486-1010         |
| 16   | Receptacle Vertical PC                  | —                   | —                         | ARF1066-ND           | 6.73    | 86.25  | 301.00  | 31-5329              |
| 17   | Shield Grounding Lug                    | —                   | —                         | ARF1067-ND           | .62     | 8.00   | 28.00   | 31-759               |
| 18   | Grounding Lug                           | —                   | —                         | ARF1068-ND           | .59     | 7.75   | 26.00   | 31-10152             |
|      | Straight/Jack-Jack                      | —                   | UG-914/U                  | ARF1069-ND           | 5.64    | 72.25  | 252.00  | 31-219               |
| 19   | Straight/Jack-Jack                      | —                   | —                         | ARFX1069-ND*         | 2.58    | 34.00  | 116.00  | 31-219-RFX           |
|      | Straight/Jack-Jack                      | 75Ω                 | —                         | ARF1150-ND           | 6.27    | 80.25  | 280.00  | 31-70019             |
| 20   | Straight/Plug-Plug                      | —                   | UG-491A/U                 | ARF1070-ND           | 9.75    | 125.25 | 436.00  | 31-218               |
|      | Straight/Plug-Plug                      | —                   | —                         | ARFX1070-ND*         | 3.18    | 40.75  | 142.00  | 31-218-RFX           |
|      | Angle/Jack-Plug                         | —                   | UG-306/U                  | ARF1071-ND           | 13.98   | 179.50 | 624.00  | 31-9                 |
| 21   | Angle/Jack-Plug                         | —                   | —                         | ARFX1071-ND*         | 4.50    | 66.50  | 215.00  | 31-9-RFX             |
|      | Angle/Jack-Plug                         | —                   | UG-306A                   | ARF1128-ND           | 15.25   | 195.75 | 682.00  | 31-209               |
| 22   | Panel/Jack-Jack                         | —                   | UG-414                    | ARF1154-ND           | 13.27   | 170.50 | 593.00  | 47000                |
|      | Bulkhead/Jack-Jack, Gasketed            | 50Ω                 | —                         | ARFX1130-ND*         | 4.08    | 52.25  | 193.00  | 31-220G-RFX          |
|      | Bulkhead/Jack-Jack (Sealed)             | 50Ω                 | UG-492A                   | ARF1129-ND           | 9.61    | 123.25 | 430.00  | 31-220H              |
|      | Bulkhead/Jack-Jack, Non-Gasketed        | 50Ω                 | —                         | ARF1072-ND           | 8.33    | 106.75 | 372.00  | 31-220N              |
|      | Bulkhead/Jack-Jack                      | —                   | —                         | ARFX1072-ND*         | 3.74    | 48.50  | 178.00  | 31-220N-RFX          |
|      | Bulkhead/Jack-Jack (Sealed)             | —                   | UG-492D                   | ARF1140-ND           | 12.26   | 157.25 | 548.00  | 31-3220              |
|      | Bulkhead/Jack-Jack, Gasketed            | 75Ω                 | —                         | ARF1151-ND           | 17.55   | 225.25 | 784.00  | 31-70020             |
| 24   | Bulkhead/Jack-Jack (Ins.)               | —                   | —                         | ARF1073-ND           | 13.51   | 173.50 | 604.00  | 31-4803              |
|      | Tee/Jack-Plug-Jack                      | —                   | UG-274                    | ARF1152-ND           | 13.26   | 170.25 | 592.00  | 31-8                 |
| 25   | Tee/Jack-Plug-Jack                      | 50Ω                 | UG-274A/U                 | ARF1074-ND           | 11.03   | 141.25 | 492.00  | 31-208               |
|      | Tee/Jack-Plug-Jack                      | 50Ω                 | —                         | ARFX1074-ND*         | 4.69    | 60.00  | 209.00  | 31-208-RFX           |
|      | Res. Cap, 50 Ohm                        | —                   | —                         | ARF1075-ND           | 16.18   | 207.50 | 723.00  | 46650-51             |
|      | Res. Cap, 50 Ohm                        | —                   | —                         | ARFX1075-ND*         | 2.59    | 33.25  | 116.00  | 46650-51-RFX         |
|      | Res. Cap, 75 Ohm                        | —                   | —                         | ARFX1076-ND*         | 2.59    | 33.25  | 116.00  | 46650-75-RFX         |
|      | Res. Cap, 93 Ohm                        | —                   | —                         | ARFX1077-ND*         | 2.59    | 33.25  | 116.00  | 46650-93-RFX         |
| 27   | Res. Cap & Chain, 50 Ohm                | —                   | —                         | ARF1078-ND           | 16.70   | 214.25 | 746.00  | 35650-50             |
|      | Res. Cap & Chain, 75 Ohm                | —                   | —                         | ARF1079-ND           | 16.70   | 214.25 | 746.00  | 35650-75             |

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1-800-344-4539

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### UHF Coaxial Connectors

| Fig. | Description              | Cable Group<br>RG/U        | Military<br>Part No. | Digi-Key<br>Part No. | 1     | Pricing<br>25 | 100    | Amphenol<br>Part No. |
|------|--------------------------|----------------------------|----------------------|----------------------|-------|---------------|--------|----------------------|
| 1    | Plug                     | 8, 9, 11, 13,<br>213, 214, | PL-259/U             | ARF1000-ND           | 2.53  | 32.50         | 113.00 | 83-1SP-1050          |
| 1    | Plug (TFF Insul.)        | 59, 62, 140, 210           | PL-259               | ARF1001-ND           | 4.20  | 53.75         | 187.00 | 83-822               |
| 1    | Plug (UG Standard)       | 59, 62, 140, 210           | —                    | ARF1166-ND           | 4.72  | 60.75         | 211.00 | 83-750               |
| 2    | Plug                     | 58, 141                    | —                    | ARF1002-ND           | 3.97  | 51.00         | 177.00 | 83-58FCP             |
| 2    | Plug (Crimp)             | 58, 141, 142               | —                    | ARFX1002-ND*         | 2.78  | 36.00         | 129.00 | 83-58FCP-RFX         |
| 3    | Plug (Crimp)             | 58, 141                    | —                    | ARF1165-ND           | 4.91  | 63.00         | 219.00 | 83-58SP              |
| 4    | Reducing Adapter         | 55, 58, 141, 142           | UG-175/U             | ARF1003-ND           | .82   | 10.50         | 37.00  | 83-185               |
| 4    | Reducing Adapter         | 58, 141, 142               | UG-175               | ARFX1003-ND*         | .45   | 5.95          | 23.00  | 83-185-RFX           |
| 4    | Reducing Adapter         | 59, 62, 71, 140, 210       | UG-176/U             | ARF1004-ND           | .79   | 10.00         | 35.00  | 83-168               |
| 4    | Reducing Adapter         | 59, 62, 71, 140, 210       | UG-176               | ARFX1004-ND*         | .45   | 6.00          | 23.00  | 83-168-RFX           |
| 5    | Panel Receptacle         | —                          | SO-239/U             | ARF1005-ND           | 2.92  | 37.50         | 131.00 | 83-1R                |
| 5    | Panel Receptacle         | —                          | SO-239               | ARFX1005-ND*         | 2.68  | 34.25         | 121.00 | 83-1R-RFX            |
| 5    | Panel Mount (TFF Insul.) | —                          | SO-239/A             | ARF1168-ND           | 5.48  | 70.25         | 245.00 | 83-798               |
| 6    | Panel Mount Hood         | 58, 141                    | UG-177               | ARF1167-ND           | 2.69  | 34.50         | 121.00 | 83-765               |
| 7    | Bulkhead Receptacle      | —                          | —                    | ARF1006-ND           | 9.71  | 124.75        | 434.00 | 83-875-1002          |
| 8    | Bulkhead Receptacle      | —                          | —                    | ARF1007-ND           | 3.51  | 45.00         | 157.00 | 83-878               |
| 8    | Bulkhead Receptacle      | —                          | —                    | ARFX1007-ND*         | 3.22  | 41.25         | 144.00 | 83-878-RFX           |
| 9    | Straight/Jack-Jack       | —                          | PL-258/U             | ARF1008-ND           | 4.46  | 57.25         | 200.00 | 83-1J                |
| 10   | Bulkhead/Jack-Jack       | —                          | UG-363/U             | ARF1009-ND           | 13.56 | 187.50        | 719.00 | 83-1F                |
| 11   | Angle/Jack-Plug          | —                          | UG-646/U             | ARF1010-ND           | 7.74  | 134.75        | 448.00 | 83-1AP               |
| 12   | Teel/Jack-Plug-Jack      | —                          | M-358                | ARF1011-ND           | 11.28 | 153.25        | 579.00 | 83-1T                |

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### Mini UHF Connectors

| Fig. | Description   | Cable Group<br>RG/U | Digi-Key<br>Part No. | 1    | Pricing<br>25 | 100    | Amphenol<br>Part No. |
|------|---------------|---------------------|----------------------|------|---------------|--------|----------------------|
| 13   | Plug (Crimp)* | 58                  | ARF1092-ND           | 2.37 | 30.50         | 105.00 | 81-115N-1000         |
| 14   | Jack (Crimp)* | 58                  | ARF1093-ND           | 4.13 | 53.00         | 184.00 | 81-116               |

\* Crimp tools are listed below.

### Between Series Adapters

| Fig. | Description          | Military<br>Part No. | Digi-Key<br>Part No. | 1     | Pricing<br>25 | 100     | Amphenol<br>Part No. |
|------|----------------------|----------------------|----------------------|-------|---------------|---------|----------------------|
| 15   | BNC Jack to N Plug   | UG-201A/U            | ARF1096-ND           | 12.20 | 156.50        | 545.00  | 31-216               |
| 15   | BNC Jack to N Plug   | UG-201A/U            | ARFX1096-ND*         | 10.29 | 132.25        | 460.00  | 31-216-RFX           |
| 16   | BNC Jack to TNC Plug | —                    | ARF1098-ND           | 29.29 | 376.00        | 1309.00 | 79675                |
| 20   | BNC Jack to UHF Plug | UG-273/U             | ARF1099-ND           | 13.25 | 170.25        | 592.00  | 31-28                |
| 20   | BNC Jack to UHF Plug | UG-273/U             | ARFX1099-ND*         | 12.14 | 155.75        | 543.00  | 31-28-RFX            |
| 21   | UHF Jack to RCA Plug | —                    | ARF1101-ND           | 8.95  | 192.43        | 608.60  | 83-10                |
| 17   | BNC Plug to N Jack   | UG-349A/U            | ARF1102-ND           | 14.63 | 187.75        | 654.00  | 31-217               |
| 17   | BNC Plug to N Jack   | UG-349A/U            | ARFX1102-ND*         | 13.91 | 178.75        | 622.00  | 31-217-RFX           |
| 22   | BNC Plug to SMA Jack | —                    | ARF1103-ND           | 45.05 | 783.50        | 2725.01 | 901-165              |
| 18   | BNC Plug to TNC Jack | —                    | ARF1104-ND           | 35.42 | 454.75        | 1583.00 | 79025                |
| 19   | BNC Plug to UHF Jack | UG-255/U             | ARF1105-ND           | 12.89 | 165.50        | 576.00  | 2900                 |
| 23   | N Plug to SMA Jack   | —                    | ARF1106-ND           | 60.92 | 1059.50       | 3685.01 | 901-294              |
| 24   | N Plug to UHF Jack   | UG-146/U             | ARF1107-ND           | 17.85 | 229.00        | 797.00  | 4400                 |

\* RFX adapters.

### ECONOHX™ Crimp Tools and Dies

| Fig.                          | Description                                                                      | Digi-Key<br>Part No. | Price<br>Each | Amphenol<br>Part No. |
|-------------------------------|----------------------------------------------------------------------------------|----------------------|---------------|----------------------|
| <i>CTL Series Crimp Tools</i> |                                                                                  |                      |               |                      |
| 25                            | Crimp Tool – RG 58, 59, 62, Plenum 59, 62                                        | ARF1116-ND†          | 47.27         | CTL-1                |
| 25                            | Crimp Tool – RG 174, Belden 8281                                                 | ARF1117-ND†          | 47.27         | CTL-2                |
| 25                            | Crimp Tool – RG 58, 8, 213                                                       | ARF1118-ND†          | 47.27         | CTL-3                |
| 25                            | Crimp Tool – Belden 8227, IBM 7362211                                            | ARF1119-ND†          | 47.27         | CTL-4                |
| 25                            | Crimp Tool – RG 55, 58, 59, 62, 140, 141, 142, 210, 223, 303, 400, Plenum 59, 62 | ARF1183-ND†          | 47.27         | CTL-5                |
| <i>Crimp Tool and Dies</i>    |                                                                                  |                      |               |                      |
| 25                            | Tool Handle without Dies                                                         | ARF1108-ND           | 92.51         | 227-987              |
| 26                            | Crimp Die Set – Twin AX                                                          | ARF1110-ND           | 72.55         | 227-1417             |
| 26                            | Crimp Die Set – BNC, TNC                                                         | ARF1111-ND           | 56.55         | 227-1418             |
| 26                            | Crimp Die Set – RG 58, 59                                                        | ARF1112-ND           | 56.55         | 227-1419             |
| 26                            | Crimp Die Set – “N” Type                                                         | ARF1113-ND           | 56.55         | 227-1420             |

† CTL Series crimp tools are sold complete as a tool handle with die set included.

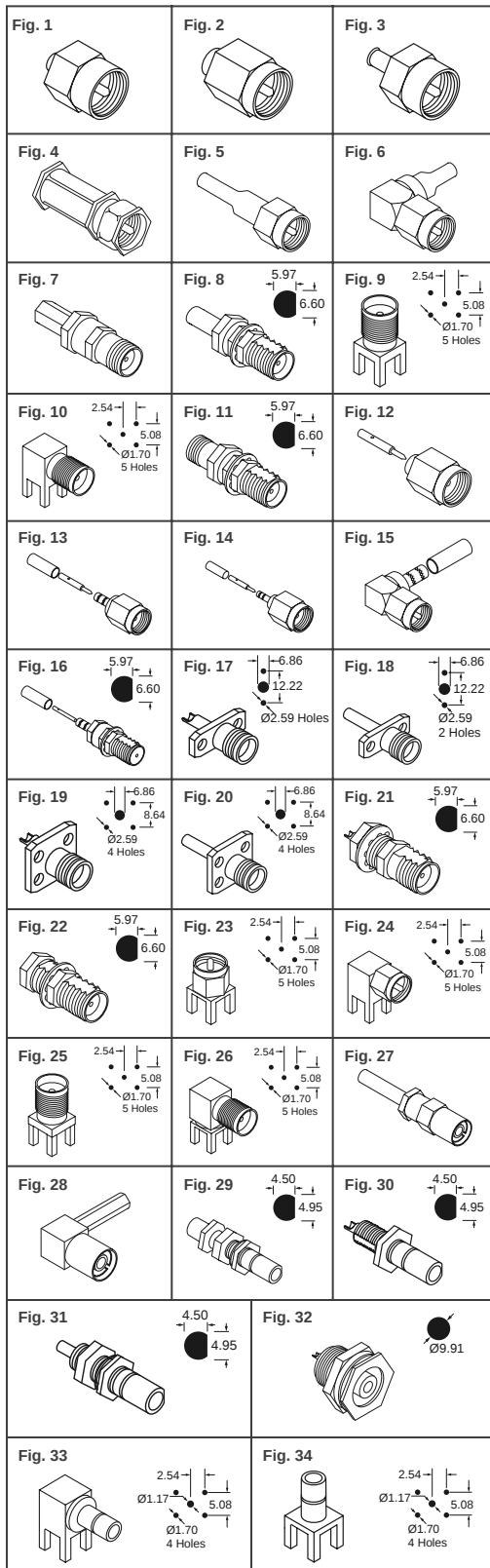
### Weidmüller Crimp Tools Paladin Tools 1300 Series Crimp Tool and Dies

| Fig. | Description                                           | Digi-Key<br>Part No. | Price<br>Each | Paladin<br>Part No. |
|------|-------------------------------------------------------|----------------------|---------------|---------------------|
| 25   | Crimp Tool – Frame Only – without Dies                | PAL1302-ND†          | 41.17         | PA1302              |
| 26   | Crimp Die Set – RG/U Cable 58, 59, 62A                | PAL2034-ND           | 31.60         | PA2034              |
| 26   | Crimp Die Set – RG/U Cable RG8, 213, 216              | PAL2039-ND           | 31.60         | PA2039              |
| —    | (2) Die Screws – EZI Change for PAL 1302-ND           | PAL2303-ND           | 5.98          | PA2303              |
| 26   | Crimp Die Set – RG58/174, Both 50/75 Ohm Center Pins  | PA2046-ND            | 19.48         | PA2046              |
| 26   | Crimp Die Set – RG59/8281, Both 50/75 Ohm Center Pins | PA2047-ND            | 19.48         | PA2047              |
| 26   | Die Set for AMP BNC/TNC RG58                          | PA2027-ND            | 19.48         | PA2027              |
| 26   | Die Set for AMP BNC/TNC RG59/62AU                     | PA2028-ND            | 19.48         | PA2028              |

### 1600 Series Crimp Tool and Dies

| Fig. | Description                              | Connector Series        | Digi-Key<br>Part No. | Price<br>Each | Paladin<br>Part No. |
|------|------------------------------------------|-------------------------|----------------------|---------------|---------------------|
| 25   | Crimp Tool – Frame Only – without Dies   |                         | PAL1600-ND†          | 78.73         | PA1600              |
| 26   | Crimp Die Set – Combination RG 58, 59/62 | BNC, TNC, UHF, MHV, SMA | PAL2005-ND           | 56.00         | PA2005              |
| 26   | Crimp Die Set – RG/U Cable 59, 62AU      | BNC, TNC, UHF, MHV, SMA | PAL2002-ND           | 56.00         | PA2002              |
| 26   | Crimp Die Set – RG/U Cable Belden 8281   | BNC, TNC, UHF, MHV, SMA | PAL2009-ND           | 56.00         | PA2009              |
| 26   | Crimp Die Set – Dual Crimp RG58          | BNC, TNC                | PA2001-ND            | 35.98         | PA2001              |
| 26   | Crimp Die Set – Dual Crimp RG59          | BNC, TNC                | PA2003-ND            | 35.98         | PA2003              |

† Must Order Die Separately



## SMA Coaxial Connectors

| Fig. | Description                                     | Cable Group<br>RG/U               | Plating           | Cable Attachment<br>Outer / Inner | Digi-Key<br>Part No. | Pricing<br>1 25 100  | Amphenol<br>Part No. |
|------|-------------------------------------------------|-----------------------------------|-------------------|-----------------------------------|----------------------|----------------------|----------------------|
| 1    | Plug, Straight                                  | .085" (2.2mm)<br>RG-405 (M17/133) | Passivated<br>Nut | Solder Plugable                   | ARF1184-ND           | 4.91 85.50 297.00    | 901-9723             |
| 2    | Plug, Straight                                  | .141" (3.6mm)<br>RG-402 (M17/130) | Gold Nut          | Solder Plugable                   | ARF1185-ND           | 5.17 90.00 313.00    | 901-9808             |
| 3    | Plug, Straight                                  | .085" (2.2mm)<br>RG-405 (M17/133) | Passivated<br>Nut | Solder Plugable                   | ARF1186-ND           | 5.35 93.00 324.00    | 901-9805-HP          |
| 4    | Plug, Straight                                  | 55, 58, 141, 142, 223<br>174, 316 | —                 | Clamp Solder                      | ARF1187-ND*          | 31.95 555.50 1932.00 | 901-103              |
| 5    | Plug, Straight                                  | 558, 1428, 223, 400               | Gold              | Crimp Solder                      | ARF1188-ND*          | 28.97 503.75 1752.00 | 901-128-11           |
| 5    | Plug, Straight                                  | 558, 1428, 223, 400               | Passivated        | Crimp Solder                      | ARF1189-ND           | 7.12 123.75 430.00   | 901-9511-1           |
| 5    | Plug, Straight                                  | 174, 179, 187, 188, 316           | Gold              | Crimp Solder                      | ARF1190-ND           | 5.39 93.75 326.00    | 901-9511-1SF         |
| 5    | Plug, Straight                                  | 174, 179, 187, 188, 316           | Passivated        | Crimp Solder                      | ARF1191-ND           | 6.79 118.00 411.00   | 901-9511-3           |
| 5    | Plug, Straight                                  | 174, 179, 187, 188, 316           | Passivated        | Crimp Solder                      | ARF1192-ND           | 5.59 97.25 338.00    | 901-9511-3SF         |
| 5    | Plug, Straight                                  | Dbl. Braid RG-188, 316            | Passivated        | Crimp Solder                      | ARF1193-ND           | 6.16 107.00 372.00   | 901-9511-12SF        |
| 6    | Plug, Right Angle                               | 55, 141, 142, 223                 | Gold              | Crimp Solder                      | ARF1194-ND           | 10.43 181.50 631.00  | 901-9531-1           |
| 6    | Plug, Right Angle                               | SF 1428, Times AA-2423            | Passivated        | Crimp Solder                      | ARF1195-ND           | 7.03 122.25 425.00   | 901-9531-1SF         |
| 6    | Plug, Right Angle                               | 174, 179, 187, 188, 316           | Gold              | Crimp Solder                      | ARF1196-ND           | 10.87 189.00 658.00  | 901-9531-3           |
| 6    | Plug, Right Angle                               | 174, 179, 187, 188, 316           | Passivated        | Crimp Solder                      | ARF1197-ND           | 10.73 122.25 425.00  | 901-9531-3SF         |
| 6    | Plug, Right Angle                               | Double Braid RG-316               | Gold              | Crimp Solder                      | ARF1198-ND           | 11.29 194.75 683.00  | 901-9531-12          |
| 6    | Plug, Right Angle                               | Double Braid RG-316               | Passivated        | Crimp Solder                      | ARF1199-ND           | 7.27 126.50 440.00   | 901-9531-12SF        |
| 7    | Jacks                                           | 174, 179, 187, 188, 316           | Gold              | Crimp Solder                      | ARF1200-ND           | 24.38 424.00 1475.00 | 901-9602-3           |
| 7    | Jacks                                           | 174, 179, 187, 188, 316           | Passivated        | Crimp Solder                      | ARF1201-ND           | 19.97 347.25 1208.00 | 901-9602-3SF         |
| 8    | Jacks, Bulkhead                                 | 55, 142, 223, 400                 | Passivated        | Crimp Solder                      | ARF1202-ND           | 14.01 243.75 848.00  | 901-9610-1SF         |
| 8    | Jacks, Bulkhead                                 | 174, 179, 187, 188, 316           | Gold              | Crimp Solder                      | ARF1203-ND           | 11.40 194.75 677.00  | 901-9610-3           |
| 8    | Jacks, Bulkhead                                 | 174, 179, 187, 188, 316           | Passivated        | Crimp Solder                      | ARF1204-ND           | 8.75 152.25 530.00   | 901-9610-3SF         |
| 9    | Jacks, Printed Circuit Board, Panel             | —                                 | Gold              | —                                 | ARF1205-ND           | 8.10 140.75 490.00   | 901-144              |
| 10   | Jacks, Printed Circuit Board, Angle             | —                                 | Gold              | —                                 | ARF1206-ND           | 10.11 175.75 611.00  | 901-143              |
| 11   | Adapters, Bulkhead Jack-Jack, Front or Rear Mt. | —                                 | Gold              | —                                 | ARF1207-ND           | 13.01 226.25 787.00  | 901-9209-A           |
| 11   | Adapters, Bulkhead Jack-Jack, Front or Rear Mt. | —                                 | Passivated        | —                                 | ARF1208-ND           | 11.37 197.75 688.00  | 901-9209-ASF         |

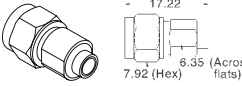
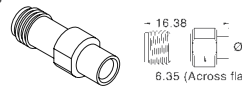
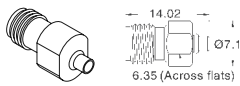
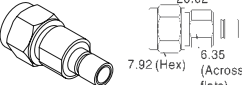
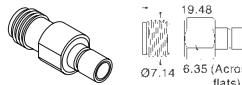
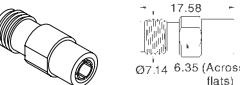
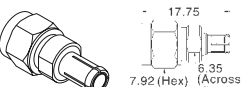
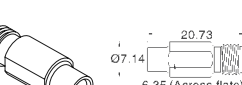
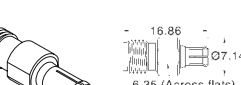
\* Safety wire holes.

## SMA Brass Coaxial Connectors

| Fig. | Description                | Cable Group<br>RG/U | Plating | Cable Attachment<br>Outer / Inner | Digi-Key<br>Part No. | Pricing<br>1 25 100 | Amphenol<br>Part No. |
|------|----------------------------|---------------------|---------|-----------------------------------|----------------------|---------------------|----------------------|
| 12   | Plug, Straight             | .141" (3.6mm) S/R   | Gold    | Solder Solder                     | ARF1209-ND           | 3.10 54.00 188.00   | 901-9868             |
| 12   | Plug, Straight             | .085" (2.16mm) S/R  | Gold    | Solder Solder                     | ARF1210-ND           | 3.10 54.00 188.00   | 901-9867             |
| 13   | Plug, Straight             | 58                  | Gold    | Crimp Solder                      | ARF1211-ND           | 4.65 80.75 281.00   | 901-9870             |
| 13   | Plug, Straight             | 141, 223            | Gold    | Crimp Solder                      | ARF1212-ND           | 4.65 80.75 281.00   | 901-9871             |
| 13   | Plug, Straight             | 58                  | Nickel  | Crimp Solder                      | ARFX1213-ND NEW!     | 1.79 40.50 147.00   | 901-9876-RFX         |
| 14   | Plug, Straight             | 174, 188, 316       | Nickel  | Crimp Solder                      | ARFX1214-ND NEW!     | 1.79 40.50 147.00   | 901-9877-RFX         |
| 14   | Plug, Straight             | 174, 188, 316       | Gold    | Crimp Solder                      | ARF1215-ND           | 4.63 80.50 280.00   | 901-9916             |
| 15   | Plug, Right Angle          | 174, 188, 316       | Gold    | Crimp Solder                      | ARF1216-ND           | 7.84 136.25 474.00  | 901-9872             |
| 15   | Plug, Right Angle          | 58                  | Gold    | Crimp Solder                      | ARF1217-ND           | 8.25 143.50 499.00  | 901-9873             |
| 15   | Plug, Right Angle          | 141, 223            | Gold    | Crimp Solder                      | ARF1218-ND           | 7.84 136.25 474.00  | 901-9874             |
| 15   | Plug, Right Angle          | 58                  | Nickel  | Crimp Solder                      | ARF1219-ND           | 5.34 110.56 411.75  | 901-9880             |
| 15   | Plug, Right Angle          | 58                  | Nickel  | Crimp Solder                      | ARFX1219-ND NEW!     | 5.64 104.65 273.00  | 901-9880-RFX         |
| 15   | Plug, Right Angle          | 174, 188, 316       | Nickel  | Crimp Solder                      | ARFX1220-ND NEW!     | 3.32 75.25 273.00   | 901-9881-RFX         |
| 16   | Bulkhead Jack              | 174, 188, 316       | Gold    | Crimp Solder                      | ARF1221-ND           | 7.57 131.75 458.00  | 901-9875             |
| 16   | Bulkhead Jack              | 174, 188, 316       | Nickel  | Crimp Solder                      | ARF1222-ND           | 7.56 154.69 550.00  | 901-9879             |
| 16   | Bulkhead Jack              | 174, 188, 316       | Nickel  | Crimp Solder                      | ARFX1222-ND NEW!     | 7.84 154.96 357.00  | 901-9879-RFX         |
| 17   | Panel Receptacle, Jack     | —                   | Nickel  | —                                 | ARFX1223-ND NEW!     | 5.21 96.60 253.00   | 901-9893-RFX         |
| 18   | Panel Receptacle, Jack     | —                   | Nickel  | —                                 | ARF1224-ND           | 7.59 172.50 552.00  | 901-9891             |
| 18   | Panel Receptacle, Jack     | —                   | Nickel  | —                                 | ARFX1224-ND NEW!     | 8.09 146.81 368.00  | 901-9891-RFX         |
| 19   | Panel Receptacle, Jack     | —                   | Nickel  | —                                 | ARFX1225-ND NEW!     | 3.13 71.00 257.00   | 901-9892-RFX         |
| 20   | Panel Receptacle, Jack     | —                   | Nickel  | —                                 | ARFX1226-ND NEW!     | 6.50 113.25 393.00  | 901-9887-RFX         |
| 21   | Bulkhead Recept. Front Mt. | —                   | Nickel  | —                                 | ARFX1227-ND NEW!     | 2.60 59.00 214.00   | 901-9889-RFX         |
| 22   | Bulkhead Recept. Rear Mt.  | —                   | Nickel  | —                                 | ARFX1228-ND NEW!     | 2.60 59.00 214.00   | 901-9890-RFX         |
| 23   | Plug Straight PCB Recep.   | —                   | Gold    | —                                 | ARFX1229-ND NEW!     | 2.36 53.50 194.00   | 901-9895-RFX         |
| 24   | Plug Rt. Angle PCB Recep.  | —                   | Gold    | —                                 | ARF1230-ND           | 8.44 181.88 582.00  | 901-9894             |
| 24   | Plug Rt. Angle PCB Recep.  | —                   | Gold    | —                                 | ARFX1230-ND NEW!     | 8.59 159.28 391.00  | 901-9894-RFX         |
| 25   | Receptacle, Straight PCB   | —                   | Gold    | —                                 | ARFX1231-ND NEW!     | 2.14 48.50 176.00   | 901-144-RFX          |
| 26   | Recept., Right Angle PCB   | —                   | Gold    | —                                 | ARFX1232-ND NEW!     | 6.23 105.53 291.00  | 901-143-RFX          |

## SMB Coaxial Connectors

| Fig. | Description                                       | Cable Group<br>RG/U        | Plating                                            | Cable Attachment<br>Outer / Inner |        | Digi-Key<br>Part No. | 1    | Pricing<br>25 | 100    | Amphenol<br>Part No. |
|------|---------------------------------------------------|----------------------------|----------------------------------------------------|-----------------------------------|--------|----------------------|------|---------------|--------|----------------------|
| 27   | Plug, Straight                                    | RG-174, 179, 187,188, 316  | Nickel                                             | Crimp                             | Solder | ARF1233-ND           | 5.57 | 96.75         | 337.00 | 903-370P-51S         |
| 28   | Plug, Right Angle                                 | RG-174, 179, 187,188, 316  | Gold                                               | Crimp                             | Solder | ARF1234-ND           | 3.93 | 68.25         | 238.00 | 903-289P-51A2        |
| 28   | Plug, Right Angle                                 | RG-174, 179, 187,188, 316  | Nickel                                             | Crimp                             | Solder | ARF1235-ND           | 3.43 | 59.50         | 207.00 | 903-367P-51A2        |
| 28   | Plug, Right Angle                                 | RG-178, 196                | Gold                                               | Crimp                             | Solder | ARF1236-ND           | 4.28 | 74.50         | 259.00 | 903-291P-51A1        |
| 28   | Plug, Right Angle                                 | RG-178, 196                | Nickel                                             | Crimp                             | Solder | ARF1237-ND           | 3.82 | 66.50         | 231.00 | 903-368P-51A1        |
| 29   | Bulkhead Jack                                     | RG-174, 179, 187, 188, 316 | Nickel                                             | Crimp                             | Solder | ARF1238-ND           | 6.05 | 105.25        | 366.00 | 903-505J-51S         |
| 29   | Bulkhead Jack                                     | Dbl. Shield 316            | Nickel                                             | Crimp                             | Solder | ARF1239-ND           | 5.83 | 101.25        | 353.00 | 903-505J-51S1        |
| Fig. | Description                                       |                            | Plating                                            |                                   |        | Digi-Key<br>Part No. | 1    | Pricing<br>25 | 100    | Amphenol<br>Part No. |
| 30   | Bulkhead, Recept. Front Mount Solder Cup Terminal |                            | Gold                                               |                                   |        | ARF1240-ND           | 5.20 | 90.25         | 314.00 | 903-406J-51R         |
| 31   | Bulkhead, Recept. Front Mount Blunt Post Terminal |                            | Gold                                               |                                   |        | ARF1241-ND           | 4.28 | 74.50         | 259.00 | 903-402J-51R         |
| 32   | Bulkhead Jack, Recept. Recessed, Solder Cup Term. |                            | Gold                                               |                                   |        | ARF1242-ND           | 8.25 | 143.50        | 499.00 | 903-407J-51R         |
| 33   | Jack Right Angle                                  |                            | Tin Lead (Body & Legs)<br>Gold (Interface & Term.) |                                   |        | ARF1243-ND           | 5.85 | 101.75        | 354.00 | 903-373J-51A         |
| 34   | Jack Straight                                     |                            | Gold                                               |                                   |        | ARF1244-ND           | 5.02 | 87.25         | 304.00 | 903-499J-51P2        |

| <b>Fig. 1</b><br>  | <b>Fig. 2</b><br>  | <b>Fig. 3</b><br>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | <b>Fig. 4</b><br> |                   |             |                  |                   |                   |            |                  |   |                       |            |     |         |       |        |              |   |                       |            |     |         |       |        |              |   |                       |            |     |         |       |        |              |   |                       |            |     |         |       |        |              |   |                      |            |     |         |       |        |              |   |                      |            |     |         |       |        |              |   |                      |            |     |         |       |        |              |   |                      |            |     |         |       |        |              |   |                      |            |     |         |       |        |              |    |                      |            |     |         |       |        |              |    |                      |            |     |         |       |        |              |    |                      |            |     |         |       |        |              |
|-----------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------|-------------------|-------------|------------------|-------------------|-------------------|------------|------------------|---|-----------------------|------------|-----|---------|-------|--------|--------------|---|-----------------------|------------|-----|---------|-------|--------|--------------|---|-----------------------|------------|-----|---------|-------|--------|--------------|---|-----------------------|------------|-----|---------|-------|--------|--------------|---|----------------------|------------|-----|---------|-------|--------|--------------|---|----------------------|------------|-----|---------|-------|--------|--------------|---|----------------------|------------|-----|---------|-------|--------|--------------|---|----------------------|------------|-----|---------|-------|--------|--------------|---|----------------------|------------|-----|---------|-------|--------|--------------|----|----------------------|------------|-----|---------|-------|--------|--------------|----|----------------------|------------|-----|---------|-------|--------|--------------|----|----------------------|------------|-----|---------|-------|--------|--------------|
| <b>Fig. 5</b><br>  | <b>Fig. 6</b><br>  | <b>Fig. 7</b><br>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | <b>Fig. 8</b><br> |                   |             |                  |                   |                   |            |                  |   |                       |            |     |         |       |        |              |   |                       |            |     |         |       |        |              |   |                       |            |     |         |       |        |              |   |                       |            |     |         |       |        |              |   |                      |            |     |         |       |        |              |   |                      |            |     |         |       |        |              |   |                      |            |     |         |       |        |              |   |                      |            |     |         |       |        |              |   |                      |            |     |         |       |        |              |    |                      |            |     |         |       |        |              |    |                      |            |     |         |       |        |              |    |                      |            |     |         |       |        |              |
| <b>Fig. 9</b><br>  | <b>Fig. 10</b><br> | <table><tr><th>Fig.</th><th>Description</th><th>VSWR (GHz)</th><th>Freq. Range (GHz)</th><th>Digi-Key Part No.</th><th>Pricing 10</th><th>Johnson Part No.</th></tr><tr><td>1</td><td>SMA Plug to MMCX Jack</td><td>1.05+0.05f</td><td>0-6</td><td>J617-ND</td><td>36.00</td><td>298.80</td><td>134-1019-151</td></tr><tr><td>2</td><td>SMA Plug to MMCX Plug</td><td>1.05+0.05f</td><td>0-6</td><td>J618-ND</td><td>39.00</td><td>323.70</td><td>134-1019-161</td></tr><tr><td>3</td><td>SMA Jack to MMCX Jack</td><td>1.05+0.05f</td><td>0-6</td><td>J619-ND</td><td>33.00</td><td>273.90</td><td>134-1019-171</td></tr><tr><td>4</td><td>SMA Jack to MMCX Plug</td><td>1.05+0.05f</td><td>0-6</td><td>J620-ND</td><td>36.00</td><td>298.80</td><td>134-1019-181</td></tr><tr><td>5</td><td>SMA Plug to SMB Jack</td><td>1.05+0.01f</td><td>0-4</td><td>J621-ND</td><td>33.00</td><td>273.90</td><td>134-1012-011</td></tr><tr><td>6</td><td>SMA Plug to SMB Plug</td><td>1.05+0.01f</td><td>0-4</td><td>J622-ND</td><td>36.00</td><td>298.80</td><td>134-1012-021</td></tr><tr><td>7</td><td>SMA Jack to SMB Plug</td><td>1.05+0.01f</td><td>0-4</td><td>J623-ND</td><td>29.00</td><td>240.70</td><td>134-1012-031</td></tr><tr><td>8</td><td>SMA Jack to SMB Jack</td><td>1.05+0.01f</td><td>0-4</td><td>J624-ND</td><td>33.00</td><td>273.90</td><td>134-1012-041</td></tr><tr><td>9</td><td>SMA Plug to MCX Jack</td><td>1.03+0.03f</td><td>0-6</td><td>J625-ND</td><td>33.00</td><td>273.90</td><td>134-1018-001</td></tr><tr><td>10</td><td>SMA Plug to MCX Plug</td><td>1.03+0.03f</td><td>0-6</td><td>J626-ND</td><td>36.00</td><td>298.80</td><td>134-1018-011</td></tr><tr><td>11</td><td>SMA Jack to MCX Jack</td><td>1.03+0.03f</td><td>0-6</td><td>J627-ND</td><td>29.00</td><td>240.70</td><td>134-1018-021</td></tr><tr><td>12</td><td>SMA Jack to MCX Plug</td><td>1.03+0.03f</td><td>0-6</td><td>J628-ND</td><td>33.00</td><td>273.90</td><td>134-1018-031</td></tr></table> |                                                                                                      | Fig.              | Description | VSWR (GHz)       | Freq. Range (GHz) | Digi-Key Part No. | Pricing 10 | Johnson Part No. | 1 | SMA Plug to MMCX Jack | 1.05+0.05f | 0-6 | J617-ND | 36.00 | 298.80 | 134-1019-151 | 2 | SMA Plug to MMCX Plug | 1.05+0.05f | 0-6 | J618-ND | 39.00 | 323.70 | 134-1019-161 | 3 | SMA Jack to MMCX Jack | 1.05+0.05f | 0-6 | J619-ND | 33.00 | 273.90 | 134-1019-171 | 4 | SMA Jack to MMCX Plug | 1.05+0.05f | 0-6 | J620-ND | 36.00 | 298.80 | 134-1019-181 | 5 | SMA Plug to SMB Jack | 1.05+0.01f | 0-4 | J621-ND | 33.00 | 273.90 | 134-1012-011 | 6 | SMA Plug to SMB Plug | 1.05+0.01f | 0-4 | J622-ND | 36.00 | 298.80 | 134-1012-021 | 7 | SMA Jack to SMB Plug | 1.05+0.01f | 0-4 | J623-ND | 29.00 | 240.70 | 134-1012-031 | 8 | SMA Jack to SMB Jack | 1.05+0.01f | 0-4 | J624-ND | 33.00 | 273.90 | 134-1012-041 | 9 | SMA Plug to MCX Jack | 1.03+0.03f | 0-6 | J625-ND | 33.00 | 273.90 | 134-1018-001 | 10 | SMA Plug to MCX Plug | 1.03+0.03f | 0-6 | J626-ND | 36.00 | 298.80 | 134-1018-011 | 11 | SMA Jack to MCX Jack | 1.03+0.03f | 0-6 | J627-ND | 29.00 | 240.70 | 134-1018-021 | 12 | SMA Jack to MCX Plug | 1.03+0.03f | 0-6 | J628-ND | 33.00 | 273.90 | 134-1018-031 |
| Fig.                                                                                                | Description                                                                                         | VSWR (GHz)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Freq. Range (GHz)                                                                                    | Digi-Key Part No. | Pricing 10  | Johnson Part No. |                   |                   |            |                  |   |                       |            |     |         |       |        |              |   |                       |            |     |         |       |        |              |   |                       |            |     |         |       |        |              |   |                       |            |     |         |       |        |              |   |                      |            |     |         |       |        |              |   |                      |            |     |         |       |        |              |   |                      |            |     |         |       |        |              |   |                      |            |     |         |       |        |              |   |                      |            |     |         |       |        |              |    |                      |            |     |         |       |        |              |    |                      |            |     |         |       |        |              |    |                      |            |     |         |       |        |              |
| 1                                                                                                   | SMA Plug to MMCX Jack                                                                               | 1.05+0.05f                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 0-6                                                                                                  | J617-ND           | 36.00       | 298.80           | 134-1019-151      |                   |            |                  |   |                       |            |     |         |       |        |              |   |                       |            |     |         |       |        |              |   |                       |            |     |         |       |        |              |   |                       |            |     |         |       |        |              |   |                      |            |     |         |       |        |              |   |                      |            |     |         |       |        |              |   |                      |            |     |         |       |        |              |   |                      |            |     |         |       |        |              |   |                      |            |     |         |       |        |              |    |                      |            |     |         |       |        |              |    |                      |            |     |         |       |        |              |    |                      |            |     |         |       |        |              |
| 2                                                                                                   | SMA Plug to MMCX Plug                                                                               | 1.05+0.05f                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 0-6                                                                                                  | J618-ND           | 39.00       | 323.70           | 134-1019-161      |                   |            |                  |   |                       |            |     |         |       |        |              |   |                       |            |     |         |       |        |              |   |                       |            |     |         |       |        |              |   |                       |            |     |         |       |        |              |   |                      |            |     |         |       |        |              |   |                      |            |     |         |       |        |              |   |                      |            |     |         |       |        |              |   |                      |            |     |         |       |        |              |   |                      |            |     |         |       |        |              |    |                      |            |     |         |       |        |              |    |                      |            |     |         |       |        |              |    |                      |            |     |         |       |        |              |
| 3                                                                                                   | SMA Jack to MMCX Jack                                                                               | 1.05+0.05f                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 0-6                                                                                                  | J619-ND           | 33.00       | 273.90           | 134-1019-171      |                   |            |                  |   |                       |            |     |         |       |        |              |   |                       |            |     |         |       |        |              |   |                       |            |     |         |       |        |              |   |                       |            |     |         |       |        |              |   |                      |            |     |         |       |        |              |   |                      |            |     |         |       |        |              |   |                      |            |     |         |       |        |              |   |                      |            |     |         |       |        |              |   |                      |            |     |         |       |        |              |    |                      |            |     |         |       |        |              |    |                      |            |     |         |       |        |              |    |                      |            |     |         |       |        |              |
| 4                                                                                                   | SMA Jack to MMCX Plug                                                                               | 1.05+0.05f                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 0-6                                                                                                  | J620-ND           | 36.00       | 298.80           | 134-1019-181      |                   |            |                  |   |                       |            |     |         |       |        |              |   |                       |            |     |         |       |        |              |   |                       |            |     |         |       |        |              |   |                       |            |     |         |       |        |              |   |                      |            |     |         |       |        |              |   |                      |            |     |         |       |        |              |   |                      |            |     |         |       |        |              |   |                      |            |     |         |       |        |              |   |                      |            |     |         |       |        |              |    |                      |            |     |         |       |        |              |    |                      |            |     |         |       |        |              |    |                      |            |     |         |       |        |              |
| 5                                                                                                   | SMA Plug to SMB Jack                                                                                | 1.05+0.01f                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 0-4                                                                                                  | J621-ND           | 33.00       | 273.90           | 134-1012-011      |                   |            |                  |   |                       |            |     |         |       |        |              |   |                       |            |     |         |       |        |              |   |                       |            |     |         |       |        |              |   |                       |            |     |         |       |        |              |   |                      |            |     |         |       |        |              |   |                      |            |     |         |       |        |              |   |                      |            |     |         |       |        |              |   |                      |            |     |         |       |        |              |   |                      |            |     |         |       |        |              |    |                      |            |     |         |       |        |              |    |                      |            |     |         |       |        |              |    |                      |            |     |         |       |        |              |
| 6                                                                                                   | SMA Plug to SMB Plug                                                                                | 1.05+0.01f                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 0-4                                                                                                  | J622-ND           | 36.00       | 298.80           | 134-1012-021      |                   |            |                  |   |                       |            |     |         |       |        |              |   |                       |            |     |         |       |        |              |   |                       |            |     |         |       |        |              |   |                       |            |     |         |       |        |              |   |                      |            |     |         |       |        |              |   |                      |            |     |         |       |        |              |   |                      |            |     |         |       |        |              |   |                      |            |     |         |       |        |              |   |                      |            |     |         |       |        |              |    |                      |            |     |         |       |        |              |    |                      |            |     |         |       |        |              |    |                      |            |     |         |       |        |              |
| 7                                                                                                   | SMA Jack to SMB Plug                                                                                | 1.05+0.01f                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 0-4                                                                                                  | J623-ND           | 29.00       | 240.70           | 134-1012-031      |                   |            |                  |   |                       |            |     |         |       |        |              |   |                       |            |     |         |       |        |              |   |                       |            |     |         |       |        |              |   |                       |            |     |         |       |        |              |   |                      |            |     |         |       |        |              |   |                      |            |     |         |       |        |              |   |                      |            |     |         |       |        |              |   |                      |            |     |         |       |        |              |   |                      |            |     |         |       |        |              |    |                      |            |     |         |       |        |              |    |                      |            |     |         |       |        |              |    |                      |            |     |         |       |        |              |
| 8                                                                                                   | SMA Jack to SMB Jack                                                                                | 1.05+0.01f                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 0-4                                                                                                  | J624-ND           | 33.00       | 273.90           | 134-1012-041      |                   |            |                  |   |                       |            |     |         |       |        |              |   |                       |            |     |         |       |        |              |   |                       |            |     |         |       |        |              |   |                       |            |     |         |       |        |              |   |                      |            |     |         |       |        |              |   |                      |            |     |         |       |        |              |   |                      |            |     |         |       |        |              |   |                      |            |     |         |       |        |              |   |                      |            |     |         |       |        |              |    |                      |            |     |         |       |        |              |    |                      |            |     |         |       |        |              |    |                      |            |     |         |       |        |              |
| 9                                                                                                   | SMA Plug to MCX Jack                                                                                | 1.03+0.03f                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 0-6                                                                                                  | J625-ND           | 33.00       | 273.90           | 134-1018-001      |                   |            |                  |   |                       |            |     |         |       |        |              |   |                       |            |     |         |       |        |              |   |                       |            |     |         |       |        |              |   |                       |            |     |         |       |        |              |   |                      |            |     |         |       |        |              |   |                      |            |     |         |       |        |              |   |                      |            |     |         |       |        |              |   |                      |            |     |         |       |        |              |   |                      |            |     |         |       |        |              |    |                      |            |     |         |       |        |              |    |                      |            |     |         |       |        |              |    |                      |            |     |         |       |        |              |
| 10                                                                                                  | SMA Plug to MCX Plug                                                                                | 1.03+0.03f                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 0-6                                                                                                  | J626-ND           | 36.00       | 298.80           | 134-1018-011      |                   |            |                  |   |                       |            |     |         |       |        |              |   |                       |            |     |         |       |        |              |   |                       |            |     |         |       |        |              |   |                       |            |     |         |       |        |              |   |                      |            |     |         |       |        |              |   |                      |            |     |         |       |        |              |   |                      |            |     |         |       |        |              |   |                      |            |     |         |       |        |              |   |                      |            |     |         |       |        |              |    |                      |            |     |         |       |        |              |    |                      |            |     |         |       |        |              |    |                      |            |     |         |       |        |              |
| 11                                                                                                  | SMA Jack to MCX Jack                                                                                | 1.03+0.03f                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 0-6                                                                                                  | J627-ND           | 29.00       | 240.70           | 134-1018-021      |                   |            |                  |   |                       |            |     |         |       |        |              |   |                       |            |     |         |       |        |              |   |                       |            |     |         |       |        |              |   |                       |            |     |         |       |        |              |   |                      |            |     |         |       |        |              |   |                      |            |     |         |       |        |              |   |                      |            |     |         |       |        |              |   |                      |            |     |         |       |        |              |   |                      |            |     |         |       |        |              |    |                      |            |     |         |       |        |              |    |                      |            |     |         |       |        |              |    |                      |            |     |         |       |        |              |
| 12                                                                                                  | SMA Jack to MCX Plug                                                                                | 1.03+0.03f                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 0-6                                                                                                  | J628-ND           | 33.00       | 273.90           | 134-1018-031      |                   |            |                  |   |                       |            |     |         |       |        |              |   |                       |            |     |         |       |        |              |   |                       |            |     |         |       |        |              |   |                       |            |     |         |       |        |              |   |                      |            |     |         |       |        |              |   |                      |            |     |         |       |        |              |   |                      |            |     |         |       |        |              |   |                      |            |     |         |       |        |              |   |                      |            |     |         |       |        |              |    |                      |            |     |         |       |        |              |    |                      |            |     |         |       |        |              |    |                      |            |     |         |       |        |              |
| <b>Fig. 11</b><br> | <b>Fig. 12</b><br> |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                      |                   |             |                  |                   |                   |            |                  |   |                       |            |     |         |       |        |              |   |                       |            |     |         |       |        |              |   |                       |            |     |         |       |        |              |   |                       |            |     |         |       |        |              |   |                      |            |     |         |       |        |              |   |                      |            |     |         |       |        |              |   |                      |            |     |         |       |        |              |   |                      |            |     |         |       |        |              |   |                      |            |     |         |       |        |              |    |                      |            |     |         |       |        |              |    |                      |            |     |         |       |        |              |    |                      |            |     |         |       |        |              |

JOHNSON  
Components**RF Connectors**  
**SMA/SMB Type**

|                         |                         |                        |                        |                    |
|-------------------------|-------------------------|------------------------|------------------------|--------------------|
| <b>Fig. 1</b><br>       | <b>Fig. 2</b><br>       | <b>Fig. 3</b><br>      | <b>Fig. 4 NEW!</b><br> | <b>Fig. 5</b><br>  |
| <b>Fig. 6</b><br>       | <b>Fig. 7</b><br>       | <b>Fig. 8 NEW!</b><br> | <b>Fig. 9</b><br>      | <b>Fig. 10</b><br> |
| <b>Fig. 11</b><br>      | <b>Fig. 12 NEW!</b><br> | <b>Fig. 13</b><br>     | <b>Fig. 14</b><br>     | <b>Fig. 15</b><br> |
| <b>Fig. 16</b><br>      | <b>Fig. 17 NEW!</b><br> | <b>Fig. 18</b><br>     | <b>Fig. 19</b><br>     | <b>Fig. 20</b><br> |
| <b>Fig. 21</b><br>      | <b>Fig. 22 NEW!</b><br> | <b>Fig. 23</b><br>     | <b>Fig. 24</b><br>     | <b>Fig. 25</b><br> |
| <b>Fig. 26 NEW!</b><br> | <b>Fig. 27</b><br>      | <b>Fig. 28</b><br>     | <b>Fig. 29</b><br>     | <b>Fig. 30</b><br> |

| Fig.                                              | Type (Desc.)  | Cable Group     | Plating     | Digi-Key Part No. | 1     | Pricing 10 | 50     | Johnson Part No. |
|---------------------------------------------------|---------------|-----------------|-------------|-------------------|-------|------------|--------|------------------|
| <b>SMA Type</b>                                   |               |                 |             |                   |       |            |        |                  |
| 1                                                 | Crimp Crimp   | 2*              | Gold Nickel | J523-ND           | 7.67  | 67.23      | 288.98 | 142-0303-411     |
|                                                   |               | 2*              | Nickel      | J524-ND           | 7.36  | 64.58      | 277.59 | 142-0303-416     |
| 2                                                 | Crimp Crimp   | 2*              | Gold Nickel | J525-ND           | 5.47  | 47.94      | 206.05 | 142-0403-011     |
|                                                   |               | 2*              | Nickel      | J526-ND           | 5.09  | 44.63      | 191.84 | 142-0403-016     |
| 3                                                 | Solder Solder | RG-402          | Gold        | J485-ND           | 1.26  | 11.06      | 47.53  | 142-0694-011     |
|                                                   | Solder Solder | RG-402          | Nickel      | J486-ND           | .87   | 7.67       | 32.95  | 142-0694-016     |
|                                                   | Solder Solder | RG-405          | Gold        | J487-ND           | 3.79  | 33.20      | 142.71 | 142-0699-001     |
|                                                   | Solder Solder | RG-405          | Nickel      | J488-ND           | 3.40  | 29.81      | 128.14 | 142-0699-006     |
| 4                                                 | Crimp         | RG-178/U, 196   | Gold        | J605-ND NEW!      | 5.94  | 52.07      | 223.81 | 142-0402-011     |
|                                                   | Clamp         | 2*              | Gold        | J474-ND           | 9.80  | 85.96      | 369.46 | 142-0203-011     |
|                                                   | Clamp         | 2*              | Nickel      | J475-ND           | 8.95  | 78.52      | 337.49 | 142-0203-016     |
|                                                   | Clamp         | 3**             | Gold        | J480-ND           | 16.78 | 147.12     | 632.35 | 142-0207-011     |
|                                                   | Clamp         | 3**             | Nickel      | J481-ND           | 15.83 | 138.85     | 596.82 | 142-0207-016     |
| 6                                                 | Clamp         | 2*              | Nickel      | J477-ND           | 7.63  | 66.95      | 287.75 | 142-0203-106     |
|                                                   | Clamp         | 3**             | Nickel      | J484-ND           | 8.70  | 76.32      | 328.06 | 142-0207-106     |
| 7                                                 | Crimp         | 2*              | Gold        | J510-ND           | 7.57  | 66.41      | 285.43 | 142-0403-101     |
| 8                                                 | Solder        | .086 Semi-Rigid | Gold        | J606-ND NEW!      | 8.39  | 73.56      | 316.17 | 142-0694-011     |
|                                                   | Solder        | 141 Semi-Rigid  | Gold        | J607-ND NEW!      | 8.39  | 73.56      | 316.17 | 142-0694-101     |
| 9                                                 | Clamp         | 2*              | Gold        | J478-ND           | 11.31 | 99.18      | 426.30 | 142-0103-401     |
| 10                                                | Panel Mt.     | —               | Gold        | J490-ND           | 5.28  | 46.28      | 198.94 | 142-0701-401     |
| 11                                                | Panel Mt.     | —               | Gold        | J489-ND           | 6.33  | 55.49      | 238.51 | 142-0701-411     |
| 12                                                | Solder        | —               | Gold        | J609-ND NEW!      | 12.06 | 105.79     | 454.72 | 142-0701-531     |
| 13                                                | Flange Mt.    | —               | Gold        | J492-ND           | 5.27  | 46.17      | 198.45 | 142-0701-621     |
| 14                                                | Flange Mt.    | —               | Gold        | J493-ND           | 5.27  | 46.17      | 198.45 | 142-0701-631     |
| 15                                                | PC Mt.        | —               | Gold        | J494-ND           | 6.87  | 60.25      | 258.97 | 142-0701-211     |
|                                                   | PC Mt.        | —               | Nickel      | J495-ND           | 6.46  | 56.63      | 243.41 | 142-0701-216     |
| 16                                                | PC Mt.        | —               | Gold        | J500-ND           | 5.34  | 46.80      | 201.15 | 142-0701-201     |
| 17                                                | PC Mt.        | —               | Gold        | J608-ND NEW!      | 5.73  | 50.22      | 215.85 | 142-0701-231     |
|                                                   | PC Mt.        | —               | Gold        | J496-ND           | 11.05 | 96.87      | 416.38 | 142-0701-321     |
|                                                   | PC Mt.        | —               | Nickel      | J497-ND           | 10.38 | 91.00      | 391.14 | 142-0701-326     |
| 19                                                | PC Mt.        | —               | Gold        | J569-ND           | 10.78 | 94.51      | 406.21 | 142-0701-501     |
| 20                                                | PC Mt.        | —               | Gold        | J501-ND           | 7.31  | 64.07      | 275.38 | 142-0701-301     |
| 21                                                | PC Mt.        | —               | Gold        | J502-ND           | 5.69  | 49.93      | 214.62 | 142-0701-801     |
| 22                                                | PC Mt.        | —               | Gold        | J610-ND NEW!      | 7.67  | 67.23      | 288.98 | 142-0701-871     |
| <b>SMB Type</b>                                   |               |                 |             |                   |       |            |        |                  |
| 23                                                | Crimp         | 2*              | Nickel      | J464-ND           | 5.19  | 45.54      | 195.76 | 131-1403-016     |
| 24                                                | Crimp Crimp   | 2*              | Gold Nickel | J465-ND           | 5.14  | 45.12      | 193.92 | 131-1403-101     |
|                                                   |               | 2*              | Nickel      | J466-ND           | 4.31  | 37.79      | 162.44 | 131-1403-116     |
| 25                                                | PC Mt.        | —               | Gold        | J467-ND           | 2.60  | 22.80      | 98.00  | 131-1701-201     |
|                                                   | PC Mt.        | —               | Nickel      | J468-ND           | 2.45  | 21.49      | 92.37  | 131-1701-206     |
|                                                   | PC Mt.        | —               | Nickel      | J469-ND           | 2.45  | 21.49      | 92.37  | 131-1701-216     |
| 26                                                | PC Mt.        | —               | Gold        | J613-ND† NEW!     | 2.19  | 19.24      | 82.69  | 131-3701-261     |
|                                                   | PC Mt.        | —               | Nickel      | J614-ND† NEW!     | 2.10  | 18.38      | 79.01  | 131-3701-266     |
|                                                   | PC Mt.        | —               | Gold        | J615-ND† NEW!     | 2.19  | 19.24      | 82.69  | 131-3701-271     |
|                                                   | PC Mt.        | —               | Nickel      | J616-ND† NEW!     | 2.10  | 18.38      | 79.01  | 131-3701-276     |
| 27                                                | PC Mt.        | —               | Gold        | J472-ND           | 4.95  | 43.43      | 186.69 | 131-3701-301     |
|                                                   | PC Mt.        | —               | Gold        | J470-ND           | 4.52  | 39.67      | 170.52 | 131-1701-371     |
|                                                   | PC Mt.        | —               | Nickel      | J471-ND           | 4.34  | 38.02      | 163.42 | 131-1701-376     |
| 29                                                | Panel Mt.     | —               | Gold        | J520-ND           | 6.87  | 60.22      | 258.84 | 131-3701-621     |
| 30                                                | Panel Mt.     | —               | Gold        | J522-ND           | 6.30  | 55.23      | 237.41 | 131-3701-341     |
| Crimp Tool Frame                                  |               |                 |             | J572-ND           | 76.94 | —          | —      | 140-0000-952     |
| Die Set for SMA, SMB Type (RG178, 316, 316DS, 58) |               |                 |             | J573-ND           | 76.94 | —          | —      | 140-0000-951     |

\*Group 2 Cables: RG-161/U, RG-174/U, RG-179/U, RG-187/U, RG-188/U, RG-316/U

\*\*Group 3 Cables: RG-58/U, RG-141/U, RG-303/U

† J613 and J614 Leg Length: 3.94mm; J615 and J616 Leg Length: 2.41mm

**FEATURES:** • 30% Smaller than SMB. • Rugged snap-on mating design. • Captivated contact.**Electrical:** • Impedance: 50 Ohms • Frequency Range: 0-6 GHz • Working Voltage at sea level: 335 VRMS; 250 VRMS (J531-ND and J532-ND).**Mechanical:** • Engage/Disengage Force: 3.4 lbs. max engagement/5 lbs. typical disengagement • Contact Retention Force: 4 lbs. min. axial force • Durability: 500 cycles min.

Fig. 1 – Right Angle Cable Plug

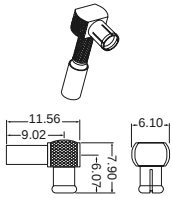


Fig. 2 – Straight Cable Plug

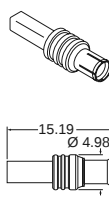


Fig. 3 – Straight Plug Receptacle

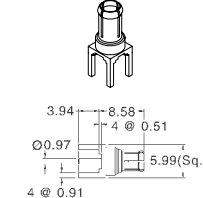


Fig. 4 – Straight PC Mount Jack

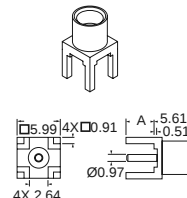


Fig. 5 – Right Angle PC Mount Jack

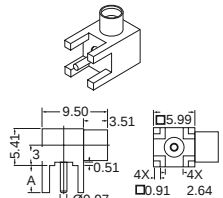


Fig. 6 – Front Mount Bulkhead Jack Receptacle

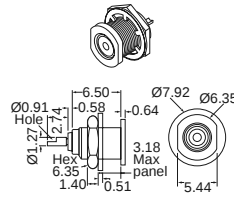


Fig. 7 – End Launch Jack

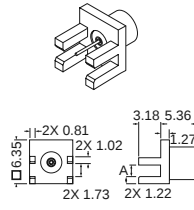


Fig. 8 – SMT Straight Jack

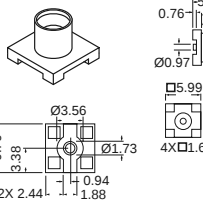


Fig. 9 – SMT Right Angle Jack

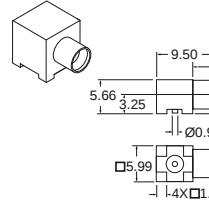
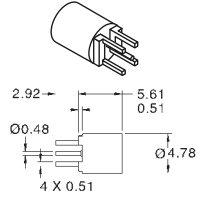


Fig. 10 – Straight Jack Receptacle - 2.54mm



| Fig. | Cable Type | Plating | Dim. A (mm) | Digi-Key Part No. | 1    | 10    | 50     | 100    | Johnson Part No. |
|------|------------|---------|-------------|-------------------|------|-------|--------|--------|------------------|
| 1    | RG 178     | Gold    | —           | J531-ND           | 5.42 | 47.51 | 204.21 | 350.07 | 133-3402-101     |
| 1    | RG 316     | Gold    | —           | J535-ND           | 5.53 | 48.48 | 208.37 | 357.21 | 133-3403-101     |
| 1    | RG 178     | Nickel  | —           | J532-ND           | 5.24 | 45.94 | 197.47 | 338.52 | 133-3402-106     |
| 1    | RG 316     | Nickel  | —           | J536-ND           | 5.24 | 45.94 | 197.47 | 338.52 | 133-3403-106     |
| 2    | RG 316     | Gold    | —           | J533-ND           | 4.39 | 38.48 | 165.38 | 283.50 | 133-3403-001     |
| 2    | RG 316     | Nickel  | —           | J534-ND           | 4.04 | 35.43 | 152.27 | 261.03 | 133-3403-006     |
| 3    | —          | Gold    | —           | J612-ND NEW!      | 5.53 | 48.48 | 208.37 | 357.21 | 133-3801-201     |
| 4    | —          | Gold    | 3.94        | J537-ND           | 4.05 | 35.51 | 152.64 | 261.66 | 133-3701-201     |
| 4    | —          | Nickel  | 3.94        | J538-ND           | 3.97 | 34.77 | 149.45 | 256.20 | 133-3701-206     |
| 4    | —          | Gold    | 2.79        | J539-ND           | 4.05 | 35.51 | 152.64 | 261.66 | 133-3701-211     |
| 4    | —          | Nickel  | 2.79        | J540-ND           | 3.97 | 34.77 | 149.45 | 256.20 | 133-3701-216     |
| 5    | —          | Gold    | 3.94        | J541-ND           | 7.79 | 68.29 | 293.51 | 503.16 | 133-3701-301     |

| Fig.                         | Cable Type | Plating | Dim. A (mm) | Digi-Key Part No. | 1      | 10    | 50     | 100    | Johnson Part No. |
|------------------------------|------------|---------|-------------|-------------------|--------|-------|--------|--------|------------------|
| 5                            | —          | Nickel  | 3.94        | J542-ND           | 7.61   | 66.72 | 286.77 | 491.61 | 133-3701-306     |
| 5                            | —          | Gold    | 2.79        | J543-ND           | 7.96   | 69.77 | 299.88 | 514.08 | 133-3701-311     |
| 5                            | —          | Nickel  | 2.79        | J544-ND           | 7.79   | 68.29 | 293.51 | 503.16 | 133-3701-316     |
| 6                            | —          | Gold    | —           | J545-ND           | 5.64   | 49.42 | 212.42 | 364.14 | 133-3701-401     |
| 6                            | —          | Nickel  | —           | J546-ND           | 5.46   | 47.88 | 205.80 | 352.80 | 133-3701-406     |
| 7                            | —          | Gold    | 1.73        | J547-ND           | 4.48   | 39.24 | 168.68 | 289.17 | 133-3701-801     |
| 8                            | —          | Gold    | —           | J548-ND           | 4.56   | 40.01 | 171.99 | 294.84 | 133-3711-201     |
| 9                            | —          | Gold    | —           | J549-ND           | 8.01   | 70.28 | 302.09 | 517.86 | 133-3711-301     |
| 10                           | —          | Gold    | —           | J611-ND NEW!      | 4.05   | 35.51 | 152.64 | 261.66 | 133-3701-231     |
| Prototype Crimp Tool         |            |         |             | J574-ND           | 275.98 | —     | —      | —      | 141-0000-908     |
| Hand Crimp Tool (frame only) |            |         |             | J572-ND           | 76.94  | —     | —      | —      | 140-0000-952     |
| Die Set (RG178, 316)         |            |         |             | J573-ND           | 76.94  | —     | —      | —      | 140-0000-951     |

**Electrical Ratings:** • Impedance: 50 Ohms • Frequency Range: 0-6 GHz • Working Voltage: 170 VRms at sea level • Insulation Resistance: 1000 megohms min.**Mechanical Ratings:** • Engagement/Disengagement Force: 8.0 lbs. max. engagement; 1.4 lbs. min. disengagement • Contact Retention Force: 2.0 lbs. min. axial force • Cable Retention: 30 lbs. • Durability: 500 cycles min.**Environmental Ratings:** • Operating Temperature: -55°C to 155°C

Fig. 1 – Straight Cabled Plug

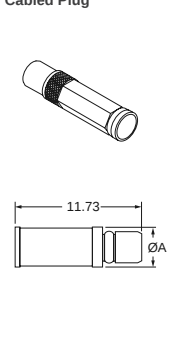


Fig. 2 – Right Angle Flexible Cabled Plug

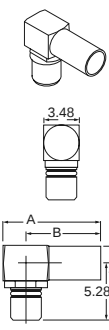


Fig. 3 – Straight Jack

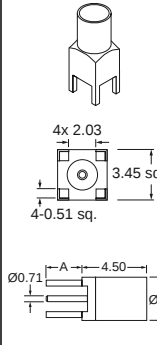


Fig. 4 – Right Angle Jack

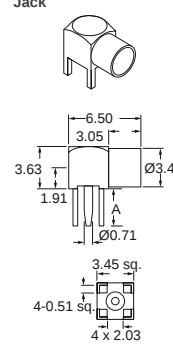


Fig. 5 – Straight Plug

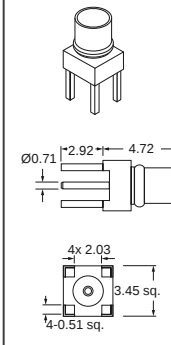


Fig. 6 – Right Angle Semi-Rigid Plug

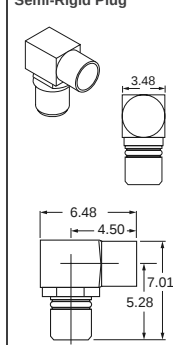
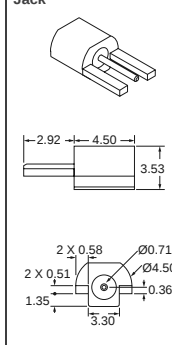


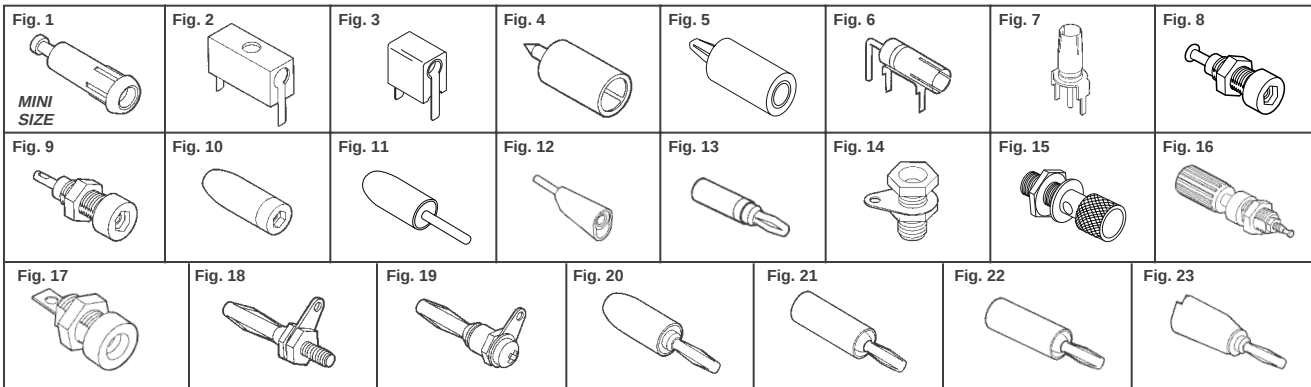
Fig. 7 – End Launch Jack



| Fig.                                                 | Cable Type                                          | Dim. (mm) A B | Digi-Key Part No. | 1    | 10    | 50     | Johnson Part No. |
|------------------------------------------------------|-----------------------------------------------------|---------------|-------------------|------|-------|--------|------------------|
| <b>Straight Cabled Plug — Gold Crimp</b>             |                                                     |               |                   |      |       |        |                  |
| 1                                                    | RG 178/U, 196                                       | 3.48 —        | J589-ND           | 5.27 | 46.17 | 198.45 | 135-3402-001     |
| 1                                                    | RG 316/U, 188, 161, 174                             | 4.39 —        | J590-ND           | 7.99 | 70.02 | 300.98 | 135-3403-001     |
| 1                                                    | RG 316 DS, 188 DS, 187 DS                           | 4.39 —        | J591-ND           | 8.16 | 71.56 | 307.60 | 135-3404-001     |
| 1                                                    | .047" Dia. Flexible, Huber K01152-07, Axon P512479A | 3.48 —        | J592-ND           | 5.27 | 46.17 | 198.45 | 135-3436-001     |
| <b>Right Angle Flexible Cabled Plug — Gold Crimp</b> |                                                     |               |                   |      |       |        |                  |
| 2                                                    | RG 178/U, 196                                       | 8.99 7.01     | J593-ND           | 8.95 | 78.52 | 337.49 | 135-3402-101     |
| 2                                                    | RG 316/U, 188, 187, 179, 161, 174                   | 10.46 8.48    | J594-ND           | 8.95 | 78.52 | 337.49 | 135-3403-101     |
| 2                                                    | RG 316 DS, RG 188 DS                                | 10.46 8.48    | J595-ND           | 9.14 | 80.17 | 344.59 | 135-3404-101     |
| 2                                                    | .047" Dia. Flexible, Huber K01152-07, Axon P512479A | 8.99 7.01     | J596-ND           | 8.95 | 78.52 | 337.49 | 135-3436-101     |

| Fig.                                            | Dim. (mm) A B | Digi-Key Part No. | 1    | 10      | 50          | Johnson Part No. |
|-------------------------------------------------|---------------|-------------------|------|---------|-------------|------------------|
| <b>Straight Jack — Gold PCB</b>                 |               |                   |      |         |             |                  |
| 3                                               | 2.92 —        | J597-ND           | 4.83 | 42.32   | 181.91      | 135-3701-201     |
| 3                                               | 1.73 —        | J598-ND           | 4.74 | 41.55   | 178.61      | 135-3701-211     |
| <b>Right Angle Jack — Gold PCB</b>              |               |                   |      |         |             |                  |
| 4                                               | 2.92 —        | J599-ND           | 9.30 | 81.57   | 350.60      | 135-3701-301     |
| 4                                               | 1.73 —        | J600-ND           | 9.13 | 80.03   | 343.98      | 135-3701-311     |
| <b>Straight Plug — Gold PCB</b>                 |               |                   |      |         |             |                  |
| 5                                               | —             | J601-ND           | 7.02 | 61.56   | 264.60      | 135-3801-201     |
| <b>Right Angle Semi-Rigid Plug — Gold RG405</b> |               |                   |      |         |             |                  |
| 6                                               | —             | J602-ND           | 8.60 | 75.41   | 324.14      | 135-3693-101     |
| <b>End Launch Jack — PCB</b>                    |               |                   |      |         |             |                  |
| 7                                               | —             | J603-ND           | 6.58 | 57.71   | 248.06      | 135-3711-801     |
| Hand Crimp Tool (frame only)....                |               |                   |      | J572-ND | 76.94 each  | 140-0000-952     |
| Crimp Tool Die Set.....                         |               |                   |      | J604-ND | 173.12 each | 140-0000-953     |

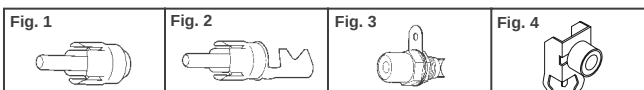
A



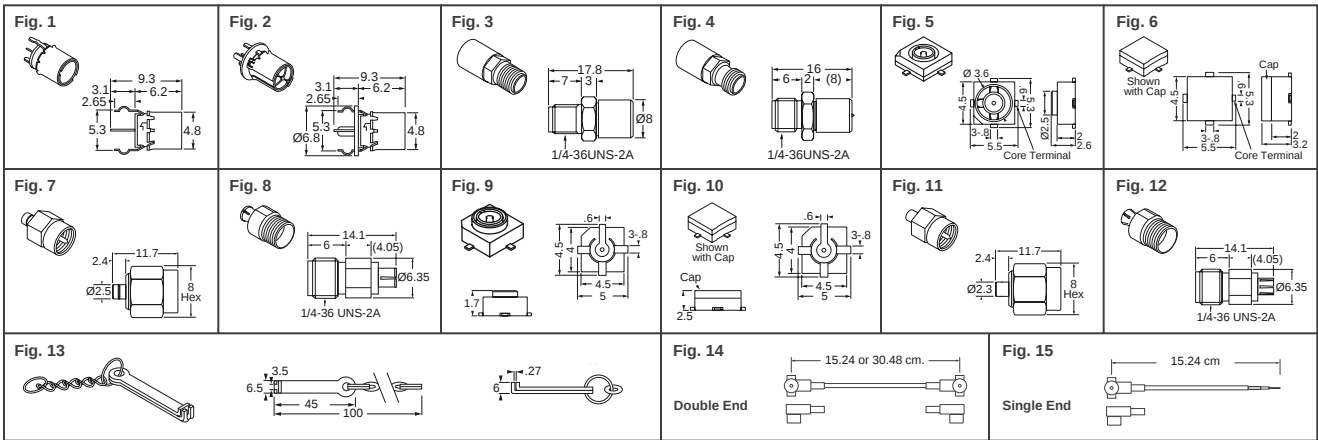
| Fig.                                             | Color  | Digi-Key Part No. | 1    | 10    | 100    | 250    | 500     | 1,000   | Johnson Part No. |
|--------------------------------------------------|--------|-------------------|------|-------|--------|--------|---------|---------|------------------|
| <b>Tip Jacks – for Standard Tip Plug: 2.03mm</b> |        |                   |      |       |        |        |         |         |                  |
| 1                                                | White  | J330-ND           | .90  | 7.99  | 63.27  | 133.20 | 249.75  | 466.20  | 105-1041-001     |
|                                                  | Red    | J124-ND           | .90  | 7.99  | 63.27  | 133.20 | 249.75  | 466.20  | 105-1042-001     |
|                                                  | Black  | J125-ND           | .90  | 7.99  | 63.27  | 133.20 | 249.75  | 466.20  | 105-1043-001     |
|                                                  | Green  | J331-ND           | .90  | 7.99  | 63.27  | 133.20 | 249.75  | 466.20  | 105-1044-001     |
|                                                  | Yellow | J333-ND           | .90  | 7.99  | 63.27  | 133.20 | 249.75  | 466.20  | 105-1047-001     |
| 2                                                | White  | J108-ND           | .32  | 2.88  | 22.80  | 48.00  | 90.00   | 168.00  | 105-0751-001     |
|                                                  | Red    | J109-ND*          | .32  | 2.88  | 22.80  | 48.00  | 90.00   | 168.00  | 105-0752-001     |
|                                                  | Black  | J110-ND*          | .32  | 2.88  | 22.80  | 48.00  | 90.00   | 168.00  | 105-0753-001     |
|                                                  | Green  | J111-ND           | .32  | 2.88  | 22.80  | 48.00  | 90.00   | 168.00  | 105-0754-001     |
|                                                  | Orange | J112-ND           | .32  | 2.88  | 22.80  | 48.00  | 90.00   | 168.00  | 105-0756-001     |
| 3                                                | White  | J575-ND           | .31  | 2.71  | 21.47  | 45.20  | 84.75   | 158.20  | 105-1101-001     |
|                                                  | Red    | J576-ND           | .31  | 2.71  | 21.47  | 45.20  | 84.75   | 158.20  | 105-1102-001     |
|                                                  | Black  | J577-ND           | .31  | 2.71  | 21.47  | 45.20  | 84.75   | 158.20  | 105-1103-001     |
|                                                  | Green  | J578-ND           | .31  | 2.71  | 21.47  | 45.20  | 84.75   | 158.20  | 105-1104-001     |
|                                                  | Yellow | J579-ND           | .31  | 2.71  | 21.47  | 45.20  | 84.75   | 158.20  | 105-1107-001     |
| 4                                                | White  | J119-ND           | .47  | 4.18  | 33.06  | 69.60  | 130.50  | 243.60  | 105-0851-001     |
|                                                  | Red    | J120-ND           | .47  | 4.18  | 33.06  | 69.60  | 130.50  | 243.60  | 105-0852-001     |
|                                                  | Black  | J121-ND           | .47  | 4.18  | 33.06  | 69.60  | 130.50  | 243.60  | 105-0853-001     |
|                                                  | Green  | J122-ND           | .47  | 4.18  | 33.06  | 69.60  | 130.50  | 243.60  | 105-0854-001     |
|                                                  | Yellow | J123-ND           | .47  | 4.18  | 33.06  | 69.60  | 130.50  | 243.60  | 105-0857-001     |
| 5                                                | White  | J581-ND           | .43  | 3.86  | 30.59  | 64.40  | 120.75  | 225.40  | 105-2201-201     |
|                                                  | Red    | J582-ND           | .43  | 3.86  | 30.59  | 64.40  | 120.75  | 225.40  | 105-2202-201     |
|                                                  | Black  | J583-ND           | .43  | 3.86  | 30.59  | 64.40  | 120.75  | 225.40  | 105-2203-201     |
|                                                  | Green  | J584-ND           | .43  | 3.86  | 30.59  | 64.40  | 120.75  | 225.40  | 105-2204-201     |
|                                                  | Yellow | J585-ND           | .43  | 3.86  | 30.59  | 64.40  | 120.75  | 225.40  | 105-2207-201     |
| 6                                                | Tin    | J463-ND           | 3.69 | 32.76 | 259.35 | 546.00 | 1023.75 | 1911.00 | 129-0701-301     |
|                                                  | Gold   | J571-ND           | 4.55 | 39.90 | 294.00 | 630.00 | 1050.00 | —       | 129-0701-302     |
| 7                                                | Tin    | J462-ND           | 3.69 | 32.76 | 259.35 | 546.00 | 1023.75 | 1911.00 | 129-0701-201     |
|                                                  | Gold   | J570-ND           | 4.55 | 39.90 | 294.00 | 630.00 | 1050.00 | —       | 129-0701-202     |
| 8                                                | White  | J105-ND           | .95  | 8.40  | 66.50  | 140.00 | 262.50  | 490.00  | 105-0601-001     |
|                                                  | Red    | J106-ND           | .95  | 8.40  | 66.50  | 140.00 | 262.50  | 490.00  | 105-0602-001     |
|                                                  | Black  | J107-ND           | .95  | 8.40  | 66.50  | 140.00 | 262.50  | 490.00  | 105-0603-001     |
|                                                  | Green  | J337-ND           | .95  | 8.40  | 66.50  | 140.00 | 262.50  | 490.00  | 105-0604-001     |
|                                                  | Yellow | J338-ND           | .95  | 8.40  | 66.50  | 140.00 | 262.50  | 490.00  | 105-0607-001     |
| 9                                                | White  | J320-ND           | .54  | 4.80  | 38.00  | 80.00  | 150.00  | 280.00  | 105-0801-001     |
|                                                  | Red    | J117-ND*          | .54  | 4.80  | 38.00  | 80.00  | 150.00  | 280.00  | 105-0802-001     |
|                                                  | Black  | J118-ND*          | .54  | 4.80  | 38.00  | 80.00  | 150.00  | 280.00  | 105-0803-001     |
|                                                  | Green  | J321-ND           | .54  | 4.80  | 38.00  | 80.00  | 150.00  | 280.00  | 105-0804-001     |
|                                                  | Orange | J322-ND           | .54  | 4.80  | 38.00  | 80.00  | 150.00  | 280.00  | 105-0806-001     |
| 10                                               | White  | J450-ND           | 1.11 | 9.89  | 78.28  | 164.80 | 309.00  | 576.80  | 105-0701-001     |
|                                                  | Red    | J451-ND           | 1.11 | 9.89  | 78.28  | 164.80 | 309.00  | 576.80  | 105-0702-001     |
|                                                  | Black  | J452-ND           | 1.11 | 9.89  | 78.28  | 164.80 | 309.00  | 576.80  | 105-0703-001     |

| Fig.                                                   | Color  | Digi-Key Part No. | 1    | 10    | 100    | 250    | 500    | 1,000   | Johnson Part No. |
|--------------------------------------------------------|--------|-------------------|------|-------|--------|--------|--------|---------|------------------|
| <b>Tip Plugs – Insulated Solderless Type</b>           |        |                   |      |       |        |        |        |         |                  |
| 11                                                     | White  | J300-ND           | .65  | 5.81  | 45.98  | 96.80  | 181.50 | 338.80  | 105-0301-001     |
|                                                        | Red    | J103-ND*          | .65  | 5.81  | 45.98  | 96.80  | 181.50 | 338.80  | 105-0302-001     |
|                                                        | Black  | J104-ND*          | .65  | 5.81  | 45.98  | 96.80  | 181.50 | 338.80  | 105-0303-001     |
|                                                        | Green  | J301-ND           | .65  | 5.81  | 45.98  | 96.80  | 181.50 | 338.80  | 105-0304-001     |
|                                                        | Yellow | J303-ND           | .65  | 5.81  | 45.98  | 96.80  | 181.50 | 338.80  | 105-0307-001     |
| 12                                                     | White  | J454-ND           | 2.43 | 21.60 | 171.00 | 360.00 | 675.00 | 1260.00 | 105-1202-001     |
|                                                        | Red    | J455-ND           | 2.43 | 21.60 | 171.00 | 360.00 | 675.00 | 1260.00 | 105-1203-001     |
| 13                                                     | White  | J370-ND           | 1.54 | 13.70 | 108.49 | 228.40 | 428.25 | 799.40  | 111-0101-001     |
|                                                        | Red    | J164-ND*          | 1.54 | 13.70 | 108.49 | 228.40 | 428.25 | 799.40  | 111-0102-001     |
|                                                        | Black  | J165-ND*          | 1.54 | 13.70 | 108.49 | 228.40 | 428.25 | 799.40  | 111-0103-001     |
|                                                        | Green  | J371-ND           | 1.70 | 15.10 | 119.51 | 251.60 | 471.75 | 880.60  | 111-0104-001     |
|                                                        | Yellow | J372-ND           | 1.54 | 13.70 | 108.49 | 228.40 | 428.25 | 799.40  | 111-0107-001     |
| <b>Banana Jacks – Insulated Solder Terminal</b>        |        |                   |      |       |        |        |        |         |                  |
| 17                                                     | White  | J150-ND*          | .42  | 3.72  | 29.45  | 62.00  | 116.25 | 217.00  | 108-0901-001     |
|                                                        | Red    | J151-ND*          | .42  | 3.72  | 29.45  | 62.00  | 116.25 | 217.00  | 108-0902-001     |
|                                                        | Black  | J152-ND*          | .42  | 3.72  | 29.45  | 62.00  | 116.25 | 217.00  | 108-0903-001     |
|                                                        | Green  | J153-ND           | .42  | 3.72  | 29.45  | 62.00  | 116.25 | 217.00  | 108-0904-001     |
|                                                        | Orange | J356-ND           | .42  | 3.72  | 29.45  | 62.00  | 116.25 | 217.00  | 108-0906-001     |
| 18                                                     | White  | J154-ND           | .42  | 3.72  | 29.45  | 62.00  | 116.25 | 217.00  | 108-0907-001     |
|                                                        | Red    | J357-ND           | .42  | 3.72  | 29.45  | 62.00  | 116.25 | 217.00  | 108-0908-001     |
|                                                        | Black  | J155-ND           | .42  | 3.72  | 29.45  | 62.00  | 116.25 | 217.00  | 108-0910-001     |
|                                                        | Green  | J358-ND           | .42  | 3.72  | 29.45  | 62.00  | 116.25 | 217.00  | 108-0912-001     |
| 19                                                     | White  | J148-ND           | 1.11 | 9.89  | 78.28  | 164.80 | 309.00 | 576.80  | 108-0750-001     |
|                                                        | Red    | J149-ND           | .95  | 8.47  | 67.07  | 141.20 | 264.75 | 494.20  | 108-0753-001     |
| 20                                                     | White  | J144-ND*          | .88  | 7.82  | 61.94  | 130.40 | 244.50 | 456.40  | 108-0301-001     |
|                                                        | Red    | J145-ND*          | .88  | 7.82  | 61.94  | 130.40 | 244.50 | 456.40  | 108-0302-001     |
|                                                        | Black  | J146-ND*          | .88  | 7.82  | 61.94  | 130.40 | 244.50 | 456.40  | 108-0303-001     |
|                                                        | Green  | J340-ND           | .88  | 7.82  | 61.94  | 130.40 | 244.50 | 456.40  | 108-0304-001     |
|                                                        | Orange | J341-ND           | .88  | 7.82  | 61.94  | 130.40 | 244.50 | 456.40  | 108-0306-001     |
| 21                                                     | White  | J147-ND           | .88  | 7.82  | 61.94  | 130.40 | 244.50 | 456.40  | 108-0307-001     |
|                                                        | Red    | J342-ND           | .88  | 7.82  | 61.94  | 130.40 | 244.50 | 456.40  | 108-0308-001     |
|                                                        | Black  | J343-ND           | .88  | 7.82  | 61.94  | 130.40 | 244.50 | 456.40  | 108-0310-001     |
|                                                        | Green  | J344-ND           | .88  | 7.82  | 61.94  | 130.40 | 244.50 | 456.40  | 108-0312-001     |
|                                                        | Yellow | J345-ND           | .88  | 7.82  | 61.94  | 130.40 | 244.50 | 456.40  | 108-0312-001     |
| <b>Banana Plugs – Insulated Round Body Solder Stud</b> |        |                   |      |       |        |        |        |         |                  |
| 22                                                     | White  | J156-ND           | 1.77 | 15.72 | 124.45 | 262.00 | 491.25 | 917.00  | 108-1722-101     |
|                                                        | Red    | J157-ND           | 1.77 | 15.72 | 124.45 | 262.00 | 491.25 | 917.00  | 108-1723-101     |
| 23                                                     | White  | J158-ND           | 1.35 | 12.02 | 95.19  | 200.40 | 375.75 | 701.40  | 108-1722-103     |
|                                                        | Red    | J159-ND           | 1.35 | 12.02 | 95.19  | 200.40 | 375.75 | 701.40  | 108-1723-103     |
| 24                                                     | White  | J459-ND           | 1.47 | 13.03 | 103.17 | 217.20 | 407.25 | 760.20  | 108-1081-001     |
|                                                        | Red    | J460-ND           | 1.47 | 13.03 | 103.17 | 217.20 | 407.25 | 760.20  | 108-1082-001     |
|                                                        | Black  | J461-ND           | 1.47 | 13.03 | 103.17 | 217.20 | 407.25 | 760.20  | 108-1083-001     |

**J100-KIT-ND Digi-Key® Plug & Jack Kit** Contains 10 each of the plugs or jacks as denoted (\*) on chart. Price includes compartment divided plastic box for easy storage and quick access .....\$76.95



| Fig. | Description                                 | Digi-Key Part No. | 1    | Pricing | 100    |
|------|---------------------------------------------|-------------------|------|---------|--------|
| 1    | Conventional Type                           | 561K-ND           | .51  | 4.25    | 38.40  |
| 2    | Strain Relief Lug Crimps to Wire Insulation | 565K-ND           | .69  | 5.71    | 48.95  |
| 3    | Panel Mount Jack Hex Base Type              | 576K-ND           | 1.70 | 14.07   | 125.25 |
| 4    | Snap-Fit 90° PC Phono Jack                  | 901K-ND           | 1.07 | 8.87    | 79.90  |



## FL (Finger-Lock) Series Coaxial Connectors:

Low-profile microminiature high-frequency connectors. The FL series connectors are low-profile microminiature coaxial connectors intended for high-density packaging of components on printed circuit boards. The FL series is ideal for high-density circuit board wiring in signal transmission applications at high frequencies up to 1 GHz.

**Features:** High-level matching: Maximum V.S.W.R. is only 1.2 at frequencies up to 1 GHz. **Applications:** Typical applications include cellular telephones, radio communications equipment, electronic measuring instruments, CATV, control units, etc. **Material and Finish:** • Shell: Brass or phosphor bronze, silver plating • Center contact (male): Brass, gold plating • Center contact (female): Phosphor bronze, gold plating • Insulation: Polybutylene terephthalate (PBT), black. **Performance Characteristics:** • Characteristic impedance: 50Ω • Insulation resistance: 1000 MΩ or more (at 250 VDC) • Contact resistance: 10 mΩ or less for both center and outer conductors (at 1 ADC) • Withstanding voltage: 250 VAC (rms) for one minute • Coupling/removal force: 300 gf of more • Life of contacts: 50 times of use

## S.FL2 Series Coaxial Connectors:

S.FL2 (Super FL Type 2 Coaxial Connector) Series is a surface mount, low profile, miniature coaxial connector intended for high density packaging. Compared to Hirose's FL series connectors, the S.FL2 Series offers a 50% reduced profile when assembled, achieving increased density of internal wiring for high frequency transmission applications.

**Features:** Highly flexible, offers high frequency performance below V.S.W.R. 1.2 over 0-2000MHz range.

## H.FL Series Coaxial Connectors:

The world's smallest low-profile coaxial connectors. The H.FL series of coaxial connectors consists of the world's smallest surface-mount low profile coaxial connectors. The H.FL connectors have a lower profile, with a mounted height of approximately 30% that of our S.FL2 connectors. They occupy 20% less board space, allowing higher density internal wiring.

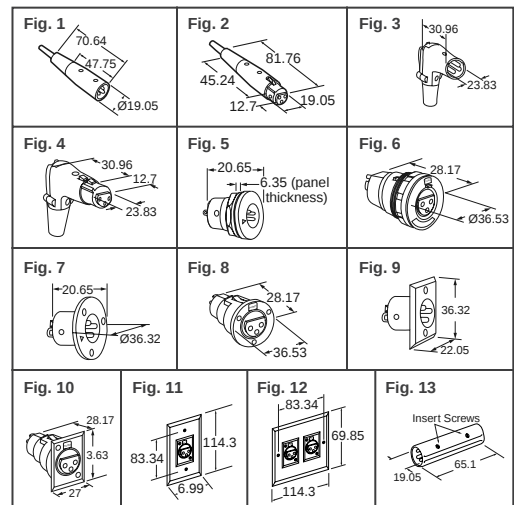
**Features:** • High frequency response of V.S.W.R. 1.3 or less from D.C. to 3000 MHz. **Material and Treatment:** • Shell: Phosphor bronze, silver plating • Insulator: PBT plastic (plug side), black; Liquid crystal polymer (receptacle side), black • Male center contact: Bronze, gold plating • Female center contact: Phosphor bronze, gold plating. **Performance Characteristics:** • Characteristic impedance: 50Ω • Insulation resistance: 500 MΩ or greater at DC 250V • Contact resistance: 20mΩ (center), 10mΩ (exterior) at DC 10mA • Dielectric strength: AC 300V (r.m.s.), 1 minute • Contact service life: 50 times • Voltage standing wave ratio: 1.3 or less, DC to 3000MHz (target value)

| Fig.                | Description                                   | Digi-Key Part No. | 1     | Pricing 10 | 100     | Hirose Part No.    |
|---------------------|-----------------------------------------------|-------------------|-------|------------|---------|--------------------|
| <b>FL Series</b>    |                                               |                   |       |            |         |                    |
| 1                   | Receptacle PC MT                              | H9142-ND          | 3.46  | 32.40      | 297.00  | FL-R-PC(1)         |
| 2                   | Receptacle with Washer                        | H9143-ND          | 2.43  | 22.80      | 209.00  | FL-R-PC(3)         |
| 3                   | Adapter Plug/SMA Plug                         | H9144-ND          | 98.18 | 920.40     | 8437.00 | HRMJ-FLJ           |
| 4                   | Adapter Recept/SMA Plug                       | H9145-ND          | 79.90 | 749.10     | 6866.75 | HRMJ-FLP-1         |
| 13                  | Removal Tool (FL Series)                      | H9146-ND          | 31.85 | —          | —       | FL-LP-N            |
| 14                  | 6" (15.24cm) FL/FL Series Cable Assembly      | 10212-ND          | 12.03 | 112.80     | 1034.00 | 4189-06            |
| 14                  | 12" (30.48cm) FL/FL Series Cable Assembly     | 10213-ND          | 12.54 | 117.60     | 1078.00 | 4189-12            |
| 14                  | 12" (30.48cm) FL/SMA Series Cable Assembly    | 10214-ND          | 23.36 | 219.00     | 2007.50 | 4192-12            |
| 15                  | 6" (15.24cm) FL Single End Cable Assembly     | 10215-ND          | 8.80  | 82.50      | 756.25  | 4191-06            |
| <b>S.FL2 Series</b> |                                               |                   |       |            |         |                    |
| 5                   | Receptacle Coaxial SMT                        | H9152-ND          | 2.66  | 24.90      | 228.25  | S.FL2-R-SMT(01)    |
| 6                   | Receptacle Coaxial with Cap SMT               | H9153-ND          | 2.78  | 26.10      | 239.25  | S.FL2-R-SMT(C)(10) |
| 7                   | Adapter Plug/SMA Jack                         | H9154-ND          | 53.89 | 505.20     | 4631.00 | HRMP-S.FLJ         |
| 8                   | Adapter Jack/SMA Plug                         | H9155-ND          | 66.88 | 627.00     | 5747.50 | HRMJ-S.FLP         |
| 13                  | Removal Tool (S.FL2 Series)                   | H9156-ND          | 51.01 | —          | —       | S.FL-LP-N          |
| 14                  | 6" (15.24cm) S.FL2/S.FL2 Cable Assembly       | 10220-ND          | 11.36 | 106.50     | 976.25  | 2189-06            |
| 14                  | 12" (30.48cm) S.FL2/S.FL2 Cable Assembly      | 10221-ND          | 12.70 | 119.10     | 1091.75 | 2189-12            |
| 14                  | 12" (30.48cm) S.FL2/SMA Cable Assembly        | 10222-ND          | 32.32 | 303.00     | 2777.50 | 2192-12            |
| 15                  | 6" (15.24cm) S.FL2 Single End Cable Assembly  | 10223-ND          | 8.48  | 79.50      | 728.75  | 2191-6             |
| <b>H.FL Series</b>  |                                               |                   |       |            |         |                    |
| 9                   | Receptacle Coaxial SMT                        | H9147-ND          | 2.00  | 18.73      | 171.66  | H.FL-R-SMT(01)     |
| 10                  | Receptacle Coaxial w/ Cap SMT                 | H9148-ND          | 1.95  | 18.30      | 167.75  | H.FL-R-SMT(C)(10)  |
| 11                  | Adapter Jack/SMA Jack                         | H9150-ND          | 45.18 | 423.60     | 3883.00 | HRMP-H.FLJ         |
| 12                  | Adapter Plug/SMA Jack                         | H9149-ND          | 50.91 | 477.30     | 4375.25 | HRMJ-H.FLP-3       |
| 13                  | Removal Tool (H.FL Series)                    | H9151-ND          | 53.13 | —          | —       | H.FL-LP-N          |
| 14                  | 6" (15.24cm) H.FL/H.FL Series Cable Assembly  | 10216-ND          | 10.62 | 99.60      | 913.00  | 1189-06            |
| 14                  | 12" (30.48cm) H.FL/H.FL Series Cable Assembly | 10217-ND          | 11.97 | 112.20     | 1028.50 | 1189-12            |
| 14                  | 12" (30.48cm) H.FL/SMA Cable Assembly         | 10218-ND          | 31.01 | 290.70     | 2664.75 | 1192-12            |
| 15                  | 6" (15.24cm) H.FL Single End Cable Assembly   | 10219-ND          | 7.87  | 73.80      | 676.50  | 1191-06            |

## Switchcraft® Audio Connectors and Couplers

| Fig. | Description                                                    | Digi-Key Part No. | 1     | Pricing 10 | 25     | Mfg. Part No. |
|------|----------------------------------------------------------------|-------------------|-------|------------|--------|---------------|
| 1    | Plug Male Straight 3 pos Satin Nickel Finish                   | SC1003-ND         | 4.96  | 37.21      | 85.38  | A3M           |
| 1    | Plug Male Straight 3 pos Black w/Silver Contacts               | SC1004-ND†        | 4.96  | 37.21      | 85.38  | A3MB          |
| 1    | Plug Male Straight 3 pos Satin Nickel Finish                   | SC1014-ND         | 5.70  | 42.77      | 98.14  | A4M           |
| 1    | Plug Male Straight 5 pos Satin Nickel Finish                   | SC1022-ND         | 10.06 | 75.48      | 173.21 | A5M           |
| 2    | Plug Female Straight 3 pos Satin Nickel Finish                 | SC1001-ND         | 5.59  | 41.91      | 96.18  | A3F           |
| 2    | Plug Female Straight 3 pos Black w/Silver Contacts             | SC1002-ND†        | 5.59  | 41.91      | 96.18  | A3FB          |
| 2    | Plug Female Straight 4 pos Satin Nickel Finish                 | SC1013-ND         | 7.78  | 58.38      | 133.96 | A4F           |
| 2    | Plug Female Straight 5 pos Satin Nickel Finish                 | SC1021-ND         | 12.68 | 95.15      | 218.36 | A5F           |
| 3    | Plug Male Rt. Angle 3 pos Satin Nickel Finish                  | SC1012-ND         | 14.65 | 109.91     | 252.21 | R3M           |
| 4    | Plug Female Rt. Angle 3 pos Satin Nickel Finish                | SC1011-ND         | 15.87 | 119.10     | 273.31 | R3F           |
| 5    | Receptacle Male Panel Mount 3 pos Satin Nickel Finish          | SC1006-ND         | 8.81  | 66.07      | 151.62 | B3M           |
| 6    | Receptacle Female Panel Mount 3 pos Satin Nickel Finish        | SC1005-ND         | 14.54 | 109.05     | 250.25 | B3F           |
| 7    | Receptacle Male Panel Mount 3 pos Satin Nickel Finish          | SC1008-ND         | 5.99  | 44.90      | 103.04 | C3M           |
| 8    | Receptacle Female Panel Mount 3 pos Satin Nickel Finish        | SC1007-ND         | 8.41  | 63.08      | 144.75 | C3F           |
| 9    | Receptacle Male Narrow Panel Mount 3 pos Satin Nickel Finish   | SC1010-ND         | 4.67  | 35.07      | 80.47  | D3M           |
| 9    | Receptacle Male Narrow Panel Mount 4 pos Satin Nickel Finish   | SC1020-ND         | 5.56  | 41.70      | 95.68  | D4M           |
| 9    | Receptacle Male Narrow Panel Mount 5 pos Satin Nickel Finish   | SC1028-ND         | 9.80  | 73.56      | 168.80 | D5M           |
| 10   | Receptacle Female Narrow Panel Mount 3 pos Satin Nickel Finish | SC1009-ND         | 6.30  | 47.26      | 108.44 | D3F           |
| 10   | Receptacle Female Narrow Panel Mount 4 pos Satin Nickel Finish | SC1019-ND         | 8.95  | 67.14      | 154.08 | D4F           |
| 10   | Receptacle Female Narrow Panel Mount 5 pos Satin Nickel Finish | SC1027-ND         | 14.45 | 108.41     | 248.78 | D5F           |
| 11   | Wall Plate Receptacle Female 3 pos Stainless Steel             | SC1030-ND         | 15.76 | 118.25     | 271.35 | K3FS          |
| 12   | Wall Plate Double Receptacle Female 3 pos Stainless Steel      | SC1032-ND         | 22.12 | 165.93     | 380.78 | K3FS          |
| 13   | Adapter Audio, 3 pos Male to Male Shielded                     | SC1129-ND         | 12.94 | 97.08      | 222.77 | 390           |

† "Black Velvet" (Electrically Conductive Chrome Plate)



# Switchcraft® 1/4" (6.35mm) Plugs, Jacks & Audio Adapters

|         |         |         |         |         |         |         |                            |
|---------|---------|---------|---------|---------|---------|---------|----------------------------|
| Fig. 1  | Fig. 2  | Fig. 3  | Fig. 4  | Fig. 5  | Fig. 6  | Fig. 7  | Dimensions for Figures 1-7 |
| Fig. 8  | Fig. 9  | Fig. 10 | Fig. 11 | Fig. 12 | Fig. 13 | Fig. 14 | Fig. 15                    |
| Fig. 16 | Fig. 17 | Fig. 18 | Fig. 19 | Fig. 20 | Fig. 21 | Fig. 22 | Fig. 23                    |

| Fig.                                                                      | Description                              | Mates With            | Dimensions (mm)  | Digi-Key Part No. | 1    | Pricing 10 | 25     | Switchcraft Part No. |
|---------------------------------------------------------------------------|------------------------------------------|-----------------------|------------------|-------------------|------|------------|--------|----------------------|
| <b>1/4" (6.35mm) Two Conductor Phone Plugs</b>                            |                                          |                       |                  |                   |      |            |        |                      |
| 1                                                                         | Shielded w/ Screw Terminals              | 11 or 215J            | 54.76 9.52 17.48 | SC1062-ND         | 5.99 | 44.90      | 103.04 | 70                   |
| 2                                                                         | Shielded Handle w/ Cable Clamp           | 11 or 215J            | 49.23 6.35 17.48 | SC1063-ND         | 6.98 | 52.39      | 120.22 | 170                  |
| <b>1/4" (6.35mm) Three Conductor Phone Plugs</b>                          |                                          |                       |                  |                   |      |            |        |                      |
| 3                                                                         | Black w/ Solder Lug Terminals            | 12B                   | 54.76 7.14 19.05 | SC1064-ND         | 4.87 | 36.56      | 83.91  | 60                   |
| 4                                                                         | Shielded w/ Solder Lug Terminals         | 12B                   | 54.76 9.52 17.48 | SC1065-ND         | 6.98 | 52.39      | 120.22 | 190                  |
| <b>1/4" (6.35mm) "Littel Plugs" Two Conductor Phone Plugs</b>             |                                          |                       |                  |                   |      |            |        |                      |
| 5                                                                         | Black w/ Solder Lug & Cable Clamp        | 11                    | 42.88 7.54 12.70 | SC1072-ND         | 3.19 | 23.95      | 54.96  | 250                  |
| 6                                                                         | Red w/ Solder Lug & Cable Clamp          | 11                    | 42.88 7.54 12.70 | SC1073-ND         | 3.19 | 23.95      | 54.96  | 255                  |
| 7                                                                         | Shielded w/ Solder Lug & Cable Clamp     | 11                    | 42.88 7.54 12.70 | SC1075-ND         | 3.96 | 29.72      | 68.21  | 280                  |
| <b>1/4" (6.35mm) "Littel Plugs" Two Conductor Audio Loudspeaker Plugs</b> |                                          |                       |                  |                   |      |            |        |                      |
| 8                                                                         | Nickel Finish w/ .33 to .33 Bushing Dia. | 11 or 215J            | 72.60 9.02 18.80 | SC1141-ND         | 5.59 | 41.91      | 96.18  | 187                  |
| <b>1/4" (6.35mm) "Littel Plugs" Three Conductor Phone Plugs</b>           |                                          |                       |                  |                   |      |            |        |                      |
| 9                                                                         | Black w/ Solder Lug & Cable Clamp        | 12B                   | 42.88 7.54 12.70 | SC1081-ND         | 4.50 | 33.79      | 77.53  | 267                  |
| 10                                                                        | Shielded w/ Screw Terminals              | 12B                   | 42.88 7.54 12.70 | SC1083-ND         | 5.76 | 43.19      | 99.12  | 290                  |
| 11                                                                        | Shielded w/ Solder Lug & Cable Clamp     | 12B                   | 42.88 7.54 12.70 | SC1084-ND         | 5.36 | 40.20      | 92.25  | 297                  |
| <b>1/4" (6.35mm) Right Angle Flat, Two Conductor Type Phone Plugs</b>     |                                          |                       |                  |                   |      |            |        |                      |
| 12                                                                        | Black w/ Solder Lugs                     | 11                    | —                | SC1067-ND         | 3.68 | 27.58      | 63.30  | 227                  |
| 13                                                                        | Shielded w/ Solder Lugs                  | 11                    | —                | SC1068-ND         | 4.39 | 32.93      | 75.57  | 228                  |
| <b>1/4" (6.35mm) Right Angle Flat, Three Conductor Type Phone Plugs</b>   |                                          |                       |                  |                   |      |            |        |                      |
| 14                                                                        | Shielded w/ Solder Lugs                  | 12B                   | —                | SC1069-ND         | 5.67 | 42.55      | 97.65  | 238                  |
| <b>1/4" (6.35mm) Right Angle Phone Plug, Two Conductor Type</b>           |                                          |                       |                  |                   |      |            |        |                      |
| 15                                                                        | Nickel Plate 3 pc. Const.                | 11, 12A, 111, or 112A | —                | SC1143-ND         | 4.36 | 32.72      | 75.08  | 226                  |
| <b>.206" (5.23mm) Commercial Phone Plugs, Two Conductor Type</b>          |                                          |                       |                  |                   |      |            |        |                      |
| 16                                                                        | Black w/ Solder Lug & Cable Clamp        | S11                   | —                | SC1077-ND         | 3.19 | 23.95      | 54.96  | S250                 |
| <b>.206" (5.23mm) Commercial Phone Plugs, Three Conductor Type</b>        |                                          |                       |                  |                   |      |            |        |                      |
| 17                                                                        | Black w/ Screw Terminals                 | S12B                  | 42.88 7.54 12.70 | SC1080-ND         | 5.30 | 39.77      | 91.27  | S260                 |

| Fig.                                                                 | Schematic | Description                                      | Digi-Key Part No. | 1    | Pricing 10 | 25     | Switchcraft Part No. |
|----------------------------------------------------------------------|-----------|--------------------------------------------------|-------------------|------|------------|--------|----------------------|
| <b>1/4" (6.35mm) "Littel Jax," Two Conductor Phone Jacks</b>         |           |                                                  |                   |      |            |        |                      |
| 18                                                                   | A         | Phone Jack 1/4" (6.35mm), Open Circuit           | SC1085-ND         | 2.00 | 14.97      | 34.35  | C11                  |
| 19                                                                   | B         | Mil Number M641/6-1                              | SC1086-ND         | 2.82 | 21.17      | 48.58  | C11                  |
| 20                                                                   | C         | Phone Jack 1/4" (6.35mm) Tip Shunt               | SC1089-ND         | 2.00 | 14.97      | 34.35  | C12A                 |
| 21                                                                   | D         | Mil Number M641/12-1                             | SC1090-ND         | 3.51 | 26.30      | 60.35  | C12A                 |
| <b>1/4" (6.35mm) "Littel Jax," Three Conductor Phone Jacks</b>       |           |                                                  |                   |      |            |        |                      |
| 22                                                                   | C         | Phone Jack Double Open Circuit                   | SC1094-ND         | 2.08 | 15.61      | 35.82  | 12B                  |
| 23                                                                   | C         | Phone Jack .375" (9.53mm) Bushing                | SC1096-ND         | 2.28 | 17.11      | 39.26  | 112B                 |
| 24                                                                   | C         | Phone Jack .210" (5.33mm)                        | SC1097-ND         | 3.08 | 23.09      | 52.99  | S12B                 |
| 25                                                                   | D         | Phone Jack Tip Shunt                             | SC1098-ND         | 4.79 | 35.92      | 82.44  | 13B                  |
| 26                                                                   | E         | Phone Jack Double Closed Circuit                 | SC1099-ND         | 5.02 | 37.63      | 86.36  | 14B                  |
| <b>1/4" (6.35mm) Two Conductor Jacks with Solder Lug Terminals</b>   |           |                                                  |                   |      |            |        |                      |
| 27                                                                   | A         | Phone Jack Enclosed Insulated Bushing            | SC1103-ND         | 2.22 | 16.68      | 38.27  | N111                 |
| 28                                                                   | B         | Phone Jack Enclosed Single Closed Circuit        | SC1104-ND         | 1.91 | 14.33      | 32.88  | N112A                |
| 29                                                                   | B         | Phone Jack Enclosed Insulated Bushing            | SC1105-ND         | 2.37 | 17.75      | 40.73  | N112A                |
| <b>1/4" (6.35mm) Two Conductor Jacks with PC Terminals</b>           |           |                                                  |                   |      |            |        |                      |
| 30                                                                   | A         | Phone Jack Enclosed PCB Open Circuit             | SC1113-ND         | 1.88 | 14.11      | 32.39  | 111PC                |
| 31                                                                   | A         | Phone Jack Enclosed PCB Insulated Bushing        | SC1114-ND         | 2.22 | 16.68      | 38.27  | N111PC               |
| 32                                                                   | B         | Phone Jack Enclosed PCB Single Closed Circuit    | SC1115-ND         | 1.91 | 14.33      | 32.88  | N112APC              |
| 33                                                                   | B         | Phone Jack Enclosed PCB Insulated Bushing        | SC1116-ND         | 2.37 | 17.75      | 40.73  | N112APC              |
| 34                                                                   | A         | Phone Jack Rt. Angle Single Open Circuit         | SC1121-ND         | 1.68 | 12.62      | 28.95  | RN111PC              |
| 35                                                                   | B         | Phone Jack Rt. Angle Single Closed Circuit       | SC1122-ND         | 1.91 | 14.33      | 32.88  | RN112APC             |
| <b>1/4" (6.35mm) Three Conductor Jacks with Solder Lug Terminals</b> |           |                                                  |                   |      |            |        |                      |
| 36                                                                   | C         | Phone Jack Enclosed Double Open Circuit          | SC1107-ND         | 1.97 | 14.75      | 33.86  | 112B                 |
| 37                                                                   | C         | Phone Jack Enclosed w/ Solder Lugs               | SC1108-ND*        | 2.88 | 21.60      | 49.56  | M112B                |
| 38                                                                   | E         | Phone Jack Enclosed Double Closed Circuit        | SC1111-ND         | 2.62 | 19.67      | 45.14  | 114B                 |
| 39                                                                   | E         | Phone Jack Enclosed Insulated Bushing            | SC1112-ND         | 3.08 | 23.09      | 52.99  | N114B                |
| <b>1/4" (6.35mm) Three Conductor Jacks with PC Terminals</b>         |           |                                                  |                   |      |            |        |                      |
| 40                                                                   | C         | Phone Jack Enclosed PCB Dlp Open Circuit         | SC1117-ND         | 1.97 | 14.75      | 33.86  | 112BPC               |
| 41                                                                   | E         | Phone Jack Enclosed PCB Insulated Bushing        | SC1120-ND         | 3.08 | 23.09      | 52.99  | N114BPC              |
| 42                                                                   | C         | Phone Jack Rt. Angle Double Open Circuit         | SC1123-ND         | 2.08 | 15.61      | 35.82  | RN112BPC             |
| 43                                                                   | D         | Phone Jack Rt. Angle Tip Closed Ring Open        | SC1124-ND         | 2.31 | 17.32      | 39.75  | RN113BPC             |
| 44                                                                   | E         | Phone Jack Rt. Angle Double Closed Circuit       | SC1125-ND         | 2.42 | 18.18      | 41.71  | RN114BPC             |
| <b>1/4" (6.35mm) "TP-Jax" Thick-panel Phone Jacks</b>                |           |                                                  |                   |      |            |        |                      |
| 45                                                                   | A         | 2 Cond, Open Circuit                             | SC1034-ND         | 6.30 | 47.26      | 108.44 | 151                  |
| 46                                                                   | C         | 3 Cond, Open Circuit                             | SC1035-ND         | 6.95 | 52.17      | 119.73 | 152B                 |
| <b>"Extension-Jax" 1/4" (6.35mm) Cable Extension Jacks</b>           |           |                                                  |                   |      |            |        |                      |
| 47                                                                   | —         | In Line 2 Cond Black Handle Screw Terminals      | SC1036-ND         | 5.36 | 40.20      | 92.25  | 80                   |
| 48                                                                   | —         | In Line 2 Cond Shielded Screw Terminals          | SC1037-ND         | 6.95 | 52.17      | 119.73 | 120                  |
| 49                                                                   | —         | In Line 2 Cond Shielded Solder Lugs, Cable Clamp | SC1038-ND         | 6.95 | 52.17      | 119.73 | 121                  |
| 50                                                                   | —         | In Line 2 Cond Shielded Solder Lugs, Cable Clamp | SC1039-ND         | 5.99 | 44.90      | 103.04 | 128                  |
| 51                                                                   | —         | In Line 3 Cond Shielded Solder Lugs              | SC1040-ND         | 8.61 | 64.58      | 148.19 | 131                  |
| 52                                                                   | —         | In Line 3 Cond Black Handle Screw Terminals      | SC1041-ND         | 7.41 | 55.60      | 127.58 | 830                  |
| 53                                                                   | —         | In Line 3 Cond Shielded Handle Screw Terminals   | SC1042-ND         | 8.41 | 63.08      | 144.75 | 1230                 |
| <b>Jack Cover</b>                                                    |           |                                                  |                   |      |            |        |                      |
| 54                                                                   | —         | Jack Cover Black w/ Hardware                     | SC1101-ND         | 7.41 | 55.60      | 127.58 | 515                  |
| <b>* .25 inch (6.35mm) I.D. sleeve, metal bushing</b>                |           |                                                  |                   |      |            |        |                      |

| Fig.                  | Description                           | Digi-Key Part No. | 1     | Pricing 10 | 25     | 100    | Switchcraft Part No. |
|-----------------------|---------------------------------------|-------------------|-------|------------|--------|--------|----------------------|
| <b>Audio Adapters</b> |                                       |                   |       |            |        |        |                      |
| 55                    | 3-Contact Female to 3 pos. Phone Plug | SC1126-ND         | 15.28 | 114.61     | 263.01 | 955.10 | 386A                 |
| 56                    | 3-Pin Male to 3 Cond. Phone Plug      | SC1127-ND         | 13.77 | 103.28     | 237.00 | 860.66 | 387A                 |

# Switchcraft® Phone, Power & Phono Plugs & Jacks

A

| <p><b>Fig. 1</b></p> <p><b>3.5mm Plug</b></p>                     | <p><b>Fig. 2</b></p> <p><b>2.5mm Plug</b></p>             | <p><b>Fig. 3</b></p> <p><b>Fig. 4</b></p> <p><b>Fig. 5</b></p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         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 |       |       |        |    |                                      |                                        |           |       |       |       |        |    |                                      |                                          |           |       |       |       |          |    |                                            |                            |           |       |       |        |          |             |                                                           |           |      |       |       |        |      |   |      |                                           |           |      |       |       |     |   |      |                                            |           |      |       |       |      |    |       |                                    |           |      |       |       |      |    |      |                                    |           |      |       |       |      |             |  |  |  |  |  |  |  |   |      |                                   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| <p><b>Fig. 6</b></p> <p><b>Fig. 7</b></p>                         | <p><b>Fig. 8</b></p> <p><b>Fig. 9</b></p>                 | <p><b>Fig. 10</b></p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  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| <p><b>Fig. 11</b></p> <p><b>Fig. 12</b></p> <p><b>Fig. 13</b></p> |                                                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        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                                     |           |      |       |       |        |    |                                |                                                     |           |       |       |       |        |                                       |                                     |           |     |      |      |       |        |   |                                         |                                            |           |      |       |       |        |    |                                            |                                          |           |       |       |        |        |   |                                     |                                              |           |      |       |       |        |                                                |                                         |           |     |      |      |       |        |    |                                    |                                               |           |      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| <p><b>Fig. 14</b></p>                                             | <p><b>Fig. 15</b></p>                                     | <table><thead><tr><th>Fig.</th><th>Mates With</th><th>Description</th><th>Digi-Key Part No.</th><th>1</th><th>10</th><th>25</th><th>Switchcraft Part No.</th></tr></thead><tbody><tr><td colspan="8">"Tini Plug" Miniature Phone Plugs</td></tr><tr><td>1</td><td>41</td><td>.141" (3.58mm) Black w/ Screw Terminals</td><td>SC1053-ND</td><td>2.99</td><td>22.45</td><td>51.52</td><td>740</td></tr><tr><td>1</td><td>41</td><td>.141" (3.58mm) Black w/ Solder Lug &amp; Cable Clamp</td><td>SC1055-ND</td><td>2.91</td><td>21.81</td><td>50.05</td><td>750</td></tr><tr><td>1</td><td>41</td><td>.141" (3.58mm) Red w/ Solder Lug &amp; Cable Clamp</td><td>SC1056-ND</td><td>2.91</td><td>21.81</td><td>50.05</td><td>755</td></tr><tr><td>1</td><td>41</td><td>.141" (3.58mm) Shielded w/ Solder Lug &amp; Cable Clamp</td><td>SC1057-ND</td><td>3.99</td><td>29.94</td><td>68.70</td><td>780</td></tr><tr><td colspan="8">"Micro-plug" Subminiature Phone Plugs</td></tr><tr><td>2</td><td>Fig. 3, 4, 6, 7</td><td>.097" (2.46mm) 2 Cond Black w/ Solder Lugs</td><td>SC1058-ND</td><td>2.96</td><td>22.24</td><td>51.03</td><td>850</td></tr><tr><td>2</td><td>Fig. 3, 4, 6, 7</td><td>.097" (2.46mm) 2 Cond Red w/ Solder Lugs</td><td>SC1059-ND</td><td>2.96</td><td>22.24</td><td>51.03</td><td>855</td></tr><tr><td>2</td><td>Fig. 3, 4, 6, 7</td><td>.097" (2.46mm) 2 Cond Natural w/ Solder Lugs</td><td>SC1060-ND</td><td>2.96</td><td>22.24</td><td>51.03</td><td>880</td></tr><tr><td colspan="8">"Micro-d Jax" Subminiature Enclosed Phone Jack</td></tr><tr><td>3</td><td>850</td><td>Subminiature 2 Cond Closed Circuit Solder Lug</td><td>SC1043-ND</td><td>1.97</td><td>14.75</td><td>33.86</td><td>MDSL2A</td></tr><tr><td>6</td><td>850</td><td>Subminiature 2 Cond Closed Circuit PCB</td><td>SC1044-ND</td><td>1.97</td><td>14.75</td><td>33.86</td><td>MDPC2A</td></tr><tr><td>4</td><td>850</td><td>Subminiature Rt. Angle 2 Cond Solder Lug</td><td>SC1045-ND</td><td>2.19</td><td>16.46</td><td>37.78</td><td>MDSL2ARA</td></tr><tr><td>7</td><td>850</td><td>Subminiature Rt. Angle PCB</td><td>SC1046-ND</td><td>2.19</td><td>16.46</td><td>37.78</td><td>MDPC2ARA</td></tr><tr><td colspan="8">Power Plugs</td></tr><tr><td>5</td><td>712A</td><td>Power Plug .1" Black Handle (2.5 mm Dia.)</td><td>SC1051-ND</td><td>2.91</td><td>21.81</td><td>50.05</td><td>760</td></tr><tr><td>5</td><td>722A</td><td>Power Plug .08" Black Handle (2.1 mm Dia.)</td><td>SC1052-ND</td><td>2.91</td><td>21.81</td><td>50.05</td><td>S760</td></tr><tr><td>10</td><td>L712A</td><td>Conn Power Plug Locking 2.5 mm Blk</td><td>SC1148-ND</td><td>4.22</td><td>31.65</td><td>72.62</td><td>761K</td></tr><tr><td>10</td><td>712A</td><td>Conn Power Plug Locking 2.5 mm Blk</td><td>SC1149-ND</td><td>4.22</td><td>31.65</td><td>72.62</td><td>760K</td></tr><tr><td colspan="8">Power Jacks</td></tr><tr><td>8</td><td>760K</td><td>Panel Mount Jack 1" Dia. PC Terminals (2.5 mm Dia.)</td><td>SC1050-ND</td><td>2.91</td><td>21.81</td><td>50.05</td><td>PC712A</td></tr><tr><td>8</td><td>S760K</td><td>Panel Mount Jack .08" Dia. (2.1mm Dia.)</td><td>SC1047-ND</td><td>2.91</td><td>21.81</td><td>50.05</td><td>PC722A</td></tr><tr><td>9</td><td>760</td><td>Panel Mount Jack 1" Dia., Solder Lug (2.5 mm Dia.)</td><td>SC1048-ND</td><td>2.91</td><td>21.81</td><td>50.05</td><td>712A</td></tr><tr><td>9</td><td>S760</td><td>Panel Mount Jack .08" Dia., Solder Lug (2.1 mm Dia.)</td><td>SC1049-ND</td><td>2.91</td><td>21.81</td><td>50.05</td><td>722A</td></tr><tr><td>11</td><td>761K</td><td>Conn Power Jack 2.5 mm Panel Mount Long</td><td>SC1150-ND</td><td>3.99</td><td>29.94</td><td>68.70</td><td>L712A</td></tr><tr><td>11</td><td>S761K</td><td>Conn Power Jack 2.1 mm Panel Mount Long</td><td>SC1151-ND</td><td>3.99</td><td>29.94</td><td>68.70</td><td>L722A</td></tr><tr><td>12</td><td>760</td><td>Conn Power Jack Right Angle PCB 2.5 mm</td><td>SC1152-ND</td><td>1.11</td><td>8.32</td><td>19.09</td><td>RAPC712</td></tr><tr><td>12</td><td>S760</td><td>Conn Power Jack Right Angle PCB 2.1 mm</td><td>SC1153-ND</td><td>1.08</td><td>8.13</td><td>18.65</td><td>RAPC722</td></tr><tr><td>13</td><td>760</td><td>Conn Power Jack Hybrid SMT 2.5 mm</td><td>SC1154-ND</td><td>2.14</td><td>16.04</td><td>36.80</td><td>RASH712</td></tr><tr><td>13</td><td>S760</td><td>Conn Power Jack Hybrid SMT 2.1 mm</td><td>SC1155-ND</td><td>2.14</td><td>16.04</td><td>36.80</td><td>RASH722</td></tr></tbody></table> | Fig.              | Mates With  | Description       | Digi-Key Part No. | 1                    | 10 | 25  | Switchcraft Part No. | "Tini Plug" Miniature Phone Plugs |  |  |  |  |  |  |  | 1  | 41                             | .141" (3.58mm) Black w/ Screw Terminals | SC1053-ND | 2.99  | 22.45 | 51.52 | 740   | 1  | 41                 | .141" (3.58mm) Black w/ Solder Lug & Cable Clamp | SC1055-ND | 2.91 | 21.81 | 50.05 | 750   | 1  | 41                                | .141" (3.58mm) Red w/ Solder Lug & Cable Clamp | SC1056-ND | 2.91 | 21.81 | 50.05 | 755    | 1  | 41                             | .141" (3.58mm) Shielded w/ Solder Lug & Cable Clamp | SC1057-ND | 3.99  | 29.94 | 68.70 | 780    | "Micro-plug" Subminiature Phone Plugs |                                     |           |     |      |      |       |        | 2 | Fig. 3, 4, 6, 7                         | .097" (2.46mm) 2 Cond Black w/ Solder Lugs | SC1058-ND | 2.96 | 22.24 | 51.03 | 850    | 2  | Fig. 3, 4, 6, 7                            | .097" (2.46mm) 2 Cond Red w/ Solder Lugs | SC1059-ND | 2.96  | 22.24 | 51.03  | 855    | 2 | Fig. 3, 4, 6, 7                     | .097" (2.46mm) 2 Cond Natural w/ Solder Lugs | SC1060-ND | 2.96 | 22.24 | 51.03 | 880    | "Micro-d Jax" Subminiature Enclosed Phone Jack |                                         |           |     |      |      |       |        | 3  | 850                                | Subminiature 2 Cond Closed Circuit Solder Lug | SC1043-ND | 1.97  | 14.75 | 33.86 | MDSL2A | 6  | 850                                  | Subminiature 2 Cond Closed Circuit PCB | SC1044-ND | 1.97  | 14.75 | 33.86 | MDPC2A | 4  | 850                                  | Subminiature Rt. Angle 2 Cond Solder Lug | SC1045-ND | 2.19  | 16.46 | 37.78 | MDSL2ARA | 7  | 850                                        | Subminiature Rt. Angle PCB | SC1046-ND | 2.19  | 16.46 | 37.78  | MDPC2ARA | Power Plugs |                                                           |           |      |       |       |        |      | 5 | 712A | Power Plug .1" Black Handle (2.5 mm Dia.) | SC1051-ND | 2.91 | 21.81 | 50.05 | 760 | 5 | 722A | Power Plug .08" Black Handle (2.1 mm Dia.) | SC1052-ND | 2.91 | 21.81 | 50.05 | S760 | 10 | L712A | Conn Power Plug Locking 2.5 mm Blk | SC1148-ND | 4.22 | 31.65 | 72.62 | 761K | 10 | 712A | Conn Power Plug Locking 2.5 mm Blk | SC1149-ND | 4.22 | 31.65 | 72.62 | 760K | Power Jacks |  |  |  |  |  |  |  | 8 | 760K | Panel Mount Jack 1" Dia. PC Terminals (2.5 mm Dia.) | SC1050-ND | 2.91 | 21.81 | 50.05 | PC712A | 8 | S760K | Panel Mount Jack .08" Dia. (2.1mm Dia.) | SC1047-ND | 2.91 | 21.81 | 50.05 | PC722A | 9 | 760 | Panel Mount Jack 1" Dia., Solder Lug (2.5 mm Dia.) | SC1048-ND | 2.91 | 21.81 | 50.05 | 712A | 9 | S760 | Panel Mount Jack .08" Dia., Solder Lug (2.1 mm Dia.) | SC1049-ND | 2.91 | 21.81 | 50.05 | 722A | 11 | 761K | Conn Power Jack 2.5 mm Panel Mount Long | SC1150-ND | 3.99 | 29.94 | 68.70 | L712A | 11 | S761K | Conn Power Jack 2.1 mm Panel Mount Long | SC1151-ND | 3.99 | 29.94 | 68.70 | L722A | 12 | 760 | Conn Power Jack Right Angle PCB 2.5 mm | SC1152-ND | 1.11 | 8.32 | 19.09 | RAPC712 | 12 | S760 | Conn Power Jack Right Angle PCB 2.1 mm | SC1153-ND | 1.08 | 8.13 | 18.65 | RAPC722 | 13 | 760 | Conn Power Jack Hybrid SMT 2.5 mm | SC1154-ND | 2.14 | 16.04 | 36.80 | RASH712 | 13 | S760 | Conn Power Jack Hybrid SMT 2.1 mm | SC1155-ND | 2.14 | 16.04 | 36.80 | RASH722 |
| Fig.                                                              | Mates With                                                | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | Digi-Key Part No. | 1           | 10                | 25                | Switchcraft Part No. |    |     |                      |                                   |  |  |  |  |  |  |  |    |                                |                                         |           |       |       |       |       |    |                    |                                                  |           |      |       |       |       |    |                                   |           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| "Tini Plug" Miniature Phone Plugs                                 |                                                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        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| 1                                                                 | 41                                                        | .141" (3.58mm) Black w/ Screw Terminals                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | SC1053-ND         | 2.99        | 22.45             | 51.52             | 740                  |    |     |                      |                                   |  |  |  |  |  |  |  |    |                                |                                         |           |       |       |       |       |    |                    |                                                  |           |      |       |       |       |    |                                   |           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| 1                                                                 | 41                                                        | .141" (3.58mm) Black w/ Solder Lug & Cable Clamp                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | SC1055-ND         | 2.91        | 21.81             | 50.05             | 750                  |    |     |                      |                                   |  |  |  |  |  |  |  |    |                                |                                         |           |       |       |       |       |    |                    |                                                  |           |      |       |       |       |    |                                   |           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| 1                                                                 | 41                                                        | .141" (3.58mm) Red w/ Solder Lug & Cable Clamp                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | SC1056-ND         | 2.91        | 21.81             | 50.05             | 755                  |    |     |                      |                                   |  |  |  |  |  |  |  |    |                                |                                         |           |       |       |       |       |    |                    |                                                  |           |      |       |       |       |    |                                   |           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| 1                                                                 | 41                                                        | .141" (3.58mm) Shielded w/ Solder Lug & Cable Clamp                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    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| "Micro-plug" Subminiature Phone Plugs                             |                                                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        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| 2                                                                 | Fig. 3, 4, 6, 7                                           | .097" (2.46mm) 2 Cond Black w/ Solder Lugs                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             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| 2                                                                 | Fig. 3, 4, 6, 7                                           | .097" (2.46mm) 2 Cond Red w/ Solder Lugs                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               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| 2                                                                 | Fig. 3, 4, 6, 7                                           | .097" (2.46mm) 2 Cond Natural w/ Solder Lugs                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           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| "Micro-d Jax" Subminiature Enclosed Phone Jack                    |                                                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        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| 3                                                                 | 850                                                       | Subminiature 2 Cond Closed Circuit Solder Lug                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | SC1043-ND         | 1.97        | 14.75             | 33.86             | MDSL2A               |    |     |                      |                                   |  |  |  |  |  |  |  |    |                                |                                         |           |       |       |       |       |    |                    |                                                  |           |      |       |       |       |    |                                   |           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| 6                                                                 | 850                                                       | Subminiature 2 Cond Closed Circuit PCB                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | SC1044-ND         | 1.97        | 14.75             | 33.86             | MDPC2A               |    |     |                      |                                   |  |  |  |  |  |  |  |    |                                |                                         |           |       |       |       |       |    |                    |                                                  |           |      |       |       |       |    |                                   |                                                |           |      |       |       |        |    |                                |                                                     |           |       |       |       |        |                                       |                                     |           |     |      |      |       |        |   |                                         |                                            |           |      |       |       |        |    |                                            |                                          |           |       |       |        |        |   |                                     |                                              |           |      |       |       |        |                                                |                                         |           |     |      |      |       |        |    |                                    |                                               |           |      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| 4                                                                 | 850                                                       | Subminiature Rt. Angle 2 Cond Solder Lug                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | SC1045-ND         | 2.19        | 16.46             | 37.78             | MDSL2ARA             |    |     |                      |                                   |  |  |  |  |  |  |  |    |                                |                                         |           |       |       |       |       |    |                    |                                                  |           |      |       |       |       |    |                                   |                                                |           |      |       |       |        |    |                                |                           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| 7                                                                 | 850                                                       | Subminiature Rt. Angle PCB                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | SC1046-ND         | 2.19        | 16.46             | 37.78             | MDPC2ARA             |    |     |                      |                                   |  |  |  |  |  |  |  |    |                                |                                         |           |       |       |       |       |    |                    |                                                  |           |      |       |       |       |    |                                   |                                                |           |      |       |       |        |    |                                |                           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| Power Plugs                                                       |                                                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        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| 5                                                                 | 712A                                                      | Power Plug .1" Black Handle (2.5 mm Dia.)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | SC1051-ND         | 2.91        | 21.81             | 50.05             | 760                  |    |     |                      |                                   |  |  |  |  |  |  |  |    |                                |                                         |           |       |       |       |       |    |                    |                                                  |           |      |       |       |       |    |                                   |           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| 5                                                                 | 722A                                                      | Power Plug .08" Black Handle (2.1 mm Dia.)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | SC1052-ND         | 2.91        | 21.81             | 50.05             | S760                 |    |     |                      |                                   |  |  |  |  |  |  |  |    |                                |                                         |           |       |       |       |       |    |                    |                                                  |           |      |       |       |       |    |                                   |                                                |           |      |       |       |        |    |                                |                                                     |           |       |       |       |        |                                       |                                     |           |     |      |      |       |        |   |                                         |                                            |           |      |       |       |        |    |                                            |                                          |           |       |       |        |        |   |                                     |                                              |           |      |       |       |        |                                                |                                         |           |     |      |      |       |        |    |                                    |                                               |           |      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| 10                                                                | L712A                                                     | Conn Power Plug Locking 2.5 mm Blk                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     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                  |           |      |       |       |        |   |       |                                         |           |      |       |       |        |   |     |                                                    |           |      |       |       |      |   |      |                                                      |           |      |       |       |      |    |      |                                         |           |      |       |       |       |    |       |                                         |           |      |       |       |       |    |     |                                        |           |      |      |       |         |    |      |                                        |           |      |      |       |         |    |     |                                   |           |      |       |       |         |    |      |                                   |           |      |       |       |         |
| 10                                                                | 712A                                                      | Conn Power Plug Locking 2.5 mm Blk                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     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                                     |           |      |       |       |        |    |                                |                                                     |           |       |       |       |        |                                       |                                     |           |     |      |      |       |        |   |                                         |                                            |           |      |       |       |        |    |                                            |                                          |           |       |       |        |        |   |                                     |                                              |           |      |       |       |        |                                                |                                         |           |     |      |      |       |        |    |                                    |                                               |           |      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| Power Jacks                                                       |                                                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        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| 8                                                                 | 760K                                                      | Panel Mount Jack 1" Dia. PC Terminals (2.5 mm Dia.)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               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| 8                                                                 | S760K                                                     | Panel Mount Jack .08" Dia. (2.1mm Dia.)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             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                |           |       |       |       |        |                                       |                                     |           |     |      |      |       |        |   |                                         |                                            |           |      |       |       |        |    |                                            |                                          |           |       |       |        |        |   |                                     |                                              |           |      |       |       |        |                                                |                                         |           |     |      |      |       |        |    |                                    |                                               |           |       |       |       |        |    |                                      |                                        |           |       |       |       |        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| 9                                                                 | 760                                                       | Panel Mount Jack 1" Dia., Solder Lug (2.5 mm Dia.)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     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| 9                                                                 | S760                                                      | Panel Mount Jack .08" Dia., Solder Lug (2.1 mm Dia.)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   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| 11                                                                | 761K                                                      | Conn Power Jack 2.5 mm Panel Mount Long                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | SC1150-ND         | 3.99        | 29.94             | 68.70             | L712A                |    |     |                      |                                   |  |  |  |  |  |  |  |    |                                |                                         |           |       |       |       |       |    |                    |                                                  |           |      |       |       |       |    |                                   |                                                |           |      |       |       |        |    |                                |                                                     |           |       |       |       |        |                                       |                                     |           |     |      |      |       |        |   |                                         |                                            |           |      |       |       |        |    |                                            |                                          |           |       |       |        |        |   |                                     |                                              |           |      |       |       |        |                                                |                                         |           |     |      |      |       |        |    |                                    |                                               |           |      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| 11                                                                | S761K                                                     | Conn Power Jack 2.1 mm Panel Mount Long                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                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                                     |           |      |       |       |        |    |                                |                                                     |           |       |       |       |        |                                       |                                     |           |     |      |      |       |        |   |                                         |                                            |           |      |       |       |        |    |                                            |                                          |           |       |       |        |        |   |                                     |                                              |           |      |       |       |        |                                                |                                         |           |     |      |      |       |        |    |                                    |                                               |           |       |       |       |        |    |                                      |                                        |           |       |       |       |        |    |                                      |                                          |           |       |       |       |          |    |                                            |                            |           |       |       |        |          |             |                                                           |           |      |       |       |        |      |   |      |                                           |           |      |       |       |     |   |      |                                            |           |      |       |       |      |    |       |                                    |           |      |       |       |      |    |      |                                    |           |      |       |       |      |             |  |  |  |  |  |  |  |   |      |                                                     |           |      |       |       |        |   |       |                                         |           |      |       |       |        |   |     |                                                    |           |      |       |       |      |   |      |                                                      |           |      |       |       |      |    |      |                                         |           |      |       |       |       |    |       |                                         |           |      |       |       |       |    |     |                                        |           |      |      |       |         |    |      |                                        |           |      |      |       |         |    |     |                                   |           |      |       |       |         |    |      |                                   |           |      |       |       |         |
| 12                                                                | 760                                                       | Conn Power Jack Right Angle PCB 2.5 mm                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | SC1152-ND         | 1.11        | 8.32              | 19.09             | RAPC712              |    |     |                      |                                   |  |  |  |  |  |  |  |    |                                |                                         |           |       |       |       |       |    |                    |                                                  |           |      |       |       |       |    |                                   |                                                |           |      |       |       |        |    |                                |                                                     |           |       |       |       |        |                                       |                                     |           |     |      |      |       |        |   |                                         |                                            |           |      |       |       |        |    |                                            |                                          |           |       |       |        |        |   |                                     |                                              |           |      |       |       |        |                                                |                                         |           |     |      |      |       |        |    |                                    |                                               |           |      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| 12                                                                | S760                                                      | Conn Power Jack Right Angle PCB 2.1 mm                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | SC1153-ND         | 1.08        | 8.13              | 18.65             | RAPC722              |    |     |                      |                                   |  |  |  |  |  |  |  |    |                                |                                         |           |       |       |       |       |    |                    |                                                  |           |      |       |       |       |    |                                   |                                                |           |      |       |       |        |    |                                |                                                     |           |       |       |       |        |                                       |                                     |           |     |      |      |       |        |   |                                         |                                            |           |      |       |       |        |    |                                            |                                          |           |       |       |        |        |   |                                     |                                              |           |      |       |       |        |                                                |                                         |           |     |      |      |       |        |    |                                    |                                               |           |      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                  |           |      |       |       |        |   |       |                                         |           |      |       |       |        |   |     |                                                    |           |      |       |       |      |   |      |                                                      |           |      |       |       |      |    |      |                                         |           |      |       |       |       |    |       |                                         |           |      |       |       |       |    |     |                                        |           |      |      |       |         |    |      |                                        |           |      |      |       |         |    |     |                                   |           |      |       |       |         |    |      |                                   |           |      |       |       |         |
| 13                                                                | 760                                                       | Conn Power Jack Hybrid SMT 2.5 mm                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | SC1154-ND         | 2.14        | 16.04             | 36.80             | RASH712              |    |     |                      |                                   |  |  |  |  |  |  |  |    |                                |                                         |           |       |       |       |       |    |                    |                                                  |           |      |       |       |       |    |                                   |                                                |           |      |       |       |        |    |                                |                                                     |           |       |       |       |        |                                       |                                     |           |     |      |      |       |        |   |                                         |                                            |           |      |       |       |        |    |                                            |                                          |           |       |       |        |        |   |                                     |                                              |           |      |       |       |        |                                                |                                         |           |     |      |      |       |        |    |                                    |                                               |           |      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| 13                                                                | S760                                                      | Conn Power Jack Hybrid SMT 2.1 mm                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | SC1155-ND         | 2.14        | 16.04             | 36.80             | RASH722              |    |     |                      |                                   |  |  |  |  |  |  |  |    |                                |                                         |           |       |       |       |       |    |                    |                                                  |           |      |       |       |       |    |                                   |                                                |           |      |       |       |        |    |                                |                                                     |           |       |       |       |        |                                       |                                     |           |     |      |      |       |        |   |                                         |                                            |           |      |       |       |        |    |                                            |                                          |           |       |       |        |        |   |                                     |                                              |           |      |       |       |        |                                                |                                         |           |     |      |      |       |        |    |                                    |                                               |           |       |       |       |        |    |                                      |                                        |           |       |       |       |        |    |                                      |                                          |           |       |       |       |          |    |                                            |                            |           |       |       |        |          |             |                                                           |           |      |       |       |        |      |   |      |                                           |           |      |       |       |     |   |      |                                            |           |      |       |       |      |    |       |                                    |           |      |       |       |      |    |      |                                    |           |      |       |       |      |             |  |  |  |  |  |  |  |   |      |                                   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| <p><b>Fig. 16</b></p>                                             | <p><b>Fig. 17</b></p>                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        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 |       |       |        |    |                                      |                                        |           |       |       |       |        |    |                                      |                                          |           |       |       |       |          |    |                                            |                            |           |       |       |        |          |             |                                                           |           |      |       |       |        |      |   |      |                                           |           |      |       |       |     |   |      |                                            |           |      |       |       |      |    |       |                                    |           |      |       |       |      |    |      |                                    |           |      |       |       |      |             |  |  |  |  |  |  |  |   |      |                                   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| <p><b>Fig. 18</b></p>                                             | <p><b>Fig. 19</b></p>                                     | <table><thead><tr><th>Fig.</th><th>Description</th><th>Digi-Key Part No.</th><th>1</th><th>10</th><th>25</th><th>100</th><th>Switchcraft Part No.</th></tr></thead><tbody><tr><td colspan="8">Phono Jacks and Plugs</td></tr><tr><td>14</td><td>Phono Jack 2 Cond. Panel Mount</td><td>SC1130-ND</td><td>1.51</td><td>11.33</td><td>26.01</td><td>94.44</td><td>3501F</td></tr><tr><td>15</td><td>Phono Plug 2 Cond.</td><td>SC1131-ND</td><td>.51</td><td>3.85</td><td>8.83</td><td>32.07</td><td>3501M</td></tr><tr><td>16</td><td>Phono Plug 2 Cond. w/ Cable Clamp</td><td>SC1132-ND</td><td>1.00</td><td>7.48</td><td>17.17</td><td>62.37</td><td>3501MC</td></tr><tr><td>17</td><td>Phono Jack 2 Cond. Panel Mount</td><td>SC1133-ND</td><td>1.40</td><td>10.48</td><td>24.04</td><td>87.31</td><td>3501FP</td></tr><tr><td>—</td><td>Insulated Washer Flat For SC1133-ND</td><td>SC1144-ND</td><td>.34</td><td>2.57</td><td>5.89</td><td>21.38</td><td>S-2207</td></tr><tr><td>—</td><td>Insulated Washer Extruded For SC1133-ND</td><td>SC1145-ND</td><td>.37</td><td>2.78</td><td>6.38</td><td>23.16</td><td>S-1564</td></tr><tr><td>18</td><td>Phono Jack 2 Cond. Panel Mount w/ Hardware</td><td>SC1134-ND</td><td>1.77</td><td>13.26</td><td>30.42</td><td>110.48</td><td>3501FR</td></tr><tr><td>—</td><td>Insulated Washer Flat For SC1134-ND</td><td>SC1146-ND</td><td>.24</td><td>1.71</td><td>3.21</td><td>11.78</td><td>S-1028</td></tr><tr><td>—</td><td>Insulated Washer Extruded For SC1134-ND</td><td>SC1147-ND</td><td>.37</td><td>2.78</td><td>6.38</td><td>23.16</td><td>S-1029</td></tr><tr><td>19</td><td>Phono Plug 2 Cond, Red Cable Clamp</td><td>SC1135-ND</td><td>1.48</td><td>11.12</td><td>25.52</td><td>92.66</td><td>3558-1</td></tr><tr><td>19</td><td>Phono Plug 2 Cond, Black Cable Clamp</td><td>SC1136-ND</td><td>1.48</td><td>11.12</td><td>25.52</td><td>92.66</td><td>3558-2</td></tr><tr><td>19</td><td>Phono Plug 2 Cond, White Cable Clamp</td><td>SC1137-ND</td><td>1.48</td><td>11.12</td><td>25.52</td><td>92.66</td><td>3558-5</td></tr><tr><td>20</td><td>Phono Plug 2 Cond, Shielded w/ Cable Clamp</td><td>SC1138-ND</td><td>1.97</td><td>14.75</td><td>33.86</td><td>122.95</td><td>3502</td></tr><tr><td>21</td><td>Phono Extension Jack 2 Cond, Shielded w/ Heavy Duty Clamp</td><td>SC1139-ND</td><td>2.76</td><td>20.74</td><td>47.60</td><td>172.84</td><td>3503</td></tr></tbody></table>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Fig.              | Description | Digi-Key Part No. | 1                 | 10                   | 25 | 100 | Switchcraft Part No. | Phono Jacks and Plugs             |  |  |  |  |  |  |  | 14 | Phono Jack 2 Cond. Panel Mount | SC1130-ND                               | 1.51      | 11.33 | 26.01 | 94.44 | 3501F | 15 | Phono Plug 2 Cond. | SC1131-ND                                        | .51       | 3.85 | 8.83  | 32.07 | 3501M | 16 | Phono Plug 2 Cond. w/ Cable Clamp | SC1132-ND                                      | 1.00      | 7.48 | 17.17 | 62.37 | 3501MC | 17 | Phono Jack 2 Cond. Panel Mount | SC1133-ND                                           | 1.40      | 10.48 | 24.04 | 87.31 | 3501FP | —                                     | Insulated Washer Flat For SC1133-ND | SC1144-ND | .34 | 2.57 | 5.89 | 21.38 | S-2207 | — | Insulated Washer Extruded For SC1133-ND | SC1145-ND                                  | .37       | 2.78 | 6.38  | 23.16 | S-1564 | 18 | Phono Jack 2 Cond. Panel Mount w/ Hardware | SC1134-ND                                | 1.77      | 13.26 | 30.42 | 110.48 | 3501FR | — | Insulated Washer Flat For SC1134-ND | SC1146-ND                                    | .24       | 1.71 | 3.21  | 11.78 | S-1028 | —                                              | Insulated Washer Extruded For SC1134-ND | SC1147-ND | .37 | 2.78 | 6.38 | 23.16 | S-1029 | 19 | Phono Plug 2 Cond, Red Cable Clamp | SC1135-ND                                     | 1.48      | 11.12 | 25.52 | 92.66 | 3558-1 | 19 | Phono Plug 2 Cond, Black Cable Clamp | SC1136-ND                              | 1.48      | 11.12 | 25.52 | 92.66 | 3558-2 | 19 | Phono Plug 2 Cond, White Cable Clamp | SC1137-ND                                | 1.48      | 11.12 | 25.52 | 92.66 | 3558-5   | 20 | Phono Plug 2 Cond, Shielded w/ Cable Clamp | SC1138-ND                  | 1.97      | 14.75 | 33.86 | 122.95 | 3502     | 21          | Phono Extension Jack 2 Cond, Shielded w/ Heavy Duty Clamp | SC1139-ND | 2.76 | 20.74 | 47.60 | 172.84 | 3503 |   |      |                                           |           |      |       |       |     |   |      |                                            |           |      |       |       |      |    |       |                                    |           |      |       |       |      |    |      |                                    |           |      |       |       |      |             |  |  |  |  |  |  |  |   |      |                                                     |           |      |       |       |        |   |       |                                         |           |      |       |       |        |   |     |                                                    |           |      |       |       |      |   |      |                                                      |           |      |       |       |      |    |      |                                         |           |      |       |       |       |    |       |                                         |           |      |       |       |       |    |     |                                        |           |      |      |       |         |    |      |                                        |           |      |      |       |         |    |     |                                   |           |      |       |       |         |    |      |                                   |           |      |       |       |         |
| Fig.                                                              | Description                                               | Digi-Key Part No.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 1                 | 10          | 25                | 100               | Switchcraft Part No. |    |     |                      |                                   |  |  |  |  |  |  |  |    |                                |                                         |           |       |       |       |       |    |                    |                                                  |           |      |       |       |       |    |                                   |                                                |           |      |       |       |        |    |                                |                                                     |           |       |       |       |        |                                       |                                     |           |     |      |      |       |        |   |                                         |                                            |           |      |       |       |        |    |                                            |                                          |           |       |       |        |        |   |                                     |                                              |           |      |       |       |        |                                                |                                         |           |     |      |      |       |        |    |                                    |                                               |           |       |       |       |        |    |                                      |                                        |           |       |       |       |        |    |                                      |                                          |           |       |       |       |          |    |                                            |                            |           |       |       |        |          |             |                                                           |           |      |       |       |        |      |   |      |                                           |           |      |       |       |     |   |      |                                            |           |      |       |       |      |    |       |                                    |           |      |       |       |      |    |      |                                    |           |      |       |       |      |             |  |  |  |  |  |  |  |   |      |                                   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| Phono Jacks and Plugs                                             |                                                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        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                  |           |      |       |       |        |   |       |                                         |           |      |       |       |        |   |     |                                                    |           |      |       |       |      |   |      |                                                      |           |      |       |       |      |    |      |                                         |           |      |       |       |       |    |       |                                         |           |      |       |       |       |    |     |                                        |           |      |      |       |         |    |      |                                        |           |      |      |       |         |    |     |                                   |           |      |       |       |         |    |      |                                   |           |      |       |       |         |
| 14                                                                | Phono Jack 2 Cond. Panel Mount                            | SC1130-ND                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | 1.51              | 11.33       | 26.01             | 94.44             | 3501F                |    |     |                      |                                   |  |  |  |  |  |  |  |    |                                |                                         |           |       |       |       |       |    |                    |                                                  |           |      |       |       |       |    |                                   |                                                |           |      |       |       |        |    |                                |                                                     |           |       |       |       |        |                                       |                                     |           |     |      |      |       |        |   |                                         |                                            |           |      |       |       |        |    |                                            |                                          |           |       |       |        |        |   |                                     |                                              |           |      |       |       |        |                                                |                                         |           |     |      |      |       |        |    |                                    |                                               |           |       |       |       |        |    |                                      |                  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| 15                                                                | Phono Plug 2 Cond.                                        | SC1131-ND                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              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| 16                                                                | Phono Plug 2 Cond. w/ Cable Clamp                         | SC1132-ND                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              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| 17                                                                | Phono Jack 2 Cond. Panel Mount                            | SC1133-ND                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       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| —                                                                 | Insulated Washer Flat For SC1133-ND                       | SC1144-ND                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              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                                     |           |      |       |       |        |    |                                |                                                     |           |       |       |       |        |                                       |                                     |           |     |      |      |       |        |   |                                         |                                            |           |      |       |       |        |    |                                            |                                          |           |       |       |        |        |   |                                     |                                              |           |      |       |       |        |                                                |                                         |           |     |      |      |       |        |    |                                    |                                               |           |      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| —                                                                 | Insulated Washer Extruded For SC1133-ND                   | SC1145-ND                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              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                                     |           |      |       |       |        |    |                                |                                                     |           |       |       |       |        |                                       |                                     |           |     |      |      |       |        |   |                                         |                                            |           |      |       |       |        |    |                                            |                                          |           |       |       |        |        |   |                                     |                                              |           |      |       |       |        |                                                |                                         |           |     |      |      |       |        |    |                                    |                                               |           |      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| 18                                                                | Phono Jack 2 Cond. Panel Mount w/ Hardware                | SC1134-ND                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | 1.77              | 13.26       | 30.42             | 110.48            | 3501FR               |    |     |                      |                                   |  |  |  |  |  |  |  |    |                                |                                         |           |       |       |       |       |    |                    |                                                  |           |      |       |       |       |    |                                   |                                                |           |      |       |       |        |    |  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| —                                                                 | Insulated Washer Flat For SC1134-ND                       | SC1146-ND                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              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| —                                                                 | Insulated Washer Extruded For SC1134-ND                   | SC1147-ND                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              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                                     |           |      |       |       |        |    |                                |                                                     |           |       |       |       |        |                                       |                                     |           |     |      |      |       |        |   |                                         |                                            |           |      |       |       |        |    |                                            |                                          |           |       |       |        |        |   |                                     |                                              |           |      |       |       |        |                                                |                                         |           |     |      |      |       |        |    |                                    |                                               |           |      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| 19                                                                | Phono Plug 2 Cond, Red Cable Clamp                        | SC1135-ND                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              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                                     |           |      |       |       |        |    |                                |                                                     |           |       |       |       |        |                                       |                                     |           |     |      |      |       |        |   |                                         |                                            |           |      |       |       |        |    |                                            |                                          |           |       |       |        |        |   |                                     |                                              |           |      |       |       |        |                                                |                                         |           |     |      |      |       |        |    |                                    |                                               |           |      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| 19                                                                | Phono Plug 2 Cond, Black Cable Clamp                      | SC1136-ND                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              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                                     |           |      |       |       |        |    |                                |                                                     |           |       |       |       |        |                                       |                                     |           |     |      |      |       |        |   |                                         |                                            |           |      |       |       |        |    |                                            |                                          |           |       |       |        |        |   |                                     |                                              |           |      |       |       |        |                                                |                                         |           |     |      |      |       |        |    |                                    |                                               |           |      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                  |           |      |       |       |        |   |       |                                         |           |      |       |       |        |   |     |                                                    |           |      |       |       |      |   |      |                                                      |           |      |       |       |      |    |      |                                         |           |      |       |       |       |    |       |                                         |           |      |       |       |       |    |     |                                        |           |      |      |       |         |    |      |                                        |           |      |      |       |         |    |     |                                   |           |      |       |       |         |    |      |                                   |           |      |       |       |         |
| 19                                                                | Phono Plug 2 Cond, White Cable Clamp                      | SC1137-ND                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              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                                     |           |      |       |       |        |    |                                |                                                     |           |       |       |       |        |                                       |                                     |           |     |      |      |       |        |   |                                         |                                            |           |      |       |       |        |    |                                            |                                          |           |       |       |        |        |   |                                     |                                              |           |      |       |       |        |                                                |                                         |           |     |      |      |       |        |    |                                    |                                               |           |      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| 20                                                                | Phono Plug 2 Cond, Shielded w/ Cable Clamp                | SC1138-ND                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              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| 21                                                                | Phono Extension Jack 2 Cond, Shielded w/ Heavy Duty Clamp | SC1139-ND                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              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                                     |           |      |       |       |        |    |                                |                                                     |           |       |       |       |        |                                       |                                     |           |     |      |      |       |        |   |                                         |                                            |           |      |       |       |        |    |                                            |                                          |           |       |       |        |        |   |                                     |                                              |           |      |       |       |        |                                                |                                         |           |     |      |      |       |        |    |                                    |                                               |           |      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| <p><b>Fig. 20</b></p>                                             | <p><b>Fig. 21</b></p>                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        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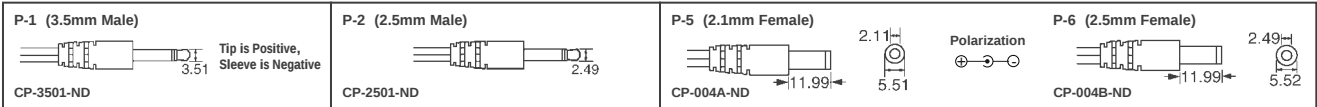
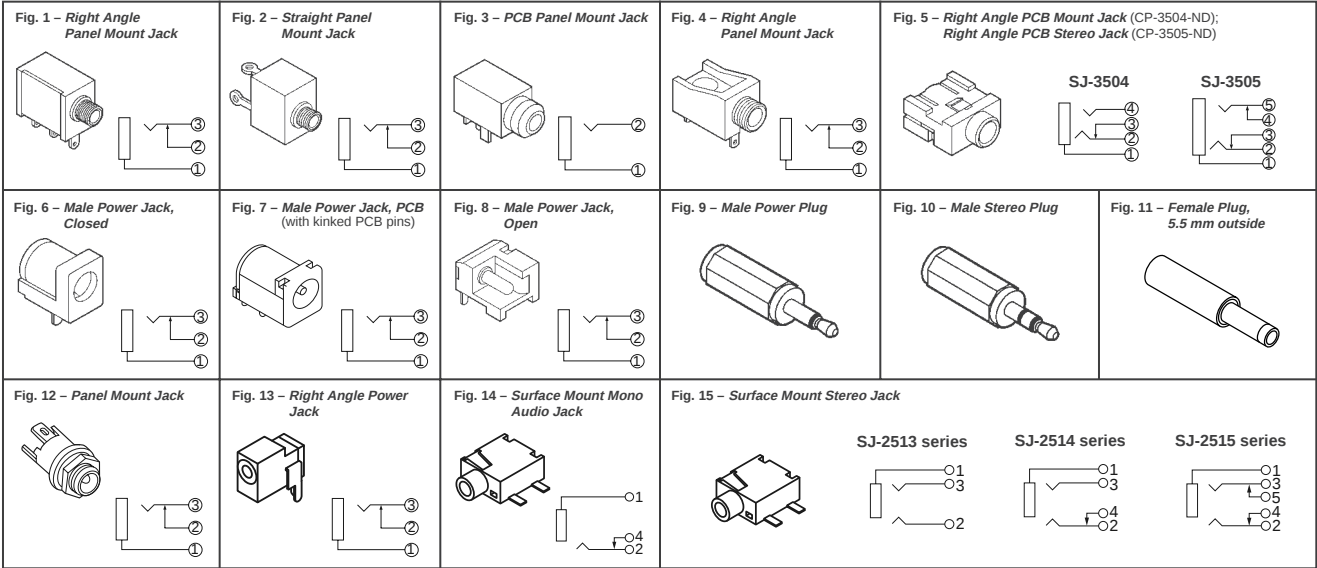


CUI STACK

## Power Connectors

## General Specifications:

• Contact Resistance: 10 - 20 mΩ • Insulation Resistance: 50 MΩ min.: 500 VDC • Voltage Withstand: 250 VAC, 1 minute • Life: 10,000 cycles, most models • Insertion/Extraction Force: 0.8 - 2.0 Kgs

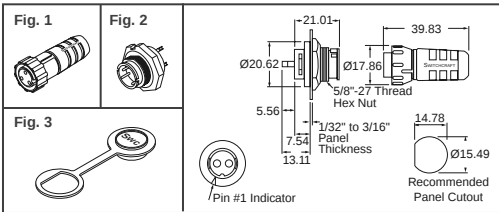


| Fig. | Mating Connector | Digi-Key Part No. | 1    | 10    | 100    | CUI Stack Part No. |
|------|------------------|-------------------|------|-------|--------|--------------------|
| 1    | 2.5 mm (P-2)     | CP-2502-ND        | .99  | 8.58  | 66.00  | MJ-2502            |
| 2    | 2.5 mm (P-2)     | CP-2505-ND        | .93  | 8.06  | 62.00  | MJ-2505            |
| 3    | 2.5 mm (P-2)     | CP-2503-ND        | .51  | 4.39  | 33.80  | MJ-2503A           |
| 4    | 3.5 mm (P-1)     | CP-3536-ND        | .39  | 3.41  | 26.20  | MJ-3536            |
| 5    | 3.5 mm           | CP-3504-ND        | 2.06 | 17.86 | 137.40 | SJ-3504            |
| 5    | 3.5 mm           | CP-3505-ND        | 2.10 | 18.23 | 140.20 | SJ-3505            |
| 6    | 2.0 mm (P-5)     | CP-002A-ND        | .38  | 3.30  | 25.40  | PJ-002A            |
| 6    | 2.4 mm (P-6)     | CP-002B-ND        | .38  | 3.30  | 25.40  | PJ-002B            |
| 7    | 2.1 mm           | CP-202A-ND        | .38  | 3.30  | 25.40  | PJ-202A            |
| 7    | 2.5 mm           | CP-202B-ND        | .38  | 3.30  | 25.40  | PJ-202B            |
| 8    | 2.0 mm (P-5)     | CP-003A-ND        | .34  | 2.96  | 22.80  | PJ-003A            |
| 8    | 2.4 mm (P-6)     | CP-003B-ND        | .34  | 2.96  | 22.80  | PJ-003B            |
| 9    | 3.5 mm (P-1)     | CP-3501-ND        | .76  | 6.58  | 50.60  | MP-3501            |
| 9    | 2.5 mm (P-2)     | CP-2501-ND        | .76  | 6.58  | 50.60  | MP-2501            |
| 10   | 3.5 mm           | CP-3502-ND        | .87  | 7.57  | 58.20  | SP-3501            |

| Fig. | Mating Connector | Digi-Key Part No. | 1    | 10    | 100    | CUI Stack Part No. |
|------|------------------|-------------------|------|-------|--------|--------------------|
| 11   | 2.1 mm (P-5)     | CP-004A-ND        | .65  | 5.59  | 43.00  | PP-002A            |
| 11   | 2.5 mm (P-6)     | CP-004B-ND        | .65  | 5.59  | 43.00  | PP-002B            |
| 12   | 2.1 mm (P-5)     | MJ-2513-ND        | 1.83 | 15.86 | 122.00 | PJ-005A            |
| 12   | 2.5 mm (P-6)     | CP-6-ND           | 1.83 | 15.86 | 122.00 | PJ-005B            |
| 13   | 1.3 mm           | CP-2519-ND        | .45  | 3.90  | 30.00  | PJ-007             |
| 14   | 2.5 mm           | CP-2512-ND        | 2.07 | 17.94 | 138.00 | MJ-2510-SMT-TR     |
| 15   | 2.5 mm           | CP-2514-ND        | 2.10 | 18.20 | 140.00 | SJ-2513-SMT-TR     |
| 15   | 2.5 mm           | CP-2516-ND        | 2.16 | 18.72 | 144.00 | SJ-2514-SMT-TR     |
| 15   | 2.5 mm           | CP-2518-ND        | 2.19 | 18.98 | 146.00 | SJ-2515-SMT-TR     |

| Fig. | Mating Connector | Digi-Key Part No. | 800    | 1,000   | 1,600    | 2,000    | CUI Stack Part No. |
|------|------------------|-------------------|--------|---------|----------|----------|--------------------|
| 14   | 2.5 mm           | CP-2511-ND        | —      | 1035.00 | —        | 917.70/M | MJ-2510-SMT        |
| 15   | 2.5 mm           | CP-2513-ND        | —      | 1050.00 | —        | 931.00/M | SJ-2513-SMT        |
| 15   | 2.5 mm           | CP-2515-ND        | 864.00 | —       | 957.60/M | —        | SJ-2514-SMT        |
| 15   | 2.5 mm           | CP-2517-ND        | —      | 1095.00 | —        | 970.90/M | SJ-2515-SMT        |

## Switchcraft® EN3 Weathertight Connectors



**FEATURES AND BENEFITS:** • Housing rated UL 94V-0 against flammability • Contact terminal: Solder Cup Contacts • Panel Connector Shell features a positioning keyway to prevent misalignments • No Grommets. Cable clamp assembly features living hinges, which snap easily onto and holds the cable • Choose cord plug or panel mount • 2-8 pins • Exceeds Coast Guard specifications for water tightness (CFR 46 Part 110.20) • Optional cap covers the panel housing assembly when not in use.

**APPLICATIONS:** • Process control • Marine electronics • Medical instrumentation • Geothermal instrumentation • Communication • Transportation • General industrial electronics.

**SPECIFICATIONS:** • Mechanical: Shock: Mil-Std. 202 method 213B, condition K • Vibration: Mil-Std 202 Method 201. • Life: 600 insertion/withdrawal cycles (min.) • Electrical: Voltage Rating (sea level): • Tested at 600 VRMS • Insulation Resistance: 100 Megohms (min.) at 77°F (25°C) • Contact Resistance: 3.0 Milliohms (max.) • Current Rating: 7.5 Amps (#20 contact) • Environmental: • Temperature Limits: -40°C to +65°C (non-operating) • Moisture Resistance: Mil-Std 202 Method 106F • Insulation Resistance: Mil-Std 202 Method 302, condition B • Thermal Shock: Mil-Std 202 Method 107G • Salt Spray: Mil-Std 202 Method 101D, condition B • Water Tightness Test: U.S. Coast Guard CFR 46 Part 110.20

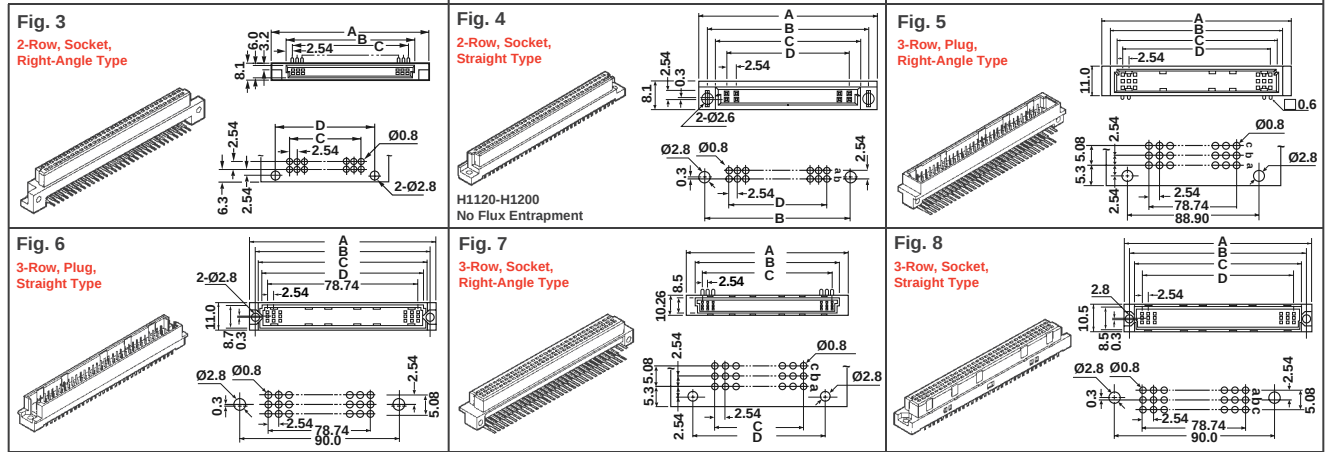
| Fig. | Description                            | Digi-Key Part No. | 1     | 10    | 25     | Switchcraft Part No. |
|------|----------------------------------------|-------------------|-------|-------|--------|----------------------|
| 1    | Conn. Weathertight 3 Pos. Plug Female  | SC1156-ND         | 5.39  | 40.41 | 92.74  | EN3C3F               |
| 1    | Conn. Weathertight 3 Pos. Plug Male    | SC1157-ND         | 3.88  | 29.08 | 66.73  | EN3C3M               |
| 1    | Conn. Weathertight 4 Pos. Plug Female  | SC1158-ND         | 6.44  | 48.33 | 110.90 | EN3C4F               |
| 1    | Conn. Weathertight 4 Pos. Plug Male    | SC1159-ND         | 4.47  | 33.57 | 77.04  | EN3C4M               |
| 1    | Conn. Weathertight 5 Pos. Plug Female  | SC1160-ND         | 7.52  | 56.45 | 129.54 | EN3C5F               |
| 1    | Conn. Weathertight 5 Pos. Plug Male    | SC1161-ND         | 5.10  | 38.28 | 87.83  | EN3C5M               |
| 1    | Conn. Weathertight 6 Pos. Plug Female  | SC1162-ND         | 8.58  | 64.36 | 147.70 | EN3C6F               |
| 1    | Conn. Weathertight 6 Pos. Plug Male    | SC1163-ND         | 5.70  | 42.77 | 98.14  | EN3C6M               |
| 1    | Conn. Weathertight 8 Pos. Plug Female  | SC1164-ND         | 10.72 | 80.40 | 184.50 | EN3C8F               |
| 2    | Conn. Weathertight 3 Pos. Recp. Female | SC1165-ND         | 4.73  | 35.50 | 81.45  | EN3P3F               |
| 2    | Conn. Weathertight 3 Pos. Recp. Male   | SC1166-ND         | 3.42  | 25.66 | 58.88  | EN3P3M               |
| 2    | Conn. Weathertight 4 Pos. Recp. Female | SC1167-ND         | 5.79  | 43.41 | 99.61  | EN3P4F               |
| 2    | Conn. Weathertight 4 Pos. Recp. Male   | SC1168-ND         | 4.02  | 30.15 | 69.19  | EN3P4M               |
| 2    | Conn. Weathertight 5 Pos. Recp. Female | SC1169-ND         | 6.78  | 50.89 | 116.78 | EN3P5F               |
| 2    | Conn. Weathertight 5 Pos. Recp. Male   | SC1170-ND         | 4.62  | 34.64 | 79.49  | EN3P5M               |
| 2    | Conn. Weathertight 6 Pos. Recp. Female | SC1171-ND         | 7.84  | 58.80 | 134.94 | EN3P6F               |
| 2    | Conn. Weathertight 6 Pos. Recp. Male   | SC1172-ND         | 5.24  | 39.34 | 90.29  | EN3P6M               |
| 2    | Conn. Weathertight 8 Pos. Recp. Female | SC1173-ND         | 6.44  | 48.33 | 110.90 | EN3P8M               |
| 3    | Conn. Weathertight Recp. Dust Cap      | SC1174-ND         | 1.00  | 7.48  | 17.17  | EN3CAP               |







## DIN Connectors



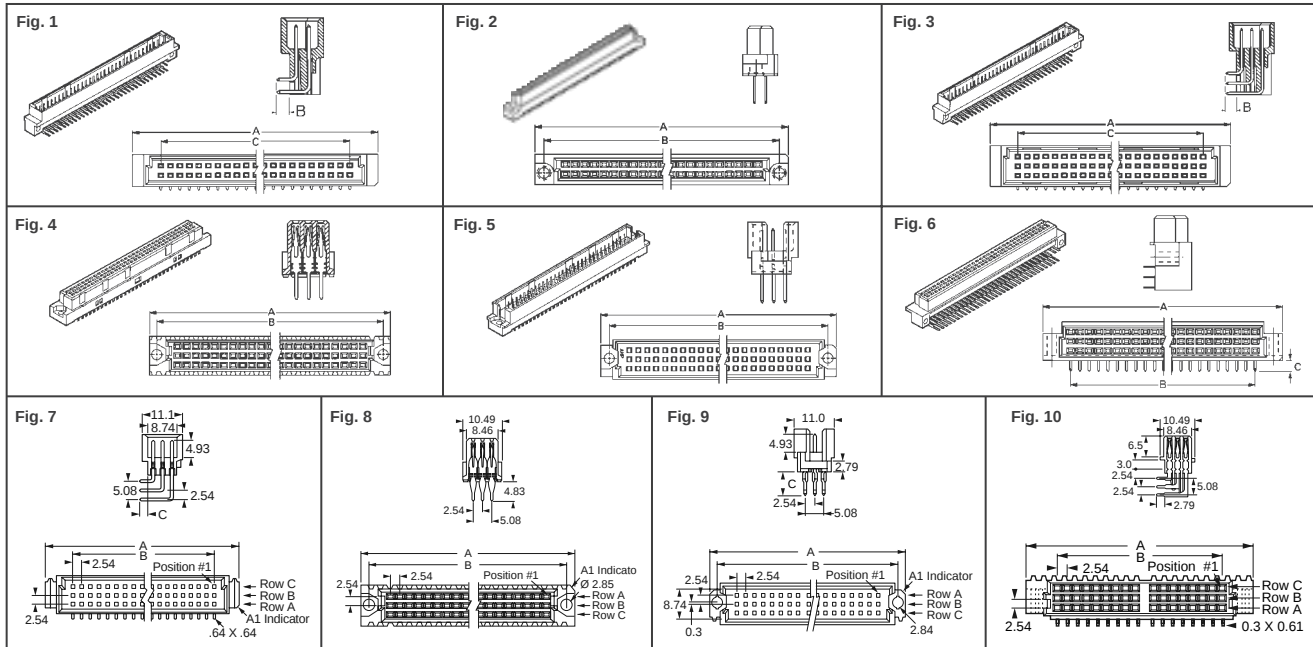
| Fig. | No. of Rows | No. of Pins | Type                | Dimensions (mm)             | Digi-Key Part No | 1     | 10     | Pricing 100 | 500     | 1,000   | Hirose Part No.      |
|------|-------------|-------------|---------------------|-----------------------------|------------------|-------|--------|-------------|---------|---------|----------------------|
| 1    | 2           | 20          | Plug-Right Angle    | 38.12 29.47 22.86 33.02     | H1020-ND         | 2.62  | 22.55  | 124.64      | 582.20  | 1082.40 | PCN10-20P-2.54DS     |
|      |             | 32          | Plug-Right Angle    | 53.26 44.71 38.10 48.26     | H1032-ND         | 3.17  | 27.23  | 150.48      | 702.90  | 1306.80 | PCN10-32P-2.54DS     |
|      |             | 44          | Plug-Right Angle    | 68.60 59.95 53.34 63.50     | H1044-ND         | 3.42  | 29.43  | 162.64      | 759.70  | 1412.40 | PCN10-44P-2.54DS     |
|      |             | 50          | Plug-Right Angle    | 76.22 67.57 60.96 71.12     | H1050-ND         | 3.71  | 31.90  | 176.32      | 823.60  | 1531.20 | PCN10-50P-2.54DS     |
|      |             | 64          | Plug-Right Angle    | 94.00 85.35 78.74 88.90     | H1064-ND         | 4.16  | 35.75  | 197.60      | 923.00  | 1716.00 | PCN10-64P-2.54DS     |
|      |             | 90          | Plug-Right Angle    | 127.02 118.37 111.76 121.92 | H1090-ND         | 5.15  | 44.28  | 244.72      | 1143.10 | 2125.20 | PCN10-90P-2.54DS     |
| 2    | 2           | 100         | Plug-Right Angle    | 139.72 131.07 124.46 134.62 | H1100-ND         | 5.95  | 51.15  | 282.72      | 1320.60 | 2455.20 | PCN10-100P-2.54DS    |
|      |             | 20          | Plug-Straight       | 43.3 38.1 29.47 22.86       | H2020-ND         | 2.02  | 17.33  | 95.76       | 447.30  | 831.60  | PCN10-20P-2.54DSA    |
|      |             | 32          | Plug-Straight       | 58.34 53.34 44.71 38.10     | H2032-ND         | 2.66  | 22.83  | 126.16      | 589.30  | 1095.60 | PCN10-32P-2.54DSA    |
|      |             | 44          | Plug-Straight       | 73.58 68.10 59.95 53.34     | H2044-ND         | 2.94  | 25.30  | 139.84      | 653.20  | 1214.40 | PCN10-44P-2.54DSA    |
|      |             | 50          | Plug-Straight       | 81.40 76.20 67.57 60.96     | H2050-ND         | 3.74  | 32.18  | 177.84      | 830.70  | 1544.40 | PCN10-50P-2.54DSA    |
|      |             | 64          | Plug-Straight       | 99.18 93.98 85.34 78.74     | H2064-ND         | 4.26  | 36.58  | 202.16      | 944.30  | 1755.60 | PCN10-64P-2.54DSA    |
| 3    | 2           | 90          | Plug-Straight       | 132.20 127.00 118.37 111.76 | H2090-ND         | 5.86  | 50.33  | 278.16      | 1299.30 | 2415.60 | PCN10-90P-2.54DSA    |
|      |             | 100         | Plug-Straight       | 144.90 139.70 131.07 124.46 | H2100-ND         | 6.08  | 52.25  | 288.80      | 1349.00 | 2508.00 | PCN10-100P-2.54DSA   |
|      |             | 20          | Socket-Right Angle  | 43.10 29.12 22.86 38.10     | H2120-ND         | 3.26  | 28.05  | 155.04      | 724.20  | 1346.40 | PCN10C-20S-2.54DS    |
|      |             | 32          | Socket-Right Angle  | 58.34 44.36 38.10 53.34     | H2132-ND         | 4.38  | 37.68  | 208.24      | 972.70  | 1808.40 | PCN10C-32S-2.54DS    |
|      |             | 44          | Socket-Right Angle  | 73.58 59.60 53.34 68.58     | H2144-ND         | 5.63  | 48.40  | 267.52      | 1249.60 | 2323.20 | PCN10C-44S-2.54DS    |
|      |             | 50          | Socket-Right Angle  | 81.20 67.22 60.96 76.20     | H2150-ND         | 5.95  | 51.15  | 282.72      | 1320.60 | 2455.20 | PCN10C-50S-2.54DS    |
| 4    | 2           | 64          | Socket-Right Angle  | 98.98 85.00 78.74 93.98     | H2164-ND         | 7.68  | 66.00  | 364.80      | 1704.00 | 3168.00 | PCN10C-64S-2.54DS    |
|      |             | 90          | Socket-Right Angle  | 132.00 118.02 111.76 127.00 | H2190-ND         | 9.57  | 82.23  | 454.48      | 2122.90 | 3946.80 | PCN10C-90S-2.54DS    |
|      |             | 100         | Socket-Right Angle  | 144.70 130.72 124.46 139.70 | H2200-ND         | 11.36 | 97.63  | 539.60      | 2520.50 | 4686.00 | PCN10C-100S-2.54DS   |
|      |             | 20          | Socket-Right Angle  | 43.10 29.12 22.86 38.10     | H3020-ND         | 2.30  | 19.80  | 122.40      | 558.00  | 1008.00 | PCN13-20S-2.54DS     |
|      |             | 32          | Socket-Right Angle  | 58.34 44.36 38.10 53.43     | H3032-ND         | 2.82  | 24.20  | 149.60      | 682.00  | 1232.00 | PCN13-32S-2.54DS     |
|      |             | 44          | Socket-Right Angle  | 73.58 59.60 53.34 68.58     | H3044-ND         | 3.33  | 28.60  | 176.80      | 806.00  | 1456.00 | PCN13-44S-2.54DS     |
| 5    | 2           | 50          | Socket-Right Angle  | 81.20 67.22 60.96 76.20     | H3050-ND         | 4.10  | 35.20  | 217.60      | 992.00  | 1792.00 | PCN13-50S-2.54DS     |
|      |             | 64          | Socket-Right Angle  | 98.98 85.00 78.74 93.98     | H3064-ND         | 4.16  | 35.75  | 221.00      | 1007.50 | 1820.00 | PCN13-64S-2.54DS     |
|      |             | 90          | Socket-Right Angle  | 132.00 118.02 111.76 127.00 | H3090-ND         | 5.31  | 45.65  | 282.20      | 1286.50 | 2324.00 | PCN13-90S-2.54DS     |
|      |             | 100         | Socket-Right Angle  | 144.70 130.72 124.46 139.70 | H3100-ND         | 5.76  | 49.50  | 306.00      | 1395.00 | 2520.00 | PCN13-100S-2.54DS    |
|      |             | 20          | Socket-Straight     | 39.12 34.12 29.12 22.86     | H1120-ND         | 3.42  | 29.43  | 162.64      | 759.70  | 1412.40 | PCN10C-20S-2.54DSA   |
|      |             | 32          | Socket-Straight     | 54.36 49.36 44.36 38.10     | H1132-ND         | 4.10  | 35.20  | 194.56      | 908.80  | 1689.60 | PCN10C-32S-2.54DSA   |
| 6    | 2           | 44          | Socket-Straight     | 69.60 64.60 59.60 53.34     | H1144-ND         | 5.70  | 48.95  | 270.56      | 1263.80 | 2349.60 | PCN10C-44S-2.54DSA   |
|      |             | 50          | Socket-Straight     | 77.22 72.22 67.22 60.96     | H1150-ND         | 5.86  | 50.33  | 278.16      | 1299.30 | 2415.60 | PCN10C-50S-2.54DSA   |
|      |             | 64          | Socket-Straight     | 95.00 90.00 85.00 78.74     | H1164-ND         | 7.14  | 61.33  | 338.96      | 1583.30 | 2943.60 | PCN10C-64S-2.54DSA   |
|      |             | 90          | Socket-Straight     | 128.02 123.02 118.02 111.76 | H1190-ND         | 9.15  | 78.65  | 434.72      | 2030.60 | 3775.20 | PCN10C-90S-2.54DSA   |
|      |             | 100         | Socket-Straight     | 140.72 135.72 130.72 124.46 | H1200-ND         | 10.34 | 88.83  | 490.96      | 2293.30 | 4263.60 | PCN10C-100S-2.54DSA  |
|      |             | 32          | Socket-Straight-W/W | 54.36 49.36 44.36 38.10     | H4232-ND         | 7.78  | 66.83  | 369.36      | 1725.30 | 3207.60 | PCN10-32S-2.54WB     |
| 7    | 2           | 50          | Socket-Straight-W/W | 77.22 72.22 67.22 60.96     | H4250-ND         | 11.30 | 97.08  | 536.56      | 2506.30 | 4659.60 | PCN10-50S-2.54WB     |
|      |             | 64          | Socket-Straight-W/W | 95.00 90.00 85.00 78.74     | H4264-ND         | 13.54 | 116.33 | 642.96      | 3003.30 | 5583.60 | PCN10-64S-2.54WB     |
|      |             | 90          | Socket-Straight-W/W | 128.02 123.00 118.00 111.76 | H4290-ND         | 18.82 | 161.70 | 893.76      | 4174.80 | 7761.60 | PCN10-90S-2.54WB     |
|      |             | 20          | Socket-Straight     | 39.12 34.12 29.12 22.86     | H4020-ND         | 1.70  | 14.58  | 90.10       | 410.75  | 742.00  | PCN13-20S-2.54DSA    |
|      |             | 32          | Socket-Straight     | 54.36 49.36 44.36 38.10     | H4032-ND         | 2.02  | 17.33  | 107.10      | 488.25  | 882.00  | PCN13-32S-2.54DSA    |
|      |             | 44          | Socket-Straight     | 69.60 64.60 59.60 53.34     | H4044-ND         | 2.34  | 20.08  | 124.10      | 565.75  | 1022.00 | PCN13-44S-2.54DSA    |
| 8    | 3           | 50          | Socket-Straight     | 77.22 72.22 67.22 60.96     | H4050-ND         | 2.59  | 22.28  | 137.70      | 627.75  | 1134.00 | PCN13-50S-2.54DSA    |
|      |             | 64          | Socket-Straight     | 95.00 90.00 85.00 78.74     | H4064-ND         | 2.98  | 25.58  | 158.10      | 720.75  | 1302.00 | PCN13-64S-2.54DSA    |
|      |             | 90          | Socket-Straight     | 128.02 123.02 118.02 111.76 | H4090-ND         | 3.81  | 32.73  | 202.30      | 922.25  | 1666.00 | PCN13-90S-2.54DSA    |
|      |             | 100         | Socket-Straight     | 140.72 135.72 130.72 124.46 | H4100-ND         | 4.13  | 35.48  | 219.30      | 999.75  | 1806.00 | PCN13-100S-2.54DSA   |
|      |             | 64          | Socket-Straight     | 95.00 90.00 85.00 78.74     | H8164-ND         | 6.98  | 59.95  | 331.36      | 1547.80 | 2877.60 | PCN10MC-64S-2.54DSA  |
|      |             | 100         | Socket-Straight     | 140.72 135.72 130.72 124.46 | H8200-ND         | 11.87 | 102.03 | 563.92      | 2634.10 | 4897.20 | PCN10MC-100S-2.54DSA |
| 1    | 2           | 64          | Plug-Right Angle    | 94.00 85.35 78.74 88.90     | H5164-ND         | 6.62  | 56.93  | 314.64      | 1469.70 | 2732.40 | PCN10MC-64P-2.54DS   |
|      |             | 100         | Plug-Right Angle    | 139.72 131.07 124.46 134.62 | H5200-ND         | 7.39  | 63.53  | 351.12      | 1640.10 | 3049.20 | PCN10MC-100P-2.54DS  |
|      |             | 64*         | Plug-Right Angle    | 94.00 88.00 85.25 78.74     | H5064-ND         | 4.83  | 41.53  | 229.52      | 1072.10 | 1993.20 | PCN10-64ACP-2.54DS   |
| 5    | 3           | 96          | Plug-Right Angle    | 94.00 88.00 85.25 78.74     | H5096-ND         | 5.86  | 50.33  | 278.16      | 1299.30 | 2415.60 | PCN10-96P-2.54DS     |
|      |             | 96          | Plug-Right Angle    | 94.00 88.00 85.25 78.74     | H5196-ND         | 7.36  | 63.25  | 349.60      | 1633.00 | 3036.00 | PCN10MC-96P-2.54DS   |
|      |             | 64*         | Plug-Straight       | 95.00 90.00 88.00 85.25     | H6064-ND         | 4.74  | 40.70  | 224.96      | 1050.80 | 1953.60 | PCN10-64ACP-2.54DSA  |
| 6    | 3           | 96          | Plug-Straight       | 95.00 90.00 88.00 85.25     | H6096-ND         | 7.04  | 60.50  | 334.40      | 1562.00 | 2904.00 | PCN10-96P-2.54DSA    |
|      |             | 64*         | Socket-Right Angle  | 94.00 85.00 78.74 88.90     | H7064-ND         | 4.96  | 42.63  | 235.60      | 1100.50 | 2046.00 | PCN13-64ACS-2.54DS   |
|      |             | 96          | Socket-Right Angle  | 94.00 85.00 78.74 88.90     | H7096-ND         | 6.05  | 51.98  | 287.28      | 1341.90 | 2494.80 | PCN13-96S-2.54DS     |
| 7    | 3           | 96          | Socket-Straight     | 95.00 90.00 85.00 78.74     | H8196-ND         | 9.47  | 81.40  | 449.92      | 2101.60 | 3907.20 | PCN10MC-96S-2.54DSA  |
|      |             | 64*         | Socket-Straight     | 95.00 90.00 85.00 78.74     | H8064-ND         | 6.69  | 57.48  | 317.68      | 1493.90 | 2758.80 | PCN10-64ACS-2.54DSA  |
|      |             | 96          | Socket-Straight     | 95.00 90.00 85.00 78.74     | H8096-ND         | 4.26  | 36.58  | 202.16      | 944.30  | 1755.60 | PCN13-96S-2.54DSA    |
|      |             | 96          | Socket-Straight-W/W | 95.00 90.00 85.00 78.74     | H8296-ND         | 19.46 | 167.20 | 924.16      | 4316.80 | 8025.60 | PCN10-96S-2.54WB     |

\* 64 pins; in 3-row format with pins on outside rows and middle row open.

# 1-800-344-4539

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# AMP DIN Connectors



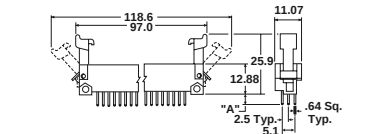
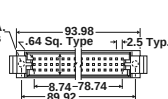
| Fig. | No. of Rows | No. of Pins | Type                             | Dimensions - (mm) |        |       | Digi-Key Part No. | Pricing |        |        | AMP Part No. |
|------|-------------|-------------|----------------------------------|-------------------|--------|-------|-------------------|---------|--------|--------|--------------|
|      |             |             |                                  | A                 | B      | C     |                   | 1       | 25     | 50     |              |
| 1    | 2           | 64          | Plug, Right Angle                | 93.98             | 2.64   | 78.74 | A1250-ND          | 3.11    | 72.15  | 116.55 | 533248-1     |
| 2    | 2           | 64          | Socket, Straight                 | 94.87             | 89.99  | —     | A1252-ND          | 4.17    | 96.85  | 156.45 | 650861-5     |
|      | 2           | 32          | Socket, Straight                 | 54.86             | 50.01  | —     | A1253-ND          | 3.36    | 78.00  | 126.00 | 650858-5     |
| 3    | 3           | 96          | Plug, Right Angle                | 93.98             | 2.64   | 78.74 | A1254-ND          | 2.91    | 67.57  | 109.15 | 650473-5     |
|      | 3           | 64*         | Plug, Right Angle                | 93.98             | 2.64   | 78.74 | A1255-ND          | 2.44    | 56.59  | 91.41  | 650945-5     |
| 4    | 3           | 96          | Socket, Straight                 | 93.98             | 89.99  | —     | A1258-ND          | 3.49    | 81.08  | 130.98 | 535043-5     |
|      | 3           | 64*         | Socket, Straight                 | 93.98             | 89.99  | —     | A1259-ND          | 3.33    | 77.35  | 124.95 | 650408-5     |
| 5    | 3           | 96          | Plug, Straight                   | 95.00             | 89.99  | —     | A1260-ND          | 3.09    | 71.73  | 115.87 | 650470-5     |
|      | 3           | 64*         | Plug, Straight                   | 95.00             | 89.99  | —     | A1261-ND          | 2.41    | 55.90  | 90.30  | 650934-5     |
| 6    | 3           | 96          | Socket, Right Angle              | 93.78             | 78.74  | 2.79  | A1262-ND          | 3.78    | 87.75  | 141.75 | 650461-5     |
|      | 3           | 64*         | Socket, Right Angle              | 93.78             | 78.74  | 2.79  | A1263-ND          | 3.09    | 71.79  | 115.97 | 650870-4     |
|      | 3           | 96          | Socket, Right Angle              | 93.78             | 78.74  | 4.24  | A1264-ND          | 4.40    | 102.05 | 164.85 | 650462-5     |
|      | 3           | 96          | Socket, Right Angle              | 93.78             | 78.74  | 4.24  | A1264-ND          | 4.40    | 102.05 | 164.85 | 650462-5     |
| 7    | 3           | 48          | Pin, Right Angle                 | 53.34             | 38.10  | 2.64  | A1275-ND          | 2.04    | 47.30  | 76.40  | 650478-5     |
|      | 2           | 32          | Pin, Right Angle                 | 53.34             | 38.10  | 2.64  | A1276-ND          | 1.93    | 44.85  | 72.45  | 650946-5     |
|      | 3           | 120         | Pin, Right Angle                 | 114.30            | 99.06  | 2.64  | A1277-ND          | 4.54    | 105.30 | 170.10 | 650906-5     |
|      | 3           | 150         | Pin, Right Angle                 | 139.70            | 124.46 | 2.64  | A1278-ND          | 5.43    | 126.10 | 203.70 | 650907-5     |
|      | 3           | 96          | Pin, Right Angle                 | 93.98             | 78.74  | —     | A1279-ND          | 2.91    | 67.57  | 109.15 | 650947-5     |
|      | 2           | 64          | Pin, Right Angle                 | 93.98             | 78.74  | —     | A1280-ND          | 2.44    | 56.59  | 91.41  | 650951-5     |
|      | 3           | 48          | Pin, Right Angle                 | 53.34             | 38.10  | 3.30  | A1281-ND          | 2.21    | 51.35  | 82.95  | 650948-5     |
|      | 3           | 120         | Pin, Right Angle                 | 114.30            | 99.06  | 3.30  | A1283-ND          | 8.04    | 186.55 | 301.35 | 650949-5     |
| 8    | 3           | 96          | Vertical Receptacle              | 93.98             | 89.99  | —     | A1285-ND          | 3.49    | 81.08  | 130.98 | 535090-5     |
|      | 2           | 64          | Vertical Receptacle              | 93.98             | 89.99  | —     | A1286-ND          | 2.91    | 67.57  | 109.15 | 650956-5     |
|      | 3           | 48          | Vertical Receptacle              | 53.34             | 38.10  | —     | A1287-ND          | 3.08    | 71.50  | 115.50 | 535070-5     |
|      | 3           | 120         | Vertical Receptacle              | 114.30            | 110.31 | —     | A1289-ND          | 5.49    | 127.40 | 205.80 | 535098-5     |
|      | 3           | 150         | Vertical Receptacle              | 139.70            | 135.71 | —     | A1290-ND          | 6.36    | 147.55 | 238.35 | 650405-5     |
|      | 3           | 96          | Vertical Receptacle w/Action Pin | 93.98             | 89.99  | —     | A1291-ND          | 3.49    | 81.08  | 130.98 | 535032-4     |
|      | 2           | 64          | Vertical Receptacle w/Action Pin | 93.98             | 89.99  | —     | A1292-ND          | 3.33    | 77.35  | 124.95 | 535059-5     |
|      | 3           | 48          | Vertical Receptacle w/Action Pin | 53.34             | 49.38  | —     | A1293-ND          | 2.78    | 64.65  | 104.43 | 535034-5     |
|      | 2           | 32          | Vertical Receptacle w/Action Pin | 53.34             | 49.38  | —     | A1294-ND          | 4.26    | 98.80  | 159.60 | 535068-5     |
|      | 3           | 120         | Vertical Receptacle w/Action Pin | 114.30            | 110.31 | —     | A1295-ND          | 5.49    | 127.40 | 205.80 | 535079-5     |
|      | 3           | 150         | Vertical Receptacle w/Action Pin | 139.70            | 135.71 | —     | A1296-ND          | 13.05   | 302.90 | 489.30 | 535080-5     |
|      | 3           | 48          | Vertical Pin w/Solder Posts      | 54.36             | 49.35  | —     | A1237-ND          | 2.04    | 47.45  | 76.65  | 650477-5     |
|      | 2           | 32          | Vertical Pin w/Solder Posts      | 54.36             | 49.35  | —     | A1238-ND          | 1.79    | 41.60  | 67.20  | 650936-5     |
|      | 3           | 120         | Vertical Pin w/Solder Posts      | 115.19            | 110.31 | —     | A1239-ND          | 3.64    | 84.50  | 136.50 | 650910-5     |
|      | 3           | 150         | Vertical Pin w/Solder Posts      | 140.59            | 135.71 | —     | A1297-ND          | 4.34    | 100.75 | 162.75 | 650911-5     |
| 9    | 3           | 96          | Vertical Pin w/Action Pin Posts  | 95.00             | 89.99  | —     | A1241-ND          | 2.84    | 65.88  | 106.42 | 650889-5     |
|      | 2           | 64          | Vertical Pin w/Action Pin Posts  | 95.00             | 89.99  | 6.35  | A1242-ND          | 2.60    | 60.45  | 97.65  | 650912-5     |
|      | 3           | 48          | Vertical Pin w/Action Pin Posts  | 54.36             | 49.35  | 6.35  | A1243-ND          | 2.24    | 52.00  | 84.00  | 650918-5     |
|      | 2           | 32          | Vertical Pin w/Action Pin Posts  | 54.36             | 49.35  | 6.35  | A1244-ND          | 1.99    | 46.15  | 74.55  | 650931-5     |
|      | 3           | 120         | Vertical Pin w/Action Pin Posts  | 115.19            | 110.31 | 6.35  | A1245-ND          | 6.78    | 157.30 | 254.10 | 650921-5     |
|      | 3           | 150         | Vertical Pin w/Action Pin Posts  | 140.59            | 135.71 | 6.35  | A1246-ND          | 4.54    | 105.30 | 170.10 | 650924-5     |
|      | 3           | 96          | Vertical Pin w/Action Pin Posts  | 95.00             | 89.99  | 13.23 | A1265-ND          | 3.39    | 78.65  | 127.05 | 650909-5     |
|      | 2           | 64          | Vertical Pin w/Action Pin Posts  | 95.00             | 89.99  | 13.23 | A1266-ND          | 2.74    | 63.70  | 102.90 | 650930-5     |
| 10   | 2           | 32          | Vertical Pin w/Action Pin Posts  | 54.36             | 49.35  | 13.23 | A1268-ND          | 2.10    | 48.75  | 78.75  | 650932-5     |
|      | 3           | 150         | Vertical Pin w/Action Pin Posts  | 140.59            | 135.71 | 13.23 | A1270-ND          | 4.76    | 110.50 | 178.50 | 650923-5     |
|      | 3           | 48          | Right Angle Receptacle           | 53.24             | 48.26  | —     | A1271-ND          | 2.91    | 67.57  | 109.15 | 650868-5     |
|      | 3           | 120         | Right Angle Receptacle           | 114.20            | 109.22 | —     | A1273-ND          | 5.10    | 118.30 | 191.10 | 650874-5     |
|      | 3           | 150         | Right Angle Receptacle           | 139.60            | 134.62 | —     | A1274-ND          | 7.73    | 179.40 | 289.80 | 650875-5     |

\* 64 pins; in 3-row format with pins on outside rows and middle row open.

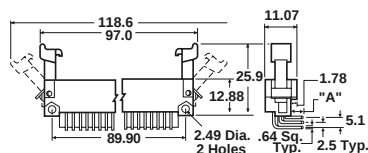
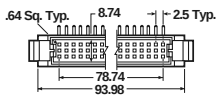
# CW INDUSTRIES DIN Connectors

• Compatible to DIN specifications 41612 • Drop-in replacement for standard DIN connectors • Ejector latch system. **Contacts:** Phosphor bronze, .025" (.64mm) diameter. **Contact Plating:** 30µ" gold over 50µ" nickel in mating area; 100µ" tin lead for solder applications, gold flash for wire wrap applications. **Insulator Material:** UL 94V-0 flame-retardant thermoplastic. **Color:** Blue. **Operating Temperature:** -55°C to +125°C. **Current Rating:** 1A (maximum) per contact.

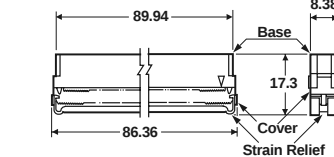
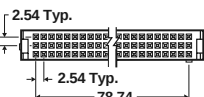
## Straight



## Right Angle

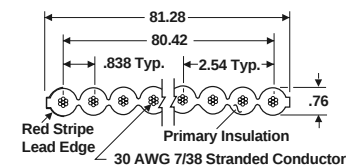


## DIN Socket Connector



## DIN Flat Cable

Characteristic: PVC (Gray). Style: UL 2768. Temperature Rating: 105°C. Conductor Type: 32 AWG, 7/40 or 30 AWG. Conductor Resistance: 158 Ohms/ft. Voltage Rating: 150 Vrms. Capacitance (ground / signal / ground): 23.0 pF/ft. Impedance (ground/signal/ground): 105 Ohms. Propagation Delay: 1.40 ns/ft.

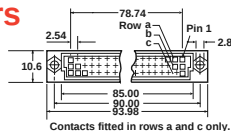
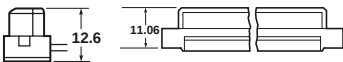


| Contacts | Type                   | "A" Dim. | Digi-Key Part No. | 1     | Pricing 10 | 100     | CW Industries Part No. |
|----------|------------------------|----------|-------------------|-------|------------|---------|------------------------|
| 96       | Straight-Solder Pin    | 4.06     | R7020-ND          | 15.93 | 127.40     | 910.00  | CWN-720-096-0077       |
| 96       | Straight-Wire Wrap     | 17.12    | R7022-ND          | 18.76 | 150.08     | 1072.00 | CWN-722-096-0021       |
| 96       | Right Angle-Solder Pin | 4.06     | R7021-ND          | 15.93 | 127.40     | 910.00  | CWN-721-096-0077       |
| 96       | Right Angle-Wire Wrap  | 17.12    | R7023-ND          | 18.76 | 150.08     | 1072.00 | CWN-723-096-0021       |
| 96       | IDC DIN Socket         | —        | R7040-ND          | 22.51 | 180.04     | 1286.00 | CWR-740-096-0054       |

| (Note: "X" in Digi-Key Part No. Represents Number of Feet) |               |                   |       |       |       |        |              |
|------------------------------------------------------------|---------------|-------------------|-------|-------|-------|--------|--------------|
| Contacts                                                   | Type          | Digi-Key Part No. | 5'    | 10'   | 25'   | 50'    | 100'         |
| 96                                                         | IDC DIN Cable | R096-X-ND         | 21.42 | 35.96 | 82.24 | 153.00 | 275.40       |
|                                                            |               |                   |       |       |       |        | C-03-043-096 |

**NorComp**  
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## DIN Connectors

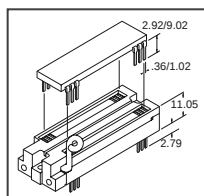


Contacts fitted in rows a and c only.

| No. of Rows | No. of Pins | Type            | Digi-Key Part No. | 1     | 10     | Pricing 100 | 500     | 1,000   | NorComp Part No. |
|-------------|-------------|-----------------|-------------------|-------|--------|-------------|---------|---------|------------------|
| 3           | 64          | Socket-IDC Type | T8064-ND          | 13.60 | 117.25 | 797.30      | 3400.25 | 5862.50 | ID064F           |
| —           | 64          | Strain Relief   | T0064-ND          | 1.07  | 9.25   | 62.90       | 268.25  | 462.50  | TD064-SR         |

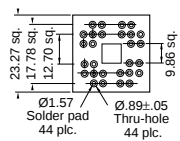
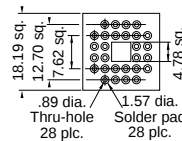
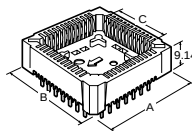
See 3M Ribbon Cable in Index for Ribbon Cable (MC64M-ND and MC64G-ND).

## AMP ZIF Lock Sockets



| No. of Pos. | Plating  | Digi-Key Part No. | 1     | 10     | Pricing 100 | 500     | 1,000 | AMP Part No. |
|-------------|----------|-------------------|-------|--------|-------------|---------|-------|--------------|
| 14          | Tin-Lead | A92143-ND         | 22.88 | 193.23 | 1688.22     | 55173-5 |       |              |
| 16          | Tin-Lead | A92163-ND         | 15.28 | 129.01 | 1127.14     | 55174-5 |       |              |
| 18          | Tin-Lead | A92183-ND         | 26.28 | 221.92 | 1938.88     | 55175-5 |       |              |
| 24          | Tin-Lead | A92246-ND         | 20.77 | 175.37 | 1532.18     | 54993-5 |       |              |
| 28          | Tin-Lead | A92286-ND         | 36.20 | 305.71 | 2670.94     | 54994-5 |       |              |
| 14          | Gold     | A91143-ND         | 27.72 | 234.08 | 2045.12     | 55173-6 |       |              |
| 18          | Gold     | A91183-ND         | 29.21 | 246.62 | 2154.68     | 55175-6 |       |              |
| 20          | Gold     | A91203-ND         | 21.89 | 184.87 | 1615.18     | 55176-6 |       |              |
| 28          | Gold     | A91286-ND         | 28.15 | 237.69 | 2076.66     | 54994-6 |       |              |
| 40          | Gold     | A91406-ND         | 47.23 | 398.81 | 3484.34     | 54995-6 |       |              |

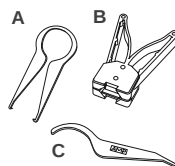
# AMP PLCC Sockets



- High normal force contacts – above 200 grams to provide optimum mating and retention of PLCC's and maintain reliable interconnection.
  - Accepts JEDEC PLCC's.
  - Recognized under the Component Program of Underwriters Laboratories Inc., File No. E28476.
  - Certified by Canadian Standards Association, File No. LR16455.
- Performance Characteristics – Capacitance:** 1.0 picofarad max.  
**Inductance (Self):** 10 nH max. at 500 KHz.  
**Dielectric Withstanding Voltage:** 600 VAC for 1.0 minute.

| No. of Pins                         | Package Configuration | Dimensions (mm)   | Digi-Key Part No. | Pricing 1 | 25    | 50    | AMP Part No. |
|-------------------------------------|-----------------------|-------------------|-------------------|-----------|-------|-------|--------------|
| High Pressure Tin with Solder Tails |                       |                   |                   |           |       |       |              |
| 28                                  | Square                | 17.40 17.40 11.53 | A2120-ND          | .73       | 16.24 | 27.61 | 821581-1     |
| 32                                  | Rectangle             | 19.94 17.40 11.53 | A2121-ND          | .88       | 19.49 | 33.13 | 821665-1     |
| 44                                  | Square                | 22.48 22.48 16.61 | A2122-ND          | 1.08      | 24.04 | 40.87 | 821575-1     |
| 52                                  | Square                | 25.02 25.02 19.15 | A2123-ND          | 1.11      | 24.69 | 41.97 | 821551-1     |
| 68                                  | Square                | 30.10 30.10 24.23 | A2124-ND          | 1.17      | 25.99 | 44.18 | 821574-1     |
| 84                                  | Square                | 35.18 35.18 29.31 | A2125-ND          | 1.32      | 29.24 | 49.70 | 821573-1     |

## PLCC Extraction Tools



| No. of Pos. | Socket Type | Tool Style | Digi-Key Part No. | Pricing 1 | 25      | 50      | AMP Part No. |
|-------------|-------------|------------|-------------------|-----------|---------|---------|--------------|
| 28          | Square      | A          | A2126-ND          | 19.64     | 462.00  | 866.25  | 821903-5     |
| 32          | Rectangle   | A          | A2127-ND          | 19.64     | 462.00  | 866.25  | 821903-1     |
| 44          | Square      | B          | A2134-ND          | 44.63     | 1050.00 | 1968.75 | 821981-1     |
| 52          | Square      | B          | A2135-ND          | 44.63     | 1050.00 | 1968.75 | 822049-1     |
| 68          | Square      | B          | A2136-ND          | 44.63     | 1050.00 | 1968.75 | 822026-1     |
| 84          | Square      | B          | A2137-ND          | 44.63     | 1050.00 | 1968.75 | 822268-1     |
| —           | General     | C          | A2139-ND          | .99       | 22.00   | 37.40   | 822154-1     |

# AMP Surface Mount PLCC Sockets

Low Insertion Force, Low Profile Surface Mount PLCC Sockets

Fig. 1

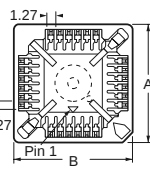
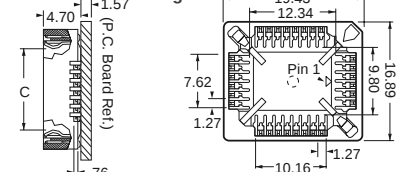


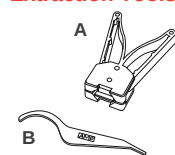
Fig. 2



- Low insertion force is provided by unique new contact design.
- Low profile—only .185" (4.7mm) max. for high density pc board stacking.
- Compatible footprint allows for socket or direct mounting.
- Housing slots accept extraction tool for easy PLCC removal.
- Pin 1 indicator and corner chamfer for PLCC orientation.
- Polyphenylene sulfide housings will withstand high temperature soldering up to 220°.
- Recognition under the Component Program of Underwriters Laboratories, Inc. pending.
- Certification by Canadian Standards Association pending.

| No. of Pins                                                 | Package Configuration | Dimensions (mm) | Digi-Key Part No. | Pricing 1 | 25    | 50    | AMP Part No. |
|-------------------------------------------------------------|-----------------------|-----------------|-------------------|-----------|-------|-------|--------------|
| Low Insertion Force, Low Profile Surface Mount PLCC Sockets |                       |                 |                   |           |       |       |              |
| 1                                                           | 20                    | Square          | A2140-ND          | .51       | 11.41 | 19.40 | 822269-1     |
| 1                                                           | 28                    | Square          | A2141-ND          | .62       | 13.82 | 23.49 | 822271-1     |
| 1                                                           | 44                    | Square          | A2142-ND          | .84       | 18.62 | 31.66 | 822275-1     |
| 1                                                           | 52                    | Square          | A2143-ND          | .95       | 21.03 | 35.75 | 822277-1     |
| 1                                                           | 68                    | Square          | A2144-ND          | 1.08      | 24.03 | 40.85 | 822279-1     |
| 1                                                           | 84                    | Square          | A2145-ND          | 1.24      | 27.63 | 46.98 | 822281-1     |
| 2                                                           | 32                    | Rectangle       | A2146-ND          | .54       | 12.02 | 20.43 | 822273-1     |

## PLCC Extraction Tools



| No. of Pos. | Socket Type | Tool Style | Digi-Key Part No. | Pricing 1 | 25      | 50      | AMP Part No. |
|-------------|-------------|------------|-------------------|-----------|---------|---------|--------------|
| 20          | Square      | A          | A2132-ND          | 44.63     | 1050.00 | 1968.75 | 822011-1     |
| 28          | Square      | A          | A2133-ND          | 44.63     | 1050.00 | 1968.75 | 822045-1     |
| 44          | Square      | A          | A2134-ND          | 44.63     | 1050.00 | 1968.75 | 821981-1     |
| 52          | Square      | A          | A2135-ND          | 44.63     | 1050.00 | 1968.75 | 822049-1     |
| 68          | Square      | A          | A2136-ND          | 44.63     | 1050.00 | 1968.75 | 822026-1     |
| 84          | Square      | A          | A2137-ND          | 44.63     | 1050.00 | 1968.75 | 822268-1     |
| 32          | Rectangle   | A          | A2138-ND          | 44.63     | 1050.00 | 1968.75 | 821980-1     |
| —           | General     | B          | A2139-ND          | .99       | 22.00   | 37.40   | 822154-1     |

# AMP I.C. Sockets Dual Leaf Low Profile Dip Sockets

## Performance Characteristics:

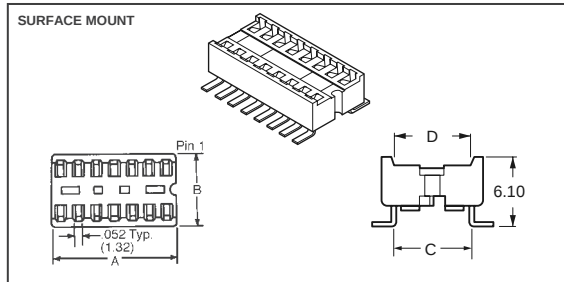
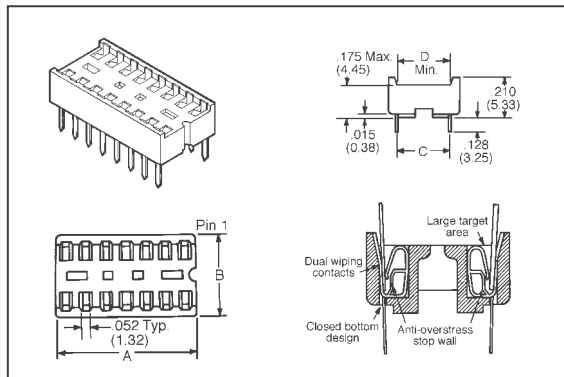
**Physical:** • Engaging force: 250 grams (.013 [0.33] pin) • Separating force: 50 grams (.008 [0.2] pin).

**Electrical:** • Rating: 250 VAC • Contact resistance: 20 milliohms max. initial, 30 milliohms max. after test • Dielectric withstanding voltage: 1000 VRMS min. • Insulation resistance: 5,000 megohms min. • Capacitance: 0.5 picofarad max.

**Environmental:** • Operating temperature: -55°C to +105°C (tin); -55°C to +125°C (gold) • Vibration: 10-2000-10 Hz in 20 minutes at .06 [1.52] or 15G's for 3 sweeps in each of 3 axis • Shock: 100 G's sawtooth; 6 shocks.

**Material and Finish:** • Housing: Glass-filled thermoplastic. 94V-0 rated. (black).

**Notes:** • Closed bottom design: inhibits flux contamination and solder wicking • Over-stress stop wall: prevents damage to socket contact from bent or twisted DIP leads and off-set insertion or extraction of DIP packages • Large target area: makes it easy to insert DIP packages • Dual wiping contacts: make a gas-tight connection for high reliability • Low profile: .175 (4.45) max. seating plane above pc board • Dual wiping contacts • Stackable end-to-end and side-to-side • Designed to meet EIA RS-415, MIL-S-87374 and stringent computer specifications • Recognized under the Component Program of Underwriters Lab. Inc. File E28476 • Certified by Canadian Standards Association File No. LR 16455.



| No. of Pins                                             | Dimensions - In. (mm) |               |              |              | Digi-Key Part No. | Pricing |       |        |        | AMP Part No. |
|---------------------------------------------------------|-----------------------|---------------|--------------|--------------|-------------------|---------|-------|--------|--------|--------------|
|                                                         | A                     | B             | C            | D            |                   | 1       | 10    | 100    | 500    |              |
| Phosphor Bronze with Tin-lead Plating                   |                       |               |              |              |                   |         |       |        |        |              |
| 6                                                       | .295 (7.49)           | .394 (10.01)  | .300 (7.62)  | .320 (8.13)  | A9306-ND          | .04     | .36   | 2.84   | 12.43  | 2-641296-3   |
| 8                                                       | .395 (10.03)          | .394 (10.01)  | .300 (7.62)  | .320 (8.13)  | A9308-ND          | .05     | .38   | 3.02   | 13.18  | 2-640463-3   |
| 14                                                      | .695 (17.65)          | .394 (10.01)  | .300 (7.62)  | .320 (8.13)  | A9314-ND          | .08     | .61   | 4.82   | 21.07  | 2-640357-3   |
| 16                                                      | .795 (20.19)          | .394 (10.01)  | .300 (7.62)  | .320 (8.13)  | A9316-ND          | .08     | .65   | 5.13   | 22.39  | 2-640358-3   |
| 18                                                      | .895 (22.73)          | .394 (10.01)  | .300 (7.62)  | .320 (8.13)  | A9318-ND          | .10     | .81   | 6.43   | 28.09  | 2-640359-3   |
| 20                                                      | .995 (25.27)          | .394 (10.01)  | .300 (7.62)  | .320 (8.13)  | A9320-ND          | .11     | .91   | 7.19   | 31.42  | 2-640464-3   |
| 22                                                      | 1.095 (27.81)         | .494 (12.55)  | .400 (10.16) | .420 (10.67) | A9322-ND          | .20     | 1.57  | 12.43  | 54.32  | 2-640360-3   |
| 24                                                      | 1.195 (30.35)         | .694 (17.63)  | .600 (15.24) | .620 (15.75) | A9324-ND          | .18     | 1.43  | 11.29  | 49.33  | 2-640361-3   |
| 28                                                      | 1.395 (35.43)         | .694 (17.63)  | .600 (15.24) | .620 (15.75) | A9328-ND          | .19     | 1.50  | 11.90  | 51.99  | 2-640362-3   |
| 40                                                      | 1.995 (50.67)         | .694 (17.63)  | .600 (15.24) | .620 (15.75) | A9340-ND          | .25     | 2.02  | 15.96  | 69.70  | 2-640379-3   |
| Phosphor Bronze with .000015" Gold Plating              |                       |               |              |              |                   |         |       |        |        |              |
| 6                                                       | .295 (7.49)           | .394 (10.01)  | .300 (7.62)  | .320 (8.13)  | A9406-ND          | .26     | 2.08  | 16.48  | 71.99  | 2-641296-4   |
| 8                                                       | .395 (10.03)          | .394 (10.01)  | .300 (7.62)  | .320 (8.13)  | A9408-ND          | .28     | 2.21  | 17.49  | 76.42  | 2-640463-4   |
| 14                                                      | .695 (17.65)          | .394 (10.01)  | .300 (7.62)  | .320 (8.13)  | A9414-ND          | .34     | 2.74  | 21.71  | 94.83  | 2-640357-4   |
| 16                                                      | .795 (20.19)          | .394 (10.01)  | .300 (7.62)  | .320 (8.13)  | A9416-ND          | .36     | 2.91  | 23.07  | 100.78 | 2-640358-4   |
| 18                                                      | .895 (22.73)          | .394 (10.01)  | .300 (7.62)  | .320 (8.13)  | A9418-ND          | .55     | 4.43  | 35.06  | 153.17 | 2-640359-4   |
| 20                                                      | .995 (25.27)          | .394 (10.01)  | .300 (7.62)  | .320 (8.13)  | A9420-ND          | .51     | 4.09  | 32.37  | 141.39 | 2-640464-4   |
| 22                                                      | 1.095 (27.81)         | .494 (12.55)  | .400 (10.16) | .420 (10.67) | A9422-ND          | .81     | 6.46  | 51.12  | 223.31 | 2-640360-4   |
| 24                                                      | 1.195 (30.35)         | .694 (17.63)  | .600 (15.24) | .620 (15.75) | A9424-ND          | .80     | 6.42  | 50.81  | 221.98 | 2-640361-4   |
| 28                                                      | 1.395 (35.43)         | .694 (17.63)  | .600 (15.24) | .620 (15.75) | A9428-ND          | .85     | 6.77  | 53.56  | 233.97 | 2-640362-4   |
| 40                                                      | 1.995 (50.67)         | .694 (17.63)  | .600 (15.24) | .620 (15.75) | A9440-ND          | 1.13    | 9.07  | 71.80  | 313.65 | 2-640379-4   |
| Phosphor Bronze with Tin Lead Plating - Economy Sockets |                       |               |              |              |                   |         |       |        |        |              |
| 14                                                      | .695 (17.65)          | .394 (10.01)  | .300 (7.62)  | .320 (8.13)  | A95143-ND         | .07     | .47   | 3.74   | 16.36  | 2-641599-3   |
| 16                                                      | .795 (20.19)          | .394 (10.01)  | .300 (7.62)  | .320 (8.13)  | A95163-ND         | .06     | .50   | 3.98   | 17.39  | 2-641600-3   |
| 18                                                      | .895 (22.73)          | .394 (10.01)  | .300 (7.62)  | .320 (8.13)  | A95183-ND         | .08     | .63   | 4.99   | 21.80  | 2-641601-3   |
| 20                                                      | .995 (25.27)          | .394 (10.01)  | .300 (7.62)  | .320 (8.13)  | A95203-ND         | .09     | .71   | 5.58   | 24.39  | 2-641602-3   |
| 22                                                      | 1.095 (27.81)         | .494 (12.55)  | .400 (10.16) | .420 (10.67) | A95224-ND         | .15     | 1.22  | 9.65   | 42.17  | 2-641603-3   |
| 24                                                      | 1.195 (30.35)         | .394 (10.01)  | .300 (7.62)  | .320 (8.13)  | A95243-ND         | .11     | .85   | 6.76   | 29.52  | 2-641932-3   |
| 28                                                      | 1.395 (35.43)         | .390 (9.91)   | .300 (7.62)  | .320 (8.13)  | A95283-ND         | .14     | 1.14  | 9.02   | 39.38  | 2-382571-3   |
| 28                                                      | 1.395 (35.43)         | .694 (17.63)  | .600 (15.24) | .620 (15.75) | A95286-ND         | .14     | 1.15  | 9.13   | 39.89  | 2-641605-3   |
| 32                                                      | 1.595 (40.51)         | .694 (17.63)  | .600 (15.24) | .620 (15.75) | A95326-ND         | .19     | 1.56  | 12.34  | 53.93  | 2-644018-3   |
| 40                                                      | 1.995 (50.67)         | .694 (17.63)  | .600 (15.24) | .620 (15.75) | A95406-ND         | .19     | 1.56  | 12.33  | 53.85  | 2-641606-3   |
| 48                                                      | 2.395 (60.83)         | .694 (17.63)  | .600 (15.24) | .620 (15.75) | A95486-ND         | .33     | 2.63  | 20.81  | 90.93  | 2-643574-3   |
| 64                                                      | 3.215 (81.66)         | 1.024 (26.01) | .900 (22.86) | .920 (23.37) | A95649-ND         | 1.16    | 9.27  | 73.39  | 320.59 | 643575-3     |
| Surface Mount, Phosphor Bronze with Tin Plating         |                       |               |              |              |                   |         |       |        |        |              |
| 8                                                       | .395 (10.03)          | .394 (10.01)  | .350 (8.89)  | .321 (8.15)  | A96083-ND         | .13     | 1.01  | 7.99   | 34.90  | 2-382401-3   |
| 14                                                      | .695 (17.65)          | .394 (10.01)  | .350 (8.89)  | .321 (8.15)  | A96143-ND         | .22     | 1.77  | 13.98  | 61.08  | 2-382402-3   |
| 16                                                      | .795 (20.19)          | .394 (10.01)  | .350 (8.89)  | .321 (8.15)  | A96163-ND         | .25     | 2.02  | 15.98  | 69.81  | 2-382403-3   |
| 18                                                      | .895 (22.73)          | .394 (10.01)  | .350 (8.89)  | .321 (8.15)  | A96183-ND         | .28     | 2.27  | 17.98  | 78.53  | 2-382404-3   |
| 20                                                      | .995 (25.27)          | .394 (10.01)  | .350 (8.89)  | .321 (8.15)  | A96203-ND         | .32     | 2.52  | 19.97  | 87.26  | 2-382405-3   |
| 24                                                      | 1.195 (30.35)         | .694 (17.63)  | .650 (16.51) | .621 (15.77) | A96246-ND         | .38     | 3.03  | 23.97  | 104.71 | 2-382408-3   |
| 28                                                      | 1.395 (35.43)         | .394 (10.01)  | .350 (8.89)  | .321 (8.15)  | A96283-ND         | .63     | 5.05  | 39.95  | 174.52 | 2-382636-1   |
| 28                                                      | 1.395 (35.43)         | .694 (17.63)  | .650 (16.51) | .621 (15.77) | A96286-ND         | .44     | 3.53  | 27.97  | 122.17 | 2-382409-3   |
| 32                                                      | 1.595 (40.51)         | .694 (17.63)  | .650 (16.51) | .621 (15.77) | A96326-ND         | .50     | 4.04  | 31.96  | 139.61 | 2-382424-3   |
| 40                                                      | 1.995 (50.67)         | .694 (17.63)  | .650 (16.51) | .621 (15.77) | A96406-ND         | .63     | 5.05  | 39.95  | 174.52 | 2-382411-3   |
| Surface Mount, Phosphor Bronze with Gold Plating        |                       |               |              |              |                   |         |       |        |        |              |
| 8                                                       | .395 (10.03)          | .394 (10.01)  | .350 (8.89)  | .321 (8.15)  | A97083-ND         | .32     | 2.60  | 20.55  | 89.76  | 2-382401-4   |
| 14                                                      | .695 (17.65)          | .394 (10.01)  | .350 (8.89)  | .321 (8.15)  | A97143-ND         | .57     | 4.54  | 35.96  | 157.07 | 2-382402-4   |
| 16                                                      | .795 (20.19)          | .394 (10.01)  | .350 (8.89)  | .321 (8.15)  | A97163-ND         | .65     | 5.19  | 41.09  | 179.50 | 2-382403-4   |
| 20                                                      | .995 (25.27)          | .394 (10.01)  | .350 (8.89)  | .321 (8.15)  | A97203-ND         | .81     | 6.49  | 51.36  | 224.38 | 2-382405-4   |
| 24                                                      | 1.195 (30.35)         | .694 (17.63)  | .650 (16.51) | .621 (15.77) | A97246-ND         | .80     | 6.43  | 50.92  | 222.43 | 2-382408-4   |
| 28                                                      | 1.395 (35.43)         | .694 (17.63)  | .650 (16.51) | .621 (15.77) | A97286-ND         | 1.14    | 9.08  | 71.91  | 314.14 | 2-382409-4   |
| 40                                                      | 1.995 (50.67)         | .694 (17.63)  | .650 (16.51) | .621 (15.77) | A97406-ND         | 1.62    | 12.98 | 102.73 | 448.76 | 2-382411-4   |

## ON-SHORE TECHNOLOGY, INC. I.C. Sockets

### Low Cost Version

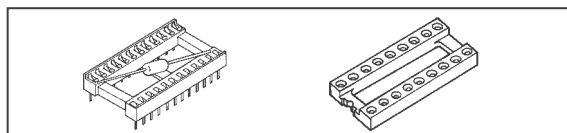
#### Special Features/Application:

- Dual wipe contacts to maximize contact area and minimize resistance
- Closed bottom design to help prevent wicking and flux contamination
- Auto insertability • Low profile design • Wide entry area for easy IC insertion • Board stand-offs for easy clean ups • Side and end stackable • Pin 1 is polarized • Stamped pin • Plating: Pin tin plated, 80-120m" tin-lead. Includes internal glass encapsulated ceramic capacitor 0.1mF, 50Vdc

### Surface Mount IC Sockets

#### Special Features/Applications:

- For surface mounted technology
- Tin for solder must be in the pc board
- **Technical Data:** • Insulator body material: glass-filled polyether-sulphone • Temperature range: 55°C to +200°C continuous • Solder temperature: 280°C, intermittent
- **Plating:** Pin tin plated min. 80m" nickel + min. 150m" tin-lead • High temperature insulator

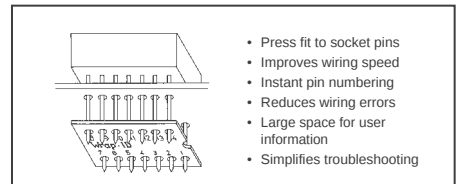


| Type of Pins                             | No. of Pins | Contact Spacing In. (mm) | Digi-Key Part No. | 1    | 10    | Pricing 100 | 1,000   | 5,000     |
|------------------------------------------|-------------|--------------------------|-------------------|------|-------|-------------|---------|-----------|
| IC Sockets — with Cap — Low Cost Version |             |                          |                   |      |       |             |         |           |
| Tin Plated                               | 14          | .300 (7.62)              | ED2124-ND         | .81  | 6.72  | 56.00       | 464.80  | 420.00/M  |
| Solder                                   | 16          | .300 (7.62)              | ED2125-ND         | .87  | 7.20  | 60.00       | 498.00  | 450.00/M  |
| Tab                                      | 18          | .300 (7.62)              | ED2126-ND         | .93  | 7.68  | 64.00       | 531.20  | 480.00/M  |
|                                          | 20          | .300 (7.62)              | ED2127-ND         | .99  | 8.16  | 68.00       | 564.40  | 510.00/M  |
| IC Sockets — Surface Mount (SMD)         |             |                          |                   |      |       |             |         |           |
| Screw Machined Pins Without Solder Tail  | 6           | .300 (7.62)              | ED2201-ND         | .72  | 5.93  | 49.40       | 410.02  | 370.50/M  |
|                                          | 8           | .300 (7.62)              | ED2202-ND         | .95  | 7.90  | 65.80       | 546.14  | 493.50/M  |
|                                          | 14          | .300 (7.62)              | ED2203-ND         | 1.67 | 13.82 | 115.20      | 952.16  | 864.00/M  |
|                                          | 16          | .300 (7.62)              | ED2204-ND         | 1.72 | 14.21 | 118.40      | 982.72  | 888.00/M  |
|                                          | 18          | .300 (7.62)              | ED2205-ND         | 1.93 | 15.98 | 133.20      | 1105.56 | 999.00/M  |
|                                          | 20          | .300 (7.62)              | ED2206-ND         | 2.15 | 17.76 | 148.00      | 1228.40 | 1110.00/M |
|                                          | 22          | .400 (10.16)             | ED2207-ND         | 2.36 | 19.54 | 162.80      | 1351.24 | 1221.00/M |
|                                          | 24          | .600 (15.24)             | ED2208-ND         | 2.87 | 23.71 | 197.60      | 1640.08 | 1482.00/M |
|                                          | 28          | .600 (15.24)             | ED2209-ND         | 3.34 | 27.60 | 230.00      | 1909.00 | 1725.00/M |
|                                          | 36          | .600 (15.24)             | ED2210-ND         | 3.86 | 31.97 | 266.40      | 2211.12 | 1998.00/M |
|                                          | 40          | .600 (15.24)             | ED2211-ND         | 4.29 | 35.52 | 296.00      | 2458.80 | 2220.00/M |
|                                          | 48          | .600 (15.24)             | ED2212-ND         | 5.15 | 42.62 | 355.20      | 2948.16 | 2664.00/M |
|                                          | 64          | .600 (15.24)             | ED2213-ND         | 6.87 | 56.83 | 473.60      | 3930.88 | 3552.00/M |



## Socket Wrap I.D.

Division of OK International



- Press fit to socket pins
- Improves wiring speed
- Instant pin numbering
- Reduces wiring errors
- Large space for user information
- Simplifies troubleshooting

Now offering an exciting, low cost item used to identify pin numbers on wire-wrapping sockets. Consisting of a socket-sized plastic panel with numbered holes in the pin location, the Socket Wrap-ID is simply slipped onto the socket before wrapping.

You can also write on them for easy identification of location, IC part number, function, etc. These unique items greatly simplify both initial wire-wrapping and subsequent troubleshooting or repair.

A great help to hobbyists, technicians, and production facilities alike.

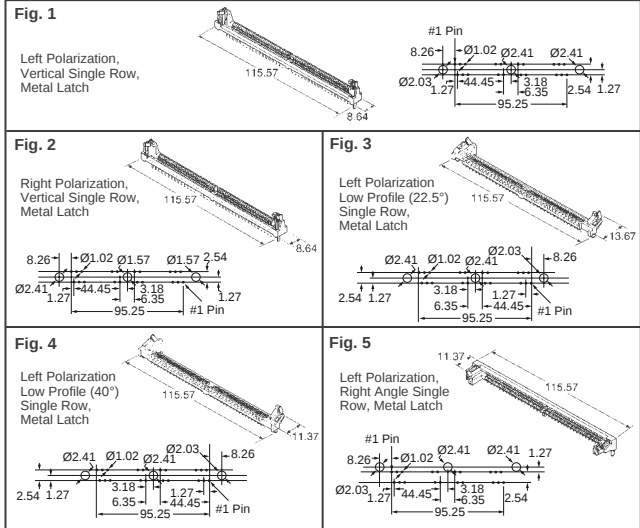
| Spacing | Description                 | Digi-Key Part No. | Price Each |
|---------|-----------------------------|-------------------|------------|
| .6      | 28 Pin I.D. (5 per package) | K272-ND           | 3.95       |
| .6      | 40 Pin I.D. (5 per package) | K273-ND           | 3.95       |
| —       | 96 Pin I.D. (5 per package) | K274-ND           | 3.95       |

# 1-800-344-4539

218-681-6674 • FAX: 218-681-3380 • [www.digikey.com](http://www.digikey.com)

**Features and Benefits:** • Zero insertion force contacts improve socket and module contact life and provide for fast on-line assembly • Guaranteed 2 points of contact per readout with standard JEDEC module • Anti-overstress latch feature provides extra protection during module removal • Polarization posts provide orientation for proper loading of socket into printed circuit board • Polarization rib properly orients module to socket • EIA standard dimensions

**Electrical Specifications:** • Voltage: 250V • Current: 1.0A • Contact Resistance: 30mΩ max. • Dielectric Withstanding Voltage: 1000V AC • Insulation Resistance: 500MΩ min. • Capacitance: 2.5 picofarads max. **Mechanical Specifications:** • Normal Force: 150g • Durability: 25 cycles **Physical Specifications:** • Housing: Black LCP, UL 94V-0 • Latch: Stainless Steel • Contact: Phosphor Bronze Alloy • Temperature: -40° to +85°C



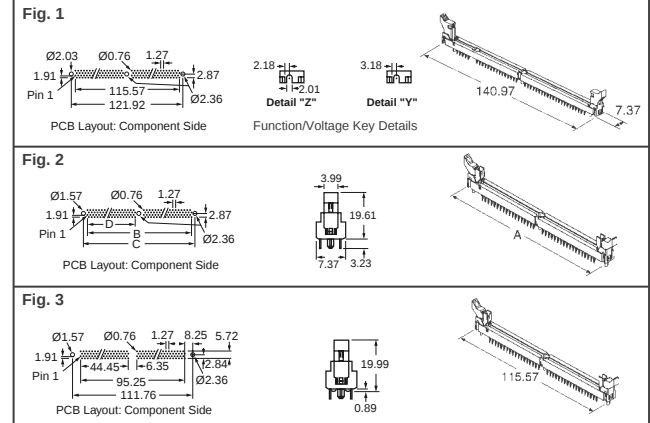
| Fig. | Plate | Digi-Key Part No. | 1    | 25     | 50     | 100    | Molex Part No. |
|------|-------|-------------------|------|--------|--------|--------|----------------|
| 1    | Tin   | WM1700-ND         | 3.67 | 85.58  | 154.85 | 277.10 | 15-82-0775     |
| 1    | Gold  | WM1702-ND         | 3.67 | 85.58  | 154.85 | 277.10 | 15-82-0762     |
| 2    | Tin   | WM1701-ND         | 3.67 | 85.58  | 154.85 | 277.10 | 15-82-0777     |
| 2    | Gold  | WM1703-ND         | 3.67 | 85.58  | 158.93 | 277.10 | 15-82-0788     |
| 3    | Tin   | WM1704-ND         | 3.67 | 85.58  | 154.85 | 277.10 | 15-82-0678     |
| 3    | Gold  | WM1705-ND         | 3.67 | 85.58  | 154.85 | 277.10 | 15-82-0675     |
| 4    | Tin   | WM1706-ND         | 3.67 | 85.58  | 154.85 | 277.10 | 15-82-0649     |
| 4    | Gold  | WM1707-ND         | 3.67 | 85.58  | 154.85 | 277.10 | 15-82-0627     |
| 5    | Tin   | WM1709-ND         | 6.41 | 149.63 | 270.75 | 484.50 | 15-82-1538     |
| 5    | Gold  | WM1708-ND         | 8.12 | 189.53 | 342.95 | 613.70 | 15-82-0312     |

## DIMM Sockets

**Features and Benefits:** • Accepts JEDEC MO-161 modules for 100% industry compatibility • Dual ejector latches for easy module removal • Palladium Nickel with Gold flash plating for improved reliability • Added contact wipe for improved reliability **Electrical Specifications:** • Voltage: 100V • Current: 1.0A • Contact Resistance: 20mΩ max. • Dielectric Withstanding Voltage: 750V AC • Insulation Resistance: 100MΩ min.

**Mechanical Specifications:** • Mating Force: 5 oz. per pair • Durability: 25 cycles min.

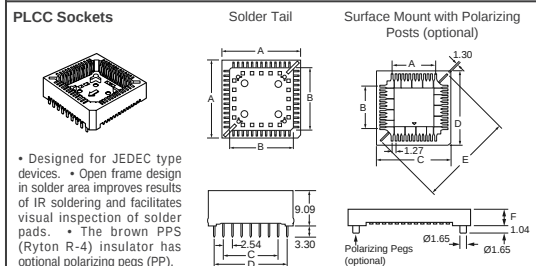
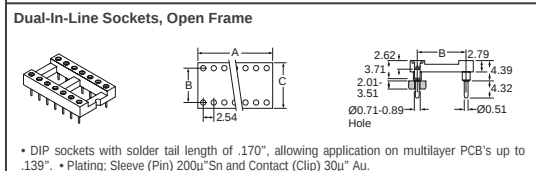
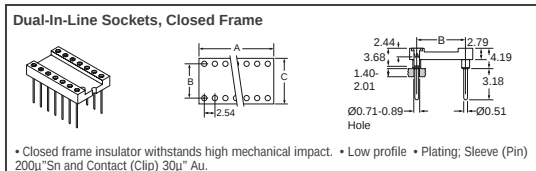
**Physical Specifications:** • Housing and Latch: High temperature resistant thermoplastic, UL 94V-0 • Contact: Phosphor Bronze • Plating Selective Palladium Nickel with Gold flash with Tin/Lead on solder tails • Temperature: -40° to +85°C



| Fig. | Description     | Circuits | Function Key | Voltage Key | Digi-Key Part No. | 1     | 25     | 50     | Molex Part No. |
|------|-----------------|----------|--------------|-------------|-------------------|-------|--------|--------|----------------|
| 1    | DRAM 3.3V       | 168      | Detail Y     | Detail Y    | WM1710-ND         | 15.44 | 360.15 | 651.70 | 71251-0001     |
| 1    | DRAM 5.0V       | 168      | Detail Y     | Detail Z    | WM1711-ND         | 15.44 | 360.15 | 651.70 | 71251-0004     |
| 1    | SDRAM 3.3V      | 168      | Detail Z     | Detail Z    | WM1714-ND         | 15.44 | 360.15 | 651.70 | 71251-0016     |
| 1    | SDRAM 5.0V      | 168      | Detail Z     | Detail Z    | WM1715-ND         | 15.44 | 360.15 | 651.70 | 71251-0017     |
| 1    | Unbuffered 3.3V | 168      | Detail X     | Detail Y    | WM1712-ND         | 15.44 | 360.15 | 651.70 | 71251-0012     |
| 1    | Unbuffered 5.0V | 168      | Detail X     | Detail Z    | WM1713-ND         | 15.44 | 360.15 | 651.70 | 71251-0013     |

| Fig.                                       | Circuits | A      | B      | C      | D     | Digi-Key Part No. | 1     | 25     | 50     | Molex Part No. |
|--------------------------------------------|----------|--------|--------|--------|-------|-------------------|-------|--------|--------|----------------|
| <i>Vertical with Dual Ejecting Latches</i> |          |        |        |        |       |                   |       |        |        |                |
| 2                                          | 128      | 105.41 | 85.09  | 101.60 | 39.37 | WM1716-ND         | 13.55 | 316.05 | 571.90 | 71243-0001     |
| 2                                          | 144      | 115.57 | 95.25  | 111.76 | 44.45 | WM1717-ND         | 14.56 | 339.68 | 614.65 | 71243-0002     |
| 2                                          | 200      | 151.13 | 130.81 | 147.32 | 62.23 | WM1718-ND         | 18.36 | 428.40 | 775.20 | 71243-0003     |
| <i>Single Low Key DIMM</i>                 |          |        |        |        |       |                   |       |        |        |                |
| 3                                          | 144      | —      | —      | —      | —     | WM1719-ND         | 14.56 | 339.68 | 614.65 | 71243-0009     |

## MILL-MAX Dual-In-Line & PLCC Sockets

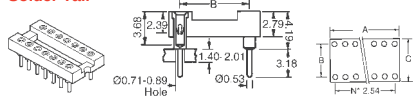


| No. of Pins                                                                   | A           | B           | Dimensions (mm) | C           | D     | E    | F | Digi-Key Part No. | 1    | 10    | 100    | Mill-Max Part No.    |
|-------------------------------------------------------------------------------|-------------|-------------|-----------------|-------------|-------|------|---|-------------------|------|-------|--------|----------------------|
| <i>Dual-In-Line Sockets, Solder Tail Closed Frame</i>                         |             |             |                 |             |       |      |   |                   |      |       |        |                      |
| 8                                                                             | 10.16       | 7.62        | 10.16           | —           | —     | —    | — | ED60000-ND        | .42  | 2.89  | 23.31  | 210-93-308-41-001000 |
| 14                                                                            | 17.78       | 7.62        | 10.16           | —           | —     | —    | — | ED60001-ND        | .73  | 5.07  | 40.95  | 210-93-314-41-001000 |
| 16                                                                            | 20.32       | 7.62        | 10.16           | —           | —     | —    | — | ED60002-ND        | .83  | 5.77  | 46.62  | 210-93-316-41-001000 |
| 24                                                                            | 30.48       | 7.62        | 10.16           | —           | —     | —    | — | ED60003-ND        | 1.25 | 8.68  | 70.14  | 210-93-324-41-001000 |
| 24                                                                            | 30.48       | 15.24       | 17.78           | —           | —     | —    | — | ED60004-ND        | 1.25 | 8.68  | 70.14  | 210-93-624-41-001000 |
| 28                                                                            | 35.56       | 15.24       | 17.78           | —           | —     | —    | — | ED60005-ND        | 1.46 | 10.11 | 81.69  | 210-93-628-41-001000 |
| 32                                                                            | 40.64       | 15.24       | 17.78           | —           | —     | —    | — | ED60006-ND        | 1.67 | 11.57 | 93.45  | 210-93-632-41-001000 |
| 40                                                                            | 50.80       | 15.24       | 17.78           | —           | —     | —    | — | ED60007-ND        | 2.09 | 14.46 | 116.76 | 210-93-640-41-001000 |
| <i>Dual-In-Line Sockets, Long Solder Tail for Multilayer PCBs, Open Frame</i> |             |             |                 |             |       |      |   |                   |      |       |        |                      |
| 8                                                                             | 10.16       | 7.62        | 10.16           | —           | —     | —    | — | ED60008-ND        | .59  | 4.06  | 32.76  | 111-93-308-41-001000 |
| 14                                                                            | 17.78       | 7.62        | 10.16           | —           | —     | —    | — | ED60009-ND        | .98  | 6.81  | 55.02  | 111-93-314-41-001000 |
| 16                                                                            | 20.32       | 7.62        | 10.16           | —           | —     | —    | — | ED60010-ND        | 1.13 | 7.80  | 63.00  | 111-93-316-41-001000 |
| 20                                                                            | 25.40       | 7.62        | 10.16           | —           | —     | —    | — | ED60011-ND        | 1.36 | 9.41  | 76.02  | 111-93-320-41-001000 |
| 24                                                                            | 30.48       | 7.62        | 10.16           | —           | —     | —    | — | ED60012-ND        | 1.63 | 11.28 | 91.14  | 111-93-324-41-001000 |
| 24                                                                            | 30.48       | 15.24       | 17.78           | —           | —     | —    | — | ED60013-ND        | 1.63 | 11.28 | 91.14  | 111-93-624-41-001000 |
| 28                                                                            | 35.56       | 15.24       | 17.78           | —           | —     | —    | — | ED60014-ND        | 1.90 | 13.16 | 106.26 | 111-93-628-41-001000 |
| 32                                                                            | 40.64       | 15.24       | 17.78           | —           | —     | —    | — | ED60015-ND        | 2.17 | 15.05 | 121.59 | 111-93-632-41-001000 |
| 40                                                                            | 50.80       | 15.24       | 17.78           | —           | —     | —    | — | ED60016-ND        | 2.72 | 18.82 | 152.04 | 111-93-640-41-001000 |
| <i>PLCC Sockets Solder Tail</i>                                               |             |             |                 |             |       |      |   |                   |      |       |        |                      |
| 20                                                                            | 14.99       | 9.14        | 5.08            | 10.16       | —     | —    | — | ED80000-ND        | 1.11 | 9.95  | 88.40  | 540-99-020-24-000000 |
| 28                                                                            | 17.53       | 11.68       | 7.62            | 12.70       | —     | —    | — | ED80001-ND        | 1.37 | 12.33 | 109.60 | 540-99-028-24-000000 |
| 32*                                                                           | 19.89/17.35 | 14.33/11.79 | 10.16/7.62      | 15.24/12.70 | —     | —    | — | ED80002-ND        | 1.49 | 13.41 | 119.20 | 540-99-032-24-000000 |
| 44                                                                            | 22.61       | 16.76       | 12.70           | 17.78       | —     | —    | — | ED80003-ND        | 1.48 | 13.30 | 118.20 | 540-99-044-24-000000 |
| 52                                                                            | 25.15       | 19.30       | 15.24           | 20.32       | —     | —    | — | ED80004-ND        | 2.06 | 18.54 | 164.80 | 540-99-052-24-000000 |
| 68                                                                            | 30.23       | 24.38       | 20.32           | 25.40       | —     | —    | — | ED80005-ND        | 1.87 | 16.79 | 149.20 | 540-99-068-24-000000 |
| 84                                                                            | 35.31       | 29.46       | 25.40           | 30.48       | —     | —    | — | ED80006-ND        | 2.39 | 21.47 | 190.80 | 540-99-084-24-000000 |
| <i>PLCC Sockets Surface Mount</i>                                             |             |             |                 |             |       |      |   |                   |      |       |        |                      |
| 20                                                                            | 5.08        | 5.08        | 14.86           | 14.86       | 16.69 | 4.57 | — | ED80007-ND        | 1.26 | 11.30 | 100.40 | 540-99-020-17-400000 |
| 28                                                                            | 7.62        | 7.62        | 17.40           | 17.40       | 20.29 | 4.57 | — | ED80008-ND        | 1.29 | 11.57 | 102.80 | 540-99-028-17-400000 |
| 32*                                                                           | 7.62        | 10.16       | 16.89           | 19.46       | 22.48 | 4.27 | — | ED80009-ND        | 1.37 | 12.35 | 109.80 | 540-99-032-17-400000 |
| 44                                                                            | 12.70       | 12.70       | 22.48           | 22.48       | 27.48 | 4.57 | — | ED80010-ND        | 1.67 | 15.05 | 133.80 | 540-99-044-17-400000 |
| 52                                                                            | 15.24       | 15.24       | 25.40           | 25.40       | 31.09 | 4.57 | — | ED80011-ND        | 1.78 | 15.98 | 142.00 | 540-99-052-17-400000 |
| 68                                                                            | 20.32       | 20.32       | 30.53           | 30.53       | 38.28 | 4.57 | — | ED80012-ND        | 1.98 | 17.80 | 158.20 | 540-99-068-17-400000 |
| 84                                                                            | 25.40       | 25.40       | 35.56           | 35.56       | 45.49 | 4.57 | — | ED80013-ND        | 2.21 | 19.87 | 176.60 | 540-99-084-17-400000 |
| <i>PLCC Sockets Surface Mount with Polarizing Posts</i>                       |             |             |                 |             |       |      |   |                   |      |       |        |                      |
| 20                                                                            | 5.08        | 5.08        | 14.86           | 14.86       | 16.69 | 4.57 | — | ED80014-ND        | 1.26 | 11.30 | 100.40 | 540-99-020-17-400200 |
| 28                                                                            | 7.62        | 7.62        | 17.40           | 17.40       | 20.29 | 4.57 | — | ED80015-ND        | 1.29 | 11.57 | 102.80 | 540-99-028-17-400200 |
| 32*                                                                           | 7.62        | 10.16       | 16.89           | 19.46       | 22.48 | 4.27 | — | ED80016-ND        | 1.37 | 12.35 | 109.80 | 540-99-032-17-400200 |
| 44                                                                            | 12.70       | 12.70       | 22.48           | 22.48       | 27.48 | 4.57 | — | ED80017-ND        | 1.67 | 15.05 | 133.80 | 540-99-044-17-400200 |
| 52                                                                            | 15.24       | 15.24       | 25.40           | 25.40       | 31.09 | 4.57 | — | ED80018-ND        | 1.78 | 15.98 | 142.00 | 540-99-052-17-400200 |
| 68                                                                            | 20.32       | 20.32       | 30.53           | 30.53       | 38.28 | 4.57 | — | ED80019-ND        | 1.98 | 17.80 | 158.20 | 540-99-068-17-400200 |
| 84                                                                            | 25.40       | 25.40       | 35.56           | 35.56       | 45.49 | 4.57 | — | ED80020-ND        | 2.21 | 19.87 | 176.60 | 540-99-084-17-400200 |

\* Rectangular

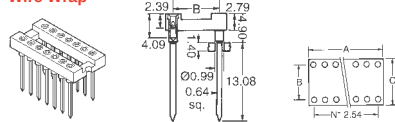
## Dual-In-Line Sockets – Open Frame (Screw Machined)

### Solder Tail



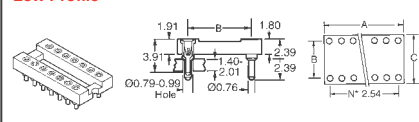
Most popular line of standard low profile IC-Sockets. Open frame design leaves space beneath IC for improved heat dissipation, easier PCB cleaning and inspection. **Insertion Characteristics:** 4-finger standard. **Plating:** For ED3308-ED3964: Sleeve (Pin) - 200µ" Sn. Contact (Clip) - 30µ" Au. For ED3108-ED3764: Sleeve (Pin) - 200µ" Sn. Contact (Clip) - 150µ" Au. For ED5608-ED5664: Sleeve (Pin) - 10µ" Au. Contact (Clip) - 30µ" Au.

## Wire Wrap



Solderless wire wrap terminals are firmly locked in the insulator body to withstand torque of wrapping tool. Length of terminal for three-level wrapping. **Insertion Characteristics:** 4-finger standard. **Plating:** For ED4308-ED4964: Sleeve (Pin) – 200µ" Sn. Contact (Clip) – 30µ" Au. For ED57083-ED57406: Sleeve (Pin) – 10µ" Au. Contact (Clip) – 30µ" Au.

**Low Profile**



"Ultra low profile" Dual-in-line sockets are equipped with specially designed contacts allowing .095" (2.41mm) height above PCB. Special short contact requires .075" (1.91mm) insertion depth only. Solder tail diameter .030" (.76mm). **Insertion Characteristics:** 4-finger short contact. **Plating:** Sleeve (Pin) — 200µ Sn. Contact (Clip) — 30µ Au.

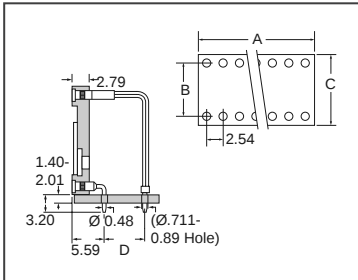
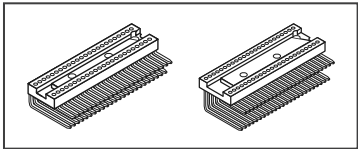
| No. of Pins        | Dimensions (mm.) |       | Digi-Key Part No. | Pricing   |      |       |        | Milli-Max Part No. |         |                   |
|--------------------|------------------|-------|-------------------|-----------|------|-------|--------|--------------------|---------|-------------------|
|                    | A                | B     |                   | 1         | 10   | 100   | 500    |                    | 1,000   |                   |
| Solder Tail (Gold) |                  |       |                   |           |      |       |        |                    |         |                   |
| 8                  | 10.16            | 7.62  | 10.16             | ED3308-N  | .42  | 2.88  | 23.35  | 100.08             | 166.80  | 110-93-308-41-001 |
| 14                 | 17.78            | 7.62  | 10.16             | ED3314-N  | .73  | 5.06  | 40.87  | 175.14             | 291.90  | 110-93-314-41-001 |
| 16                 | 20.30            | 7.62  | 10.16             | ED3316-N  | .83  | 5.78  | 46.70  | 200.16             | 333.60  | 110-93-316-41-001 |
| 18                 | 22.86            | 7.62  | 10.16             | ED3318-N  | .94  | 6.51  | 52.54  | 225.18             | 375.30  | 110-93-318-41-001 |
| 20                 | 25.40            | 7.62  | 10.16             | ED3320-N  | 1.04 | 7.23  | 58.38  | 250.20             | 417.00  | 110-93-320-41-001 |
| 24                 | 30.48            | 7.62  | 10.16             | ED3324-N  | 1.25 | 8.67  | 70.06  | 300.24             | 500.40  | 110-93-324-41-001 |
| 28                 | 35.56            | 7.62  | 10.16             | ED3328-N  | 1.46 | 10.12 | 81.73  | 350.28             | 583.80  | 110-93-328-41-001 |
| 22                 | 27.94            | 10.16 | 12.70             | ED3422-N  | 1.15 | 7.95  | 64.22  | 275.22             | 458.70  | 110-93-422-41-001 |
| 24                 | 30.48            | 10.16 | 12.70             | ED3424-N  | 1.25 | 8.67  | 70.06  | 300.24             | 500.40  | 110-93-424-41-001 |
| 24                 | 30.48            | 15.24 | 17.78             | ED3624-N  | 1.25 | 8.67  | 70.06  | 300.24             | 500.40  | 110-93-624-41-001 |
| 28                 | 35.56            | 15.24 | 17.78             | ED3628-N  | 1.46 | 10.12 | 81.73  | 350.28             | 583.80  | 110-93-628-41-001 |
| 40                 | 40.64            | 15.24 | 17.78             | ED3640-N  | 1.67 | 11.50 | 93.41  | 400.32             | 667.20  | 110-93-640-41-001 |
| 50                 | 50.80            | 15.24 | 17.78             | ED3650-N  | 2.06 | 14.40 | 116.76 | 500.00             | 834.00  | 110-93-650-41-001 |
| 48                 | 48.96            | 15.24 | 17.78             | ED3648-N  | 1.50 | 17.35 | 101.11 | 600.48             | 1000.80 | 110-93-648-41-001 |
| 50                 | 63.50            | 22.86 | 25.40             | ED3950-N  | 2.61 | 18.07 | 145.95 | 625.50             | 1042.50 | 110-93-950-41-001 |
| 64                 | 81.28            | 22.86 | 25.40             | ED3964-N  | 3.34 | 23.13 | 186.82 | 800.64             | 1334.40 | 110-93-964-41-001 |
| Solder Tail (Gold) |                  |       |                   |           |      |       |        |                    |         |                   |
| 8                  | 10.16            | 7.62  | 10.16             | ED50083-N | .59  | 4.11  | 33.18  | 142.20             | 237.00  | 110-13-308-41-001 |
| 14                 | 17.78            | 7.62  | 10.16             | ED56143-N | 1.04 | 7.18  | 57.96  | 248.40             | 414.00  | 110-13-314-41-001 |
| 16                 | 20.30            | 7.62  | 10.16             | ED56163-N | 1.18 | 8.19  | 66.15  | 283.50             | 472.50  | 110-13-316-41-001 |
| 18                 | 22.86            | 7.62  | 10.16             | ED56183-N | 1.33 | 9.23  | 74.55  | 319.50             | 532.50  | 110-13-318-41-001 |
| 20                 | 25.40            | 7.62  | 10.16             | ED56203-N | 1.48 | 10.24 | 82.74  | 354.60             | 591.00  | 110-13-320-41-001 |
| 24                 | 30.48            | 7.62  | 10.16             | ED56243-N | 1.77 | 12.30 | 99.33  | 425.70             | 709.50  | 110-13-324-41-001 |
| 28                 | 35.56            | 7.62  | 10.16             | ED56283-N | 2.07 | 14.35 | 115.92 | 496.80             | 828.00  | 110-13-328-41-001 |
| 24                 | 30.48            | 15.24 | 17.78             | ED56246-N | 1.77 | 12.30 | 99.33  | 425.70             | 709.50  | 110-13-624-41-001 |
| 28                 | 35.56            | 15.24 | 17.78             | ED56286-N | 2.07 | 14.35 | 115.92 | 496.80             | 828.00  | 110-13-628-41-001 |
| 32                 | 40.64            | 15.24 | 17.78             | ED56326-N | 2.36 | 16.38 | 132.30 | 567.00             | 945.00  | 110-13-632-41-001 |
| 40                 | 50.80            | 15.24 | 17.78             | ED56406-N | 2.96 | 20.49 | 165.48 | 709.20             | 1182.00 | 110-13-640-41-001 |
| 64                 | 81.28            | 22.86 | 25.40             | ED56646-N | 3.73 | 32.79 | 264.81 | 1134.90            | 1891.50 | 110-13-964-41-001 |
| Solder Tail (Tin)  |                  |       |                   |           |      |       |        |                    |         |                   |
| 8                  | 10.16            | 7.62  | 10.16             | ED3108-N  | .32  | 2.25  | 18.14  | 77.76              | 129.60  | 110-99-308-41-001 |
| 14                 | 17.78            | 7.62  | 10.16             | ED3114-N  | .57  | 3.93  | 31.75  | 136.08             | 226.80  | 110-99-314-41-001 |
| 16                 | 20.30            | 7.62  | 10.16             | ED3116-N  | .65  | 4.49  | 36.29  | 155.52             | 259.20  | 110-99-316-41-001 |
| 18                 | 22.86            | 7.62  | 10.16             | ED3118-N  | .73  | 5.05  | 40.82  | 174.96             | 291.60  | 110-99-318-41-001 |
| 20                 | 25.40            | 7.62  | 10.16             | ED3120-N  | .81  | 5.62  | 45.36  | 194.40             | 324.00  | 110-99-320-41-001 |
| 24                 | 30.48            | 7.62  | 10.16             | ED3124-N  | .97  | 6.74  | 54.43  | 233.28             | 388.80  | 110-99-324-41-001 |
| 28                 | 35.56            | 7.62  | 10.16             | ED3128-N  | 1.13 | 7.86  | 63.50  | 272.16             | 453.60  | 110-99-328-41-001 |
| 24                 | 30.48            | 10.16 | 12.70             | ED3524-N  | .97  | 6.74  | 54.43  | 233.28             | 388.80  | 110-99-424-41-001 |
| 28                 | 30.48            | 15.24 | 17.78             | ED3528-N  | .97  | 6.74  | 54.43  | 233.28             | 388.80  | 110-99-624-41-001 |
| 32                 | 40.64            | 10.16 | 12.70             | ED3732-N  | 1.13 | 8.86  | 63.50  | 272.16             | 453.60  | 110-99-432-41-001 |
| 40                 | 50.80            | 15.24 | 17.78             | ED3732-N  | 1.30 | 11.99 | 72.58  | 311.04             | 518.40  | 110-99-632-41-001 |
| 40                 | 50.80            | 15.24 | 17.78             | ED3740-N  | 1.62 | 18.22 | 90.72  | 388.80             | 648.00  | 110-99-640-41-001 |
| 48                 | 60.96            | 15.24 | 17.78             | ED3748-N  | 1.94 | 13.48 | 108.86 | 466.56             | 777.60  | 110-99-648-41-001 |
| 64                 | 81.28            | 22.86 | 25.40             | ED3764-N  | 2.59 | 17.97 | 145.15 | 622.08             | 1036.80 | 110-99-964-41-001 |

| No. of Pins | Dimensions (mm) |       |       | Digi-Key Part No. | Pricing |       |        |         | Mill-Max Part No. |                   |
|-------------|-----------------|-------|-------|-------------------|---------|-------|--------|---------|-------------------|-------------------|
|             | A               | B     | C     |                   | 1       | 10    | 100    | 500     |                   | 1,000             |
| Wire Wrap   |                 |       |       |                   |         |       |        |         |                   |                   |
| 8           | 10.16           | 7.62  | 10.16 | ED4308-ND         | .92     | 6.34  | 51.24  | 219.60  | 366.00            | 123-93-308-41-001 |
| 14          | 17.78           | 7.62  | 10.16 | ED4314-ND         | 1.60    | 11.10 | 89.67  | 384.30  | 640.50            | 123-93-314-41-001 |
| 16          | 20.30           | 7.62  | 10.16 | ED4316-ND         | 1.83    | 12.69 | 102.48 | 439.20  | 732.00            | 123-93-316-41-001 |
| 18          | 22.86           | 7.62  | 10.16 | ED4318-ND         | 2.06    | 14.27 | 115.29 | 494.10  | 823.50            | 123-93-318-41-001 |
| 20          | 25.40           | 7.62  | 10.16 | ED4320-ND         | 2.29    | 15.86 | 128.10 | 549.00  | 915.00            | 123-93-320-41-001 |
| 24          | 30.48           | 7.62  | 10.16 | ED4324-ND         | 2.75    | 19.03 | 153.72 | 658.80  | 1098.00           | 123-93-324-41-001 |
| 28          | 35.56           | 7.62  | 10.16 | ED4328-ND         | 3.20    | 22.20 | 179.34 | 768.60  | 1281.00           | 123-93-328-41-001 |
| 32          | 27.94           | 10.16 | 12.70 | ED4422-ND         | 2.52    | 17.45 | 140.91 | 603.90  | 1006.50           | 123-93-422-41-001 |
| 34          | 30.48           | 10.16 | 12.70 | ED4424-ND         | 2.75    | 19.03 | 153.72 | 658.80  | 1098.00           | 123-93-424-41-001 |
| 36          | 30.48           | 15.24 | 17.78 | ED4624-ND         | 2.75    | 19.03 | 153.72 | 658.80  | 1098.00           | 123-93-624-41-001 |
| 38          | 35.56           | 15.24 | 17.78 | ED4628-ND         | 3.20    | 22.20 | 179.34 | 768.60  | 1281.00           | 123-93-628-41-001 |
| 42          | 40.64           | 15.24 | 17.78 | ED4632-ND         | 3.66    | 25.38 | 204.96 | 878.40  | 1464.00           | 123-93-632-41-001 |
| 44          | 50.80           | 15.24 | 17.78 | ED4640-ND         | 4.58    | 31.72 | 256.20 | 1098.00 | 1830.00           | 123-93-640-41-001 |
| 48          | 60.96           | 15.24 | 17.78 | ED4648-ND         | 5.49    | 38.06 | 307.44 | 1317.60 | 2196.00           | 123-93-648-41-001 |
| 50          | 63.50           | 22.86 | 25.40 | ED4950-ND         | 5.72    | 39.65 | 320.25 | 1372.50 | 2287.50           | 123-93-950-41-001 |
| 64          | 81.28           | 22.86 | 25.40 | ED4964-ND         | 7.32    | 50.75 | 405.92 | 1756.80 | 2928.00           | 123-93-964-41-001 |
| Wire Wrap   |                 |       |       |                   |         |       |        |         |                   |                   |
| 8           | 10.16           | 7.62  | 10.16 | ED57083-ND        | 1.16    | 8.06  | 65.10  | 279.00  | 465.00            | 123-13-308-41-001 |
| 14          | 17.78           | 7.62  | 10.16 | ED57143-ND        | 2.04    | 14.12 | 114.03 | 488.70  | 814.50            | 123-13-314-41-001 |
| 16          | 20.30           | 7.62  | 10.16 | ED57163-ND        | 2.33    | 16.15 | 130.41 | 558.90  | 931.50            | 123-13-316-41-001 |
| 20          | 25.40           | 7.62  | 10.16 | ED57203-ND        | 2.91    | 20.18 | 162.96 | 698.40  | 1164.00           | 123-13-320-41-001 |
| 24          | 30.48           | 7.62  | 10.16 | ED57243-ND        | 3.49    | 24.21 | 195.51 | 837.90  | 1396.50           | 123-13-324-41-001 |
| 28          | 30.48           | 15.24 | 17.78 | ED57246-ND        | 3.49    | 24.21 | 195.51 | 837.90  | 1396.50           | 123-13-624-41-001 |
| 38          | 30.48           | 15.24 | 17.78 | ED57286-ND        | 4.07    | 28.24 | 228.06 | 977.40  | 1629.00           | 123-13-628-41-001 |
| 40          | 50.80           | 15.24 | 17.78 | ED57406-ND        | 5.82    | 40.35 | 325.92 | 1396.80 | 2328.00           | 123-13-640-41-001 |
| Low Profile |                 |       |       |                   |         |       |        |         |                   |                   |
| 8           | 10.16           | 7.62  | 10.16 | ED5308-ND         | .70     | 4.86  | 39.27  | 168.30  | 280.50            | 115-93-308-41-003 |
| 14          | 17.78           | 7.62  | 10.16 | ED5314-ND         | 1.18    | 8.16  | 65.94  | 282.60  | 471.00            | 115-93-314-41-003 |
| 16          | 20.30           | 7.62  | 10.16 | ED5316-ND         | 1.35    | 9.33  | 75.39  | 323.10  | 538.50            | 115-93-316-41-003 |
| 18          | 22.86           | 7.62  | 10.16 | ED5318-ND         | 1.52    | 10.50 | 84.84  | 363.60  | 606.00            | 115-93-318-41-003 |
| 20          | 25.40           | 7.62  | 10.16 | ED5320-ND         | 1.62    | 11.26 | 90.93  | 389.70  | 649.50            | 115-93-320-41-003 |
| 24          | 30.48           | 7.62  | 10.16 | ED5324-ND         | 1.95    | 13.49 | 108.99 | 467.10  | 778.50            | 115-93-324-41-003 |
| 28          | 35.56           | 7.62  | 10.16 | ED5328-ND         | 2.27    | 15.76 | 127.26 | 545.40  | 909.00            | 115-93-328-41-003 |
| 32          | 27.94           | 10.16 | 12.70 | ED5422-ND         | 1.79    | 12.38 | 99.96  | 428.40  | 714.00            | 115-93-422-41-003 |
| 34          | 30.48           | 10.16 | 12.70 | ED5424-ND         | 1.95    | 13.49 | 108.99 | 467.10  | 778.50            | 115-93-424-41-003 |
| 36          | 30.48           | 15.24 | 17.78 | ED5624-ND         | 1.95    | 13.49 | 108.99 | 467.10  | 778.50            | 115-93-624-41-003 |
| 38          | 35.56           | 15.24 | 17.78 | ED5628-ND         | 2.27    | 15.76 | 127.26 | 545.40  | 909.00            | 115-93-628-41-003 |
| 42          | 40.64           | 15.24 | 17.78 | ED5632-ND         | 2.60    | 18.02 | 145.53 | 623.70  | 1039.50           | 115-93-632-41-003 |
| 44          | 50.80           | 15.24 | 17.78 | ED5640-ND         | 3.25    | 22.52 | 181.86 | 779.40  | 1299.00           | 115-93-640-41-003 |
| 48          | 60.96           | 15.24 | 17.78 | ED5648-ND         | 3.90    | 27.01 | 218.19 | 935.10  | 1558.50           | 115-93-648-41-003 |



## Dual-In-Line Sockets – Right Angle Mount Closed Frame

- For components to be mounted perpendicularly to the PCB, such as LED displays.
- Right angle solder tails are available with either .300" (7.62mm) [standard] or .100" (2.54mm) row spacing.
- Plating: Sleeve (Pin) - 200µ" Sn. Contact (Clip) - 30µ" Au.



| No. of Pins | Dimensions (mm) |       |       |      | Digi-Key Part No. | Pricing |        |        |         | Mill-Max Part No. |                   |
|-------------|-----------------|-------|-------|------|-------------------|---------|--------|--------|---------|-------------------|-------------------|
|             | A               | B     | C     | D    |                   | 1       | 10     | 100    | 500     |                   | 1,000             |
| 6           | 7.62            | 7.62  | 10.16 | 7.62 | ED58407-ND        | 2.46    | 17.06  | 137.76 | 590.40  | 984.00            | 299-93-306-10-001 |
| 8           | 10.16           | 7.62  | 10.16 | 7.62 | ED58408-ND        | 3.28    | 22.75  | 183.75 | 787.50  | 1312.50           | 299-93-308-10-001 |
| 10          | 12.70           | 7.62  | 10.16 | 7.62 | ED58409-ND        | 3.93    | 27.25  | 220.08 | 943.20  | 1572.00           | 299-93-310-10-001 |
| 12          | 15.24           | 7.62  | 10.16 | 7.62 | ED58410-ND        | 4.71    | 32.68  | 263.97 | 1131.30 | 1885.50           | 299-93-312-10-001 |
| 14          | 17.78           | 7.62  | 10.16 | 7.62 | ED58411-ND        | 5.50    | 38.12  | 307.86 | 1319.40 | 2199.00           | 299-93-314-10-001 |
| 16          | 20.30           | 7.62  | 10.16 | 7.62 | ED58412-ND        | 6.29    | 43.60  | 352.17 | 1509.30 | 2515.50           | 299-93-316-10-001 |
| 18          | 22.86           | 7.62  | 10.16 | 7.62 | ED58413-ND        | 7.07    | 49.04  | 396.06 | 1697.40 | 2829.00           | 299-93-318-10-001 |
| 20          | 25.40           | 7.62  | 10.16 | 7.62 | ED58414-ND        | 7.58    | 52.57  | 424.62 | 1819.80 | 3033.00           | 299-93-320-10-001 |
| 24          | 30.48           | 7.62  | 10.16 | 7.62 | ED58415-ND        | 9.10    | 63.08  | 509.46 | 2183.40 | 3639.00           | 299-93-324-10-001 |
| 8           | 10.16           | 15.24 | 17.78 | 7.62 | ED58416-ND        | 3.80    | 26.34  | 212.73 | 911.70  | 1519.50           | 299-93-608-10-002 |
| 10          | 12.70           | 15.24 | 17.78 | 7.62 | ED58417-ND        | 4.55    | 31.54  | 254.73 | 1091.70 | 1819.50           | 299-93-610-10-002 |
| 12          | 15.24           | 15.24 | 17.78 | 7.62 | ED58418-ND        | 5.46    | 37.86  | 305.76 | 1310.40 | 2184.00           | 299-93-612-10-002 |
| 14          | 17.78           | 15.24 | 17.78 | 7.62 | ED58419-ND        | 6.37    | 44.17  | 356.79 | 1529.10 | 2548.50           | 299-93-614-10-002 |
| 16          | 20.30           | 15.24 | 17.78 | 7.62 | ED58420-ND        | 7.28    | 50.47  | 407.61 | 1746.90 | 2911.50           | 299-93-616-10-002 |
| 18          | 22.86           | 15.24 | 17.78 | 7.62 | ED58421-ND        | 8.19    | 56.78  | 458.64 | 1965.60 | 3276.00           | 299-93-618-10-002 |
| 20          | 25.40           | 15.24 | 17.78 | 7.62 | ED58422-ND        | 8.78    | 60.89  | 491.82 | 2107.80 | 3513.00           | 299-93-620-10-002 |
| 22          | 27.94           | 15.24 | 17.78 | 7.62 | ED58423-ND        | 9.66    | 66.98  | 540.96 | 2318.40 | 3864.00           | 299-93-622-10-002 |
| 24          | 30.48           | 15.24 | 17.78 | 7.62 | ED58424-ND        | 10.54   | 73.09  | 590.31 | 2529.90 | 4216.50           | 299-93-624-10-002 |
| 26          | 33.02           | 15.24 | 17.78 | 7.62 | ED58425-ND        | 11.42   | 79.17  | 639.45 | 2740.50 | 4567.50           | 299-93-626-10-002 |
| 28          | 35.56           | 15.24 | 17.78 | 7.62 | ED58426-ND        | 12.30   | 85.25  | 688.59 | 2951.10 | 4918.50           | 299-93-628-10-002 |
| 30          | 38.10           | 15.24 | 17.78 | 7.62 | ED58427-ND        | 13.17   | 91.34  | 737.73 | 3161.70 | 5269.50           | 299-93-630-10-002 |
| 32          | 40.64           | 15.24 | 17.78 | 7.62 | ED58428-ND        | 14.05   | 97.42  | 786.87 | 3372.30 | 5620.50           | 299-93-632-10-002 |
| 36          | 45.72           | 15.24 | 17.78 | 7.62 | ED58429-ND        | 15.81   | 109.62 | 885.36 | 3794.40 | 6324.00           | 299-93-636-10-002 |
| 40          | 50.80           | 15.24 | 17.78 | 7.62 | ED58430-ND        | 17.57   | 121.78 | 983.64 | 4215.60 | 7026.00           | 299-93-640-10-002 |
| 6           | 7.62            | 7.62  | 10.16 | 2.54 | ED58431-ND        | 2.40    | 16.67  | 134.61 | 576.90  | 961.50            | 299-93-306-11-001 |
| 8           | 10.16           | 7.62  | 10.16 | 2.54 | ED58432-ND        | 3.20    | 22.20  | 179.34 | 768.60  | 1281.00           | 299-93-308-11-001 |
| 10          | 12.70           | 7.62  | 10.16 | 2.54 | ED58433-ND        | 3.84    | 26.62  | 215.04 | 921.60  | 1536.00           | 299-93-310-11-001 |
| 12          | 15.24           | 7.62  | 10.16 | 2.54 | ED58434-ND        | 4.61    | 31.93  | 257.88 | 1105.20 | 1842.00           | 299-93-312-11-001 |
| 14          | 17.78           | 7.62  | 10.16 | 2.54 | ED58435-ND        | 5.37    | 37.26  | 300.93 | 1289.70 | 2149.50           | 299-93-314-11-001 |
| 16          | 20.30           | 7.62  | 10.16 | 2.54 | ED58436-ND        | 6.14    | 42.59  | 343.98 | 1474.20 | 2457.00           | 299-93-316-11-001 |
| 18          | 22.86           | 7.62  | 10.16 | 2.54 | ED58437-ND        | 6.91    | 47.89  | 386.82 | 1657.80 | 2763.00           | 299-93-318-11-001 |
| 20          | 25.40           | 7.62  | 10.16 | 2.54 | ED58438-ND        | 7.41    | 51.38  | 414.96 | 1778.40 | 2964.00           | 299-93-320-11-001 |
| 24          | 30.48           | 7.62  | 10.16 | 2.54 | ED58439-ND        | 8.89    | 61.65  | 497.91 | 2133.90 | 3556.50           | 299-93-324-11-001 |

**1-800-344-4539**

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## IC Sockets

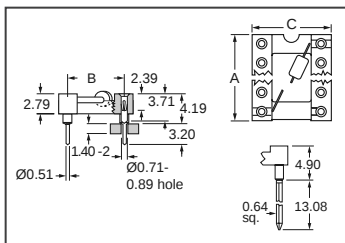
With Integral Decoupling Capacitor  
Machine Screw Contact

**Special Features/Applications:**

- To eliminate noise at the source before it can reach the chip
- Advantages for uses such as high speed logic and memory applications
- To eliminate long leads as potential sources of noise because capacitor leads are connected directly to the ground and voltage pin of the socket
- To save minimum of 12% on board space

**Technical Data:** • Insulator body material: glass filled polyester UL94VO • Pin: screw machined

Socket with integral glass encapsulated ceramic capacitor 0.1 $\mu$ F, 50 VDC



| Type of Pins                 | No. of Pins | Dimensions (mm) |       | Digi-Key Part No. | 1         | Pricing 100 | 100   | Mill-Max Part No. |                      |
|------------------------------|-------------|-----------------|-------|-------------------|-----------|-------------|-------|-------------------|----------------------|
|                              |             | A               | B     | C                 |           |             |       |                   |                      |
| Tin Plated, Solder Tab       | 14          | 17.78           | 7.62  | 10.16             | ED2101-ND | 1.68        | 14.56 | 117.60            | 110-93-314-41-801000 |
|                              | 16          | 20.32           | 7.62  | 10.16             | ED2102-ND | 1.80        | 15.60 | 126.00            | 110-93-316-41-801000 |
|                              | 18          | 22.86           | 7.62  | 10.16             | ED2103-ND | 1.92        | 16.67 | 134.61            | 110-93-318-41-801000 |
|                              | 20          | 25.40           | 7.62  | 10.16             | ED2104-ND | 1.96        | 16.98 | 137.13            | 110-93-320-41-801000 |
|                              | 24#         | 30.48           | 7.62  | 10.16             | ED2106-ND | 2.24        | 19.37 | 156.45            | 110-93-324-41-801000 |
| Gold Plated, Solder Tab      | 24          | 30.48           | 15.24 | 17.78             | ED2105-ND | 2.47        | 21.40 | 172.83            | 110-93-624-41-801000 |
|                              | 28          | 35.56           | 15.24 | 17.78             | ED2107-ND | 2.67        | 23.11 | 186.69            | 110-93-628-41-801000 |
|                              | 40          | 50.80           | 15.24 | 17.78             | ED2108-ND | 3.14        | 27.25 | 220.08            | 110-93-640-41-801000 |
|                              | 14          | 17.78           | 7.62  | 10.16             | ED2109-ND | 1.98        | 17.19 | 138.81            | 110-13-314-41-801000 |
|                              | 16          | 20.32           | 7.62  | 10.16             | ED2110-ND | 2.17        | 18.82 | 152.04            | 110-13-316-41-801000 |
| Gold Plated, Solder Tab      | 18          | 22.86           | 7.62  | 10.16             | ED2111-ND | 2.32        | 20.12 | 162.54            | 110-13-318-41-801000 |
|                              | 20          | 25.40           | 7.62  | 10.16             | ED2112-ND | 2.40        | 20.80 | 168.00            | 110-13-320-41-801000 |
|                              | 24#         | 30.48           | 7.62  | 10.16             | ED2114-ND | 2.77        | 24.00 | 193.83            | 110-13-324-41-801000 |
|                              | 24          | 30.48           | 15.24 | 17.78             | ED2113-ND | 3.00        | 26.03 | 210.21            | 110-13-624-41-801000 |
|                              | 28          | 35.56           | 15.24 | 17.78             | ED2115-ND | 3.27        | 28.31 | 228.69            | 110-13-628-41-801000 |
| 3-Level Tin Plated Wire-Wrap | 40          | 50.80           | 15.24 | 17.78             | ED2116-ND | 3.86        | 33.49 | 270.48            | 110-13-640-41-801000 |
|                              | 14          | 17.78           | 7.62  | 10.16             | ED2117-ND | 2.72        | 23.53 | 190.05            | 123-93-314-41-801000 |
|                              | 16          | 20.32           | 7.62  | 10.16             | ED2118-ND | 3.00        | 26.00 | 210.00            | 123-93-316-41-801000 |
|                              | 18          | 22.86           | 7.62  | 10.16             | ED2119-ND | 3.24        | 28.11 | 227.01            | 123-93-318-41-801000 |
|                              | 20          | 25.40           | 7.62  | 10.16             | ED2120-ND | 3.38        | 29.30 | 236.67            | 123-93-320-41-801000 |
| Wire-Wrap                    | 24          | 30.48           | 15.24 | 17.78             | ED2121-ND | 4.16        | 36.09 | 291.48            | 123-93-624-41-801000 |
|                              | 28          | 35.56           | 15.24 | 17.78             | ED2122-ND | 4.64        | 40.25 | 325.08            | 123-93-628-41-801000 |
|                              | 40          | 50.80           | 15.24 | 17.78             | ED2123-ND | 5.85        | 50.73 | 409.71            | 123-93-640-41-801000 |

# With .300" (7.62mm) Contact Row Spacing.

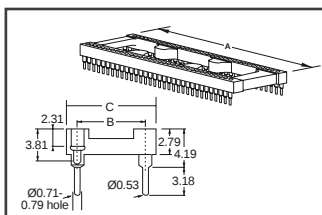


## Shrink Dip Sockets – Solder Tail – Open Frame

- High density Dual-in-Line Sockets for devices featuring .070" (1.78mm) lead spacing.
- Four-finger beryllium copper contacts meet high vibration and shock requirements.

**Insertion Characteristics:** 4-finger standard.

**Plating:** Sleeve (Pin) – 200μ" Sn.  
Contact (Clip) – 30μ" Au.



| No. of Pins | Dim. (mm) |       |       | Digi-Key Part No. | Pricing |       |        |         | Mill-Max Part No. |                   |
|-------------|-----------|-------|-------|-------------------|---------|-------|--------|---------|-------------------|-------------------|
|             | A         | B     | C     |                   | 1       | 10    | 500    | 1,000   |                   |                   |
| 16          | 14.53     | 7.62  | 9.91  | ED22163-ND        | 1.60    | 11.10 | 89.67  | 384.30  | 640.50            | 117-93-316-41-005 |
| 28          | 25.20     | 10.16 | 12.45 | ED22284-ND        | 2.71    | 18.77 | 151.62 | 649.80  | 1083.00           | 117-93-428-41-005 |
| 30          | 26.97     | 10.16 | 12.45 | ED22304-ND        | 2.90    | 20.10 | 162.33 | 695.70  | 1159.50           | 117-93-430-41-005 |
| 48          | 42.98     | 10.16 | 12.45 | ED22484-ND        | 4.64    | 32.16 | 259.77 | 1113.30 | 1855.50           | 117-93-448-41-005 |
| 28          | 18.08     | 15.24 | 17.53 | ED22406-ND        | 1.93    | 13.39 | 108.15 | 463.50  | 772.50            | 117-93-620-41-005 |
| 28          | 25.20     | 15.24 | 17.53 | ED22288-ND        | 2.71    | 18.77 | 151.62 | 649.80  | 1083.00           | 117-93-628-41-005 |
| 40          | 35.86     | 15.24 | 17.53 | ED22406-ND        | 3.06    | 26.78 | 216.30 | 927.00  | 1545.00           | 117-93-640-41-005 |
| 42          | 37.64     | 15.24 | 17.53 | ED22426-ND        | 4.05    | 28.11 | 227.01 | 972.90  | 1621.50           | 117-93-642-41-005 |
| 48          | 42.98     | 15.24 | 17.53 | ED22486-ND        | 4.64    | 32.16 | 259.77 | 1113.30 | 1855.50           | 117-93-648-41-005 |
| 52          | 46.53     | 15.24 | 17.53 | ED22526-ND        | 4.88    | 33.85 | 273.42 | 1171.80 | 1953.00           | 117-93-652-41-005 |
| 56          | 50.09     | 15.24 | 17.53 | ED22566-ND        | 5.26    | 36.48 | 294.63 | 1262.70 | 2104.50           | 117-93-656-41-005 |
| 64          | 57.20     | 15.24 | 17.53 | ED22646-ND        | 6.02    | 41.70 | 336.84 | 1443.60 | 2406.00           | 117-93-664-41-005 |
| 64          | 57.20     | 19.05 | 21.34 | ED22647-ND        | 6.02    | 41.70 | 336.84 | 1443.60 | 2406.00           | 117-93-764-41-005 |
| 68          | 60.76     | 15.24 | 17.53 | ED22686-ND        | 6.39    | 43.20 | 357.84 | 1533.60 | 2556.00           | 117-93-668-41-005 |

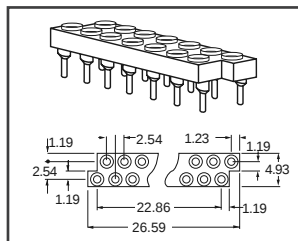


## Zig Zag Sockets

- Double row staggered strips will accommodate Single-in-Line Zig-Zag memory packages on high density boards, left stackable.

**Insertion Characteristics:** 4-finger low force.

**Plating:** Sleeve (Pin) – 200μ" Sn.  
Contact (Clip) – 30μ" Au.



| No. of Pins | Insulator Body | Digi-Key Part No. | Pricing |      |       |        |        | Mill-Max Part No. |
|-------------|----------------|-------------------|---------|------|-------|--------|--------|-------------------|
|             |                |                   | 1       | 10   | 100   | 500    | 1,000  |                   |
| 20          | Left Stackable | ED2220-ND         | 1.37    | 9.46 | 76.44 | 327.60 | 546.00 | 410-93-220-10-001 |



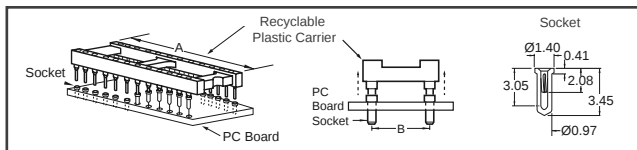
## Dual-In-Line Socket Carriers Miniature

- Reuseable carriers
- Pin Carrier Assemblies assure maximum ventilation and better visibility for inspection and repair.
- Easy mounting due to the **RECYCLABLE PLASTIC CARRIER**. No solder wicking problems.

*Requires .039" (.99mm) min. diameter holes in PCB.*

**Insertion Characteristics:** 3-finger.

**Plating:** Sleeve (Pin) – 200μ" Sn. Contact (Clip) – 30μ" Au.



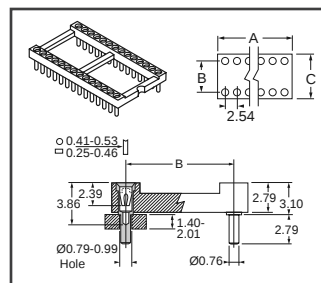
| No. of Pins | Dim. (mm)<br># B | Part No. | Pricing   |      | Pricing |        |         | Mill-Max Part No. |                  |
|-------------|------------------|----------|-----------|------|---------|--------|---------|-------------------|------------------|
|             |                  |          | 1         | 10   | 100     | 500    | 1,000   |                   |                  |
| 8           | 10.16            | 7.62     | ED6008-18 | 93   | 6.45    | 52.08  | 223.20  | 672.00            | 614-93-308-31-02 |
| 14          | 17.78            | 7.62     | ED6014-18 | 1.63 | 11.28   | 91.14  | 139.60  | 351.00            | 614-93-314-31-02 |
| 16          | 20.32            | 7.62     | ED6016-18 | 1.86 | 12.90   | 104.16 | 146.40  | 744.00            | 614-93-316-31-02 |
| 18          | 22.86            | 7.62     | ED6018-18 | 2.09 | 14.51   | 117.18 | 160.80  | 837.00            | 614-93-318-31-02 |
| 20          | 25.40            | 7.62     | ED6020-18 | 2.33 | 16.12   | 130.20 | 188.00  | 930.00            | 614-93-320-31-02 |
| 24          | 30.48            | 7.62     | ED6024-18 | 2.79 | 19.34   | 156.24 | 226.40  | 1116.00           | 614-93-324-31-02 |
| 28          | 35.56            | 7.62     | ED6028-18 | 3.26 | 22.57   | 182.28 | 271.20  | 1302.00           | 614-93-328-31-02 |
| 34          | 40.64            | 15.24    | ED6134-18 | 2.29 | 19.34   | 156.24 | 689.60  | 1116.00           | 614-93-624-31-02 |
| 36          | 45.72            | 15.24    | ED6136-18 | 3.28 | 22.51   | 178.32 | 781.60  | 1380.00           | 614-93-636-31-02 |
| 32          | 40.64            | 15.24    | ED6132-18 | 3.72 | 25.79   | 198.32 | 891.60  | 1488.00           | 614-93-632-31-02 |
| 40          | 50.80            | 15.24    | ED6140-18 | 4.65 | 32.24   | 260.40 | 1116.00 | 1860.00           | 614-93-640-31-02 |



## Dual-In-Line Socket – Low Profile Open Frame

- Dip Sockets with reduced height; only .122" (3.10mm) above PCB.
- Hi-Rel 4-finger #30 clin

**Plating:** Sleeve (Pin) – 200μ" Sn.  
Contact (Clip) – 30μ" Au.



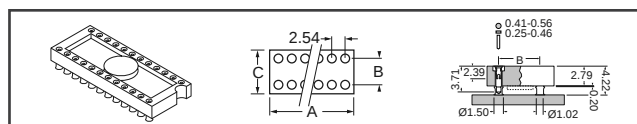
| No. of Pins | Dim. (mm) |       |       | Digi-Key Part No. | Pricing |       |        |        | Mill-Max Part No. |                   |
|-------------|-----------|-------|-------|-------------------|---------|-------|--------|--------|-------------------|-------------------|
|             | A         | B     | C     |                   | 1       | 100   | 500    | 1,000  |                   |                   |
| 8           | 10.16     | 7.62  | 10.16 | ED58083-ND        | 62      | 5.28  | 43.20  | 159.36 | 268.80            | 115-93-308-41-001 |
| 14          | 17.78     | 7.62  | 10.16 | ED58143-ND        | 1.05    | 8.86  | 72.45  | 267.26 | 450.80            | 115-93-314-41-001 |
| 16          | 20.32     | 7.62  | 10.16 | ED58163-ND        | 1.20    | 10.12 | 82.80  | 305.44 | 515.20            | 115-93-316-41-001 |
| 18          | 22.86     | 7.62  | 10.16 | ED58183-ND        | 1.35    | 11.39 | 93.15  | 343.62 | 579.60            | 115-93-318-41-001 |
| 20          | 25.40     | 7.62  | 10.16 | ED58203-ND        | 1.44    | 12.21 | 99.90  | 368.52 | 621.60            | 115-93-320-41-001 |
| 24          | 30.48     | 7.62  | 10.16 | ED58243-ND        | 1.73    | 14.66 | 119.93 | 442.39 | 746.20            | 115-93-324-41-001 |
| 28          | 35.56     | 7.62  | 10.16 | ED58283-ND        | 2.02    | 17.11 | 139.95 | 516.26 | 870.80            | 115-93-328-41-001 |
| 32          | 30.48     | 15.24 | 17.78 | ED58323-ND        | 1.73    | 14.66 | 139.93 | 442.39 | 746.20            | 115-93-324-41-001 |
| 36          | 35.56     | 15.24 | 17.78 | ED58363-ND        | 2.02    | 17.11 | 139.95 | 516.26 | 870.80            | 115-93-328-41-001 |
| 40          | 40.64     | 15.24 | 17.78 | ED58403-ND        | 2.31    | 19.53 | 159.75 | 589.30 | 994.00            | 115-93-632-41-001 |
| 48          | 50.80     | 15.24 | 17.78 | ED58406-ND        | 2.89    | 24.42 | 199.80 | 737.04 | 1243.20           | 115-93-640-41-001 |



## Dual-In-Line Sockets – Surface Mount, Stub Tail, Closed Frame

- Closed frame insulator is vision system compatible.
- High-temp Nylon 46, suitable for infra-red and vapor phase soldering.

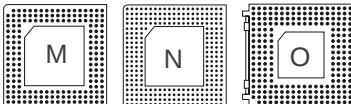
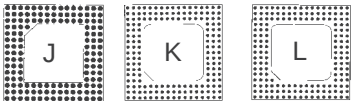
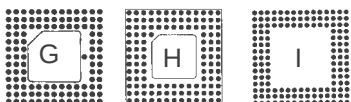
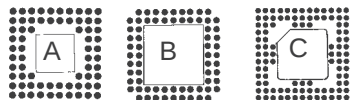
**Plating:** Sleeve (Pin) – 200μ" Sn.  
Contact (Clip) – 200μ" Sn.



| No. of Pins                  | Dim. (mm.) |       |       | Digi-Key Part No. | Pricing |       |        |        |         | Mill-Max Part No.    |
|------------------------------|------------|-------|-------|-------------------|---------|-------|--------|--------|---------|----------------------|
|                              | A          | B     | C     |                   | 1       | 10    | 100    | 500    | 1,000   |                      |
| Vacuum Pads Top Surface Only |            |       |       |                   |         |       |        |        |         |                      |
| 8                            | 10.16      | 7.62  | 10.16 | ED2128-ND         | 57      | 4.94  | 39.90  | 171.00 | 285.00  | 214-99-308-01-670800 |
| 14                           | 17.78      | 7.62  | 10.16 | ED2132-ND         | 96      | 8.29  | 69.99  | 287.10 | 478.50  | 214-99-314-01-670800 |
| 16                           | 20.32      | 7.62  | 10.16 | ED2130-ND         | 110     | 9.49  | 76.65  | 328.50 | 547.50  | 214-99-316-01-670800 |
| 28                           | 22.86      | 7.62  | 10.16 | ED2131-ND         | 123     | 10.63 | 85.89  | 368.10 | 613.50  | 214-99-318-01-670800 |
| 20                           | 25.40      | 7.62  | 10.16 | ED2132-ND         | 132     | 11.44 | 92.40  | 396.00 | 660.00  | 214-99-320-01-670800 |
| Vacuum Pads Top and Bottom   |            |       |       |                   |         |       |        |        |         |                      |
| 24                           | 30.48      | 15.24 | 17.78 | ED2133-ND         | 158     | 13.70 | 110.67 | 473.40 | 790.50  | 214-99-624-01-670800 |
| 28                           | 35.56      | 15.24 | 17.78 | ED2134-ND         | 185     | 15.99 | 129.15 | 553.50 | 922.50  | 214-99-628-01-670800 |
| 32                           | 40.64      | 15.24 | 17.78 | ED2135-ND         | 211     | 18.30 | 147.64 | 633.60 | 1056.00 | 214-99-632-01-670800 |
| 40                           | 50.80      | 15.24 | 17.78 | ED2136-ND         | 264     | 22.85 | 184.59 | 791.10 | 1318.50 | 214-99-640-01-670800 |



# Pin Grid Array Sockets



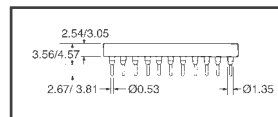
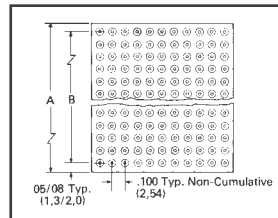
**MATERIAL:** • **Insulator body:** Standard material is glass filled thermoplastic polyester (PCT), self-extinguishing, rated UL94V-0. • **Color:** Black. • **Receptacle (sleeve):** Screw-machined brass (QQ-B-626), plated 200µ" tin-lead (SnPb 90/10) over 80-120µ" nickel. • **Pin:** Screw-machined brass (QQ-B-626), plated 200µ" tin-lead (SnPb 90/10) over 80-120µ" nickel. • **Contact (clip):** Stamped Beryllium-copper (QQ-C-533) heat treated, plated gold flash, 30µ" gold, over 80-120µ" nickel.

**ELECTRICAL DATA:** • **Rated Current:** 1A • **Rated Voltage:** 100 VRMS/150 VDC • **Contact Resistance:** 100 mΩ max. • **Insulation resistance:** 10,000 MΩ min. • **Dielectric Strength:** 1000 VRMS min. • **Capacity:** 0.3 pF max. • **Operating Temp. range:** -55°C to +125°C

| Pin Grid Array Size | No. of Pins | Foot-print (See Diag.) | Description (Type of Contacts) | Frame Style | Digi-Key Part No. | Pricing |        |         |
|---------------------|-------------|------------------------|--------------------------------|-------------|-------------------|---------|--------|---------|
|                     |             |                        |                                |             |                   | 1       | 10     | 100     |
| 10x10               | 68          | A                      | Solder-Tail                    | Open        | ED2002-ND         | 3.37    | 29.20  | 235.83  |
| 11x11               | 68          | B                      | Solder-Tail                    | Open        | ED2004-ND         | 3.37    | 29.20  | 235.83  |
| 13x13               | 101         | C                      | Solder-Tail                    | Open        | ED2007-ND         | 4.68    | 40.56  | 327.60  |
| 14x14               | 132         | D                      | Solder-Tail                    | Open        | ED2008-ND         | 6.12    | 53.04  | 428.40  |
| 13x13               | 88          | E                      | Solder-Tail                    | Open        | ED2009-ND         | 4.36    | 37.80  | 305.34  |
| 10x10               | 84          | F                      | Solder-Tail                    | Open        | ED2011-ND         | 4.16    | 36.09  | 291.48  |
| 13x13               | 114         | G                      | Solder-Tail                    | Open        | ED2026-ND         | 5.28    | 45.79  | 369.81  |
| 13x13               | 121         | H                      | Solder-Tail                    | Open        | ED2027-ND         | 5.61    | 48.62  | 392.70  |
| 15x15               | 144         | I                      | Solder-Tail                    | Open        | ED2028-ND         | 6.68    | 57.85  | 467.25  |
| 15x15               | 145         | J                      | Solder-Tail                    | Open        | ED2029-ND         | 6.72    | 58.27  | 470.61  |
| 17x17               | 168         | K                      | Solder-Tail                    | Open        | ED2030-ND         | 7.79    | 67.50  | 545.16  |
| 17x17               | 169         | L                      | Solder-Tail                    | Open        | ED2031-ND         | 7.84    | 67.91  | 548.52  |
| 10x10               | 68          | A                      | 3 Level Wire Wrap              | Open        | ED2014-ND         | 9.50    | 82.29  | 664.65  |
| 11x11               | 68          | B                      | 3 Level Wire Wrap              | Open        | ED2016-ND         | 9.50    | 82.29  | 664.65  |
| 13x13               | 101         | C                      | 3 Level Wire Wrap              | Open        | ED2019-ND         | 13.19   | 114.32 | 923.37  |
| 14x14               | 132         | D                      | 3 Level Wire Wrap              | Open        | ED2020-ND         | 17.24   | 149.40 | 1206.66 |
| 13x13               | 88          | E                      | 3 Level Wire Wrap              | Open        | ED2021-ND         | 11.49   | 99.61  | 804.51  |
| 10x10               | 84          | F                      | 3 Level Wire Wrap              | Open        | ED2023-ND         | 10.10   | 87.54  | 707.07  |
| 13x13               | 121         | H                      | 3 Level Wire Wrap              | Open        | ED2037-ND         | 15.80   | 136.94 | 1106.07 |
| 15x15               | 144         | I                      | 3 Level Wire Wrap              | Open        | ED2038-ND         | 18.62   | 161.38 | 1303.47 |
| 15x15               | 145         | J                      | 3 Level Wire Wrap              | Open        | ED2039-ND         | 18.75   | 162.50 | 1312.50 |
| 17x17               | 168         | K                      | 3 Level Wire Wrap              | Open        | ED2040-ND         | 21.72   | 188.27 | 1520.61 |
| 17x17               | 169         | L                      | 3 Level Wire Wrap              | Open        | ED2041-ND         | 21.85   | 189.38 | 1529.64 |
| 18x18               | 179         | M                      | Solder-Tail                    | Open        | ED2042-ND         | 8.30    | 71.92  | 580.86  |
| 21x21               | 273         | N                      | Solder-Tail                    | Open        | ED2044-ND         | 12.53   | 108.60 | 877.17  |
| 18x18               | 223         | O                      | Solder-Tail                    | Open        | ED2046-ND         | 13.18   | 114.22 | 922.53  |

| Insulator Size | A In. (mm)  | B In. (mm)  |
|----------------|-------------|-------------|
| 10 x 10        | 1.0 (25.40) | .9 (22.86)  |
| 11 x 11        | 1.1 (27.94) | 1.0 (25.40) |
| 13 x 13        | 1.3 (33.02) | 1.2 (30.48) |
| 14 x 14        | 1.4 (35.56) | 1.3 (33.02) |
| 15 x 15        | 1.5 (38.10) | 1.4 (35.56) |
| 17 x 17        | 1.7 (43.18) | 1.6 (40.64) |
| 18 x 18        | 1.8 (45.72) | 1.7 (43.18) |
| 20 x 20        | 2.0 (50.80) | 1.9 (48.26) |
| 21 x 21        | 2.1 (53.34) | 2.0 (50.80) |

\*Non-cumulative



## Single In-Line Strip Sockets - Solder Tail and Solderless

Fig. 1 — Standard Solder Tail

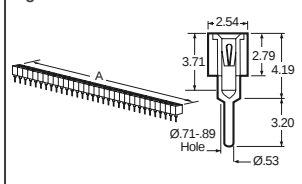


Fig. 2 — Low Profile Socket

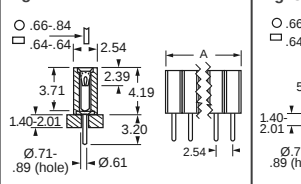


Fig. 3 — Socket Strip

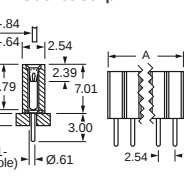


Fig. 4 — Low Profile Pin Header

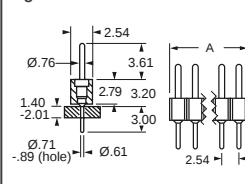
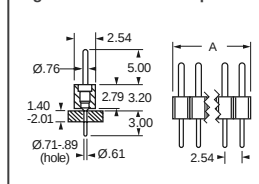


Fig. 5 — Pin Header Strip



**MATERIALS:** • **Insulator Body:** Glass filled thermoplastic polyester, self-extinguishing rated UL 94V-0; color black; resistant against detergents, mineral acids, solvents, greases and oils (short time). • **Receptacle (sleeve):** Screw machined brass, plated 200µ" tin-lead. • **Pin:** Screw machined brass with 10µ" gold plating. • **Contact:** Stamped beryllium-copper, plated 30µ" gold. • **Mechanical Life:** 100 cycles min.

**ELECTRICAL DATA:** • **Rated Current:** 1A. • **Current Rating:** Clips have rating of 3A. • **Rated Voltage:** 100 VRMS/150 VDC. • **Contact Resistance:** 10mΩ max. • **Insulation Resistance:** 10,000MΩ min. • **Dielectric Strength:** 1000 VRMS min. • **Capacity:** 0.3 pF max.

**ENVIRONMENTAL DATA:** • **Operating Temp. Range:** -55/+125°C. • **Vibration:** 10-2000 Hz, 15 g. • **Shock (no elect. discontinuity greater than 1µs):** 150g. • **Solderability:** IEC 68-2-20 Ta. • **Resistance to Soldering Heat:** IEC 68-2-20, 260°C, 5s. • **Resistance to Atmosphere Corrosion:** IEC 68-2-42 & 43.

| Fig.                                                               | No. of Pins | Dim. A (mm) | Plating Sleeve/Pin | Clip    | Digi-Key Part No. | Pricing |       |        | Mill-Max Part No.    |
|--------------------------------------------------------------------|-------------|-------------|--------------------|---------|-------------------|---------|-------|--------|----------------------|
|                                                                    |             |             |                    |         |                   | 1       | 10    | 100    |                      |
| <b>Strip Sockets Solder Tail — 7000 Series</b>                     |             |             |                    |         |                   |         |       |        |                      |
| 1                                                                  | 64          | 162.56      | 200µ" Sn           | 30µ" Au | ED7064-ND         | 2.89    | 24.48 | 200.25 | 310-93-164-41-001    |
| <b>Single Row Socket, Straight Angle Solder Tail — Series 7400</b> |             |             |                    |         |                   |         |       |        |                      |
| 1                                                                  | 64          | 162.56      | 10µ" Au            | 30µ" Au | ED7464-ND         | 4.10    | 34.68 | 283.73 | 310-13-164-41-001000 |
| <b>Single Row, Low Profile Socket — Series 7600</b>                |             |             |                    |         |                   |         |       |        |                      |
| 2                                                                  | 36          | 91.44       | 200µ" Sn           | 30µ" Au | ED7636-ND         | 4.14    | 35.04 | 286.65 | 801-93-036-10-012000 |
| <b>Single Row Pin Socket, Straight Solder Tail — 7100 Series</b>   |             |             |                    |         |                   |         |       |        |                      |
| 3                                                                  | 50          | 127.00      | 200µ" Sn           | 30µ" Au | ED7150-ND         | 5.98    | 50.63 | 414.23 | 801-93-050-10-001    |
| <b>Single Row, Low Profile Pin Header — Series 7500</b>            |             |             |                    |         |                   |         |       |        |                      |
| 4                                                                  | 64          | 162.56      | 10µ" Au            | —       | ED7564-ND         | 6.72    | 56.84 | 465.08 | 800-10-064-10-002000 |
| <b>Single Row Pin Header, Straight Solder Tail — 7200 Series</b>   |             |             |                    |         |                   |         |       |        |                      |
| 5                                                                  | 64          | 162.56      | 10µ" Au            | —       | ED7264-ND         | 6.85    | 57.97 | 474.30 | 800-10-064-10-001    |

| Digi-Key Part No.  | Base Price | Pin Adder |
|--------------------|------------|-----------|
| <b>7000 Series</b> |            |           |
| ED70XX-ND          | .33        | .04       |
| <b>7400 Series</b> |            |           |
| ED74XX-ND          | .26        | .06       |
| <b>7600 Series</b> |            |           |
| ED76XX-ND          | .54        | .10       |
| <b>7100 Series</b> |            |           |
| ED71XX-ND          | .47        | .11       |
| <b>7500 Series</b> |            |           |
| ED75XX-ND          | .32        | .10       |
| <b>7200 Series</b> |            |           |
| ED72XX-ND          | .45        | .10       |

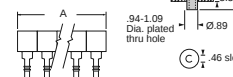
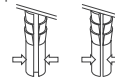
## Single In-Line Strip Sockets - Solderless Press Fit, Compliant Tail

**FEATURES:** Unique compliant tail pins conforms to .040" ±.003" (1.02mm ±.08mm) finished hole diameter without stressing inner layers. **APPLICATION OF COMPLIANT TAIL PINS:** Mill-Max's patented (Patent No. 4,799,904) compliant tail features precision machined pins that are hollow and slotted to conform to a .040" ±.003" (1.02mm ±.08mm)

diameter PTH. As the pin is inserted, the slot compresses to fit the PTH, thus avoiding damage (see illustration). The pin's tail has fine serrations that form a perfect 'gas tight' connection that doesn't require soldering. And since the pin doesn't damage the hole, compliant tail sockets and connectors can be easily replaced.

| No. of Pins | Dim. A | Plating Sleeve/Pin | Clip    | Digi-Key Part No. | Pricing |       |        | Mill-Max Part No. |
|-------------|--------|--------------------|---------|-------------------|---------|-------|--------|-------------------|
|             |        |                    |         |                   | 1       | 10    | 100    |                   |
| 64          | 6.4    | 200µ" Sn           | 30µ" Au | ED7364-ND         | 7.35    | 62.15 | 508.50 | 346-93-164-41-013 |

| Digi-Key Part No. | Base Price | Pin Adder |
|-------------------|------------|-----------|
| ED73XX-ND         | .95        | .10       |



**HOW TO ORDER - 4 EASY STEPS**  
 How do I order an ED7064 header with 64 pins?  
 Call Digi-Key where you'll happily receive the price.  
 or Determine the cost yourself

ED □ □ □ □ - ND  
 Series      Number of Desired Pins

How to Order - In 4 Easy Steps

**Step 1.** Select needed "Digi-Key Part Number" and number of pins desired. ....  
**Step 2.** Begin with appropriate "Base Price" of your selected Part Number (refer to chart).....  
**Step 3.** Multiply the number of pins you desire by "Pin Adder" of your selected Part Number (refer to chart).....  
**Step 4.** Add Step 2 & Step 3 together for Final Cost!.....

Our Example

ED7064-ND  
 .33  
 64 x .04 = 2.56  
 Your Cost = \$2.89

Your Digi-Key Part Number

ED - - - - - ND  
 x =  
 Your Cost = \$

NOTE: For quantities of 10 or more, call 1-800-DIGI-KEY.

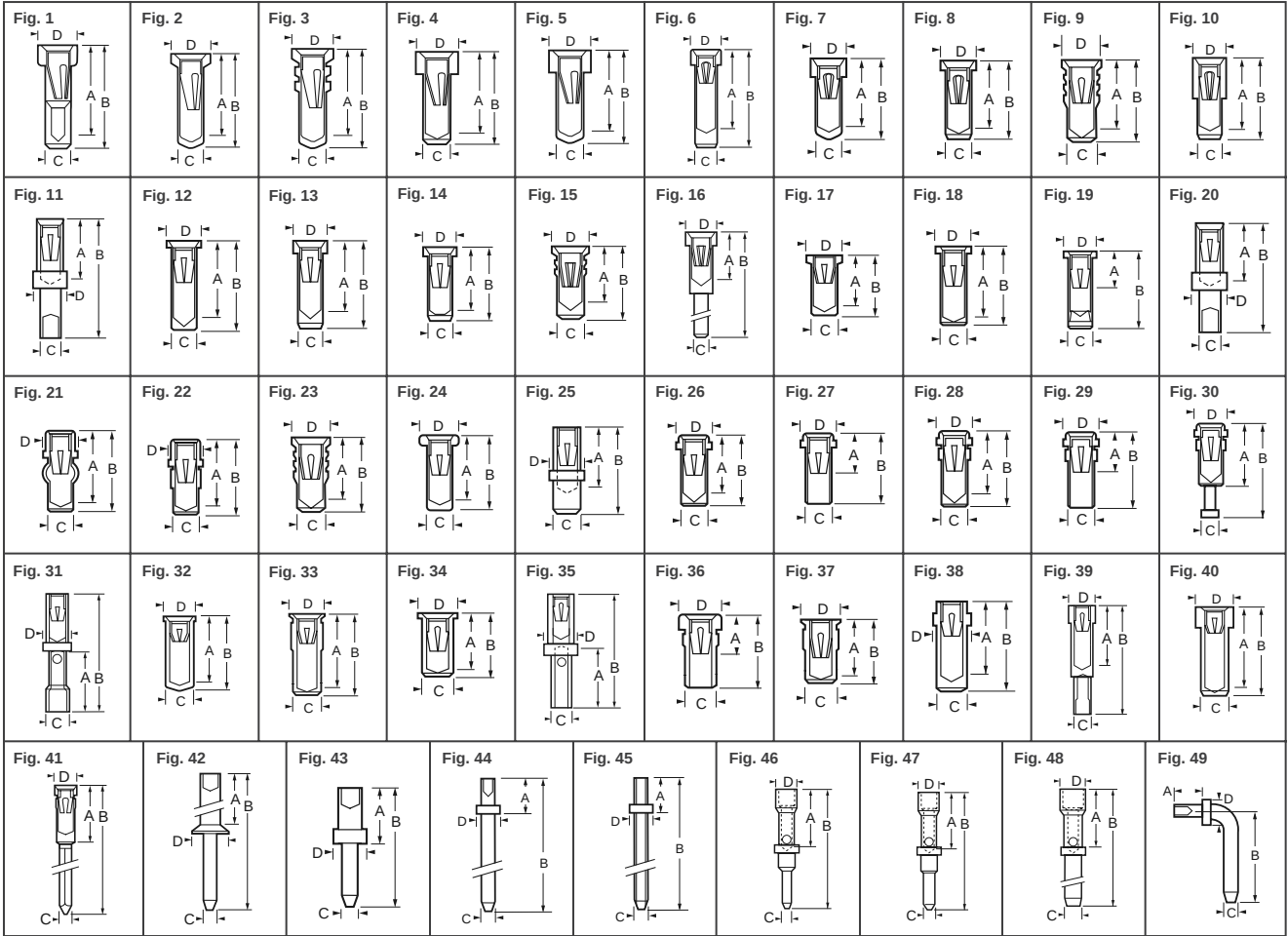
1-800-344-4539

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# Pin Receptacles and P.C. Pins

A



| Fig.                                        | Mounting Hole Diameter | Dimensions Inch (mm) |              |             |             | Digi-Key Part No. | 10   | Pricing 100 | 1,000  |
|---------------------------------------------|------------------------|----------------------|--------------|-------------|-------------|-------------------|------|-------------|--------|
|                                             |                        | A                    | B            | C           | D           |                   |      |             |        |
| .015" - .021" (.38mm - .53mm) Pin Diameter  |                        |                      |              |             |             |                   |      |             |        |
| 1                                           | .036 (.91)             | .138 (3.51)          | .155 (3.94)  | .034 (.86)  | .058 (1.47) | ED5036-ND         | 1.48 | 11.10       | 74.00  |
| 2                                           | .040 (1.02)            | .120 (3.05)          | .136 (3.45)  | .038 (.97)  | .055 (1.40) | ED5037-ND         | .80  | 6.00        | 40.00  |
| 3                                           | .040 (1.02)            | .150 (3.81)          | .170 (4.32)  | .038 (.97)  | .055 (1.40) | ED5038-ND         | .81  | 6.09        | 40.60  |
| 4                                           | .041 (1.04)            | .124 (3.15)          | .140 (3.56)  | .038 (.97)  | .055 (1.40) | ED5039-ND         | 1.57 | 11.79       | 78.60  |
| 3                                           | .041 (1.04)            | .154 (3.91)          | .170 (4.32)  | .038 (.97)  | .055 (1.40) | ED5040-ND         | 1.58 | 11.88       | 79.20  |
| 4                                           | .040 (1.02)            | .127 (3.23)          | .146 (3.71)  | .038 (.97)  | .055 (1.40) | ED5046-ND         | .93  | 6.96        | 46.40  |
| 5                                           | .040 (1.02)            | .140 (3.56)          | .160 (4.06)  | .038 (.97)  | .056 (1.42) | ED5041-ND         | 1.77 | 13.26       | 88.40  |
| .015" - .025" (.38mm - .64mm) Pin Diameter  |                        |                      |              |             |             |                   |      |             |        |
| 6                                           | .051 (1.30)            | .205 (5.21)          | .248 (6.30)  | .049 (1.24) | .063 (1.60) | ED5045-ND         | 2.08 | 15.57       | 103.80 |
| 7                                           | .053 (1.35)            | .135 (3.43)          | .160 (4.06)  | .051 (1.30) | .072 (1.83) | ED5042-ND         | 1.71 | 12.84       | 85.60  |
| 8                                           | .057 (1.45)            | .142 (3.61)          | .161 (4.09)  | .055 (1.40) | .072 (1.83) | ED5044-ND         | .99  | 7.44        | 49.60  |
| 9                                           | .057 (1.45)            | .150 (3.81)          | .170 (4.32)  | .053 (1.35) | .072 (1.83) | ED5004-ND         | 1.75 | 13.11       | 87.40  |
| 10                                          | .061 (1.55)            | .150 (3.81)          | .180 (4.57)  | .058 (1.47) | .080 (2.03) | ED5043-ND         | 1.60 | 12.03       | 80.20  |
| .022" - .032" (.56mm - .81mm) Pin Diameter  |                        |                      |              |             |             |                   |      |             |        |
| 11                                          | .060 (1.52)            | .170 (4.32)          | .294 (7.47)  | .040 (1.02) | .094 (2.39) | ED5015-ND         | 4.26 | 31.92       | 212.80 |
| 12                                          | .063 (1.60)            | .233 (5.92)          | .259 (6.58)  | .060 (1.52) | .077 (1.96) | ED5008-ND         | 1.89 | 14.16       | 94.40  |
| 13                                          | .071 (1.80)            | .210 (5.33)          | .250 (6.35)  | .068 (1.73) | .093 (2.36) | ED5006-ND         | 2.04 | 15.30       | 102.00 |
| 14                                          | .076 (1.93)            | .185 (4.70)          | .206 (5.23)  | .073 (1.85) | .090 (2.29) | ED5007-ND         | 2.00 | 15.03       | 100.20 |
| .025" - .037" (.64mm - .94mm) Pin Diameter  |                        |                      |              |             |             |                   |      |             |        |
| 15                                          | .061 (1.55)            | .165 (4.19)          | .200 (5.08)  | .057 (1.45) | .078 (1.98) | ED5005-ND         | 2.85 | 21.36       | 142.40 |
| 16                                          | .042 (1.07)            | .180 (4.57)          | .320 (8.13)  | .040 (1.02) | .078 (1.98) | ED5009-ND         | 2.38 | 17.88       | 119.20 |
| 16                                          | .042 (1.07)            | .180 (4.57)          | .397 (10.08) | .040 (1.02) | .078 (1.98) | ED5010-ND         | 2.82 | 21.12       | 140.80 |
| .037" - .043" (.94mm - 1.09mm) Pin Diameter |                        |                      |              |             |             |                   |      |             |        |
| 17                                          | .071 (1.80)            | .127 (3.23)          | .150 (3.81)  | .069 (1.75) | .090 (2.29) | ED5019-ND         | 2.71 | 20.31       | 135.40 |
| .032" - .047" (.56mm - 1.19mm) Pin Diameter |                        |                      |              |             |             |                   |      |             |        |
| 18                                          | .075 (1.91)            | .180 (4.57)          | .206 (5.23)  | .072 (1.83) | .090 (2.29) | ED5016-ND         | 2.04 | 15.30       | 102.00 |
| 19                                          | .075 (1.91)            | .125 (3.18)          | .221 (5.61)  | .072 (1.83) | .090 (2.29) | ED5018-ND         | 4.21 | 31.56       | 210.40 |
| 20                                          | .067 (1.70)            | .200 (5.08)          | .324 (8.23)  | .065 (1.65) | .125 (3.18) | ED5021-ND         | 4.58 | 34.38       | 229.20 |
| 21                                          | .076 (1.93)            | .195 (4.95)          | .220 (5.59)  | .074 (1.88) | .102 (2.59) | ED5020-ND         | 4.32 | 32.40       | 216.00 |
| 22                                          | .078 (1.98)            | .195 (4.95)          | .220 (5.59)  | .072 (1.83) | .102 (2.59) | ED5025-ND         | 2.95 | 22.11       | 147.40 |
| 23                                          | .076 (1.93)            | .180 (4.57)          | .206 (5.23)  | .071 (1.80) | .090 (2.29) | ED5017-ND         | 2.42 | 18.12       | 120.80 |
| 24                                          | .091 (2.31)            | .220 (5.59)          | .253 (6.43)  | .088 (2.24) | .120 (3.05) | ED5013-ND         | 2.96 | 22.17       | 147.80 |
| 25                                          | .089 (2.26)            | .220 (5.59)          | .317 (8.05)  | .085 (2.16) | .125 (3.18) | ED5014-ND         | 3.66 | 27.48       | 183.20 |
| 26                                          | .087 (2.21)            | .195 (4.95)          | .236 (5.99)  | .085 (2.16) | .125 (3.18) | ED5012-ND         | 2.54 | 19.05       | 127.00 |
| 27                                          | .087 (2.21)            | .130 (3.30)          | .236 (5.99)  | .085 (2.16) | .125 (3.18) | ED5011-ND         | 2.54 | 19.08       | 127.00 |
| 28                                          | .089 (2.26)            | .190 (4.83)          | .250 (6.35)  | .080 (2.03) | .110 (2.79) | ED5027-ND         | 2.98 | 22.32       | 148.80 |
| 29                                          | .089 (2.26)            | .131 (3.33)          | .250 (6.35)  | .080 (2.03) | .110 (2.79) | ED5028-ND         | 3.14 | 23.58       | 157.20 |
| 30                                          | .089 (2.26)            | .190 (4.83)          | .343 (8.71)  | .060 (1.52) | .110 (2.79) | ED5026-ND         | 3.11 | 23.34       | 155.60 |
| 31                                          | —                      | .282 (7.16)          | .529 (13.44) | .105 (2.67) | .102 (2.59) | ED5022-ND         | 6.77 | 50.79       | 338.60 |

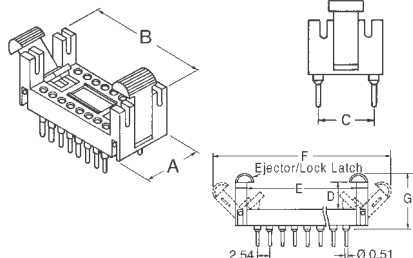
| Fig.                                                | Mounting Hole Diameter | Dimensions Inch (mm) |              |             |             | Digi-Key Part No. | 10   | Pricing 100 | 1,000  |
|-----------------------------------------------------|------------------------|----------------------|--------------|-------------|-------------|-------------------|------|-------------|--------|
|                                                     |                        | A                    | B            | C           | D           |                   |      |             |        |
| <b>.040" - .050" (1.02mm - 1.27mm) Pin Diameter</b> |                        |                      |              |             |             |                   |      |             |        |
| 32                                                  | .102 (2.59)            | .260 (6.60)          | .290 (7.37)  | .100 (2.54) | .118 (3.00) | ED5024-ND         | 2.52 | 18.87       | 125.80 |
| 33                                                  | .103 (2.62)            | .260 (6.60)          | .290 (7.37)  | .088 (2.24) | .118 (3.00) | ED5023-ND         | 3.53 | 26.49       | 176.60 |
| <b>.048" - .064" (1.22mm - 1.63mm) Pin Diameter</b> |                        |                      |              |             |             |                   |      |             |        |
| 34                                                  | .102 (2.59)            | .180 (4.57)          | .213 (5.41)  | .098 (2.49) | .120 (3.05) | ED5029-ND         | 3.28 | 24.57       | 163.80 |
| 35                                                  | —                      | .267 (6.78)          | .530 (13.46) | .103 (2.62) | .141 (3.58) | ED5032-ND         | 7.31 | 54.81       | 365.40 |
| 36                                                  | .108 (2.74)            | .134 (3.40)          | .250 (6.35)  | .102 (2.59) | .136 (3.45) | ED5031-ND         | 4.03 | 30.24       | 201.60 |
| <b>.045" - .064" (1.14mm - 1.63mm) Pin Diameter</b> |                        |                      |              |             |             |                   |      |             |        |
| 37                                                  | .104 (2.64)            | .190 (4.83)          | .223 (5.66)  | .098 (2.49) | .120 (3.05) | ED5030-ND         | 4.09 | 30.69       | 204.60 |
| <b>.065" - .082" (1.65mm - 2.08mm) Pin Diameter</b> |                        |                      |              |             |             |                   |      |             |        |
| 38                                                  | .144 (3.66)            | .340 (8.64)          | .412 (10.46) | .142 (3.61) | .188 (4.78) | ED5035-ND         | 5.52 | 41.40       | 276.00 |
| 39                                                  | —                      | .375 (9.53)          | .690 (17.53) | .100 (2.54) | .144 (3.66) | ED5033-ND         | 7.31 | 54.81       | 365.40 |
| <b>.084" - .102" (2.13mm - 2.59mm) Pin Diameter</b> |                        |                      |              |             |             |                   |      |             |        |
| 40                                                  | .144 (3.66)            | .415 (10.54)         | .465 (11.81) | .142 (3.61) | .188 (4.78) | ED5034-ND         | 6.68 | 50.10       | 334.00 |
| <b>.015" - .025" (.38mm - .64mm) Pin Diameter</b>   |                        |                      |              |             |             |                   |      |             |        |
| 41                                                  | .055 (1.40)            | .200 (5.08)          | .700 (17.78) | .025 (.64)  | .072 (1.83) | ED5001-ND         | 1.41 | 10.59       | 70.60  |
| 41                                                  | .055 (1.40)            | .200 (5.08)          | .560 (14.22) | .025 (.64)  | .072 (1.83) | ED5002-ND         | 1.26 | 9.42        | 62.80  |
| 41                                                  | .055 (1.40)            | .200 (5.08)          | .460 (11.68) | .025 (.64)  | .072 (1.83) | ED5003-ND         | 1.62 | 12.12       | 80.80  |
| <b>.025" (.64mm) Pin Diameter</b>                   |                        |                      |              |             |             |                   |      |             |        |
| 42                                                  | .035 (.89)             | .047 (1.19)          | .260 (6.60)  | .025 (.64)  | .062 (1.57) | ED5055-ND         | .84  | 6.30        | 42.00  |
| 42                                                  | .035 (.89)             | .078 (1.98)          | .291 (7.39)  | .025 (.64)  | .062 (1.57) | ED5056-ND         | .66  | 4.98        | 33.20  |
| 43                                                  | .043 (1.09)            | .076 (1.93)          | .201 (5.11)  | .025 (.64)  | .062 (1.57) | ED5053-ND         | .83  | 6.21        | 41.40  |
| 43                                                  | .043 (1.09)            | .107 (2.72)          | .232 (5.89)  | .025 (.64)  | .062 (1.57) | ED5054-ND         | .67  | 5.04        | 33.60  |
| <b>.040" (1.02mm) Pin Diameter</b>                  |                        |                      |              |             |             |                   |      |             |        |
| 44                                                  | .043 (1.09)            | .047 (1.19)          | .221 (5.61)  | .040 (1.02) | .070 (1.78) | ED5047-ND         | .72  | 5.40        | 36.00  |
| 44                                                  | .043 (1.09)            | .102 (2.59)          | .252 (6.40)  | .040 (1.02) | .070 (1.78) | ED5048-ND         | .75  | 5.64        | 37.60  |
| 44                                                  | .043 (1.09)            | .071 (1.80)          | .259 (6.58)  | .040 (1.02) | .070 (1.78) | ED5049-ND         | .76  | 5.73        | 38.20  |
| 44                                                  | .043 (1.09)            | .102 (2.59)          | .290 (7.37)  | .040 (1.02) | .070 (1.78) | ED5050-ND         | .80  | 6.03        | 40.20  |
| 44                                                  | .043 (1.09)            | .071 (1.80)          | .371 (9.42)  | .040 (1.02) | .070 (1.78) | ED5051-ND         | 1.11 | 8.34        | 55.60  |
| 44                                                  | .043 (1.09)            | .102 (2.59)          | .402 (10.21) | .040 (1.02) | .070 (1.78) | ED5052-ND         | .95  | 7.14        | 47.60  |
| 45                                                  | .043 (1.09)            | .102 (2.59)          | .252 (6.40)  | .040 (1.02) | .070 (1.78) | ED5057-ND         | 1.31 | 9.84        | 65.60  |
| 46                                                  | —                      | .282 (7.16)          | .588 (14.94) | .040 (1.02) | .105 (2.67) | ED5061-ND         | 4.33 | 32.49       | 216.60 |
| <b>.062" (1.57mm) Pin Diameter</b>                  |                        |                      |              |             |             |                   |      |             |        |
| 47                                                  | —                      | .282 (7.16)          | .588 (14.94) | .062 (1.57) | .105 (2.67) | ED5060-ND         | 4.58 | 34.38       | 229.20 |
| <b>.080" (2.03mm) Pin Diameter</b>                  |                        |                      |              |             |             |                   |      |             |        |
| 48                                                  | —                      | .282 (7.16)          | .506 (12.85) | .080 (2.03) | .105 (2.67) | ED5059-ND         | 4.42 | 33.15       | 221.00 |
| <b>.040" (1.02mm) Pin Diameter</b>                  |                        |                      |              |             |             |                   |      |             |        |
| 49                                                  | .043 (1.09)            | .082 (2.08)          | .257 (6.53)  | .040 (1.02) | .070 (1.78) | ED5058-ND         | 2.65 | 19.86       | 132.40 |

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## Lock / Eject DIP Sockets

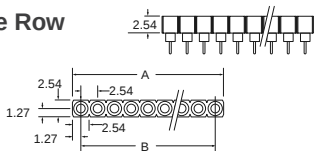


| No. of Pins | Dimensions (mm) |       |       |      |       |       |       |
|-------------|-----------------|-------|-------|------|-------|-------|-------|
|             | A               | B     | C     | D    | E     | F     | G     |
| 14          | 10.16           | 24.13 | 7.62  | 6.35 | —     | —     | 13.97 |
| 16          | 10.16           | 26.67 | 7.62  | 6.35 | —     | —     | 13.97 |
| 24          | 17.78           | 36.83 | 15.24 | 6.35 | —     | —     | 13.97 |
| 14          | 10.16           | 24.13 | 7.62  | 7.11 | 19.56 | 33.02 | 13.72 |
| 16          | 10.16           | 26.67 | 7.62  | 7.11 | 21.08 | 39.12 | 13.72 |
| 24          | 17.78           | 37.85 | 15.24 | 4.62 | 32.26 | 45.72 | 11.68 |
| 28          | 17.78           | 42.93 | 15.24 | 4.62 | 37.37 | 50.80 | 11.68 |
| 32          | 17.78           | 48.01 | 15.24 | 4.62 | 42.93 | 55.88 | 11.68 |
| 40          | 17.78           | 58.17 | 15.24 | 4.62 | 52.58 | 66.04 | 11.68 |

| No. of Pins | Fits Jumper Connectors, such as: | Digi-Key Part No. | Price Each |      |      | Aries Part No. |
|-------------|----------------------------------|-------------------|------------|------|------|----------------|
|             |                                  |                   | 1          | 25   | 100  |                |
| 14          | IC Packages                      | A514-ND           | 3.03       | 2.42 | 1.85 | 14-C280-10     |
| 16          | IC Packages                      | A516-ND           | 3.27       | 2.62 | 2.01 | 16-C280-10     |
| 24          | IC Packages                      | A524-ND           | 4.57       | 3.66 | 2.79 | 24-C182-10     |
| 28          | IC Packages                      | A528-ND           | 4.84       | 3.88 | 2.97 | 28-C182-10     |
| 32          | IC Packages                      | A532-ND           | 5.56       | 4.45 | 3.40 | 32-C182-10     |
| 40          | IC Packages                      | A540-ND           | 7.04       | 5.64 | 4.31 | 40-C182-10     |

## Series X518 Collet Sockets with Solder Tail Pins

### Single Row



**Features:** • Cuttable to the number of pins desired to fit the application. • Side-to-side and end-to-end stackable.

#### Specifications:

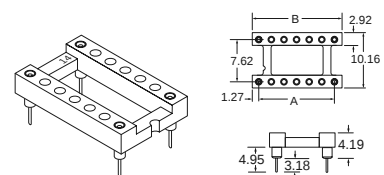
• Body material is black UL 94V-0 Nylon 4/6 • Contact Current Rating: 3A • Operating Temperature: 221°F (105°C) Tin plating; 257°F (125°C) Gold plating • Accepts leads 0.15"-0.25" (3.81mm-6.35mm) in diameter • Accepts lead lengths from .100" (2.54mm) min.

#### Mounting Considerations:

• Suggested PCB hole size: .030" ± .002" (.76mm ± .005mm) diameter.

| No. of Pins | Dim. (mm) |     | Description | Digi-Key Part No. | Price Each |      |      | Aries Part No. |
|-------------|-----------|-----|-------------|-------------------|------------|------|------|----------------|
|             | A         | B   |             |                   | 1          | 25   | 100  |                |
| 40          | 4.0       | 3.9 | Tin Plated  | A460-ND           | 2.33       | 1.96 | 1.40 | 40-0518-10     |
| 40          | 4.0       | 3.9 | Gold Plated | A461-ND           | 3.43       | 2.88 | 2.10 | 40-0518-11     |

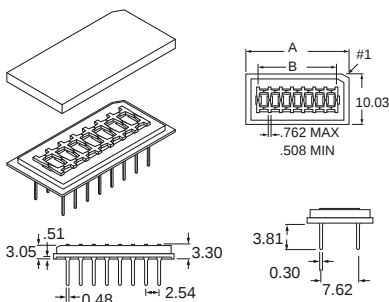
## 4-Pin Oscillator Sockets



**Specifications:** • **Body Material:** Blue UL 94V-0 Glass-filled Polyester Thermoplastic (PBT) • **Pin Body Plating:** 200µ min. Tin per MIL-T-10727 over 100µ min. Nickel per QQ-N-290 • **Contact Plating:** 10µ min. Gold per MIL-G-45204 over 50µ min. Nickel per QQ-N-290 • **Contact Current Rating:** 3 Amps • **Operating Temperature:** 105°C • **Insertion Force:** 180 grams/pin; Withdrawal Force: 90 grams/pin; Normal Force: 140 grams/pin; based on a .018" (.46mm) diameter test lead • **Accepts Leads:** .015"-.025" (.38mm-.64mm) in diameter, .100"-.146" (2.54mm-3.71mm) in length.

| Size | Dim. (mm) |       | Digi-Key Part No. | Price Each |     |     | Aries Part No. |
|------|-----------|-------|-------------------|------------|-----|-----|----------------|
|      | A         | B     |                   | 1          | 25  | 100 |                |
| Full | 15.24     | 17.78 | A462-ND           | .55        | .47 | .39 | 1107741        |
| Half | 7.62      | 10.16 | A463-ND           | .53        | .45 | .37 | 1108800        |

## Series 680 Programmable Headers and Covers



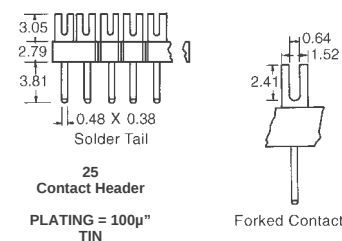
**Features:** • Complete versatility for programming within the unit itself, thus eliminating the need for DIP switches in many situations.

**Specifications:** • **Body and Cover:** Red UL 94-HB glass-filled nylon • **Current Rating:** 1 amp • **Operating Temperature:** 221°F (105°C)

**Mounting Considerations:** • Suggested PCB hole size: .032" ± .002" (.81mm ± .05mm) diameter

| No. of Pins                           | Dimensions (mm) |       | Digi-Key Part No. | Price Each |      |     | Aries Part No. |
|---------------------------------------|-----------------|-------|-------------------|------------|------|-----|----------------|
|                                       | A               | B     |                   | 1          | 25   | 100 |                |
| Covers                                |                 |       |                   |            |      |     |                |
| 4                                     | —               | —     | A470-ND           | .26        | .23  | .18 | 04-655-10      |
| 6                                     | —               | —     | A471-ND           | .38        | .32  | .27 | 06-655-10      |
| 8                                     | —               | —     | A472-ND           | .38        | .32  | .27 | 08-655-10      |
| 10                                    | —               | —     | A473-ND           | .41        | .35  | .30 | 10-655-10      |
| 12                                    | —               | —     | A474-ND           | .41        | .35  | .30 | 12-655-10      |
| 14                                    | —               | —     | A475-ND           | .41        | .35  | .32 | 14-655-10      |
| 16                                    | —               | —     | A476-ND           | .41        | .35  | .32 | 16-655-10      |
| 18                                    | —               | —     | A477-ND           | .45        | .38  | .33 | 18-655-10      |
| 20                                    | —               | —     | A478-ND           | .45        | .38  | .33 | 20-655-10      |
| 22                                    | —               | —     | A479-ND           | .49        | .41  | .36 | 22-655-10      |
| 24                                    | —               | —     | A480-ND           | .53        | .45  | .39 | 24-655-10      |
| Headers                               |                 |       |                   |            |      |     |                |
| 4                                     | 6.35            | 2.54  | A700-ND           | .82        | .69  | .55 | 04-680-190T    |
| 6                                     | 8.89            | 5.08  | A701-ND           | .92        | .78  | .62 | 06-680-190T    |
| 8                                     | 11.43           | 7.62  | A702-ND           | .97        | .82  | .66 | 08-680-190T    |
| 10                                    | 13.97           | 10.16 | A703-ND           | 1.03       | .87  | .70 | 10-680-190T    |
| 12                                    | 16.51           | 12.70 | A704-ND           | 1.05       | .89  | .71 | 12-680-190T    |
| 14                                    | 19.05           | 15.24 | A705-ND           | 1.10       | .93  | .74 | 14-680-190T    |
| 16                                    | 21.59           | 17.78 | A706-ND           | 1.18       | 1.00 | .79 | 16-680-190T    |
| 18                                    | 24.13           | 20.32 | A707-ND           | 1.21       | 1.02 | .83 | 18-680-190T    |
| 20                                    | 26.67           | 22.86 | A708-ND           | 1.26       | 1.06 | .86 | 20-680-190T    |
| 22                                    | 29.21           | 25.40 | A709-ND           | 1.34       | 1.13 | .90 | 22-680-190T    |
| 24                                    | 31.75           | 27.94 | A710-ND           | 1.37       | 1.15 | .93 | 24-680-190T    |
| ARIES ELECTRONICS Tool                |                 |       |                   |            |      |     |                |
| A490-ND Header Programming Tool ..... |                 |       |                   | \$23.93    |      |     |                |

## Strip Line SIP Headers

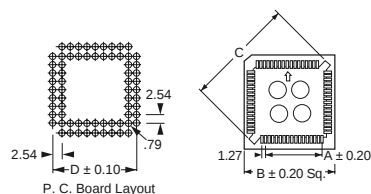


#### Coined Contacts

"Break" feature on Pin Line Headers assures Headers can be easily snapped off to any number of positions without loss or damage to any pins. No tool is required. The "break" feature minimizes stocking problems and gives immediate adaptability for any length Header requirement to any grid or matrix pattern.

| Digi-Key Part No. | 1    | Pricing |        | Aries Part No. |
|-------------------|------|---------|--------|----------------|
|                   |      | 25      | 100    |                |
| A115-ND           | 2.42 | 52.92   | 170.10 | 25-0600-10     |

## PLCC Sockets

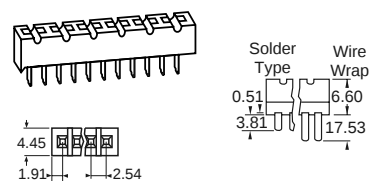


#### Solder Tail Features:

- Accepts JEDEC leaded Type A (plastic leaded chip carrier) PLCC.
- Contact solder tails on .100" (2.54mm) grid.
- Low profile.
- Tin plated contacts.

| # of Pins                    | Dimensions (mm) |       |       |         | Digi-Key Part No. | Price Each |      |      |
|------------------------------|-----------------|-------|-------|---------|-------------------|------------|------|------|
|                              | A               | B     | C     | D       |                   | 1          | 25   | 100  |
| Solder Tail                  |                 |       |       |         |                   |            |      |      |
| 68                           | 20.32           | 30.51 | 39.70 | 25.15   | A419-ND           | 1.64       | 1.32 | 1.05 |
| 84                           | 25.40           | 35.61 | 46.89 | 30.23   | A420-ND           | 1.84       | 1.48 | 1.18 |
| O.K. International Tool      |                 |       |       |         |                   |            |      |      |
| K293-ND PLCC Extraction Tool |                 |       |       | \$19.95 |                   |            |      |      |

## Strip Line SIP Socket

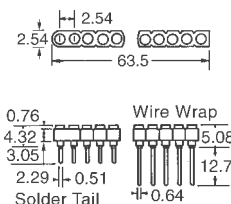


**Contacts:** Grade A spring temper phosphor bronze QQB-7500. **Plating:** 100µin plating per MIL-T-10727. **Socket:** Glass filled thermoplastic.

#### STRIP-LINE Bifurcated Contacts

| No. of Pins | Digi-Key Part No. | Price Each |      |      | Wire Wrap Digi-Key Part No. | Price Each |      |      |
|-------------|-------------------|------------|------|------|-----------------------------|------------|------|------|
|             |                   | 1          | 25   | 100  |                             | 1          | 25   | 100  |
| 12          | A200-ND           | 1.39       | 1.26 | .98  | A204-ND                     | 2.57       | 2.24 | 1.81 |
| 20          | A201-ND           | 1.85       | 1.68 | 1.32 | A205-ND                     | 3.75       | 3.27 | 2.64 |
| 25          | A202-ND           | 2.31       | 2.10 | 1.65 | A206-ND                     | 4.73       | 4.11 | 3.32 |
| 34          | A203-ND           | 2.39       | 2.18 | 1.71 | A207-ND                     | 5.82       | 5.06 | 4.09 |

## Pin Line Sockets with "Break" Feature



Tin-plated Pin Line sockets can be snapped apart into any required number of pins without damage or loss of pins. Pin Line sockets are low profile and used for mounting devices with .100" (2.54mm) spacing between pins. Rows of socket strips may be mounted on any centers or side-by-side for .100" (2.54mm) grid or matrix patterns. Strips also butt end-to-end and maintain .100" (2.54mm) spacing.

| No. of Pins                                    | Digi-Key Part No. | Price Each |      |      |
|------------------------------------------------|-------------------|------------|------|------|
|                                                |                   | 1          | 25   | 100  |
| Solder Tail Dip Socket with Screw Machined Pin |                   |            |      |      |
| 25                                             | A208-ND           | 2.31       | 2.04 | 1.65 |
| Wire Wrap Socket with Screw Machined Pin       |                   |            |      |      |
| 25                                             | A209-ND           | 7.22       | 6.28 | 5.07 |

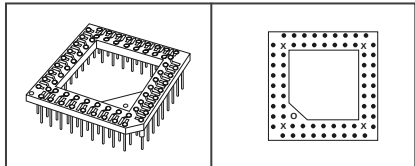
## Quad Flat Pack (QFP) to PGA Adapter for Motorola 68340

### SPECIFICATIONS:

- Adapter body is black FR-4, .094 (2.39) thick, with 1 ounce minimum Copper traces.
- **Pins:** Brass Alloy 360, 1/2 hard per QQ-B-626.
- **Pin Plating:** 200µ (5.08µm) min. Tin per MIL-T-10727 over 100µ (2.54µm) min. Nickel per QQ-N-290.
- **Operating Temperature:** 221°F (125°C).

| Pin Count | Digi-Key Part No. | Price Each | 1     | 25 | Aries Part No. |
|-----------|-------------------|------------|-------|----|----------------|
| 144       | A723-ND           | 66.34      | 56.87 |    | 97-68340       |

## Chip Carriers

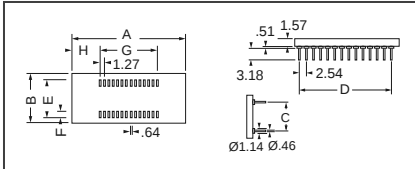


- Your present PLCC devices can be used in thru-hole applications by soldering to our adapters.
- Your standard JEDEC footprints are converted to PGA footprints.
- Your PGA Sockets (LIF) will save space.
- Your p.c. board will have more space for conductor runs when converted to .100" (2.54mm) pin spacing.
- Polarization option available.
- Your standard test clip can be used for testing.

**SPECIFICATIONS: Body:** Copper Clad FR-4 Solder Plated. Pins: Brass, Tin/Lead Plated.

| Pin Count | Digi-Key Part No. | Price Each | 1    | 25   | 100 | Aries Part No. |
|-----------|-------------------|------------|------|------|-----|----------------|
| 68        | A171-ND           | 10.24      | 9.56 | 8.88 |     | 68-505-110     |

## Surface Mount SOIC to DIP and SOJ to DIP Adapters



**Materials:** Board: .062" (1.57mm) thick double-sided FR-4 with 1 oz. copper traces. Pins: Brass alloy 360, 1/2 hard per QQ-B-626

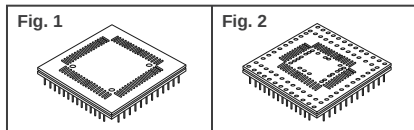
**Plating:** 200µ min. 93/7 tin/lead per MIL-T-10727 type 1 over 100µ min. nickel per QQ-N-290.

Suggested P.C.B. mounting hole = .028" (.71mm) Diameter

| No. of Pins | Digi-Key Part No. | Dimensions (mm) | Price Each | 1     | 25    | 100  | Aries Part No. |
|-------------|-------------------|-----------------|------------|-------|-------|------|----------------|
| 8           | A724-ND           | 10.16 11.68     | 7.62       | 7.62  | 11.56 | 3.94 | 3.81 3.07      |
| 14          | A725-ND           | 17.78 11.43     | 7.62       | 15.24 | 10.67 | 3.51 | 7.62 4.57      |
| 16          | A726-ND           | 20.32 11.43     | 7.62       | 17.78 | 10.67 | 3.51 | 8.89 4.57      |
| 20          | A727-ND           | 25.40 11.43     | 7.62       | 22.86 | 10.67 | 3.51 | 11.43 4.57     |
| 24          | A325-ND           | 25.40 10.67     | 7.62       | 22.86 | 8.89  | 2.29 | 15.24 1.52     |
| 24          | A720-ND           | 30.48 17.78     | 15.24      | 27.94 | 11.56 | 3.81 | 13.97 4.57     |
| 24          | A322-ND           | 30.48 11.43     | 7.62       | 27.94 | 10.67 | 3.51 | 13.97 4.57     |
| 28          | A320-ND           | 35.56 17.78     | 15.24      | 33.02 | 11.43 | 1.91 | 16.51 9.53     |
| 28          | A321-ND           | 35.56 10.67     | 7.62       | 33.02 | 8.89  | 2.29 | 16.51 9.53     |
| 32          | A323-ND           | 40.64 17.78     | 15.24      | 38.10 | 16.51 | 5.08 | 19.05 10.80    |
| 32          | A324-ND           | 40.64 13.46     | 10.16      | 38.10 | 12.70 | 2.29 | 19.05 10.80    |

| No. of Pins | Type | Digi-Key Part No. | Price Each | 1    | 25   | 100 | Aries Part No. |
|-------------|------|-------------------|------------|------|------|-----|----------------|
| 8           | SOIC | A724-ND           | 6.52       | 5.48 | 4.83 |     | 08-350000-10   |
| 14          | SOIC | A725-ND           | 6.52       | 5.48 | 4.83 |     | 14-350000-10   |
| 16          | SOIC | A726-ND           | 6.52       | 5.48 | 4.83 |     | 16-350000-10   |
| 20          | SOIC | A727-ND           | 6.52       | 5.48 | 4.83 |     | 20-350000-10   |
| 20          | SOJ  | A325-ND           | 6.22       | 5.33 | 4.74 |     | 20-350001-10   |
| 24          | SOIC | A720-ND           | 9.84       | 8.27 | 7.29 |     | 24-650000-10   |
| 24          | SOIC | A322-ND           | 4.80       | 4.08 | 3.20 |     | 24-350000-10   |
| 28          | SOIC | A320-ND           | 8.62       | 7.40 | 6.57 |     | 28-650000-10   |
| 28          | SOIC | A321-ND           | 6.22       | 5.33 | 4.74 |     | 28-350002-10   |
| 32          | SOJ  | A323-ND           | 10.35      | 8.88 | 7.89 |     | 32-650000-10   |
| 32          | SOJ  | A324-ND           | 9.10       | 7.80 | 6.93 |     | 32-450001-10   |

## Quad Flat Pack (QFP) to PGA Adapters



Adapters convert surface mount type Quad Flat Pack (QFP) packages to standard pin grid array through-hole packages on .100" (2.54mm) pin spacing. This allows the surface mount QFP package to be used in standard PGA and PGA ZIF sockets, which is extremely useful for testing. Typically, surface mount QFP packages are less expensive than their through-hole PGA counterparts. The surface mount packages are often more readily available. Also, the user does not have to redesign a through-hole board in order to utilize the advantages of the surface mount QFP packages.

| Fig. No. | Chip Type/ Mfg. | Pads No. | PGA No. | Pins/ Matrix | Digi-Key Part No. | Price Each | 1     | 25 | Aries Part No. |
|----------|-----------------|----------|---------|--------------|-------------------|------------|-------|----|----------------|
| 1        | JEDEC           | 132      | 132     | 13x13        | A174-ND           | 28.04      | 25.24 |    | 95-132/25      |
| 2        | EIAJ            | 100      | 100     | 13x13        | A175-ND           | 27.10      | 24.40 |    | 96-100M65      |
| 1        | EIAJ            | 160      | 160     | 15x15        | A176-ND           | 27.10      | 24.40 |    | 96-160M65      |
| —        | EIAJ            | 208      | 208     | 17x17        | A722-ND           | 51.45      | 44.10 |    | 96-208M50      |

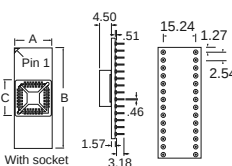
## Surface Mount PLCC to DIP Adapters

### Materials:

- **Pins and Contacts:** Phosphor bronze adapter • **Body:** FR-4, .062" (1.57mm) thick • **Socket:** LCP, UL 94V-0 rated • **Pads & Traces:** 1 oz. min. copper.

**Plating:** 200µ" tin per MIL-T-10727 over 100µ" nickel per QQ-N-290.

**Contacts:** 150µ" 90/10 tin/lead.



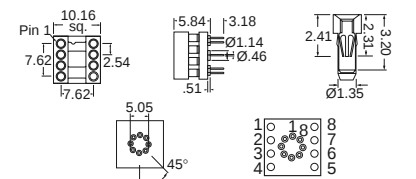
| No. of Pins | Dim. (mm) | C      | Digi-Key Part No. | Price Each | 1     | 25    | Aries Part No. |
|-------------|-----------|--------|-------------------|------------|-------|-------|----------------|
| 28          | 19.56     | 35.56  | 17.91             | A326-ND    | 23.84 | 20.44 | 28-653000-10   |
| 32          | 17.91     | 40.64  | 20.45             | A721-ND    | 39.02 | 32.78 | 32-653000-10   |
| 44          | 24.64     | 55.88  | 23.11             | A327-ND    | 26.16 | 22.43 | 44-653000-10   |
| 68          | 32.51     | 86.36  | 30.99             | A328-ND    | 30.28 | 25.95 | 68-653000-10   |
| 84          | 37.59     | 106.68 | 36.07             | A329-ND    | 30.28 | 25.95 | 84-653000-10   |

## TO to DIP Adapter/Socket

**Features:** 8-pin DIP IC socket on the top and a circular, 8-pin TO can male pin footprint on the bottom, can be readily mounted on boards having TO thru-hole footprints without having to redesign the board.

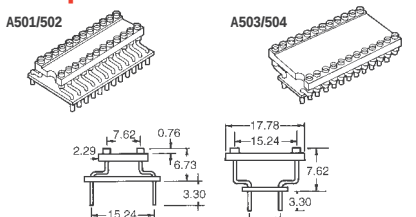
- **Socket Body:** black UL 94V-0 glass-filled polyester thermoplastic.
- **Female Pin Body Plating:** 200µ min. Tin over 100µ min. Nickel.
- **Contact Plating:** 10µ min. Gold 50µ min. Nickel.
- **Male Pin:** Brass Alloy 360.
- **Male Pin Plating:** 200µ min. Tin.
- **Current rating:** 3 Amps.
- **Operating Temperature:** 221°F (105°C) Tin plating.
- **Accepts leads:** .015"-.025" (.38mm-.64mm) in diameter, .100"-.125" (2.54mm-3.18mm) long.

**Mounting Considerations:** Suggested PCB hole size: .028" (.71mm) diameter.



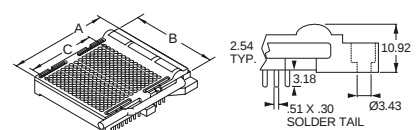
| Digi-Key Part No. | Price Each | 1    | 25   | 100  | 500 | Aries Part No. |
|-------------------|------------|------|------|------|-----|----------------|
| A330-ND           | 6.35       | 5.45 | 4.83 | 4.65 |     | 1109523        |

## Adapter Sockets



| No. of Pins | Description (mm) | Digi-Key Part No. | Price Each | 1    | 25   | 100 | Aries Part No. |
|-------------|------------------|-------------------|------------|------|------|-----|----------------|
| 24          | 7.62 to 15.24    | A501-ND           | 9.75       | 7.41 | 5.20 |     | 1106396-24     |
| 28          | 7.62 to 15.24    | A502-ND           | 10.88      | 8.27 | 5.80 |     | 1106396-28     |
| 24          | 15.24 to 7.62    | A503-ND           | 9.75       | 7.41 | 5.20 |     | 1107254-24     |
| 28          | 15.24 to 7.62    | A504-ND           | 10.88      | 8.27 | 5.80 |     | 1107254-28     |

## PGA Zero Insertion Force (ZIF) Sockets



**Features:** • The Aries ZIF PGA is an extremely rugged, yet smooth acting test socket. • A strong metal cam activates the contacts which are normally closed. This prevents dependency on the plastic for contact force. • Housing of glass filled PPS, UL-94V-0 rated.

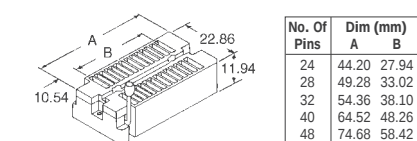
**Specifications:** • **Contacts:** Beryllium copper. • **Temperature Rating:** -65°C +125°C. • **Housing:** Glass filled PPS UL94V0 rated. • **Handle:** Stainless steel.

| Grid Size | No. of Pins | Dimensions (mm) | A     | B     | C | Digi-Key Part No. | Price Each |
|-----------|-------------|-----------------|-------|-------|---|-------------------|------------|
| 13 x 13   | 169         | 48.11           | 42.55 | 30.48 |   | A314-ND           | 28.04      |
| 15 x 15   | 225         | 53.19           | 47.63 | 35.56 |   | A315-ND           | 34.94      |
| 17 x 17   | 289         | 58.27           | 52.71 | 40.64 |   | A316-ND           | 42.62      |
| 19 x 19   | 361         | 63.35           | 57.79 | 45.72 |   | A317-ND           | 51.26      |
| 21 x 21   | 441         | 68.43           | 62.87 | 50.80 |   | A318-ND           | 60.93      |

## Universal Zero Insertion Force (ZIF) Test Sockets

The new Aries Universal Test Socket is a direct replacement for other test sockets currently on the market, with a number of significant advantages.

- .900 (22.86) overall height with contact level up
- Available 24, 28, 32, 40, 48 pins in body of UL 94V0 rated polyphenylene sulfide.
- Contacts available tin plated (for up to 105°C) or gold plated (for up to 150°C).
- Insulation Resistance - 1000 megohms min. Dielectric withstanding voltage - 1000 VAC min.
- Contact rating - 1 amp.
- All pin count sockets (24, 28, 32, 40, 48) go into p.c.b.'s with .600 (15.24) centers.
- Sockets can be soldered into p.c. boards or plugged into any socket.
- Contacts are normally closed to eliminate dependence on plastic to sustain contact.



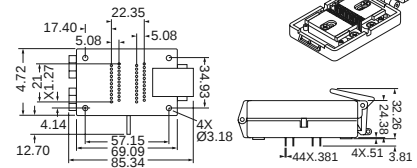
| No. of Pins | Contact Plating | Digi-Key Part No. | Price Each | 1     | 25    | 100 | Aries Part No. |
|-------------|-----------------|-------------------|------------|-------|-------|-----|----------------|
| 24          | Tin             | A300-ND           | 7.90       | 6.91  | 6.02  |     | 24-6554-10     |
| 24          | Gold            | A301-ND           | 11.41      | 9.99  | 8.71  |     | 24-6554-11     |
| 28          | Tin             | A302-ND           | 9.01       | 7.89  | 6.88  |     | 28-6554-10     |
| 28          | Gold            | A303-ND           | 12.37      | 10.83 | 9.43  |     | 28-6554-11     |
| 32          | Tin             | A304-ND           | 10.06      | 8.81  | 7.67  |     | 32-6554-10     |
| 32          | Gold            | A305-ND           | 13.72      | 12.01 | 10.46 |     | 32-6554-11     |
| 40          | Tin             | A306-ND           | 12.01      | 10.51 | 9.15  |     | 40-6554-10     |
| 40          | Gold            | A307-ND           | 16.37      | 14.33 | 12.48 |     | 40-6554-11     |
| 48          | Tin             | A308-ND           | 14.08      | 12.33 | 10.75 |     | 48-6554-10     |
| 48          | Gold            | A309-ND           | 19.13      | 16.74 | 14.59 |     | 48-6554-11     |

## Surface Mount Universal SOIC Zero Insertion Force (ZIF) Test Sockets

**Socket Accepts:** SOIC gull wing & J-lead devices up to 44 pin devices; .050" (1.27mm) lead pitch; body widths from .15" (3.81mm) to .60" (15.24mm).

- **Materials:** • **Body:** Glass-filled PPS, UL 94V-0 rated.
- **Contacts:** Beryllium copper alloy per QQ-C-543.
- **Hardware:** Stainless Steel.

**Plating:** 20µ" min. gold per MIL-G-45204 over 100µ" min. nickel per QQ-N-290 over 20µ" min. copper per MIL-C-14550.

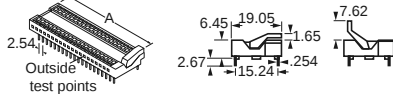


| Digi-Key Part No. | Price Each | Aries Part No. |
|-------------------|------------|----------------|
| A339-ND           | 151.94     | 44-547-11      |

## Zero Insertion Force (ZIF) Lo-Profile Sockets

**Features:** A complete line of sizes, 24, 28 and 40 pin, low profile ZIF (zero insertion force) sockets provides a low cost solution for a test socket with a height of only 8.10mm (8, 10) and even with handle in open position, measures just 14.07mm.

**Specifications:** • **Pin:** Spring temper beryllium copper, tin plated. • **Body:** Glass filled polyester UL94V0 rated. • **Cam:** Cast metal.

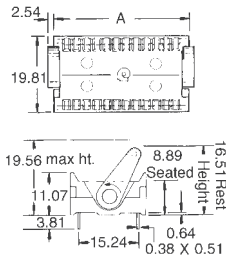


| No. of Pins | Dim. A (mm) | Digi-Key Part No. | Price Each | 1    | 25   | 100 | Aries Part No. |
|-------------|-------------|-------------------|------------|------|------|-----|----------------|
| 24          | 36.83       | A346-ND           | 5.09       | 4.53 | 3.80 |     | 24-526-10      |
| 28          | 41.91       | A347-ND           | 5.49       | 4.89 | 4.10 |     | 28-526-10      |
| 40          | 57.15       | A348-ND           | 6.60       | 5.87 | 4.93 |     | 40-526-10      |

## Zero Insertion Force (ZIF) Sockets

**Specifications:**

• **Contacts:** Heat treated beryllium copper • **Plating:** 100µ tin plating per MIL-T-10727. • **Sockets:** Glass filled thermoplastic.



| No. of Pins | Dim A (mm) | Digi Key Part No. | Price Each | 1     | 25   | 100 | Aries Part No. |
|-------------|------------|-------------------|------------|-------|------|-----|----------------|
| 24          | 33.02      | A150-ND           | 8.77       | 7.37  | 6.27 |     | 24-516-10      |
| 28          | 41.15      | A146-ND           | 9.47       | 7.96  | 6.75 |     | 28-516-10      |
| 40          | 53.34      | A152-ND           | 12.47      | 10.48 | 8.90 |     | 40-516-10      |

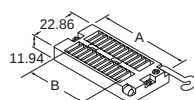
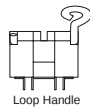
## Quick-Release Universal ZIF Test Socket

**Features:**

• Aries' Universal Test Socket accepts devices on .300" (7.62mm) to .600" (15.24mm) centers • Sockets go into PCB .600" (15.24mm) centers • Swing quick-release handle down to open contacts and insert device. Release and handle automatically returns as contacts close onto device leads.

**Specifications:**

• **Socket Body:** Black UL 94V-0 Glass-filled Polyphenylene Sulfide (PPS) • **Handle:** stainless steel • **Contact Current Rating:** 1 amp • **Insulation Resistance:** 1000 Mohms min. • **Life Cycle:** 25,000 to 50,000 cycles • **Operating Temperature:** 221°F (105°C) Tin plating; 302°F (150°C) Gold plating • **Retention Force (when closed):** 55 grams/pin based on a .020" (.51mm) diameter test lead • **Accepts leads .015"-.035" (38mm-.89mm) wide, .100"-.280" (2.79mm-7.11mm) long**



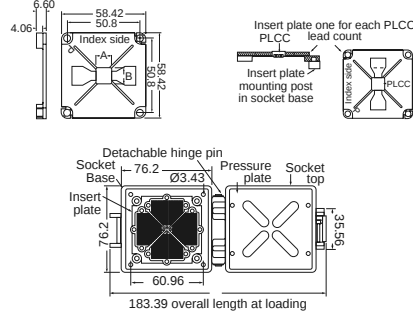
| No. of Pins | Dim. – In. (mm) |              |
|-------------|-----------------|--------------|
|             | A               | B            |
| 24          | 1.79 (45.47)    | 1.10 (27.94) |
| 28          | 1.99 (50.55)    | 1.30 (33.02) |
| 32          | 2.19 (55.63)    | 1.50 (38.10) |
| 40          | 2.59 (65.79)    | 1.90 (48.26) |
| 48          | 2.99 (75.95)    | 2.30 (58.42) |

| No. of Pins | Description | Digi-Key Part No. | Price Each | 1     | 25    | 100 | Aries Part No. |
|-------------|-------------|-------------------|------------|-------|-------|-----|----------------|
| 24          | Tin Plated  | A439-ND           | 10.35      | 8.70  | 6.64  |     | 24-6574-10     |
| 24          | Gold Plated | A440-ND           | 11.99      | 10.07 | 9.59  |     | 24-6574-11     |
| 28          | Tin Plated  | A441-ND           | 11.82      | 9.94  | 7.58  |     | 28-6574-10     |
| 28          | Gold Plated | A442-ND           | 16.24      | 13.64 | 10.38 |     | 28-6574-11     |
| 32          | Tin Plated  | A443-ND           | 13.32      | 11.20 | 8.53  |     | 32-6574-10     |
| 32          | Gold Plated | A444-ND           | 18.16      | 15.26 | 11.63 |     | 32-6574-11     |
| 40          | Tin Plated  | A445-ND           | 15.76      | 13.24 | 10.08 |     | 40-6574-10     |
| 40          | Gold Plated | A446-ND           | 21.48      | 18.05 | 13.74 |     | 40-6574-11     |
| 48          | Tin Plated  | A447-ND           | 18.49      | 15.53 | 11.84 |     | 48-6574-10     |
| 48          | Gold Plated | A448-ND           | 25.12      | 21.10 | 16.08 |     | 48-6574-11     |

## Surface Mount Universal PLCC ZIF Test Sockets

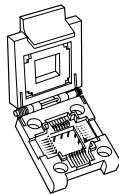
**Specifications:**

• **Plastic Parts:** UL 94V-0 glass-filled thermoplastic • **Contact Pin:** Beryllium copper • **Fasteners, Spring, Hinge Pins:** Stainless steel • **Temperature Range:** -65°C to 125°C • **Life Cycle:** 10,000 insertions maximum.



| No. of Pins    | Dim. (mm)   | Digi-Key Part No. | Price Each | Aries Part No. |
|----------------|-------------|-------------------|------------|----------------|
|                | A B         | A331-ND           | 168.22     | 84-537-21      |
| Adapter Plates |             |                   |            |                |
| 20             | 10.03/10.08 | A332-ND           | 10.61      | 20-537-20      |
| 28             | 12.57/12.62 | A333-ND           | 10.61      | 28-537-20      |
| 32             | 12.57/12.62 | A334-ND           | 10.61      | 32-537-20      |
| 44             | 17.65/17.70 | A335-ND           | 10.61      | 44-537-20      |
| 52             | 20.19/20.24 | A336-ND           | 10.61      | 52-537-20      |
| 68             | 25.27/25.32 | A337-ND           | 10.61      | 68-537-20      |
| 84             | 30.35/30.40 | A338-ND           | 10.61      | 84-537-20      |

## PLCC ZIF Test Sockets

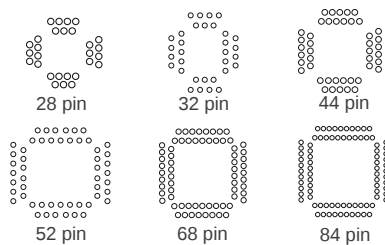
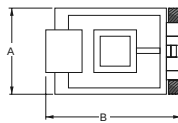


**Features:**

- Zero Insertion Force.
- Corner posts provide positive package registration.
- 12µ" Gold plating.
- 10,000 insertions min.

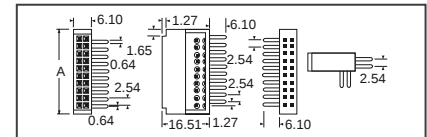
**Application:**

- Can be shimmed to accept many Ceramic, Leadless and J-Lead Packages.

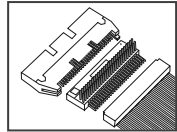


| No. of Pins | Dim. (mm) | Digi-Key Part No. | Price Each | 1     | 25    | 100 |
|-------------|-----------|-------------------|------------|-------|-------|-----|
|             | A B       | A310-ND           | 62.70      | 55.54 | 47.78 |     |
| 28          | 30.00     | A449-ND           | 73.37      | 61.63 | 54.30 |     |
| 32          | 29.97     | A450-ND           | 75.30      | 63.26 | 55.73 |     |
| 44          | 38.10     | A311-ND           | 67.33      | 59.64 | 51.30 |     |
| 68          | 42.01     | A312-ND           | 87.43      | 77.44 | 66.62 |     |
| 84          | 48.01     | A313-ND           | 92.77      | 82.17 | 70.68 |     |

## 3M Intra-Connector™



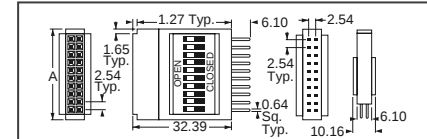
When you wanted to test for a problem that might lie on the circuit board or in the cable, you had a problem. Inaccessibility? Not with a 3M ESP Intra-Connector™ system. The Intra-Connector mates in-line with standard double row socket connectors. It has one set of female contacts, but two sets of male contacts at right angles. So, it provides instant line-by-line "probe-ability."



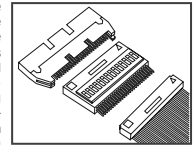
The pins can also be used to make daisy chaining possible from a single connector cable end. Modified configurations are quickly available for special connections. The Intra-Connector system provides both straight-in and right angle functions. It mates with a standard .10" x .10" (2.54mm x 2.54mm) dual row connector or PC board-mounted .025" (.64mm) square pins. Two Intra-Connector systems used with the Intra-Switch™ system form a complete test assembly for probing signals under no load and full-load conditions. Contacts are non-corrosive Alloy 770; body is glass-filled polyester thermo-plastic.

| No. of Contacts | Dim. A In. (mm) | Digi-Key Part No. | Price Each |
|-----------------|-----------------|-------------------|------------|
| 20              | 1.160 (29.46)   | 922576-20-ND      | 11.59      |
| 26              | 1.460 (37.08)   | 922576-26-ND      | 12.17      |
| 34              | 1.860 (47.24)   | 922576-34-ND      | 13.87      |
| 40              | 2.160 (54.86)   | 922576-40-ND      | 15.47      |
| 50              | 2.660 (67.56)   | 922576-50-ND      | 16.94      |
| 60              | 3.160 (80.26)   | 922576-60-ND      | 20.10      |

## 3M Intra-Switch™



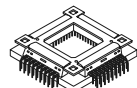
There are a lot of complicated, time consuming ways to interrupt a signal line on an assembly — some may even be damaging to your PC board. But there's one easy way: Intra-Switch™ from 3M ESP. Simply by inserting the Intra-Switch™ connector between mating system connectors you have instant line-by-line switching. The low profile design and recessed switch buttons give you room to work in confined areas. Using a pencil or probe tip, any or all switches may be actuated. Applications include switching command signals to or from test equipment and programming optional preset logic functions. Switch buttons are recessed to prevent accidental switching. "Open" and "closed" positions are clearly marked, molded-in the body. Contacts are non-corrosive Alloy 770; body is glass-filled polyester thermoplastic. Intra-Switch is compatible with most sockets and mating headers for flat cable, including 3M, T&B/Ansley, Berg, Amp, Symbex and many others.



| No. of Contacts | Dim. A In. (mm) | Digi-Key Part No. | Price Each |
|-----------------|-----------------|-------------------|------------|
| 20              | 1.160 (29.46)   | 922578-20-ND      | 24.72      |
| 26              | 1.460 (37.08)   | 922578-26-ND      | 31.81      |
| 34              | 1.860 (47.24)   | 922578-34-ND      | 33.81      |
| 40              | 2.160 (54.86)   | 922578-40-ND      | 41.64      |
| 50              | 2.660 (67.56)   | 922578-50-ND      | 36.84      |

## 3M OEM PQFP Sockets

**Features:** • Accepts JEDEC MO-069 packages, lead sizes 84 through 196 • .025" (.64mm) centerline contacts for high-density packaging • Lid design separates, maintains IC lead spacing • Lid acts as package carrier and transport protector • Lid is compatible with conventional package shipping tubes and trays • "Slotted," "open" socket walls and corners permit airflow around captured package (aids in package heat dissipation) • Hinged socket latches audibly "snap" signals secure lid/package assembly to base, expedites package withdrawal • .075" (.191mm) contact spacing and .100" (2.54mm) row spacing.



**Physical Specifications:** • **Insulation Socket and Lid:** • Material: Glass Filled Polyethersulfone (PES) • Flammability: UL94 V-0 • Color: Black • **Latching Aid:** • Material: Polycarbonate (PC) • Color: Black • **Contact:** • Material: Beryllium Copper (C172) Plating • Underplate: 50µ (1.27µm) Sulfamate Nickel • Wiping Area: 200µ (5.08µm) 60/40 Tin Lead • Solderability: 200µ (5.08µm) 60/40 Tin Lead • **Marking:** Raised Letters

**Electrical Specifications:** • Current Rating: 1 Amp • Insulation Resistance: >1x10<sup>10</sup>Ω • Withstanding Voltage: 1000 Vrms at Sea Level

**Environmental Specifications:** • Temperature Rating Operating: -55°C to +105°C

| No. of<br>Contacts | Digi-Key<br>Part No. | Pricing |        | 3M<br>Part No. |
|--------------------|----------------------|---------|--------|----------------|
|                    |                      | 1       | 10     |                |
| PQFP Socket Tin    |                      |         |        |                |
| 84                 | 3M8409-ND            | 15.00   | 107.21 | 80610725493    |
| 100                | 3M1009-ND            | 17.68   | 126.40 | 80610330245    |
| 132                | 3M1329-ND            | 25.42   | 181.71 | 80610725477    |
| 164                | 3M1649-ND            | 28.45   | 203.42 | 80610347843    |
| 196                | 3M1969-ND            | 33.82   | 241.79 | 80610573588    |



# TEXTTOOL/3M Zero Insertion Force (ZIF) I.C. Sockets

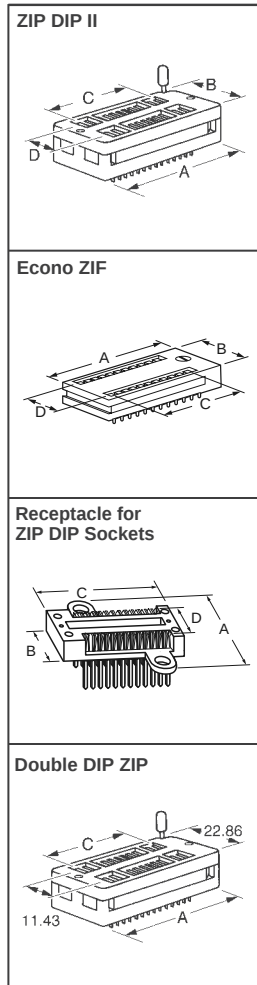
**ZIP DIP II SOCKETS:** For test and burn-in of all common dual-in-line packages on .100" lead spacing. The zero insertion pressure feature allows easy insertion and removal without lead distortion. Receptacles are ideal for high use situations such as PROM programming.

**ECONO ZIF SOCKETS:** Designed for OEM/end use applications where field replacement or programming of DIPs is required. The patented ZIF feature uses screwdriver rotation of a cam (instead of a lever) for security against vibration or accidental unloading. Leads are on .100" centers.

**RECEPTACLES FOR ZIP DIP:** Features: • Matching receptacle for every ZIP DIP Socket • Mounting flange standard option to hold receptacle to board • Pre-tapped holes in receptacle body mate with screw-hole in socket to hold socket firmly to receptacle (2 screws provided with each receptacle) • Available in

solder-tail options. **Physical Specifications:** • Insulation Material: Glass Reinforced Polysulfone, Flammability Rating: UL 94V-0 • Color: Green • Marking: Part Number Identification • Contact Material: Beryllium Copper • Plating: 30µ" (0.76µm) Gold — MIL-G-45204, Type II, Grade C over 50µ" (1.3µm) Sulfamate Nickel per QQ-N-290A, Class 2 or 75µ" (1.9µm) Nickel Boron. **Electrical Specifications:** • Current Rating: 1 Amp • Insulation Resistance: >1x10<sup>12</sup>Ω at 500 Vdc Withstanding Voltage: 1000Vrms at Sea Level. **Environmental Specifications:** • Temperature Rating Operating: -67°F (-55°C) to +302°F (+150°C)

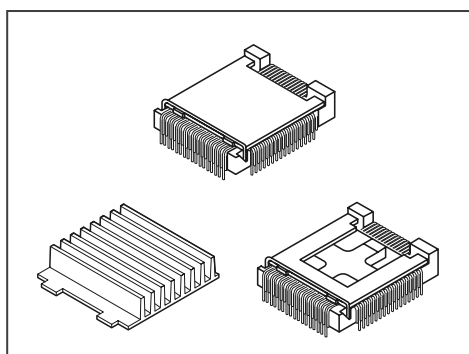
**ZIP DIP SOCKETS .100 CENTERS • DOUBLE DIP:** Features: • For DIPs with .100" lead spacing • Extra wide contact zone allows insertion of DIPs with distance between rows from .300" through .600" • Lever actuated zero insertion force mechanism • Socket easily disassembles for reparability



3M4099-ND Extraction Tool.....\$3.99

| No. of Pins           | Contact Plating | Dimensions – Inch (mm) |              |               |              | Digi-Key Part No. | Pricing |        | 3M Part No.          |
|-----------------------|-----------------|------------------------|--------------|---------------|--------------|-------------------|---------|--------|----------------------|
|                       |                 | A                      | B            | C             | D            |                   | 1       | 10     |                      |
| ZIP DIP Sockets       |                 |                        |              |               |              |                   |         |        |                      |
| 14                    | Gold            | 1.30 (33.02)           | .60 (15.24)  | .60 (15.24)   | .300 (7.62)  | 3M1402-ND         | 12.04   | 86.10  | 80610124838          |
| 16                    | Gold            | 1.39 (35.31)           | .60 (15.24)  | .70 (17.78)   | .300 (7.62)  | 3M1602-ND         | 13.08   | 93.53  | 80610090401          |
| 16                    | Tin             | 1.39 (35.31)           | .60 (15.24)  | .70 (17.78)   | .300 (7.62)  | 3M1605-ND         | 11.67   | 83.42  | 80610090492          |
| 18                    | Gold            | 1.49 (37.85)           | .60 (15.24)  | .80 (20.32)   | .300 (7.62)  | 3M1802-ND         | 14.12   | 100.97 | 80610090419          |
| 18                    | Tin             | 1.49 (37.85)           | .60 (15.24)  | .80 (20.32)   | .300 (7.62)  | 3M1805-ND         | 12.52   | 89.52  | 80610090500          |
| 20                    | Gold            | 1.59 (40.39)           | .60 (15.24)  | .90 (22.86)   | .300 (7.62)  | 3M2002-ND         | 15.16   | 108.40 | 80610124739          |
| 20                    | Tin             | 1.59 (40.39)           | .60 (15.24)  | .90 (22.86)   | .300 (7.62)  | 3M2005-ND         | 13.40   | 95.76  | 80610090971          |
| 22                    | Gold            | 1.69 (42.93)           | .70 (17.78)  | 1.00 (25.40)  | .400 (10.16) | 3M2202-ND         | 16.20   | 115.84 | 80610104301          |
| 22                    | Tin             | 1.69 (42.93)           | .70 (17.78)  | 1.00 (25.40)  | .400 (10.16) | 3M2205-ND         | 14.25   | 101.86 | 80610104319          |
| 24                    | Gold            | 1.79 (45.47)           | .90 (22.86)  | 1.10 (27.94)  | .600 (15.24) | 3M2402-ND         | 17.24   | 123.27 | 80610090427          |
| 24                    | Tin             | 1.79 (45.47)           | .90 (22.86)  | 1.10 (27.94)  | .600 (15.24) | 3M2405-ND         | 15.12   | 108.10 | 80610090989          |
| 28                    | Gold            | 1.99 (50.55)           | .90 (22.86)  | 1.30 (33.02)  | .600 (15.24) | 3M2802-ND         | 19.32   | 138.14 | 80610104327          |
| 28                    | Tin             | 1.99 (50.55)           | .90 (22.86)  | 1.30 (33.02)  | .600 (15.24) | 3M2805-ND         | 16.85   | 120.45 | 80610090740          |
| 40                    | Gold            | 2.60 (66.04)           | .90 (22.86)  | 1.90 (48.26)  | .600 (15.24) | 3M4002-ND         | 25.56   | 182.75 | 80610104335          |
| 40                    | Tin             | 2.60 (66.04)           | .90 (22.86)  | 1.90 (48.26)  | .600 (15.24) | 3M4005-ND         | 22.03   | 157.47 | 80610090997          |
| 64                    | Gold            | 3.95 (100.33)          | 1.30 (33.02) | 3.10 (78.74)  | .900 (22.86) | 3M6402-ND         | 44.26   | 316.43 | 80610090955          |
| 64                    | Tin             | 3.95 (100.33)          | 1.30 (33.02) | 3.10 (78.74)  | .900 (22.86) | 3M6405-ND         | 38.60   | 275.99 | 80610104764          |
| Econo ZIF Sockets     |                 |                        |              |               |              |                   |         |        |                      |
| 14                    | Gold            | 1.00 (25.40)           | .50 (12.70)  | .600 (15.24)  | .300 (7.62)  | 3M1403-ND         | 6.36    | 45.50  | 80610256309          |
| 14                    | Tin             | 1.00 (25.40)           | .50 (12.70)  | .600 (15.24)  | .300 (7.62)  | 3M1407-ND         | 6.14    | 43.87  | 80610257018          |
| 16                    | Gold            | 1.10 (27.94)           | .50 (12.70)  | .700 (17.78)  | .300 (7.62)  | 3M1603-ND         | 6.91    | 49.37  | 80610124358          |
| 16                    | Tin             | 1.10 (27.94)           | .50 (12.70)  | .700 (17.78)  | .300 (7.62)  | 3M1607-ND         | 6.64    | 47.44  | 80610124283          |
| 20                    | Gold            | 1.30 (33.02)           | .50 (12.70)  | .900 (22.86)  | .300 (7.62)  | 3M2003-ND         | 7.97    | 56.95  | 80610165856          |
| 20                    | Tin             | 1.30 (33.02)           | .50 (12.70)  | .900 (22.86)  | .300 (7.62)  | 3M2007-ND         | 7.63    | 54.57  | 80610181663          |
| 24                    | Gold            | 1.50 (38.10)           | .80 (20.32)  | 1.100 (27.94) | .600 (15.24) | 3M2403-ND         | 9.03    | 64.54  | 80610124291          |
| 24                    | Tin             | 1.50 (38.10)           | .80 (20.32)  | 1.100 (27.94) | .600 (15.24) | 3M2407-ND         | 8.63    | 61.71  | 80610124309          |
| 28                    | Gold            | 1.70 (43.18)           | .80 (20.32)  | 1.300 (33.02) | .600 (15.24) | 3M2803-ND         | 10.09   | 72.12  | 80610124317          |
| 28                    | Tin             | 1.70 (43.18)           | .80 (20.32)  | 1.300 (33.02) | .600 (15.24) | 3M2807-ND         | 9.63    | 68.85  | 80610124127          |
| 40                    | Gold            | 2.30 (58.42)           | .80 (20.32)  | 1.900 (48.26) | .600 (15.24) | 3M4003-ND         | 13.27   | 94.87  | 80610124135          |
| 40                    | Tin             | 2.30 (58.42)           | .80 (20.32)  | 1.900 (48.26) | .600 (15.24) | 3M4007-ND         | 12.63   | 90.26  | 80610124143          |
| 48                    | Gold            | 2.74 (69.60)           | .80 (20.32)  | 2.300 (58.42) | .600 (15.24) | 3M4803-ND         | 15.39   | 110.04 | 80610134951          |
| 48                    | Tin             | 2.74 (69.60)           | .80 (20.32)  | 2.300 (58.42) | .600 (15.24) | 3M4807-ND         | 14.62   | 104.54 | 80610134969          |
| 64                    | Gold            | 3.54 (89.92)           | 1.10 (27.94) | 3.100 (78.74) | .900 (22.86) | 3M6403-ND         | 19.64   | 140.37 | 80610124069          |
| 64                    | Tin             | 3.54 (89.92)           | 1.10 (27.94) | 3.100 (78.74) | .900 (22.86) | 3M6407-ND         | 18.62   | 133.09 | 80610124077          |
| ZIP DIP Receptacle    |                 |                        |              |               |              |                   |         |        |                      |
| 14                    | Gold            | 1.00 (25.40)           | .60 (15.24)  | 1.28 (32.51)  | .300 (7.62)  | 3M1401-ND         | 11.96   | 85.50  | 80610124648          |
| 16                    | Gold            | .96 (24.38)            | .56 (14.22)  | 1.37 (34.80)  | .300 (7.62)  | 3M1601-ND         | 12.94   | 92.49  | 80610124663          |
| 18                    | Gold            | .95 (24.13)            | .55 (13.97)  | 1.49 (37.85)  | .300 (7.62)  | 3M1801-ND         | 13.92   | 99.48  | 80610264832          |
| 18                    | Tin             | .95 (24.13)            | .55 (13.97)  | 1.49 (37.85)  | .300 (7.62)  | 3M1804-ND         | 12.02   | 85.95  | 2001803594-006006005 |
| 20                    | Gold            | 1.00 (25.40)           | .60 (15.24)  | 1.58 (40.13)  | .300 (7.62)  | 3M2001-ND         | 14.89   | 106.47 | 80610124614          |
| 20                    | Tin             | 1.00 (25.40)           | .60 (15.24)  | 1.58 (40.13)  | .300 (7.62)  | 3M2004-ND         | 12.79   | 91.45  | 2002003595-006006005 |
| 22                    | Gold            | 1.06 (26.92)           | .65 (16.51)  | 1.69 (42.93)  | .400 (10.16) | 3M2201-ND         | 15.85   | 113.31 | 80610272397          |
| 24                    | Gold            | 1.26 (32.00)           | .86 (21.84)  | 1.77 (44.96)  | .603 (15.32) | 3M2401-ND         | 16.83   | 120.30 | 80610124630          |
| 24                    | Tin             | 1.26 (32.00)           | .86 (21.84)  | 1.77 (44.96)  | .603 (15.32) | 3M2404-ND         | 13.31   | 95.17  | 2002403597-006006005 |
| 28                    | Gold            | 1.26 (32.00)           | .86 (21.84)  | 1.98 (50.29)  | .600 (15.24) | 3M2801-ND         | 18.78   | 134.28 | 80610124572          |
| 28                    | Tin             | 1.26 (32.00)           | .86 (21.84)  | 1.98 (50.29)  | .600 (15.24) | 3M2804-ND         | 15.91   | 113.76 | 2002803598-006006005 |
| 40                    | Gold            | 1.27 (32.26)           | .86 (21.84)  | 2.58 (65.53)  | .606 (15.39) | 3M4001-ND         | 24.63   | 176.06 | 80610124580          |
| 64                    | Gold            | 1.70 (43.18)           | 1.30 (33.02) | 3.95 (100.33) | .900 (22.86) | 3M6401-ND         | 36.30   | 259.48 | 80610232722          |
| 64                    | Tin             | 1.70 (43.18)           | 1.30 (33.02) | 3.95 (100.33) | .900 (22.86) | 3M6404-ND         | 29.95   | 214.13 | 2006405119-006006005 |
| Double DIP Socket ZIP |                 |                        |              |               |              |                   |         |        |                      |
| 24                    | Gold            | 1.77 (44.96)           | —            | 1.10 (27.94)  | —            | 3M2406-ND         | 26.92   | 192.42 | JE150160636          |
| 28                    | Gold            | 1.99 (50.55)           | —            | 1.30 (33.02)  | —            | 3M2806-ND         | 29.68   | 212.19 | 80610255897          |
| 32                    | Gold            | 2.19 (55.63)           | —            | 1.50 (38.10)  | —            | 3M3206-ND         | 32.45   | 231.97 | 80610350185          |
| 40                    | Gold            | 2.59 (65.79)           | —            | 1.90 (48.26)  | —            | 3M4006-ND         | 37.98   | 271.53 | 80610256838          |

## 3M OEM Type "A" LCC Sockets



### Features:

- Accepts JEDEC leadless type "A" ceramic chip carriers • Variety of lid options available • "U" lid for I.C.E. adaptor I/O cable egress • Head Sink(s) acceptable and available • Thruster spring helps register substrate three corner notches, maintain centering • Polarizing post on bottom of socket • Through hole contact tails • No tools required for package insertion/removal • Full contact probe-ability • High temperature PPS plastic and BeCu contacts for rugged performance

### Physical Specifications:

• **Insulation:** • Material: Glass Filled Polyphenylene Sulfide (PPS) • Flammability: UL94 V-0 • Color: Black • **Lid Material:** Aluminum • **Latch Material:** Stainless Steel • **Thruster & Contact Material:** Beryllium Copper (C172) Plating; Underplate: 50µ" (1.27µm) Nickel; Wiping Area: 30µ" (0.76µm) Gold; Solder Tails: 30µ" (0.76µm) Gold • **Marking:** Raised Letters

**Electrical Specifications:** • Current Rating: 1 Amp • Insulation Resistance: >1x10<sup>12</sup>Ω • Withstanding Voltage: 1000 Vrms at Sea Level

**Environmental Specifications:** • Operating Temperature Rating: -55° to +105°C

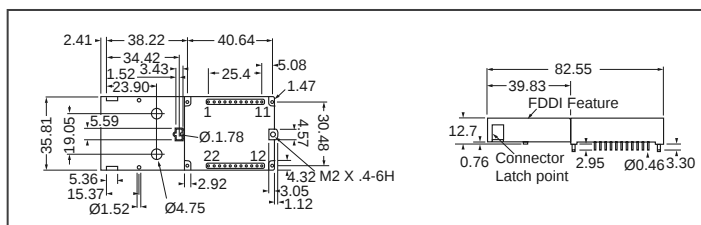
| Lid Type         | No. of Contacts | Digi-Key Part No. | Pricing |        | 3M Part No. |
|------------------|-----------------|-------------------|---------|--------|-------------|
|                  |                 |                   | 1       | 10     |             |
| LCC Sockets      |                 |                   |         |        |             |
| Full             | 68              | 3M6809A-ND        | 18.14   | 167.79 | 80610124200 |
| No Lid           | 68              | 3M6809B-ND        | 17.62   | 162.96 | 80610351738 |
| U-Shaped         | 68              | 3M6809C-ND        | 18.14   | 167.79 | 80610148241 |
| Finned Heat Sink | 68              | 3M6809D-ND        | 20.18   | 186.69 | 80610288229 |
| LCC Socket Lid   |                 |                   |         |        |             |
| Full             | —               | 3MLLSF-ND         | .50     | 4.62   | 78803540208 |
| U-Shaped         | —               | 3MLLSU-ND         | .50     | 4.62   | 78803544333 |
| Finned Heat Sink | —               | 3MLLSH-ND         | 2.97    | 27.51  | DF610063989 |

### 1402U ODL® FDDI Transceiver

### Features:

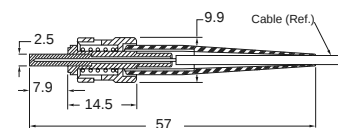
FDDI (fiber distributed data interface) — compliant specifications. • Conforms to industry-standard 22-pin configuration • Low power dissipation • Differential signal-detect indicator • Single +5 V power supply • Field keyable. • Low EMI/RFI emissions and susceptibility • Low ESD susceptibility • Compatible with 10KH and 100KH ECL logic • Compatible with typical wave soldering and aqueous cleaning processes (with process plug)

| Type                 | Digi-Key<br>Part No. | Price<br>Each | CTS<br>Part No. |
|----------------------|----------------------|---------------|-----------------|
| 1402U Series - TX/RX | 10231-ND             | 150.00        | 1402U           |



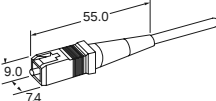
# Amphenol® Fiber Optics Connectors and Adapters

Fig. 1



- **Connection Loss:**  
62.5 / 125μm fiber ≤  
0.5 dB median
- **Body:** Black

Fig. 2



- **Connection Loss:** 0.27 dB typical: single mode

**Fig. 3**



- Specifications:** • Use with Fiber Sizes: 50/125, 62.5/125, 85/125  
• Max. Buffer Dia.: 2.46 mm • Crimp Female Inner Dia.: 4.42mm  
**Material:** • Boot: Santoprene • Crimp Female: Nickel plated copper alloy #122 (DHP) • Dust Cap: Vinyl

Fig. 4

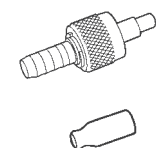
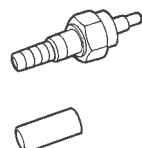


Fig. 5



- Specifications:** • Use with Fiber Sizes: 50/125, 62.5/125, 85/125 • Max Buffer Dia.: 2.46mm  
• Crimp Female Inner Dia.: 4.42mm (Part No. AFP1004-ND: 2.92 + 4.44, 4.42)

- Material:** • **Boot:** Santoprene • **O-Ring:** Buna-n • **Half & Full Sleeve:** Delrin • **Crimp Female:** Nickel plated copper alloy #122 (DHP)

| Fig.             | Description                                       | Typical Insert. Loss (dB) | Digi-Key Part No. | 1     | 10     | 25     | 50     |
|------------------|---------------------------------------------------|---------------------------|-------------------|-------|--------|--------|--------|
| 953 ST Series    |                                                   |                           |                   |       |        |        |        |
| 1                | Connector, Multimode, ST Steel, 128µm hole dia.   | —                         | AFP1007-ND        | 8.93  | 69.81  | 156.00 | 273.00 |
| 1                | Connector, Multimode, ST Ceramic, 128µm hole dia. | —                         | AFP1006-ND        | 18.72 | 146.52 | 329.30 | 567.95 |
| —                | Adapter, Multimode, ST Ceramic                    | —                         | AFP1008-ND        | 9.46  | 74.29  | 167.04 | 286.35 |
| 954 SC Series    |                                                   |                           |                   |       |        |        |        |
| 2                | Connector, SC Ceramic, 125µm hole dia.            | —                         | AFP1011-ND        | 15.36 | 123.00 | 268.50 | 462.00 |
| 2                | Connector, SC Ceramic, 126µm hole dia.            | —                         | AFP1009-ND        | 14.28 | 114.00 | 250.50 | 429.00 |
| 905 SMArt Series |                                                   |                           |                   |       |        |        |        |
| 3                | Connector, SMA Steel, 128µm hole dia.             | 2.0                       | AFP1003-ND        | 10.99 | 87.75  | 187.50 | 337.50 |
| 906 SMArt Series |                                                   |                           |                   |       |        |        |        |
| 4                | Connector, SMArt Ceramic, 128µm hole dia.         | <0.5                      | AFP1002-ND        | 29.26 | 229.52 | 518.70 | 896.80 |
| 5                | Connector, SMA Steel, 128µm, hole dia.            | <1.0                      | AFP1004-ND        | 20.70 | 161.71 | 364.36 | 628.30 |

## Fiber Optics Tooling Kits

Amphenol termination system combines flexible configuration of tooling sets with the convenience of pre-packaged materials.

Eliminates duplicate tooling and provides for all termination accessories

### Add-on Termination Kits

Contains tooling unique to each connector type. Included are cleave tool, polishing fixtures, instructions and cable preparation template.

|                   |                                    |                 |
|-------------------|------------------------------------|-----------------|
| <b>AFP1013-ND</b> | 905 SMArt Ceramic Add-On Kit ..... | <b>\$504.00</b> |
| <b>AFP1014-ND</b> | 906 SMArt Ceramic Add-On Kit ..... | <b>\$504.00</b> |
| <b>AFP1015-ND</b> | ST Ceramic Add-On Kit.....         | <b>\$420.00</b> |
| <b>AFP1012-ND</b> | 905/906 SMA Steel Add-On Kit ..... | <b>\$88.48</b>  |

### SMA Stainless Steel Consumable Kit

Includes 15µm, 3µm and 1µm lapping film, epoxy, alcohol wipes and cleaning wire.

AFP1016-ND .....\$144.08

# AMP Fiber Optic Cable

Fig. 1 — Simplex Cable



Fig. 2 — Zipcord Cable

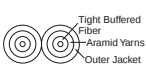
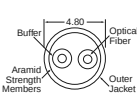


Fig. 3 — Dualan Cable



**Fig. 4 — 4-Fiber Cable**

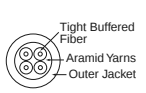


Fig. 5 — 12-Fiber Cable



| Fig.          | Cable Type | Cable Style | Fiber Size      | Installation Tensile Load Lb. (Kg) | Long Term Tensile Load Lb. (Kg) | Installation Bend Radius Inch (mm) | Long Term Bend Radius Inch (mm) | Digi-Key Part No. | Note: "X" In Part No. = Ft. Per Roll Price Per Roll |         |         | AMP Part No. |
|---------------|------------|-------------|-----------------|------------------------------------|---------------------------------|------------------------------------|---------------------------------|-------------------|-----------------------------------------------------|---------|---------|--------------|
|               |            |             |                 | 500 ft.                            | 1,000 ft.                       | 3,300 ft.                          |                                 |                   |                                                     |         |         |              |
| Simplex Cable |            |             |                 |                                    |                                 |                                    |                                 |                   |                                                     |         |         |              |
| 1             | Riser      | Simplex     | 62.5/125 Micron | 113 (51.26)                        | 68 (30.84)                      | 1.80 (45.72)                       | 1.20 (30.48)                    | AG101-X-ND        | 125.00                                              | 250.00  | 824.99  | 503016-1     |
| 1             | Plenum     | Simplex     |                 | 114 (51.71)                        | 68 (30.84)                      | 1.80 (45.72)                       | 1.20 (30.48)                    | AG201-X-ND        | 141.26                                              | 282.51  | 932.28  | 503015-1     |
| Zipcord Cable |            |             |                 |                                    |                                 |                                    |                                 |                   |                                                     |         |         |              |
| 2             | Riser      | Zipcord     | 62.5/125 Micron | 226 (102.51)                       | 108 (48.99)                     | 1.80 (45.72)                       | 1.20 (30.48)                    | AG102-X-ND        | 250.00                                              | 500.00  | 1649.99 | 502983-1     |
| 2             | Plenum     | Zipcord     |                 | 226 (102.51)                       | 108 (48.99)                     | 1.80 (45.72)                       | 1.20 (30.48)                    | AG202-X-ND        | 262.51                                              | 524.99  | 1732.48 | 502986-1     |
| Multi Cable   |            |             |                 |                                    |                                 |                                    |                                 |                   |                                                     |         |         |              |
| 3             | Riser      | Dualan      | 62.5/125 Micron | 316 (143.34)                       | 135 (61.24)                     | 2.80 (71.12)                       | 1.90 (48.26)                    | AG301-X-ND        | 262.51                                              | 524.99  | 1732.48 | 502984-1     |
| 3             | Plenum     | Dualan      |                 | 316 (143.34)                       | 135 (61.24)                     | 2.80 (71.12)                       | 1.90 (48.26)                    | AG401-X-ND        | 287.51                                              | 575.01  | 1897.54 | 502987-1     |
| 4             | Riser      | 4 Fiber     | 62.5/125 Micron | 316 (143.34)                       | 135 (61.24)                     | 2.80 (71.12)                       | 1.90 (48.26)                    | AG302-X-ND        | 475.00                                              | 950.00  | 3134.99 | 502985-1     |
| 4             | Plenum     | 4 Fiber     |                 | 316 (143.34)                       | 135 (61.24)                     | 2.80 (71.12)                       | 1.90 (48.26)                    | AG402-X-ND        | 512.51                                              | 1025.01 | 3382.54 | 502988-1     |
| 5             | Riser      | 12 Fiber    | 62.5/125 Micron | 341 (154.68)                       | 171 (77.57)                     | 3.90 (99.06)                       | 2.40 (60.96)                    | AG303-X-ND        | 700.00                                              | 1400.00 | 4619.99 | 502989-1     |
| 5             | Plenum     | 12 Fiber    |                 | 341 (154.68)                       | 171 (77.57)                     | 3.90 (99.06)                       | 2.40 (60.96)                    | AG403-X-ND        | 718.76                                              | 1437.50 | 4743.77 | 502993-1     |

**1-800-344-4539**

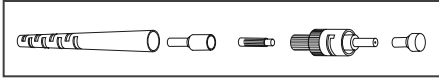
218-681-6674 • FAX: 218-681-3380 • [www.digikey.com](http://www.digikey.com)

# AMP Fiber Optic Connectors

## ST Style LightCrimp XTC Connectors

### Features:

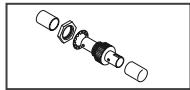
- Singlemode or multimode
- Just crimp it on the fiber
- 2-minute termination
- Epoxyless or Quick-Cure Epoxy Types
- Pre-radiused PC finish (epoxy type)
- Body Material: Epoxyless - Aluminum; Epoxy - Polymer
- Coupling Nut Material: Multimode Epoxyless - Polymer; Singlemode Epoxyless - Die Cast; Epoxy - Die Cast Zinc • Storage Temp. Range: -40°C to +85°C



| Fiber Size (µm)                          | Mode Type | Ferrule Material | Insertion Loss dB, Avg. | Oper. Temp. Range (°C) | Durability cycles, <20 (dB) change | Digi-Key Part No. | Price Each | AMP Part No. |       |          |
|------------------------------------------|-----------|------------------|-------------------------|------------------------|------------------------------------|-------------------|------------|--------------|-------|----------|
|                                          |           |                  |                         |                        |                                    |                   | 1          | 10           | 25    |          |
| LightCrimp Epoxyless ST Style Connectors |           |                  |                         |                        |                                    |                   |            |              |       |          |
| 125                                      | Multi     | Plastic          | 0.4                     | -40° to +65°           | 500                                | A20100-ND         | 9.38       | 8.34         | 7.30  | 492168-1 |
| 125,140                                  | Multi     | St. Steel        | 0.4                     | -10° to +65°           | 500                                | A20101-ND         | 12.06      | 10.72        | 9.38  | 504034-1 |
| 125                                      | Multi     | Ceramic          | 0.4                     | -40° to +65°           | 1000                               | A20102-ND         | 14.65      | 13.02        | 11.40 | 504001-1 |
| 126                                      | Single    | Ceramic          | 0.2                     | -40° to +65°           | 1000                               | A20103-ND         | 35.60      | 31.64        | 27.69 | 504000-1 |
| Epoxy ST Style Connectors                |           |                  |                         |                        |                                    |                   |            |              |       |          |
| 125                                      | Multi     | Ceramic          | 0.4                     | -20° to +75°           | 1000                               | A20104-ND         | 7.97       | 7.08         | 6.20  | 501380-1 |
| 125                                      | Multi     | Ceramic          | 0.4                     | -20° to +75°           | 1000                               | A20105-ND         | 5.31       | 4.72         | 4.13  | 503571-1 |
| 125,140                                  | Multi     | St. Steel        | 0.3                     | -20° to +75°           | 500                                | A20106-ND         | 8.01       | 7.12         | 6.23  | 504008-3 |
| 125                                      | Multi     | Composite        | 0.3                     | -20° to +75°           | 5000                               | A20107-ND         | 4.16       | 3.70         | 3.24  | 503415-1 |
| 126                                      | Single    | Zircon/Ceramic   | 0.3                     | -20° to +75°           | 200                                | A20108-ND         | 10.42      | 9.26         | 8.11  | 502579-2 |

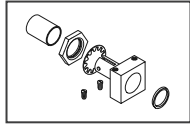
## ST Style Coupling Receptacles

### Free-Hanging or Panel Mount Design



| Type                 | Sleeve Material | Digi-Key Part No. | Price Each | AMP Part No. |          |
|----------------------|-----------------|-------------------|------------|--------------|----------|
|                      |                 |                   | 1          | 10           |          |
| Multimode            | Composite       | A20109-ND         | 3.44       | 3.06         | 501381-1 |
| Single- or Multimode | Metal           | A20110-ND         | 5.29       | 4.70         | 504021-1 |
| Single- or Multimode | Ceramic         | A20111-ND         | 8.91       | 7.92         | 502750-1 |

## ST Style Active Device Mounts



Designed to accept multimode TO-18, TO-46, and TO-52 active devices  
• Nickel plated, die cast zinc • Mount to PCB or through panel • Includes positioning ring

| Description                    | Digi-Key Part No. | Price Each |      |      | AMP Part No. |
|--------------------------------|-------------------|------------|------|------|--------------|
|                                |                   | 1          | 10   | 25   |              |
| Standard Height<br>Low Profile | A20142-ND         | 8.57       | 7.62 | 6.67 | 501474-1     |
|                                | A20143-ND         | 8.39       | 7.46 | 6.53 | 502585-2     |

## SC Style Connectors

### LightCrimp Epoxyless Type

#### Features:

- Innovative crimp design • Compliant with EIA/TIA 568A • No epoxy or adhesives • Shorter assembly time • Reduced polishing time • Lower installed cost • Secure repeatable matings • No need for curing oven or power supply • Consistent performance over a wide range of temperatures

#### Specifications:

- Attenuation @1300 nm: Mean 0.12 dB • Operational Temperature Cable Dependent: 40° to 65°C

#### Materials:

- Connector Ferrule: Zirconia Ceramic • Connector Body: Thermoplastic • Strain Relief: Thermoplastic

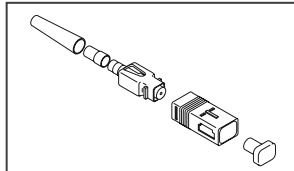
### Epoxy Type

#### Features:

- Easy to install • Singlemode or Multimode • Two versions available to match various assembly techniques • Compliant with Bellcore 326, JIS C-5973, Fibre Channel, TIA 568 • Pre-radiused ferrules

#### Performance Characteristics:

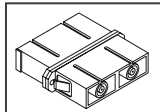
- Insertion Loss: 0.2dB typ. Return Loss: <-59dB typ. • Temp. Range: -40°C to +85°C; 0.1dB change typ. • Durability: Singlemode: 0.1dB typ. change after 200 cycles; Multimode: <0.1dB typ. change after 500 cycles



| Description                                                 | Fiber Size (µm) | Digi-Key Part No. | Price Each |       |       | AMP Part No. |
|-------------------------------------------------------------|-----------------|-------------------|------------|-------|-------|--------------|
|                                                             |                 |                   | 1          | 10    | 25    |              |
| LightCrimp Epoxyless SC Style Connectors — 3.0mm Cable Dia. |                 |                   |            |       |       |              |
| Simplex Multimode Connector                                 | 125             | A20117-ND         | 16.88      | 15.00 | 13.13 | 503692-1     |
| Duplex Multimode Connector                                  | 125             | A20118-ND         | 35.17      | 31.26 | 27.36 | 503693-1     |
| Epoxy SC Style Connectors — 3.0mm Cable Dia.                |                 |                   |            |       |       |              |
| Simplex Multimode Connector                                 | 125             | A20112-ND         | 8.60       | 7.64  | 6.69  | 503948-1     |
| Simplex Singlemode Connector                                | 125             | A20113-ND         | 17.55      | 15.60 | 13.65 | 504646-1     |
| Simplex Singlemode Connector                                | 126             | A20114-ND         | 17.55      | 15.60 | 13.65 | 504646-2     |
| Duplex Multimode Connector                                  | 125             | A20115-ND         | 17.87      | 15.88 | 13.90 | 504657-1     |
| Duplex Singlemode Connector                                 | 126             | A20116-ND         | 36.52      | 32.46 | 28.41 | 504655-1     |

## SC Coupling Adapters

Features: • Suitable for any SC type connector • Choice of housing colors • Metal Alignment Sleeve



| Description        | Color | Digi-Key Part No. | Price Each |       |       | AMP Part No. |
|--------------------|-------|-------------------|------------|-------|-------|--------------|
|                    |       |                   | 1          | 10    | 25    |              |
| SC Simplex Adapter | Blue  | A20144-ND         | 11.36      | 10.10 | 8.84  | 502632-8     |
| SC Simplex Adapter | Beige | A20145-ND         | 11.36      | 10.10 | 8.84  | 502632-9     |
| SC Duplex Adapter  | Blue  | A20146-ND         | 21.56      | 19.16 | 16.77 | 502776-8     |
| SC Duplex Adapter  | Beige | A20147-ND         | 21.56      | 19.16 | 16.77 | 502776-9     |

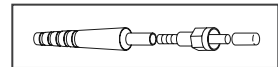
## FSMA Connectors

### Features:

- Industry compatible with 905 and 906 style connectors
- Design parameters conform to NATO and IEC interface standards • Ferrule Material: Stainless steel • Connector Body Material: Nickel-Plated brass • Fiber Diameter: 125µm

### Performance Characteristics:

- Insertion Loss: 1.5dB typical • Temperature Range: -55°C to +105°C • Durability: 200 mating cycles

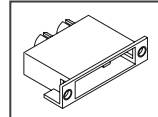


| Description          | Digi-Key Part No. | Price Each |       |       |      | AMP Part No. |
|----------------------|-------------------|------------|-------|-------|------|--------------|
|                      |                   | 1          | 10    | 25    | 50   |              |
| FSMA Connector (905) | A20126-ND         | 12.33      | 10.96 | 9.59  | 8.22 | 504566-1     |
| FSMA Connector (906) | A20127-ND         | 14.00      | 12.44 | 10.89 | 9.33 | 504014-1     |

## FSD Style Connectors

### FSD Connector

- Multimode • Meets specifications of FDDI PMD — ANSI X3.166 • Insertion Loss: typ. 0.5dB Ceramic Ferrule, 0.5 dB Polymer Ferrule • Durability: Ceramic Ferrule ≤0.2dB Change after 500 cycles; Polymer Ferrule ≤0.2 dB Change after 250 cycles • Operating Temperature: -40°C to +85°C



### FSD-MC Connector Plug

- Insertion Loss: typ. 0.5dB • Durability: typ. ≤0.2dB Change after 500 cycles • Operating Temperature: -40°C to +85°C

| Fiber Size<br>(µm)                                 | Ferrule<br>Material | Digi-Key<br>Part No. | 1     | Price Each<br>10 | 25    | AMP<br>Part No. |
|----------------------------------------------------|---------------------|----------------------|-------|------------------|-------|-----------------|
| FSD Connector - Multimode - Duty Dual ZIP Cable    |                     |                      |       |                  |       |                 |
| 125                                                | Ceramic             | A20119-ND            | 22.50 | 20.00            | 17.50 | 502015-1        |
| 125                                                | Polymer Composite   | A20120-ND            | 21.78 | 19.36            | 16.94 | 503347-5        |
| FSD-MC Connector Plug - Singlemode - Zipcord Cable |                     |                      |       |                  |       |                 |
| 125                                                | Steel/Ceramic       | A20121-ND            | 41.06 | 36.50            | 31.94 | 503345-2        |
| Field Keyable FSD-ST Receptacles                   |                     |                      |       |                  |       |                 |
| Metal Multimode Receptacle                         |                     | A20122-ND            | 20.09 | 17.86            | 15.63 | 502808-2        |
| Ceramic Singlemode Receptacle                      |                     | A20123-ND            | 27.86 | 24.76            | 21.67 | 502809-1        |

## Loopback Connectors

### SC Low Loss Loopback Connector

- Multimode • Use for equipment testing • 0.6 dB Insertion loss • 0.5" (12.7mm) Ferrule centerline

### FSD Low Loss Loopback Connector, 1.5 dB Max.

The AMP FSD Loopback connector connects the transmit side of the FDDI transceiver to the receive side. The ceramic ferrules and glass fiber provide a maximum loss of 1.5 dB. This device is used as a test unit in a fiber-to-fiber application.

|                        | Digi-Key  | Price Each |       |       | AMP      |
|------------------------|-----------|------------|-------|-------|----------|
| Description            | Part No.  | 1          | 10    | 25    | Part No. |
| SC Loopback Connector  | A20140-ND | 72.16      | 64.14 | 56.13 | 503141-1 |
| FSD Loopback Connector | A20141-ND | 97.31      | 86.50 | 75.69 | 502556-1 |

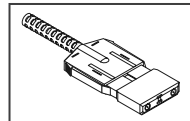
## RSD (Retractable Shroud Duplex) Connectors

### RSD Connector

- Designed to meet the requirements of the SBCon section of the ANSI X3T5.11 Fiber Channel specification currently under development • Designed to meet the intermateability details defined in the IBM Enterprise Systems Architecture/390, ESCON I/O Interface, Physical Layer specification SA23-0394-01

### RSD Connector Plug Kit

- Multimode • Compatible with IBM ESCON connector system • Simple field assembly. • Performance Characteristics: • Insertion Loss: typical 0.5dB • Durability: ≤0.2dB change after 500 cycles • Temperature Range: -20°C to +70°C



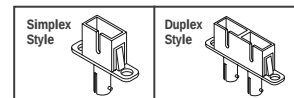
| Description                          | Digi-Key Part No. | Price Each |       |       | AMP Part No. |
|--------------------------------------|-------------------|------------|-------|-------|--------------|
|                                      |                   | 1          | 10    | 25    |              |
| ESCON Multimode DUALAN Connector Kit | A20124-ND         | 49.46      | 43.96 | 38.47 | 492181-1     |
| ESCON Curing Fixture Kit             | A9823-ND          | 17.10      | 15.20 | 13.30 | 492236-2     |
| RSD-ST Style Receptacle              | A20125-ND*        | 31.50      | 28.00 | 24.50 | 502826-2     |

\* Inter-mateable with IBM ESCON type connectors

## Hybrid Adapters

### Features:

- Use for Multimode or Singlemode • Available with mounting screws • Adapt various connector interfaces • Metal alignment sleeve



| Description   | Housing Material | Housing Color | Digi-Key Part No. | 1     | Price Each<br>10 | 25    | AMP Part No. |
|---------------|------------------|---------------|-------------------|-------|------------------|-------|--------------|
| Simplex Style |                  |               |                   |       |                  |       |              |
| SC to ST      | Plastic          | Black         | A20148-ND         | 13.70 | 12.18            | 10.66 | 502780-1     |
| SC to ST      | Plastic          | Blue          | A20149-ND         | 17.26 | 15.34            | 13.43 | 502780-2     |
| SC to ST      | Plastic          | Beige         | A20150-ND         | 17.26 | 15.34            | 13.43 | 502780-3     |
| SC to ST      | Nickel Plated    | Die Cast      | A20151-ND         | 21.26 | 18.90            | 16.54 | 503638-1     |
| SC to FC      | Plastic          | Black         | A20152-ND         | 10.46 | 9.30             | 8.14  | 502781-1     |
| SC to FC      | Plastic          | Blue          | A20153-ND         | 12.96 | 11.52            | 10.08 | 502781-2     |
| SC to FC      | Plastic          | Beige         | A20154-ND         | 12.96 | 11.52            | 10.08 | 502781-3     |
| SC to FC      | Nickel Plated    | Die Cast      | A20155-ND         | 24.84 | 22.08            | 19.32 | 503480-1     |
| FC to ST      | Nickel Plated    | Die Cast      | A20156-ND         | 19.55 | 17.38            | 15.21 | 503640-1     |
| Duplex Style  |                  |               |                   |       |                  |       |              |
| SC to ST      | Plastic          | Black         | A20157-ND         | 18.36 | 16.32            | 14.28 | 503137-1     |
| SC to ST      | Plastic          | Blue          | A20158-ND         | 18.36 | 16.32            | 14.28 | 503137-2     |
| SC to ST      | Plastic          | Beige         | A20159-ND         | 18.36 | 16.32            | 14.28 | 503137-3     |
| SC to FC      | Plastic          | Black         | A20160-ND         | 18.36 | 16.32            | 14.28 | 503135-1     |
| SC to FC      | Plastic          | Blue          | A20161-ND         | 18.36 | 16.32            | 14.28 | 503135-2     |
| SC to FC      | Plastic          | Beige         | A20162-ND         | 18.36 | 16.32            | 14.28 | 503135-3     |

# AMP Fiber Optic Switches and Accessories

## Kits, Tools and Accessories

### Termination Kits

#### For AMP SC, FSMA, ST Style, and FSD Styles

Termination kits provide all the materials and tools (except epoxy) required to terminate a particular type of fiber optic connector. Tools are conveniently packaged in a handy carrying case. The kits contain polishing materials for approximately 60 connectors. The consumable items in the kit can be purchased separately.

#### For LightCrimp ST Style

Termination Kits include all the tools required to prepare and terminate all LightCrimp ST Style connectors.

### Polishing (Lapping) Film Packets

Polishing film sheets are used with polishing bushings for hand polishing of fiber optic connectors. Most part numbers consist of a packet of ten 8.5" x 11.0" (21.59cm x 27.94cm) sheets. Each packet will polish between 60 and 80 connectors.

### Consumables Kits

Contains all consumable supplies for at least 100 connectors. Epoxy (general purpose), polish film, epoxy applicators and polish pad.

### Inspection Microscope Kits

The complete microscope kit includes a handy carrying case, tripod stand, AC adapter and all adapters needed to inspect the FSMA, FSD, ST Style and SC Type Connectors.

**Features:** • Pre-centered adapter mount provides quick, easy focusing, and changing of connectors • Kg-3 infrared filter to protect the user • Durable, lightweight A.B.S. plastic microscope body • Lockable, high density polyethylene, double-well carrying case with antistatic foam cut-outs

| Description                                                              | Digi-Key Part No. | Price Each | AMP Part No. |
|--------------------------------------------------------------------------|-------------------|------------|--------------|
| <b>LightCrimp Epoxy Type Termination Kits (Epoxy Sold Separately)</b>    |                   |            |              |
| ST Style                                                                 | A9828-ND          | 773.96     | 503746-1     |
| FSMA                                                                     | A9835-ND          | 774.62     | 503746-2     |
| FSD                                                                      | A9834-ND          | 1209.32    | 503746-6     |
| SC                                                                       | A9829-ND          | 833.18     | 503746-7     |
| <b>Epoxies (Tra-Con Epoxy-Bipax)</b>                                     |                   |            |              |
| General Purpose Use, High Impact                                         | A20219-ND         | 121.00     | 501195-4     |
| <b>LightCrimp XTC Termination Tool Kit</b>                               |                   |            |              |
| Mini Tool Kit                                                            | A9825-ND          | 566.18     | 492322-1     |
| Tool Kit Without Microscope                                              | A9826-ND          | 981.58     | 503330-1     |
| Tool Kit With Premium Microscope                                         | A9827-ND          | 2429.61    | 503330-2     |
| <b>LightCrimp SC Style Termination Tool Kit</b>                          |                   |            |              |
| LightCrimp SC Termination Kit Without Microscope                         | A9830-ND          | 1003.24    | 503706-1     |
| Microscope Adapter (Universal 2.5mm)                                     | A20215-ND         | 42.00      | 502977-1     |
| LightCrimp SC/Ceramic With Inspection Microscope                         | A9831-ND          | 2042.11    | 503706-2     |
| LightCrimp SC (Upgrade) Kit (Add to an ST Style Kit for SC Terminations) | A9832-ND          | 553.98     | 503707-1     |
| <b>Scribing Tools</b>                                                    |                   |            |              |
| Sapphire-Tipped Scribe Tool                                              | A99109-ND         | 43.75      | 504064-1     |
| Replacement Blades for A99109-ND                                         | A99110-ND         | 38.50      | 504290-1     |
| <b>Pro-Crimper II Hand Tool</b>                                          |                   |            |              |
| For use with FSMA - With Die Set                                         | A99108-ND         | 117.25     | 58551-1      |
| For use with FSMA - Die Set Only (hex die)                               | A20218-ND         | 56.00      | 58552-1      |
| For use with ST and SC Style - With Die Set                              | A99105-ND         | 105.00     | 58433-4      |
| For use with ST Style - Die Set Only                                     | A20214-ND         | 41.13      | 58424-1      |
| For use with FSD (ceramic) - With Die Set                                | A99107-ND         | 226.63     | 58519-1      |
| For use with FSD (ceramic) - Die Set Only                                | A20217-ND         | 167.13     | 58510-1      |
| For LightCrimp XTC (ST) - With Die Set                                   | A99104-ND         | 216.56     | 503568-1     |
| For LightCrimp XTC (ST) - Die Set Only                                   | A20213-ND         | 98.00      | 503567-1     |
| For LightCrimp SC (ceramic) - With Die Set                               | A99106-ND         | 311.43     | 503699-1     |
| For LightCrimp SC (ceramic) - Die Set Only                               | A20216-ND         | 243.18     | 503698-1     |
| Crimp Tool - Handle Only                                                 | A9996-ND          | 63.75      | 354940-1     |
| <b>Polishing Bushing</b>                                                 |                   |            |              |
| For ST Style (Polymer Composite) - Beige Polymer                         | A99111-ND         | 4.55       | 503304-2     |
| For ST Style (Ceramic, Stainless Steel) - Black Polymer                  | A99112-ND         | 5.25       | 503304-1     |
| Duplex Curing Fixture Kit w/Polishing Bushing                            | A9833-ND          | 143.76     | 501795-1     |
| <b>Polishing (Lapping) Film Packets</b>                                  |                   |            |              |
| FSMA, FSD, RSD - 5µm, Lt. Gray, (pkg. of 10)                             | A20221-ND         | 16.63      | 228433-8     |
| FC Type, D4 Type - 1µm, Green, (pkg. of 10)                              | A20222-ND         | 16.63      | 228433-7     |
| ST Style, AMP SC - 0.3µm, White (pkg. of 10)                             | A20223-ND         | 16.63      | 228433-5     |
| <b>Consumables Kits</b>                                                  |                   |            |              |
| FSMA, FSD, ST Style                                                      | A9836-ND          | 249.88     | 502306-1     |
| FC Type, D4 Type, AMP SC, Singlemode ST Style                            | A9837-ND          | 268.89     | 502306-2     |
| LightCrimp                                                               | A9838-ND          | 104.56     | 502306-3     |
| <b>Epoxy Curing Oven</b>                                                 |                   |            |              |
| 110 VAC Oven w/Adapter Block - Universal Block*                          | A20220-ND         | 725.81     | 502134-1     |
| <b>Microscope Kits</b>                                                   |                   |            |              |
| 100x Microscope (10x Eyepiece)                                           | A20224-ND         | 1431.34    | 502970-1     |
| ST Adapter                                                               | A20226-ND         | 31.50      | 504088-1     |
| SC Adapter                                                               | A20227-ND         | 31.50      | 503958-1     |
| FSMA Adapter                                                             | A20228-ND         | 31.50      | 504086-1     |

\* Universal block 12 single and 4 FSD Connectors

## Fiber Optic Multimode Switches

AMP Low Profile Fiber Optic Switches are miniature, board mountable devices that permit the switching of an optical signal from one fiber to another. Switching is accomplished by a slight pivoting motion of a spherical mirror which reflects the optical signal to the appropriate fiber. This patented imaging technology provides very low optical loss. AMP Fiber Optic Switches can be terminated with any AMP fiber optic connector.

**Specifications:** • **Switching Speed:** 5 msec typ. • **Operating Wavelength:** 750-1450 nm • **Insertion loss at 1300nm:** 0.5 dB typical, 0.8 dB max. per FOTP-34 • **Crosstalk:** -45 dB typical per FOTP-42 • **Switch Driver:** 5V at 80mA max., 12V option available • **Fiber Type:** Graded Index 62.5/125 • **Lead Length:** 1 meter • **Operating Temperature Range:** -10°C to +65°C per FOTP-3, C2 • **Connector Style:** ST Style • **Durability:** >1 million cycles

| Switch        | Fiber Leads Used |
|---------------|------------------|
| 1x2 SPDT      | 1, 2, 3          |
| Dual 1x2 DPDT | 1, 2, 3, 4, 5, 6 |
| 2x2 Bypass    | 1, 2, 3, 4       |

| Switch Type | Circuit | Electrical Interface | Fiber Connector | Digi-Key Part No. | Price Each | AMP Part No. |
|-------------|---------|----------------------|-----------------|-------------------|------------|--------------|
| 1 x 2       | SPDT    | Straight Pin         | ST Style        | A20163-ND         | 462.00     | 99427-2      |
| Dual 1 x 2  | DPDT    | Straight Pin         | ST Style        | A20164-ND         | 612.50     | 99982-2      |
| 2 x 2       | Bypass  | Straight Pin         | ST Style        | A20165-ND         | 488.25     | 99429-2      |

## FDDI 2000 Bypass Switches

The AMP FDDI 2000 bypass switch is a second-generation device that allows a dual-attach station to be bypassed without loss of ring integrity. The switch module contains two fully reversing optical bypass switches that direct the optical signals to the appropriate fiber according to signals on the device's electrical interface.

#### Features:

- Increases reliability of mission-critical network applications
- Meets or exceeds all ANSI standards
- Low insertion loss - 1.1 dB typical, including connectors
- Meets ANSI FDDI power output specification of -20 dBm

#### Specifications:

• **Switching Speed:** 10 ms max. • **Operating Wavelength:** 750-1450 nm • **Insertion Loss:** 1.1 dB typ., 1.8 dB max. (FOTP-34, Method B - Long Launch) • **Crosstalk:** -45 dB typical (FOTP-42) • **Switch Driver:** 5V at 160mA • **Fiber Type:** 62.5/125 µm • **Operating Temp. Range:** -10°C to +65°C • **Durability:** >1 million cycles

| Description                            | Port Interface | Mounting | Digi-Key Part No. | Price Each | AMP Part No. |
|----------------------------------------|----------------|----------|-------------------|------------|--------------|
| 6-Pos. Shielded Mini Circular DIN Plug | FSD MIC        | Panel    | A20166-ND         | 913.50     | 209161-4     |
| 6-Pos. Shielded Modular Plug           | FSD MIC        | Panel    | A20167-ND         | 913.50     | 209161-3     |
| 6-Pos. Shielded Circular DIN Plug      | FSD MIC        | Panel    | A20168-ND         | 913.50     | 209161-2     |

## Multiplexers and Demultiplexers

Multiplexers allow use of a single fiber for simultaneous transmission of two signals of different wavelengths. Demultiplexers separate the combined wavelengths from the single fiber into individual fibers. Both the multiplexers and demultiplexers are available for multimode as well as singlemode applications.

**Multimode Specifications:** • **Insertion Loss:** MUX: 0.9dB typ., 1.2dB max.; DEMUX: 0.9dB typ., 1.3dB max. (per FOTP-34, Method A) • **Directivity:** >55dB typ. • **Wavelength Bandpass:** 120 nm typ. • **Return Loss (Reflection):** MUX: 35dB Min.; DEMUX: Port 1 - <13dB; Port 2 - <15dB; Port 3 - <35dB • **Isolation:** Bi-Directional MUX and DEMUX: 35dB Min., 42dB typ.; Unidirectional MUX and DEMUX: 35 dB Min., 42dB typ. • **Operating Temperature:** -40°C to +65°C

**Singlemode Specifications:** • **Insertion Loss:** DEMUX: 0.9dB typ., 1.3dB max. (per FOTP-180) • **Directivity:** >65dB typ. • **Wavelength Bandpass:** 120 nm typ. • **Return Loss (Reflection):** DEMUX: Port 1 <40dB; Ports 2 & 3 <55dB • **Isolation:** Unidirectional DEMUX: 35 dB Min., 42dB typ. • **Polarization Sensitivity:** <0.1dB • **Operating Temperature:** -20°C to +60°C

| Fiber    | Mode       | .5m Cable Length | Connector | nm        | Digi-Key Part No. | Price Each | AMP Part No. |
|----------|------------|------------------|-----------|-----------|-------------------|------------|--------------|
| 62.5/125 | Multimode  | 3mm              | ST Style  | 850/1310  | A20169-ND         | 358.75     | 99102-3      |
| 62.5/125 | Multimode  | 3mm              | ST Style  | 1310/1550 | A20170-ND         | 358.75     | 99105-3      |
| 9/125    | Singlemode | 3mm              | FC/SPC    | 1310/1550 | A20171-ND         | 588.00     | 99717-6      |
| 9/125    | Singlemode | 3mm              | SC/SPC    | 1310/1550 | A20172-ND         | 588.00     | 99717-8      |

## Singlemode Fiber Optic Attenuators

AMP Singlemode High Performance Attenuators utilize unique all fiber mechanisms to increase the loss of an optical signal. These designs minimize reflection. High Performance Attenuators use no filters, air-gaps, or core mismatches. **Specifications:** • **Fixed Attenuation Values:** 3, 20dB • **Reflection:** <45 dB, -50, -55 and -60dB • **Operating Temperature:** -40°C to +75°C • **Vibration Resistance:** <0.1 x attenuation

| Attenuation (dB)                  | Digi-Key Part No. | Price Each | AMP Part No. |
|-----------------------------------|-------------------|------------|--------------|
| <b>FC Dual Window Attenuators</b> |                   |            |              |
| 3                                 | A20173-ND         | 172.80     | 209948-3     |
| 5                                 | A20174-ND         | 172.80     | 209948-5     |
| 10                                | A20175-ND         | 172.80     | 1-209948-0   |
| 15                                | A20176-ND         | 172.80     | 1-209948-5   |
| 20                                | A20177-ND         | 172.80     | 2-209948-0   |
| <b>SC Dual Window Attenuators</b> |                   |            |              |
| 3                                 | A20178-ND         | 172.80     | 209943-3     |
| 5                                 | A20179-ND         | 172.80     | 209943-5     |
| 10                                | A20180-ND         | 172.80     | 1-209943-0   |
| 15                                | A20181-ND         | 172.80     | 1-209943-5   |
| 20                                | A20182-ND         | 172.80     | 2-209943-0   |

1-800-344-4539

218-681-6674 • FAX: 218-681-3380 • www.digikey.com

## 1300nm Transceivers

## 22-Pin FSD Multimode Transceiver

The AMP FSD Transceiver provides logic-to-logic serial data transmission over a fiber optic transmission path. It has the advantages of a light and a small package, built-in FSD optical connector, circuit integration for reliability, single power supply operation, and raised ECL compatibility. **Features:** • Fiber Distributed Data Interface (FDDI) compliant • Internally shielded plastic package with low EMI/RFI emission • Low ESD susceptibility • 100 and 125 Mb/s • Field Keyable (A,B,M,S)

## 13-Pin MIC Molded-Optronic Transceiver

Technological advances in the areas of optical polycarbonate precision molding and resin circuit board manufacturing have enabled AMP to introduce its line of low cost fiber optic transceivers. AMP has incorporated these design breakthroughs into their new 13-pin MIC transceiver products. High quality polycarbonate camera lens technology has been configured for 1300 nm fiber optics thus eliminating high cost optical subassemblies without a performance penalty. **Features:** • Data rates of 125 Mb/s (FDDI) • Multi-sourced 13-pin single row footprint • Compatible with standard FDDI chip sets • Single +5 volts power supply • ECL compatible • MIC interface with programmable field keys (A,B,M,S)

## 9-Pin SC Duplex Molded-Optronic Transceiver

AMP Molded-Optronic 9-Pin SC Duplex Transceivers are standard compliant and multi-sourced high density footprint products that utilize SC connector interfaces capable of delivering the power budget requirements needed for 100 Base FX, FDDI PMD, FDDI LCF PMD, ATM and Fiber Channel applications. **Features:** • Data rates of 100 Mb/s (Fast Ethernet), 125 Mb/s (FDDI), 125 MB/s (LCF), 156 MB/s (ATM), and 270 Mb/s (FC) • Multi-sourced 9-pin single row footprint • Compatible with standard FDDI and ATM chip sets • Single +5 volts power supply • SC style optical interface • Wide 25 to 75% duty cycle operation

## 9-Pin Singlemode OC-3 ATM Laser Transceiver

The AMP family of 9-pin singlemode laser transceivers offer immediate solutions to SONET/ATM OC-3 intermediate reach and long reach applications. The common 9-pin footprint allows the board designer to create a single 9-pin layout to permit for operation over either multimode 62.5/125 micron or singlemode 9/125 micron optical fiber. **Features:** • Class 1 Laser Safe per FDA and IEC • Multisourced 9-pin single row footprint • Drops into 9-pin multimode footprint • Internally shielded plastic package with low EMI/RFI emission • SC Duplex singlemode connector interface • Compatible with all standard ATM chipsets • Utilizes AMP feedback stabilized 1300nm laser • Wide dynamic range receiver with AGC • Compatible with raised or standard ECL

## 9-Pin Singlemode FDDI Laser Transceiver

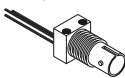
**Features:** 125 Mb/s FDDI SMF PMD Category 1 • Compatible with all standard FDDI chipsets

| Description                                             | Digi-Key Part No. | 1      | Price Each | 10     | 25       | AMP Part No. |
|---------------------------------------------------------|-------------------|--------|------------|--------|----------|--------------|
| 22-Pin FSD Multimode Transceiver, Field Keyable         | A20183-ND         | 105.00 | 90.00      | 84.00  | 269028-5 |              |
| 13-Pin MIC Molded-Optronic Transceiver, Narrow Case     | A20184-ND         | 105.00 | 90.00      | 84.00  | 269055-5 |              |
| 13-Pin MIC Molded-Optronic Transceiver, Standard Case   | A20185-ND         | 105.00 | 90.00      | 84.00  | 269054-5 |              |
| 9-Pin SC Duplex Transceiver, 100 Mb/s and 125 Mb/s      | A20186-ND         | 63.00  | 54.00      | 50.40  | 269040-1 |              |
| 9-Pin SC Duplex Transceiver, 156 Mb/s                   | A20187-ND         | 63.00  | 54.00      | 50.40  | 269039-1 |              |
| 9-Pin SC Duplex Transceiver, 270 Mb/s SC                | A20188-ND         | 63.00  | 54.00      | 50.40  | 269063-1 |              |
| 9-Pin Singlemode Transceiver, Intermediate Reach, Black | A20189-ND         | 306.25 | 262.50     | 245.00 | 269085-1 |              |
| 9-Pin Singlemode Transceiver, Intermediate Reach, Blue  | A20190-ND         | 306.25 | 262.50     | 245.00 | 269085-2 |              |
| 9-Pin Singlemode FDDI Transceiver, Category 1, Black    | A20191-ND         | 306.25 | 262.50     | 245.00 | 269087-1 |              |
| 9-Pin Singlemode FDDI Transceiver, Category 1, Blue     | A20192-ND         | 306.25 | 262.50     | 245.00 | 269087-2 |              |

## 1.3µm LED

**ST Style:** The AMP InGaAsP SLED products offer high coupled powers for digital fiber optic transmission applications. Compatible with industry standards, the AMP LED ADMs consist of hermetically sealed TO-18 style SLEDs which have been actively aligned for maximum coupled power. The ST connectors are suitable for both panel/bulk-head and PC board mounting. **Features:** • High coupled power, typ. 75 µW into 62.5 µm fiber • High reliability MTTFW 2.3 x 10<sup>6</sup> hours • Wavelength centered at 1320 nm • Hermetically sealed TO-18 style package installed in industry standard ADMs

ST Style

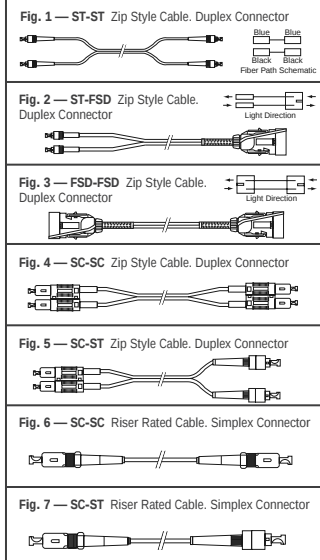


**FDDI Style:** FDDI LED performance is governed by the ANSI X3T9.6 Physical Layer Medium Dependent (PMD) document. FDDI operating conditions call for a modulated square wave at 12.5 MHz, 50% duty cycle. The coupled power is measured using 62.5 µm core fiber. The devices are permanently fixed in place to assure stable performance over all operating conditions.

| Description       | Digi-Key Part No. | 1      | Price Each | 10    | 25       | AMP Part No. |
|-------------------|-------------------|--------|------------|-------|----------|--------------|
| <b>ST Style</b>   |                   |        |            |       |          |              |
| Standard          | A20193-ND         | 92.25  | 82.00      | 71.75 | 259012-1 |              |
| Premium           | A20194-ND         | 99.00  | 88.00      | 77.00 | 259012-2 |              |
| <b>FDDI Style</b> |                   |        |            |       |          |              |
| FDDI              | A20195-ND         | 103.50 | 92.00      | 80.50 | 259012-3 |              |

## Fiber Optic Cable Assemblies

• Multimode • 62.5/125 Micron Fiber Size • Orange



| Length (meter)                                            | Digi-Key Part No. | 1     | Price Each | 10    | 25       | AMP Part No. |
|-----------------------------------------------------------|-------------------|-------|------------|-------|----------|--------------|
| <b>ST-ST — Ceramic — Light Duty Dual Cable</b>            |                   |       |            |       |          |              |
| 1                                                         | A11BBC-0201D-ND   | 23.90 | 21.24      | 18.59 | 503995-1 |              |
| 2                                                         | A11BBC-0202D-ND   | 25.29 | 22.48      | 19.67 | 503995-2 |              |
| 3                                                         | A11BBC-0203D-ND   | 26.91 | 23.92      | 20.93 | 503995-3 |              |
| 5                                                         | A11BBC-0205D-ND   | 29.90 | 26.58      | 23.26 | 503995-4 |              |
| 10                                                        | A11BBC-0210D-ND   | 37.42 | 33.26      | 29.11 | 503995-5 |              |
| <b>ST-ST — Polymer Composite — Light Duty Dual Cable</b>  |                   |       |            |       |          |              |
| 1                                                         | A11BBP-0201D-ND   | 23.18 | 20.60      | 18.03 | 503994-1 |              |
| 2                                                         | A11BBP-0202D-ND   | 24.50 | 21.78      | 19.06 | 503994-2 |              |
| 3                                                         | A11BBP-0203D-ND   | 26.08 | 23.18      | 20.29 | 503994-3 |              |
| 5                                                         | A11BBP-0205D-ND   | 28.98 | 25.76      | 22.54 | 503994-4 |              |
| 10                                                        | A11BBP-0210D-ND   | 36.27 | 32.24      | 28.21 | 503994-5 |              |
| <b>ST-FSD — Ceramic — Light Duty Dual Cable</b>           |                   |       |            |       |          |              |
| 1                                                         | A11BFC-0201D-ND   | 53.19 | 47.28      | 41.37 | 504610-1 |              |
| 2                                                         | A11BFC-0202D-ND   | 56.07 | 49.84      | 43.61 | 504610-2 |              |
| 3                                                         | A11BFC-0203D-ND   | 58.93 | 52.38      | 45.84 | 504610-3 |              |
| 5                                                         | A11BFC-0205D-ND   | 64.64 | 57.46      | 50.28 | 504610-4 |              |
| 10                                                        | A11BFC-0210D-ND   | 78.98 | 70.20      | 61.43 | 504610-5 |              |
| <b>ST-FSD — Polymer Composite — Light Duty Dual Cable</b> |                   |       |            |       |          |              |
| 1                                                         | A11BFP-0201D-ND   | 43.67 | 38.82      | 33.97 | 504609-1 |              |
| 2                                                         | A11BFP-0202D-ND   | 46.55 | 41.38      | 36.21 | 504609-2 |              |
| 3                                                         | A11BFP-0203D-ND   | 49.41 | 43.92      | 38.43 | 504609-3 |              |
| 5                                                         | A11BFP-0205D-ND   | 55.13 | 49.00      | 42.88 | 504609-4 |              |
| 10                                                        | A11BFP-0210D-ND   | 69.46 | 61.74      | 54.03 | 504609-5 |              |
| <b>FSD-FSD — Ceramic — Light Duty Dual Cable</b>          |                   |       |            |       |          |              |
| 1                                                         | A11FFC-0201D-ND   | 63.72 | 56.64      | 49.56 | 504626-1 |              |
| 2                                                         | A11FFC-0202D-ND   | 66.58 | 59.18      | 51.79 | 504626-2 |              |
| 3                                                         | A11FFC-0203D-ND   | 69.46 | 61.74      | 54.03 | 504626-3 |              |
| 5                                                         | A11FFC-0205D-ND   | 75.17 | 66.82      | 58.47 | 504626-4 |              |
| 10                                                        | A11FFC-0210D-ND   | 89.48 | 79.54      | 69.60 | 504626-5 |              |

## Multimode InGaAs Photodetector

## ST Style

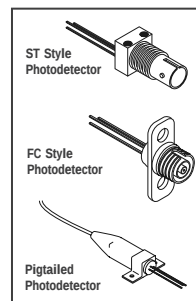
The AMP multimode design using InGaAs PIN photodetectors offer high responsivity for nearly all digital and analog fiber optic applications. The unique design balances high-speed performance with noise-free linear output. Spectral response has been optimized for the long wavelength region of 1150 nm to 1600 nm. **Features:** • High reliability passivated planar structure • High responsivity • Low dark current • Low capacitance • Hermetically sealed TO-18 style package installed in industry standard ADMs • -40° to +85°C operating temperature range

## Pigtailed

AMP pigtailed InGaAs PIN photodetectors offer high responsivity for nearly all digital and analog fiber optic applications. Spectral response has been optimized for the long wavelength region of 1150 nm to 1600 nm. The modules are designed for board mounting.

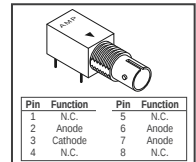
## OC-1 PIN/Preamp Modules

The AMP PIN/Preamp module offers an InGaAs PIN photodetector coupled with a GaAs transimpedance amplifier. The module also includes on chip AGC for wide dynamic range (40 dB optical) as well as low noise, wide bandwidth operation for 1300 or 1550 nm. The PIN/Preamp module is ideally suited for data rates ranging from 1 Mb/s up to SONET OC-1 fiber optic receiver applications. **Features:** • 60 MHz analog bandwidth • Low noise • -43 dBm sensitivity • Automatic gain control • Industry standard ADM • Choice of pinout configuration



| Description                   | Digi-Key Part No. | 1      | Price Each | 10       | 25 | AMP Part No. |
|-------------------------------|-------------------|--------|------------|----------|----|--------------|
| <b>ST Style</b>               |                   |        |            |          |    |              |
| Multimode, Standard           | A20197-ND         | 85.50  | 76.00      | 259013-1 |    |              |
| Multimode, Premium            | A20198-ND         | 92.25  | 82.00      | 259013-2 |    |              |
| Singlemode, Elite             | A20199-ND         | 94.50  | 84.00      | 259013-3 |    |              |
| Multimode, High Responsivity  | A20201-ND         | 105.75 | 94.00      | 259013-6 |    |              |
| <b>Low Profile ST Style</b>   |                   |        |            |          |    |              |
| Multimode, Standard           | A20200-ND         | 85.50  | 76.00      | 259013-5 |    |              |
| <b>FC Style</b>               |                   |        |            |          |    |              |
| Multimode, Standard           | A20202-ND         | 85.50  | 76.00      | 259015-1 |    |              |
| Multimode, Premium            | A20203-ND         | 92.25  | 82.00      | 259015-2 |    |              |
| Singlemode, Elite             | A20204-ND         | 94.50  | 84.00      | 259015-3 |    |              |
| Singlemode, Long Lead         | A20205-ND         | 85.50  | 76.00      | 259015-5 |    |              |
| <b>Pigtailed</b>              |                   |        |            |          |    |              |
| Singlemode, Unterminated      | A20206-ND         | 148.50 | 132.00     | 269046-1 |    |              |
| Singlemode, SC Style          | A20207-ND         | 238.50 | 148.40     | 269046-3 |    |              |
| <b>Preamp Module</b>          |                   |        |            |          |    |              |
| ST Style, Single Power Supply | A20208-ND         | 236.25 | 147.00     | 269036-1 |    |              |

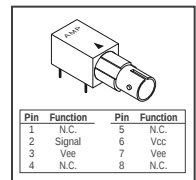
## Short Wavelength LED Transmitter



This transmitter contains a high speed 840 nm GaAlAs LED. This LED in conjunction with the package lensing is designed to efficiently couple light into optical fibers ranging in size from 50/125µm up to 200 µm PCS. These devices were designed to work together with the 125 MHz PIN/Preamp Receiver to make up a complete high speed fiber optic link. **Features:** • ST-Style port • Wave solderable

| Description              | Digi-Key Part No. | 1     | Price Each | 10    | 25       | AMP Part No. |
|--------------------------|-------------------|-------|------------|-------|----------|--------------|
| ST Board Mt., High Speed | A20209-ND         | 17.33 | 15.40      | 13.48 | 269110-1 |              |
| ST Panel Mt., High Speed | A20210-ND         | 17.33 | 15.40      | 13.48 | 269110-2 |              |

## Short Wavelength PIN/Preamp Receiver



This receiver is a low cost solution for high speed short wavelength fiber optic communication designs. The lensing of the device optimizes response for fiber sizes between 50 and 100µm. The output of the receiver is an analog, low impedance, emitter follower voltage source capable of driving an amplifier or level translating circuitry. The device can be used in either the analog mode or translated to ECL/TLTL levels for use in a digital mode at data rates up to 155Mb/s. **Features:** • Data rates up to 155 MB/s • Link distances up to 4 km • ST-style ports • Wave solderable

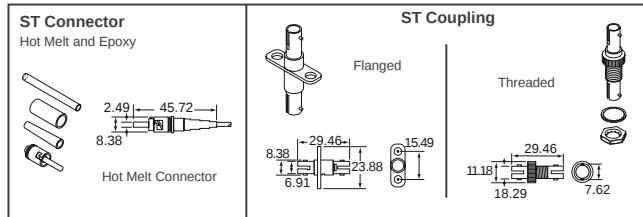
| Description    | Digi-Key Part No. | 1     | Price Each | 10    | 25       | AMP Part No. |
|----------------|-------------------|-------|------------|-------|----------|--------------|
| ST Board Mount | A20211-ND         | 17.78 | 15.80      | 13.83 | 269111-1 |              |
| ST Panel Mount | A20212-ND         | 17.78 | 15.80      | 13.83 | 269111-2 |              |

# 3M Fiber Optics

## ST\* Connectors and Accessories

The design of the 3M ST\* Connector product line is compatible with AT&T ST\* Connectors, Systimax\* components, and other ST\* connector products.

The 3M products are made with a high quality PC finish on zirconia ceramic ferrules.



### ST\* Bayonet Connectors

| Mode    | Type      | Fiber Size (µm) | Attenuation  | Reflection  | Digi-Key Part No. | Price Each        |
|---------|-----------|-----------------|--------------|-------------|-------------------|-------------------|
|         |           |                 |              |             |                   | 1 10 25           |
| Multi-  | Hot Melt  | 125             | <0.2 dB typ. | ≤25 dB typ. | MF6100-ND         | 8.78 7.80 5.85    |
| Multi-  | Crimplink | 125             | <0.2 dB typ. | ≤29 dB typ. | MF6901-ND         | 9.63 8.25 7.70    |
| Single- | Epoxy     | 126             | <0.3 dB typ. | ≤45 dB typ. | MF8106-ND         | 11.25 10.00 7.50  |
| Single- | Epoxy     | 127             | <0.3 dB typ. | ≤45 dB typ. | MF8107-ND         | 19.80 17.60 13.20 |

### ST\* Couplings

• Operating Temperature: -40°C to 85°C/-40°F to 185°F • Housing Material: Nickel Plated Zinc

| Mode    | Description                                 | Sleeve Material  | Digi-Key Part No. | Price Each  |
|---------|---------------------------------------------|------------------|-------------------|-------------|
|         |                                             |                  |                   | 1 10        |
| Multi-  | Threaded Coupling PAL Nut                   | Beryllium Copper | MF6110-ND         | 4.38 3.75   |
| Multi-  | Threaded Coupling w/Panel Nut & Lock Washer | Beryllium Copper | MF6112-ND         | 2.81 2.50   |
| Multi-  | Duplex Threaded                             | Beryllium Copper | MF6113-ND         | 13.05 11.60 |
| Single- | Threaded Coupling                           | Zirconia Ceramic | MF8110-ND         | 16.10 13.80 |
| Single- | Threaded Coupling w/Panel Nut & Lock Washer | Zirconia Ceramic | MF8119-ND         | 9.56 8.50   |
| Single- | Duplex Threaded Coupling                    | Zirconia Ceramic | MF8113-ND         | 25.88 23.00 |

MF6150-ND Hot Melt Termination Kit for ST\* Connectors.....\$1049.97  
MF8250-ND Epoxy Termination Kit for ST\* Connectors.....\$1800.00

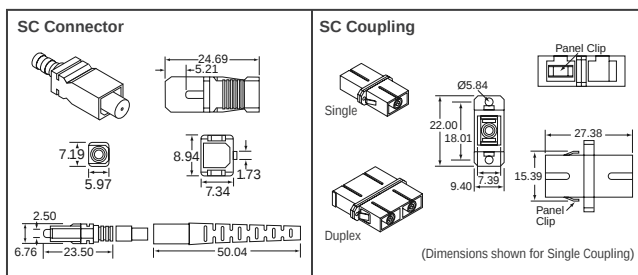
## SC Connectors and Accessories

SC Connectors comply with NTT, JIS, ISO/IEC, and TIA/EIA component and ISO/IEC, CENELEC, ANSI, TIA/EIA-568A and BSCSI system and cabling level standards.

Epoxy SC Connectors are available in single-mode and multimode utilizing epoxy adhesive.

Hot-Melt SC Connectors are available in multimode, preloaded with hot melt adhesive, enabling a field termination in less than two minutes for multiple terminations.

Crimplink SC Connectors combine the speed of non-adhesive connectors with the performance characteristics of epoxy and hot-melt connectors. They are the ideal solution for emergency restoration work or for quickly making fiber connections at a desk.



### SC Connectors

| Mode   | Type      | Fiber Size (µm) | Attenuation  | Reflection  | Digi-Key Part No. | Price Each        |
|--------|-----------|-----------------|--------------|-------------|-------------------|-------------------|
|        |           |                 |              |             |                   | 1 10 25           |
| Multi  | Hot Melt  | 125             | <0.2 dB typ. | ≤25 dB typ. | MF6300-ND         | 11.48 10.20 7.65  |
| Multi  | Crimplink | 125             | <0.3 dB typ. | ≤27 dB typ. | MF6900-ND         | 11.38 9.75 9.10   |
| Single | Epoxy     | 126             | <0.3 dB typ. | ≤45 dB typ. | MF8306-ND         | 12.94 11.50 8.63  |
| Single | Epoxy     | 127             | <0.3 dB typ. | ≤45 dB typ. | MF8307-ND         | 16.31 14.50 10.88 |

### SC Couplings

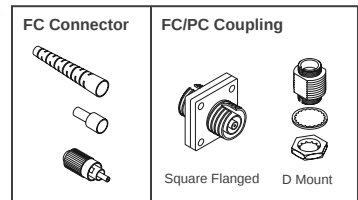
| Description              | Operating Temperature        | Digi-Key Part No. | Price Each        |
|--------------------------|------------------------------|-------------------|-------------------|
|                          |                              |                   | 1 10 25           |
| Standard Density         | -40°C - 85°C / -40°F - 185°F | MF8310-ND         | 11.25 10.00 7.50  |
| Duplex, Standard Density | -40°C - 75°C / -40°F - 167°F | MF8313-ND         | 20.25 18.00 13.50 |

MF6955-ND Crimlink Field Termination Kit for SC Connectors .....\$600.00

## FC/PC Connectors and Accessories

The 3M PC/FC Connector is designed for advanced fiber optic systems requiring exceptional stability and low reflections.

It is a field mountable, pull-proof connector that is fully compatible with all PC connectors adhering to NTT specifications.



### FC/PC Connectors

| Mode    | Type     | Fiber Size (µm) | Attenuation  | Reflection  | Digi-Key Part No. | Price Each        |
|---------|----------|-----------------|--------------|-------------|-------------------|-------------------|
|         |          |                 |              |             |                   | 1 10 25           |
| Multi-  | Hot Melt | 125             | <0.2 dB typ. | ≤25 dB typ. | MF6200-ND         | 12.15 10.80 8.10  |
| Single- | Epoxy    | 126             | <0.3 dB typ. | ≤45 dB typ. | MF8203-ND         | 15.08 13.40 10.05 |
| Single- | Epoxy    | 127             | <0.3 dB typ. | ≤45 dB typ. | MF8204-ND         | 17.33 15.40 11.55 |

### FC/PC Couplings

| Mode    | Housing Design | Operating Temperature      | Digi-Key Part No. | Price Each       |
|---------|----------------|----------------------------|-------------------|------------------|
|         |                |                            |                   | 1 10 25          |
| Multi-  | Square Flanged | -40° to 85°C/-40° to 185°F | MF6210-ND         | 9.00 8.00 6.00   |
| Single- | Square Flanged | -40° to 85°C/-40° to 185°F | MF8210-ND         | 11.25 10.00 7.50 |
| Single- | D-Mount        | -40° to 85°C/-40° to 185°F | MF8211-ND         | 14.06 12.50 9.38 |

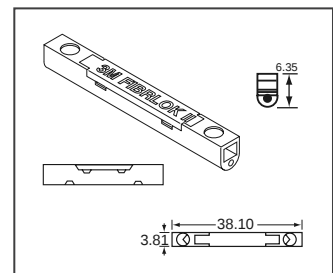
MF6350-ND Hot Melt Field Termination Kit for SC and FC/PC Connectors .....\$1049.84  
MF8350-ND Epoxy Termination Kit for SC and FC/PC Connectors .....\$1800.00

## Universal Optical Fiber Splice

The Fibriok II 2529 Universal Optical Fiber Splice can be used with either single-mode or multimode fibers with a (nominal) glass cladding diameter of 125 microns. The 2529 splice can be used with any combination of fibers with coating diameters from 250 to 900 microns.

### Specifications:

- Fiber Diameter: 125µm
- Mean Insertion Loss: <0.1 dB
- Reflectance: <-35 dB from -40° to 80°C (-40°F to 176°F)
- Tensile Strength: 1.0 lb. (.45kg) min.; >3.0 lbs. (1.36kg) typical



| Description                                                                                         | Digi-Key Part No. | Price Each |
|-----------------------------------------------------------------------------------------------------|-------------------|------------|
| Universal Optical Fiber Splice .....                                                                | MF2529-ND         | 12.25      |
| Universal Optical Fiber Splice Kit.....                                                             | MF2529-K-ND       | 1407.06    |
| Fiber Optic Assembly Tool.....                                                                      | MF2501-ND         | 85.75      |
| Fiber Splice Preparation Kit (includes MF2501 Assembly Tool and Thomas & Betts Cleaving Tool) ..... | MF2530-ND         | 1694.49    |

## Optical Mini-Source and Mini-Meter

The 3M brand Photodyne™ 2XT Optical Mini-Source and 3XT Optical Mini-Meter can be combined to provide complete optical power measurement capabilities. Using the latest in cost-effective design technology, the units perform a variety of measurements, including: • Attenuation testing • Return loss measurement • Link conformance testing • Fiber identification. **Features:** Single-mode or multimode use • Compact, lightweight case • Surface-mount circuit integration

**2XT-8513-X Specifications:** • Operating Temperature: 0°C to 40°C • Wavelength: 850/1300 nm • Typical Power Output: (62.5/125µm fiber) -10 dBm @ 850 nm; -20 dBm @ 1300 nm • Source Type: LED • Power Requirements: 9-volt alkaline battery • Typical Battery Life: 5 hours

**3XT Specifications:** • Operating Temperature: 0°C to 40°C • Wavelength: 850/1300/1550 nm • Sensor Type: Ge • Measurement Range: +3 to -50dBm • Measurement Accuracy: 10% • Measuring Resolution: 0.1 dBm • Power Requirements: 9-volt alkaline battery • Typical Battery Life: 28 hours

| Description                   | Digi-Key Part No. | Price Each    |
|-------------------------------|-------------------|---------------|
|                               |                   | 1 5           |
| 850/1300nm LED w/ST Connector | MF2XT-8513-T-ND   | 787.50 735.00 |
| 850/1300/1550nm Power Meter   | MF3XT-ND          | 408.00 380.80 |

## Fiber Identifier

The 3M™ Photodyne™ 8000XGT Fiber Identifier is designed for fast, accurate identification and traffic testing of fiber optic lines without cutting the fiber line or interrupting service. Ideal for use during routine maintenance and line modification, this small hand held unit can be used to locate any particular fiber line, non-obtrusively identify live fibers and determine whether traffic is present. **Features:** • Greater than -50 dBm sensitivity @ 1550 nm • Low insertion loss at 1550 nm on all fiber types • Can be used on 250 µm, 900 µm, ribbon, and 3mm jacketed cable • 1 kHz and 2 kHz tone detection

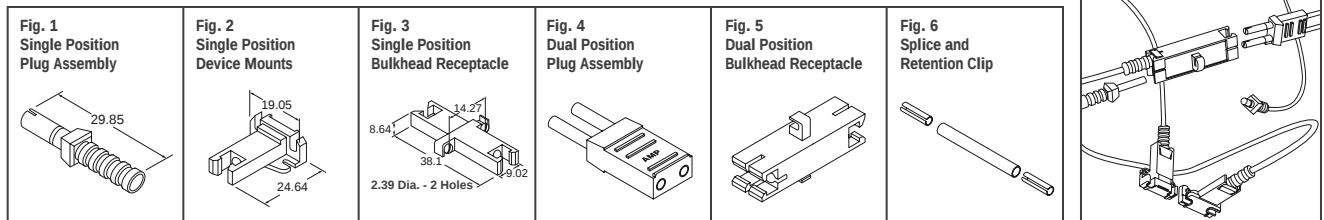
MF8000XGT-ND Fiber Identifier.....\$1794.00

1-800-344-4539

218-681-6674 • FAX: 218-681-3380 • www.digikey.com

# AMP Fiber Optics OPTIMATE® DNP (Dry Non-Polish) Connectors

Dimensions in mm.



## Optical Characteristics:

- Insertion Loss: 2dB • Ref.: FOTP 34 Method C

## Environmental Characteristics:

- Temperature Range: -40°C to +60°C

## Mechanical Characteristics:

- Insertion Force: 13.34N [3 lb] (plug to receptacle) • Cable retention plug: 8.89N [2 lb.]

## Materials:

- Retention Clip: Copper alloy, plated • Splice: Copper alloy, plated • Connectors: Thermoplastic

The economics of using fiber-optic systems is a complex subject. Comparisons of the costs of fiber-optic systems and copper-wired systems are difficult and open to debate. Proper evaluations must be based on the users' needs.

Widespread application of fiber-optic technology will depend on its providing performance equal to or superior to copper cable, and at a lower cost. That fiber-optics can outperform cable in some areas seems established. That it can do so more cheaply, is not the rule. As with many new technologies, the prices of fiber-optic components have been dropping, often dramatically. Better products at cheaper prices have been introduced continually, and manufacturers' volume production and maturity of experience are combining to produce significant price reductions. In

contrast, prices have been rising for copper cable and associated hardware. Although the point at which fiber-optic systems become less expensive than copper cable systems depends on the application, fiber-optics are becoming more attractive every day.

Users evaluating fiber-optics should consider costs beyond those for the components themselves. Considerations include the education needed to design a fiber-optic system and the costs of training craftsmen and technicians to handle, install, and maintain fiber-optic systems. On the other hand, the small size, light weight, and flexibility may present offsetting cost advantages. Handling, storage, and installation costs may be reduced.

| Fig. | Description                         | Digi-Key Part No. | 1    | 25    | Pricing 100 | 1,000   | AMP Part No. |
|------|-------------------------------------|-------------------|------|-------|-------------|---------|--------------|
| 1    | Single Position Plug Assembly       | A1703-ND          | 1.07 | 23.16 | 74.10       | 547.49  | 228008-1     |
| 2    | Single Position Device Mounts       | A1705-ND          | .95  | 20.47 | 65.49       | 483.89  | 228043-1     |
| 3    | Single Position Bulkhead Receptacle | A1707-ND          | 1.15 | 24.87 | 79.59       | 588.05  | 228042-1     |
| 4    | Dual Position Plug Assembly         | A20128-ND         | 2.12 | 45.88 | 146.82      | 1084.85 | 228088-1     |
| 5    | Dual Position Bulkhead Receptacle   | A20129-ND         | 1.47 | 31.73 | 101.54      | 750.27  | 228045-1     |
| 6    | Plastic Fiber Splice Connector      | A20130-ND         | .25  | 3.74  | 8.98        | 66.34   | 228051-1     |
| 6    | Plastic Fiber Retention Clip        | A20131-ND         | .22  | 4.01  | 11.54       | 85.28   | 228046-1     |

|          |                                                                                                  |         |
|----------|--------------------------------------------------------------------------------------------------|---------|
| A1799-ND | Technicians Guide to Fiber Optics - For more information on the technical aspect of fiber optics | \$34.43 |
|----------|--------------------------------------------------------------------------------------------------|---------|

| Description                          | Digi-Key Part No. | 1      | 5       | AMP Part No. |
|--------------------------------------|-------------------|--------|---------|--------------|
| Hot Knife, Plastic Fiber             | A99100-ND         | 39.04  | 167.33  | 228085-1     |
| Single Position Plastic Cutting Tool | A99102-ND         | 27.44  | 117.60  | 228837-1     |
| Dual Position Plastic Cutting Tool   | A99103-ND         | 74.55  | 319.50  | 228836-1     |
| Plastic Fiber Designer Kit           | A9824-ND          | 263.38 | 1128.75 | 501218-1     |

| Note: X in Part No. = Meter Per Roll<br>FIBER OPTIC CABLE (O.D. = .089) |               |       |       |       |       |        |
|-------------------------------------------------------------------------|---------------|-------|-------|-------|-------|--------|
| Digi-Key<br>Part No.                                                    | Price (Meter) |       |       |       |       |        |
|                                                                         | 5             | 10    | 15    | 25    | 50    | 100    |
| A1700-X-ND                                                              | 11.20         | 20.80 | 30.24 | 48.00 | 80.00 | 144.00 |

## Industrial Fiber Optics Kits

### Experimenters Kit

1 meter data link with matched LED and phototransistor. Includes fiber and data sheets.

FB104-ND (IF-E10) .....\$6.95 each

### Educational Kit

1 meter data link with matched LED and phototransistor. Includes fiber, data sheets, printed circuit boards and electronic components to build a complete optical link. Assembly and tutorial information included.

FB105-ND (IF-E22) .....\$16.95 each

### Plastic Fiber Tool Kit

Exclusively for use with the standard 1000 µm plastic fiber (A1700-ND). Contains: NO-Nik fiber optic strippers, hot knife, cutting and termination tool, dry non-polish termination fixture, replacement blade, instruction sheet, enclosed in a break-resistant tool box.

FB108-ND (IF-TK1) .....\$89.95 each

### NEW! Professional Fiber Cutter

Easy to use fiber cutter with 6 different fiber apertures. Cuts 750 and 1000 µm simplex and duplex optical fiber, 750, 1000, 1500 and 2000 µm bare fibers, and 16-, 32-, 48-, 64-fiber light guides. Also splits 750 and 1000 µm duplex fibers.

FB131-ND (IF-FC1) .....\$23.67 each

### NEW! Fiber Optic Tool Kit

Compact tool kit with tools and procedures for polishing, stripping jacket from fibers, cutting, hot knife for connector-less and connectorized plastic optical fibers. Includes fiber optic stripper, hot knife, fiber cutter (FB131-ND), water dispenser, polishing pad and films, polishing puck and storage container.

FB130-ND (IF-TK4) .....\$119.93 each

### Fiber Optic Splice Kit

Contains 10 splices for the 1000 µm ESKA (A1700-ND) fiber. Includes detailed instructions on splice procedure. Requires no polishing, adhesives or special tools. Very simple field assembly.

FB109-ND (IF-C-S10) .....\$6.95 each

### Fiber Optic Lab Manual

Experiments include: • Identifying the components • Making a light guide • Fiber optic cable transmission • Connectors and splices • Index matching • Fiber terminations • Speed of optoelectronic devices • Fiber optic transmitters • Receiver amplifier design

FB100-ND (IF-LM) Lab Manual .....\$7.95 each

### Fiber Optic Speed of Light Apparatus

Low-cost yet, ingenious system which teaches students how to measure the speed of light and to understand the "why" of their learning. The apparatus consists of a circuit board in protective plastic enclosure, two fiber optic cables, test connections for all outputs and a 110 VAC-to-DC power adapter. A 20 MHz dual-trace oscilloscope is required.

FB116-ND (IF-SL-A) .....\$175.00 each

Speed of Light Apparatus (Assembled) .....\$175.00 each

FB117-ND (IF-SL-K) .....\$125.00 each

Speed of Light Apparatus (Unassembled) .....\$125.00 each

### Fiber Optic Mini Course

Covers both the communications and industrial applications of fiber optics. After completion of the Lab Exercise, a fully functional digital communication link will be constructed and can be used by the student for practical applications.

FB102-ND (IF-MC10) .....\$29.95 each

### Fiber Optic 15 Week Course

A program to fill the needs of vocational schools and universities in fiber optics. Few prerequisites are needed except for a basic understanding of electronics. The use of mathematics is kept limited with emphasis on practical applications. The complete course covers the classroom and lab; and consists of a text, lab manual and lab kit.

FB103-ND (IF-SC10) .....\$75.00 each

### Emitter/Detector Kits

Set of Motorola MF0072 phototransistor and MFOE71 IR LED.

FB111-ND (IF-C-D72/E71) .....\$11.69 each

### Optical Voice Link

Convert voice into light and then couple it into, through, and out of an optical fiber. Gain experience and knowledge by working with many components. The Optical Voice Link requires no additional components and can be extended up to 200 feet.

FB114-ND (IF-OVL10-K) .....\$49.95 each

## Emitters and Detectors

Fiber family of low-cost, medium frequency, short distance fiber optic emitters and detectors. • Connector-less interface • Interference-free

transmission from light-tight housing • Simple fiber termination and connection. Each emitter and detector consists of a PVC housing, an internal active element such as an LED or photodiode, and a cinch nut to hold the fiber in place. The PVC housing retains the active element and the cinch nut

while optimizing coupling between the active element and the jacketed 1000µm plastic fiber. **Shared Ratings:** Max. Ratings and Characteristics (T<sub>A</sub>=25°C): Operating and Storage Temperature Range (T<sub>OP</sub>, T<sub>STG</sub>): -40° to 85°C. Rated above 25°C: 1.33mW/°C.

| Description                          | Reverse Voltage V <sub>R</sub> | Power Dissipation P <sub>TOT</sub> T <sub>A</sub> =25°C | Forward Current I <sub>F</sub> | Surge Current I <sub>FSM</sub> t≤10 µsec | Max. Photo-sensitivity PEAK | Output Power Coupled* | Digi-Key Part No. | Price Each | IFO Part No. |
|--------------------------------------|--------------------------------|---------------------------------------------------------|--------------------------------|------------------------------------------|-----------------------------|-----------------------|-------------------|------------|--------------|
| Infrared LED                         | 3.0V                           | 100mW                                                   | 50mA                           | 2A                                       | 950nm                       | 100µW                 | FB118-ND          | 3.48       | IF-E91A      |
| Infrared LED                         | 3.0V                           | 100mW                                                   | 100mA                          | 2A                                       | 880nm                       | 75µW                  | FB119-ND          | 3.65       | IF-E91B      |
| Plastic Fiber Optic Blue LED         | 5.0V                           | 60mW                                                    | 35mA                           | 75mA                                     | 430nm                       | 25µW                  | FB125-ND NEW!     | 14.38      | IF-E92A      |
| Plastic Fiber Optic Blue LED         | 5.0V                           | 60mW                                                    | 35mA                           | 75mA                                     | 470nm                       | 75µW                  | FB126-ND NEW!     | 14.38      | IF-E92B      |
| Plastic Fiber Optic Green LED        | 5.0V                           | 60mW                                                    | 35mA                           | 150mA                                    | 530nm                       | 75µW                  | FB127-ND NEW!     | 14.38      | IF-E93       |
| Fiber Optic LED                      | 5.0V                           | 60mW                                                    | 35mA                           | 150mA                                    | 660nm                       | <50µW                 | FB128-ND NEW!     | 4.88       | IF-E96       |
| Plastic Fiber Optic Super-Bright LED | 5.0V                           | 100mW                                                   | 40mA                           | 200mA                                    | 660nm                       | <100µW                | FB129-ND NEW!     | 6.50       | IF-E97       |

\* Into plastic fiber (1mm core diameter). Distance lens to fiber <0.1mm, 10cm polished fiber, IF=10mA

| Description       | Rise/Fall Time tr,tf | Total Capacitance CT | Dark Current (V <sub>R</sub> =30 Volts, EE=0) ID | Reverse Breakdown Voltage V(BR)R | Max. Photo-sensitivity PEAK | Power Dissipation PTOT | Digi-Key Part No. | Price Each | IFO Part No. |
|-------------------|----------------------|----------------------|--------------------------------------------------|----------------------------------|-----------------------------|------------------------|-------------------|------------|--------------|
| Active Photodiode | 5nS                  | 4pF                  | <60nA                                            | 60.0V                            | 850nm                       | 100mW                  | FB120-ND          | 4.18       | IF-D91       |

| Description            | Collector Emitter Voltage V <sub>CEO</sub> | Emitter Collector Voltage V <sub>ECO</sub> | Collector Current IC | Collector Peak Current I <sub>C</sub> t=1ms | Max. Photo-sensitivity PEAK | Power Dissipation PTOT | Digi-Key Part No. | Price Each | IFO Part No. |
|------------------------|--------------------------------------------|--------------------------------------------|----------------------|---------------------------------------------|-----------------------------|------------------------|-------------------|------------|--------------|
| Active Phototransistor | 30.0V                                      | 5.0V                                       | 50mA                 | 100mA                                       | 850nm                       | 100mW                  | FB121-ND          | 3.65       | IF-D92       |
| Active Photodarlington | 15.0V                                      | 5.0V                                       | 50mA                 | 100mA                                       | 850nm                       | 100mW                  | FB122-ND          | 5.65       | IF-D93       |

| Description                                 | Supply Voltages V <sub>S</sub> | Voltage @ Output Lead | Sinking Current DC IC | Source Current IO | Max. Photo-sensitivity PEAK | Power Dissipation PTOT | Digi-Key Part No. | Price Each | IFO Part No. |
|---------------------------------------------|--------------------------------|-----------------------|-----------------------|-------------------|-----------------------------|------------------------|-------------------|------------|--------------|
| Photologic Detector w/Totem-pole Output     | 18.0V                          | —                     | 50mA                  | 10mA              | 800nm                       | 100mW                  | FB123-ND          | 6.55       | IF-D95T      |
| Photologic Detector w/Open Collector Output | 18.0V                          | 35.0V                 | 50mA                  | —                 | 800nm                       | 100mW                  | FB124-ND          | 6.55       | IF-D95OC     |

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