

1 AMP SOLID STATE RELAY
Grayhill #70YY14350. In-line solid-state relay. Output, 1 Amp / 120Vac. Input not listed on part, but appears to be the typical 3-32 Vdc control voltage. 1.52" x 0.68" x 0.18" thick. UL.

CAT# SRLY-10

10 for \$1.50 each

\$175 each

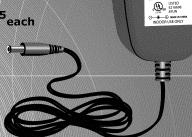
12 VDC 200 MA WALI TRANSFORMER

CUI #KA12D120020024U 2.5mm coax power plug, center positive.

CAT# DCTX-120

100 for \$2.25 each

\$3²⁵each





SALE! FLASHING, TRI-COLOR LED

Special, reduced pricing on this great attention-getting LED. Programmed to flash red, green and blue for about 5 seconds, then the colors fade in and out for the next 30 seconds. Ideal for jewelry, costumes, automobiles, audio equipment, signs and displays. Standard water-clear 5mm (T1 3/4) package. 3.5Vdc @ 40mA \$ 2 75 each

CAT # LED-95

10 for \$2.50 each 100 for \$2.00 each

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CAR MIRROR MOTORS

Side-view mirror assembly contains two small 12 Vdc motors with push/pull worm gear mechanisms that raise and lower a 4.28" square plastic platform. The motors can be separated from the larger assembly and used individually. See page 83 for more information.

CAT# DCM-273 \$7.00 per assembly

RAIN SENSOR TRANSMITTER / RECEIVER

Designed for use in a wireless rain sensor, the transmitter operates on two 3V, CR2032 coin cells, and the receiver operates on 24 Vdc. The receiver has a SPDT, 3A relay



that can be used for switching another device. The receiver also has three status LEDs, red, green and amber. The units operate at least up to 100 feet and probably further. We don't have official instructions or specs. Depending on what buttons are pushed and for how long and depending on which leds are lighted, the relay may or may not switch. We supply a basic hook-up sheet to get you started with your own experiments. The batteries are included with the transmitter. The receiver requires a 24 Volt DC power source.

CAT# EX-107 \$6.00 each

KEYCHAIN REMOTE CONTROL

Control 12 Vdc devices using keychain on/off remote switch. Ideal for automotive applications, but can also be adapted to home use with the addition of a 12 Volt relay. Black-box receiver switches 12 Vdc loads up to 15 Amps when prompted by two-button keychain transmitter control. Receiver is 2.5" x 1.8" x 0.9" thick. Includes two keychain transmitters with batteries (VR22/CN22/CN23A) and hook-up diagram. CAT# RC-10 \$18.75 each

VERY SPECIAL PRICING ULTRABRIGHT LEDs

Best pricing ever!
5mm (T 1 3/4) water clear
LEDs. Comparable brightness to our regular ultrabright LEDs, but exact specs unknown.

WHITE **CAT# LED-121** 65¢ each 100 for 50¢ each • 1000 for 35¢ each

BLUE **CAT# LED-122** 70¢ each 100 for 45¢ each • 1000 for 35¢ each

2.1 mm DC POWER JACK

Normally closed shunt opens when plug is inserted. 2.1mm pin (mates w/ DCSID) solder lugs. Large quantity available!



CAT# DCJ-1 35¢ each • 10 for 30¢ each 100 for 19¢ each • 500 for 16¢ each 1000 for 12¢ each • 5000 for 10¢ each

14 LED FLASHLIGHT

Good-looking, compact aluminum flashlight.
Water-resistant.
14 ultrabright white LEDs provide plenty

of clear, bright light. Reliable on/off pushbutton switch. Powered by three AAA batteries (not included). 4.6" long x 1.3" diameter.

CAT# FL-140 \$9.95 each

28 LED FLASHLIGHT

Compact, water-resistant aluminum flashlight. Powered by 28 ultrabright white LEDs, this is our brightest LED flashlight to date. Reliable

on/off pushbutton switch.

Brushed aluminum finish. 5.35" long x 1.2" dia.
handle, 1.8" diameter lens. Operates on 3 AAA batteries (not included). Ideal for glove box or tool kit.

CAT# FL-28 \$ 15.95 each

BRIGHT, 14-LED TABLE LAMP

Small, attractive, light-weight table lamp with 8" long adjustable gooseneck. Provides very bright illumination for reading or detail work. Requires three AAA batteries (included).

CAT# FL-347 \$9.85 each



LASER POINTER / PEN



Good-looking, good quality, ball point pen with a bright push-button laser built into the back end. Projects a bright red point of light comparable to any laser pointer we have ever sold. Metallic-grey pen was a promotional item for a medical company whose logo is imprinted on it. Replaceable ink cartridge and batteries. 4 AG3 batteries are included. Individually boxed. Excellent price for a laser pen of this quality. CAT# LP-100 \$3.50 each 25 for \$3.00 each • 100 or more \$2.50 each

6 DEVICE UNIVERSAL REMOTE CONTROL

Advent #ADR660. Replace lost or broken remotes. Replace 6 remotes with 1. Universal remote works for most popular brands of TV, DVD, VCR, Satellite or cable boxes. Includes instruction sheet with list of programming codes, or use code search to find appropriate code. Guide Key for easy navigation of onscreen guides. Operates on two AAA batteries (not included).

CAT# REM-60 \$7.50 each 10 for \$6.75 each

MINI TRIPOD

Super-lightweight and adjustable mini-tripod. Perfect for mini digital cameras for "Self-timer" or low light shots. 4.6" long, it has flexible "goose-neck" legs with rubber feet that adjust instantly to uneven surfaces. Handy pocket-clip. 52 grams.

CAT# TPM-3 \$3.75 each \$2.25 each

QUICK INDEX

See pages 92 and 93 for our COMPLETE INDEX

AC/DC WALL TRANSFORMERS55, 57
ALARMS & ACCESS15, 22, 23, 91, 92
BATTERIES36 - 38 BREADBOARDS73
BUZZERS22, 23
CABLE TIES27
CAMERAS, VIDEO40, 41
CAPACITORS
CHOKES
CIRCUIT BREAKERS20
COMPUTER ACCESS49, 50, 70
CONNECTORS42 - 49
DIODES4, 54
DISPLAYS, LED, LCD4, 5, 85, 86
ELECTROLUMINESCENT7
ENCLOSURES72
FANS17 - 19
FASTENERS26, 27
FILTERS50, 89 FLASHERS6, 8
FLASHLIGHTS3, 8
FUSES20, 21
HARDWARE23, 26 - 28, 71, 73, 79, 91
HEADPHONES24
HEAT SINKS
INTEGRATED CIRCUITS52, 53
KITS 86, 87
KNOBS63, 64
LAMPS6 - 8, 90
LCDS85, 86
L.E.DS
MAGNETS51
METERS, PANEL61 MICROPHONES24, 25
MOTORS 80 - 84
OPTO ELECTRONICS
PELTIER DEVICES19
PIEZO ELEMENTS22, 23
PLUGS30, 43 - 50
POTENTIOMETERS62, 63
POWER CORDS88
POWER SUPPLIES40, 57 - 59
PRINTED CIRCUIT SUPPLIES73, 74
PROJECT BOXES72
RELAYS32 - 34
RESISTORS68 SEMICONDUCTORS53, 54
SIRENS22
SOLAR CELLS (Photovoltaics)59
SOLDER ACCESSORIES74
SPEAKERS
SWITCHES9 - 16
TELEPHONE ACCES30, 31
TERMINALS, CRIMP26
TERMINAL STRIPS65
TEST EQUIPMENT & ACC30, 77, 78
THERMISTORS61
TOOLS 26, 28 - 30, 74 - 76 TRANSDUCERS23, 59
TRANSFORMERS55 - 57
TRANSISTORS53
TUBING, HEAT SHRINK28
VIDEO ACCESSORIES40 - 42
WALL TRANSFORMERS55
WIRE, CABLE29, 30

LIGHT EMITTING DIODES (LED <u>10</u>00 STANDARD Color Description CAT# 100 RED - diffused LED-1 10 for \$1.00 .07 .04 T-1 3/4 GREEN - diffused Special Quantity Pricing! LED-2 .05 10 for \$1.50 .12 (5mm) YELLOW - diffused LED-3 10 for \$1.50 .12 .10 **ULTRA-**New, lower prices on these ultra-bright, wide viewing angle 5mm (T 1-3/4) LEDs. Improved brightness and color consistency. **BRIGHT** Water-clear in off-state. T-1 3/4 RED - water clear 3000 mcd LED-88 2 for \$1.00 .35 .22 (5mm) RED - water clear 6000 mcd Superbright! LED-94 .75 .50 .35 BLUE - water clear 1500 mcd LED-74 \$1.75 .95 1 15 1 50 GREEN - water clear 3000 mcd I FD-57 \$2.85 1 95 WHITE - water clear 3000 mcd LED-75 \$2.00 1.65 1.30 YELLOW - water clear 3000 mcd Lower Price! LED-72 .95 .75 .47 AQUA - water clear 1500+ mcd \$2.85 2.20 1.85 LED-77 PURPLE (HOT PINK) - water clear 1000+ mcd LED-92 \$2.85 2.20 1 85 Comparable brightness to our regular ultra-bright LEDs, no flange with flange but exact specs unknown. ULTRA-**BRIGHT** WHITE - water clear, with flange SPECIAL!!! LED-121 65 50 35 T-1 3/4 WHITE - water clear, no flange Reduced Price! LED-115 65 50 35 BLUE - blue off-state, no flange LED-117 \$1.00 .65 .50 (5mm) BLUE - water clear, with flange LED-122 .70 .45 .35 5mm Ultra-Emits blue 395nm UV light. Water-clear lens. 3.7 Vdc, 20 mA. 30° beam pattern. Ideal for counterfeit bill detection, detection of fluorescence in Violet LED minerals, black-light posters. ULED-2 1.15 .95 RED - diffused .08 MI FD-1 10 for \$1.00 07 MINIATURE GREEN - diffused MLED-2 10 for \$1.25 .10 .08 T-1 YELLOW - diffused MLED-3 10 for \$1.25 .10 .08 (3mm) RED - point source 10 for \$1.00 MLED-7 .08 .07 GREEN - point source MLED-8 10 for \$1.00 .08 .07 YELLOW - point source MLED-9 10 for \$1.25 .08 .10 Ultrabright Reduced Price! BLUE - point source LED-59 \$1.50 1.20 90 WHITE - diffused Ultrabright LED-83 \$2.85 1.75 1.50 GREEN - Ultrabright - water clear Reduced Price! LED-116 \$1.50 1.20 .90 **FLASHING** Built-in flashing unit 3 - 5 Vdc operation T-1 3/4 (5mm) RED - diffused High Brightness LED-4 2 for .90 .40 .30 **LEDS** T-1 3/4 (5mm) GREEN - diffused LED-4G .50 .45 .40 T-1 3/4 (5mm)YELLOW - diffused LED-4Y 50 45 40 T-1 (3mm) RED - diffused LED-72R .65 .55 .45 T-1 (3mm) GREEN - diffused LED-72G .75 .65 .55 T-1 (3mm) YELLOW - diffused LED-72Y .75 .65 .55 **BI-COLOR** CAT# 1-99 100 1000 T RED / GREEN diffused 35 LED-6 50 45 T-1 3/4 Two leads. Reverse polarity to change color. Yellow on AC. (5mm) RED / GREEN diffused LED-63 .25 35 29 Three leads. Center cathode. Milky-white off-state. **BI-COLOR** CAT# 1-99 100 1000 T-1 RED/GREEN diffused LED-67 35 29 25 Three leads. Center cathode. Milky-white off-state. (3 mm) INFRARED CAT# 100 1000 T 1 3/4 EMITTER, clear lens 3 for \$1.00

4 GREEN LEDS, VERTICAL ASSEMBLY

4 green 3mm diameter LEDs stacked vertically. Mounted on a black plastic block, 0.17" x 0.4" x 0.8" high. Eight pc leads on a 0.1" matrix.

CAT# LED-107 5 for \$1.00

100 for 12¢ each • 500 for 9¢ each

ED

.20

.14

Pocket-size led tester. Makes it easy to check functionality, color, brightness and uniformity. Plug any leaded LED into one of 12 positions on the socket strip to test at current ratings from 2-50ma. The seven middle positions on the

ILED-8

strip are set at 10 mA allowing comparison of LEDs in those spaces. Requires 9 v battery (not included). CAT# LT-100 \$8.95 each

LEDS

1 WATT. ULTRA-ULTRA BRIGHT LED

Cree XLamp™ 7090. Extremely high-brightness LED, capable of operating at 1 Watt and above Long-life, solid-state, low-voltage and current light, ideal for architectural, landscaping and entertainment applications. The surface mount LED is mounted on a 0.80" diameter aluminum disk which serves as a heatsink and provides solder spots to simplify connection.

Note: These are new parts. Because of their sensitivity to misuse, we cannot guarantee them after voltage has been applied. Data sheet available on our web site.

100 degree viewing angle • Maximum forward voltage: 4 Vdc • Maximum forward current: 350/ 700 mA

CAT# LED-109 \$8.00 each White CAT# LED-110 \$11.50 each Green CAT# LED-111 \$11.50 each Blue CAT# LED-112 \$11.50 each

Amber **CAT# LED-113** \$8.00 each

INCREDIBLE, RED-GREEN-BLUE FLASHING

Standard clear T-1 3/4, 5mm package. This tri-color LED sequentially flashes each color quickly for about 5 seconds, then slowly fades the colors in and out over the next 30 seconds. Other colors are created by the mixing of the three main colors. Use in jewelry, costumes, automobiles, audio equipment, signs and displays, any place an eye-catching lighting accent is desired. 3.5 Vdc @ 40mA. **CAT # LED-95** \$ 3.75 each • 100 for \$ 3.00 each

\$2.75 each • 10 for \$2.50 each • 100 for \$2.00 each

LED MOUNTING HARDWARE

Black plastic clips allow snap-in mounting of standard size LE

CLIPS FOR T 1 3/4 (5 mm) LEDs

2 PIECE HOLDER Mounts in 6.3 mm hole.

1 PIECE HOLDER Mounts in 8 mm hole



CLIPLITE HOLDERS FOR T 1 3/4 LEDS Colored polycarbonate lens increases brightness and viewing angle with either diffused or non diffused LEDs. Mounts in 0.25" hole in panels of 0.06" to 0.125" thickness.

RED GREEN YELLOW **CLEAR**

HLDCL-G HLDCL-Y HLDCL-C

HLDCL-R 3 for 0.90 25 20 3 for 0.90 .25 .20 3 for 0.90 25 .20 3 for 0.90 .25 .20

PRICE!

CLIPS FOR T 1 (3 mm) LEDS

1 PIECE HOLDER Mounts in 4.5 mm hole.



LED DISPLAYS



7 SEGMENT DISPLAYS

	Char Ht.	Fits DIP Socket	Color	Description	CAT #	1-9	10-99	100+
֪֞֩֩	0.8" 0.56"	24 pin	Red	C.A. Single Digit	SDA-801	0.55	0.50	0.45
V	0.56"	24 pin	Red	C.C. Dual Digits	TDC-565	1.00	0.85	0.75

0.39" 14-SEGMENT ALPHANUMERIC LED DISPLAY

Ledtech #LC3921-11B. 14-segment alphanumeric LED display. 0.39" high green character. Gray background, white segments. Pins on 0.1" x 0.3" matrix. Fits 20 pin DIP socket. Common cathode. CAT# ANC-392 \$1.50 each • 10 for \$1.35 each • 100 for \$ 1.00 each



BARGRAPH DISPLAYS

TON	DIP Socket	Color	Description	CAT #	1-9	10-99	100+
TOTOTO	20	Red	10 segment	BG-10	1.50	1.25	1.00
	20	Green	10 segment	BG-10G	1.50	1.25	1.00
,11b	20	Yellow	10 segment	BG-10Y	1.50	1 25	1 00

GREEN LINE LED L



13" long light bar with 32 green surface-mount LEDs. A built-in lens focuses the light into a continuous light green line that is approximately 1/16" in thick at a distance of up to 1" from the lens. Operates on 18-24 Vdc. White plastic bar is 13" x 0.25" x 0.55". Three mounting holes and peel-off adhesive mounting strip. 3" leads terminated with 2-pin socket connector (2mm spacing). CAT# LBR-9 \$5.00 each

RED LED LIGHT BAR

Strip of bright red LEDs. Mounted on a 16" long x 0.56" pc board with chip resistors. Optimum voltage appears to be 18 Vdc, 110 mA. 6" wire leads.

CAT# LBR-2 \$ 8.50 each

IAMPS

T-1 3MM DIAMETER LAMPS

T-1 (3MM) w/ BARE WIRE LEADS

	CAT#		100+
5 Volt 115 ma	LP-715		\$40.00
10 Volt 50ma	LP-7218	2/\$1.00	\$40.00
14 Volt 40 ma	LP-7218 LP-23	2/\$1.00	\$40.00

T-1 (3MM) w/ INSULATED WIRE LEADS



1.5v @ 40 ma. 10" leads.

CAT# LP-3 2 for \$1.50 • 100 for 54¢ each

3v @ 55 ma. 10" leads.

CAT# LP-4 2 for \$1.50 • 100 for 54¢ each

14v @ 45 ma. 10" leads.

CAT# LP-6 2 for \$1.50 • 100 for 54¢ each

T-3 1/4 LAMPS

14V 330 MA LAMP with WIRE LEADS

GE # 193. T 3 1/4 size, 0.4" dia. x 1" long lamp with bare 0.7" wire leads. 14 Volts @ 330 mA. Large quantity available. CAT # LP-193 4 for \$ 1.00 100 for \$ 18.00 • 1000 for \$ 100.00

AUTOMOTIVE WEDGE-BASE LAMP

T 3 1/4, 1" X 0.43" diameter, size. 14 volts, 80 ma. CAT# LP-73 3 for \$1.00 • 100 for 23¢ each 500 for 18¢ each • 1.000 for 11¢ each

THREE 12V WEDGE-BASE LAMPS **AND SOCKETS**

Three GE922 wedge base lamps in sockets, connected in parallel with a 2-pin female connector on one end. Lamps are T5 wedge-type rated 12.8V, 0.98 Amps. There is 6.5" of wire between lamps. New assemblies, dusty. CAT# LP-124 \$3.50 each

HIGH-BRIGHTNESS 12 VDC LAMP

1.75" x 0.43" diameter cylindrical lamp with wire leads. 12 Vdc, 2 amps.CAT# LP-122 \$1.00 each • 100 for 70¢ each



6 VOLT LAMP

GE# BRX6V. 6 volt 6W exciter lamp, 0.62" diameter x 1.12" long tubular glass. 70 initial lumens. Lamp base is a double contact prefocus bayonet. 12" wire leads terminate to 0.187" quick-disconnect terminals. Overall length of lamp including base is 1.88". CAT# LP-64 75¢ each 10 for 60¢ each • 100 for 45¢ each

SPECIAL #550 MINI-FLANGE BASE

T-1 (3MM) 5.5 Volts 0.060 Amps CAT# LP-550 5 for \$1.00 100 for \$15.00 • 1000 for \$100.00



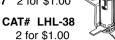
FUSE LAMPS

Popular lamps which are the same size as a 3AG 1/4" X 1 1/4" (AGC) fuse.

VOLTS	CAT#	EACH	<u>10</u>
6	LPFS-6	75¢	\$7.00
8	LPFS-8	\$1.00	\$8.50
12	LPFS-12	75¢	\$7.00

MINI BAYONET LAMP HOLDERS

For use with #44, 47, 1815 etc... standard mini-bayonet base lamps. CAT# LHL-37 2 for \$1.00



T-1 3/4 5MM DIAMETER LAMPS

T - 1 3/4 BI-PIN LAMP

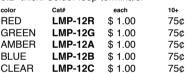
VOLTS AMPS 14 0 080 LP-7382 2 for \$1.00 100 for \$45.00 .040 LP-7387 2 for \$1.00 100 for \$45.00 28.0

T-1 3/4 MIDGET FLANGE LAMP

VOLTS AMPS САТ# 28.0 .040 LP-327 2 for \$1.00 100 for \$45.00

12V INDICATOR LAMPS

12 Vdc @ 50 mA lamp assemblies. Lens is 0.73" square x 0.5" high. Threaded bushing mounts in 0.58" dia. hole up to 0.2" thick. Solder loop terminals.





FLASH ASSEMBLIES

0.75" long xenon flash tube in a small enclosed reflector assembly. Probably removed from reusable or disposable film cameras. Reflector is 0.95" X 0.90" X 0.72". Three flat metal leads.

CAT# FLT-9 3 for \$1.00 100 for 20¢ each

Working 1.5 Vdc, xenon flash assembly with flash tube and reflector, trigger transformer, photoflash capacitor, neon charge indicator and other components. Ready to go. Built-in-AA cell holder. PC board with components, 2.1" x 2.15" x 1.15" in depth. Battery holder adds 1.6" to

length. Includes instructions.

CAT# FSH-12 \$1.85 ea. • 10 for \$1.60 ea.

HALOGEN

MR-16 STYLE

12 Volt, MR-16 bi-pin lamps. 1.975" dia. x 1.46" deep reflector.0.2" pin spacing.

50 WATT Narrow spot. EXT. CAT# HLP-503 \$2.50 each 10 for \$2.00 each



75 WATT

GE# EYJ/CG Q75MR16/NFL/CG. 25 degree beam. CAT # HLP-751 \$2.50 each • 10 for \$20.00

MR-11 STYLE

35 WATT General Electric Q35MR11/NSP(FTE)

MR-11 quartz halogen lamp. 12 Volt, 1.38" dia. Multi-Mirror™ lamp. 0.15" pin spacing. CAT# HLP-350



10 WATT T3 BI-PIN HALOGEN BULBS

Toro #52661. Two pins on 1/8" centers, plug into outdoor landscape lighting fixtures and other standard bi-pin bases. Retail package of 2 bulbs. CAT# HLP-10 \$1.90 per package of 2 bulbs



SOCKETS FOR BI-PIN HALOGEN LAMPS

HALOGEN BI-PIN SOCKET, RECTANGLE

For MR16, MR11, glass 2-pin halogen lamps.GX5.3, G-4 and GY6.35 base.500 Watts. Silver contacts, spring tension socket.



Ceramic base, 1.07" x 0.75" x 0.35". 6" leads. UL.

CAT# HLS-2 \$5.75 each

HALOGEN BI-PIN SOCKET, ROUND

For MR16, MR11, glass 2-pin halogen lamps. GX5.3, G-4 and GY6.35 base. 500 Watts. Silver contacts, spring tension socket. Ceramic base, 0.67" dia. x 0.38". 6" leads. UL. CAT# HLS-3



HALOGEN BI-PIN SOCKET WITH

\$5.75 each

MOUNTING BRACKET Mounting bracket with circular frame for MR-16

halogen lamps. GX5.3 base (round pins only). 660 Watts. CAT# HLS-1 \$9.00 each



300 WATT HALOGEN LAMP, 2-PACK

120 Volt, 300 Watt quartz halogen lamp. Typically used in



ular work lamps, outdoor flood lamps and other highbrightness fixtures. 4.6" long x 0.33" dia. with ceramic ends. Sold in packages of two.

CAT# HLP-300 \$2.50 ea. • 10 for \$2.30 ea.

DUAL FILAMENT LAMP

GE # GH 12 or JC12V50WC6 Dual filament halogen lamp. 0.6" diameter x 1.2" long.



Four pin leads (one bent). CAT # LP-65 2 for \$1.00 each • 10 for 35¢ each

ELECTROLUMINESCENT **STRIPS**

Electroluminescent "glow" strips are used for backlighting displays, control panels, special effects and model lighting. They are flexible and produce practically no heat. They operate on 80-120 Vac and will run off of inverters or standard "house" electricity.

5" X 1" STRIP

Ivory in off-state.Glows green when energized.



Solderable pins extend 0.2" beyond end of panel.

CAT# EL-5 \$3.50 each

20 for \$3.25 each • 100 for \$2.50 each

2.34" X 2.68" ELECTROLUMINESCENT STRIP. USED

Ivory in off-state; glows green when energized. Connection is via two tabs with pc pins. Note: These strips were removed from equipment.

The clear plastic covering may

be dirty and scratched. They can be cleaned.

CAT# FI -9 \$2.00 each

2.8" x 2" ELECTROLUMINESCENT STRIP. "AS-IS"

Salmon-color in off-state: glows light-green when energized. These strips were removed from equipment. Some are dirty and may have



adhesive residue which can be removed with "Googone" or other similar cleaners. Also, the leads may be broken. In order to make a connection it will be necessary to carefully trim back the plastic laminate with a razor or knife to get to what remains of the leads. They will glow if you are willing to do the work. Sold "as-is."

CAT# EL-6 \$1.50 each

EL GLOW STRIP AND INVERTER

30" (2 X 15") electroluminescent strip with batterypowered inverter designed to illuminate a bicycle front fork. The 0.3" wide EL strip has an adhesive backing. The adhesive has some imperfections, but is usable for the most part. Inverter has two settings, On and



Flashing mode. In flashing mode the batteries will last up to 100 hours. These devices might be useful for other light effect projects. Inverter requires two AAA cells (not included). Kit also includes a U-bracket for mounting on bicycle fork. Retail, clam-shell package.

CAT# EL-130 \$9.95 each

MINIATURE CCF1

CCF (Cold Cathode Fluorescent) lamps are ideal for lighting controls, models, LCD backlights and areas where space or heat is a consideration. Features include long life, low power consumption and low voltage operation. They operate on 5 or 12 Vdc depending on the inverter selected.

VELLEMAN CCFT LAMPS

Equipped with leads and connector to fit inverters. Use INV-4 for 4" lamps and INV-12 for 12" lamps

USE 111 V-4 101 4	iamps and inv-12 ion	12	iaiiips.
4" WHITE	CAT # FL-4W		\$6.78 each
12" WHITE	CAT # FL-12W		\$6.78 each
4" GREEN	CAT # FL-4G		\$6.78 each
12" GREEN	CAT # FL-12G		\$6.78 each
4" YELLOW	CAT # FL-4Y		\$6.78 each
12" YELLOW	CAT # FL-12Y		\$6.78 each
4" PINK	CAT # FL-4P		\$6.78 each
12" PINK	CAT # FL-12P		\$6.78 each
4" BLUE	CAT # FL-4B		\$6.78 each
12" BLUE	CAT # FL-12B		\$6.78 each
4" ULTRA VIOL	ET CAT # FL-4UV		\$6.78 each
12" ULTRA VIOI	LET CAT # FL-12UV		\$6.78 each

INVERTERS FOR CCFT LAMPS

Operate on 12 Vdc. The connectors on the 4" and 12" lamps, CAT #s FL-4 and FL-12 mate with the connectors on these inverters. Designed to operate one lamp, will work with most miniature CCFT lamps.

CAT# INV-4 for 4" lamps \$6.80 each **CAT# INV-12** for 12" lamps \$6.80 each

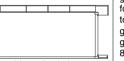
9.5" CCFT LAMP

Mini-fluorescent lamp, 0.2" diameter x 9.5" long. Prepped with 20" siliconrubber insulated leads with 3-pin socket connector. Can be lighted with our 12Vdc inverter, CAT# INV-12, but keyed connector on lamp needs to be shaved to fit connector on inverter.

CAT# FL-95W \$5.35 each

CCFT BACKLIGHT PANEL

Removed from new equipment, this backlight is lighted by an 8.5" long CCFT lamp. A 0.175" thick plastic panel under a



frosted plastic screen is mounted in a plastic frame. When energized it provides a soft white glow over an area 7.75" x 3". Easily disassembled to access the individual components. A CCFT inverter (like our CAT# INV-12) is required to light the lamp.

CAT# BF-231 \$4.50 each

LIGHTS and FLASHERS

FLASHING LIGHTS

For alarm systems, discos, personal use, warning in case of danger, etc. Long-life xenon tube. Protected against polarity reversal. Fully sealed and water-proof. Power supply: 12 Vdc, 150 mA. Flash rate: 120/min. 2.75" dia. X 1.70". Acrylic cover with black ABS base. Threaded mounting studs on 1.7" centers. Hardware included.

	•	
<u>color</u>	CAT#	<u>price</u>
red	STROBE-3R	\$8.95 each
green	STROBE-3G	\$8.95 each
blue	STROBE-3B	\$8.95 each
amber	STROBE-3A	\$8.95 each
clear	STROBE-3C	\$8.95 each

FLASHERS

HALOGEN BICYCLE LIGHT AND LED

FLASHER

Five ultrabright leds can be set for one of seven eye-catching flashing patterns.



Flasher can be mounted on seatpost or attached to arm, leg or belt. Set includes bicycle mounting hardware, armband and beltclip. Lamp requires 2 C cells. Flasher requires 2 AA cells. Batteries not included.

HALOGEN LAMP AND FLASHER SET CAT # FL-14 \$ 7.50 per set

LED FLASHER ONLY
with hardware and armband.
CAT # FSH-6 \$ 4.95 each

FLASHING, CYCLING LED STARS AND BARS

Originally marketed as Christmas lights, these LED covered bars and stars make excellent attention-getting marketing displays or disco-type lighting. In-line pattern generator provides more than 24 different light effects including chasing, burst, wagon wheel, rain fall, progressive and pulsating. Each set of 8 stars or 20 bars operates independently. They cannot be daisy-chained.

LED BARS

Twenty 6.5" long bars on an 11 foot cable. Each green plastic bar has eight leds, 2 red, yellow, amber and green (160 leds total). Each bar has two mounting

holes. 5Vdc, 2 Amp power supply included.

CAT# LVL-2 \$5.50 each • 12 for \$4.75 each

LED STARS (AS-IS)

Eight 6.3" diameter stars. Two groups of four attached to a pattern generator. Each green plastic star has 8 spokes with a red, yellow, amber and green led on each spoke, a total of 32 leds per star, 256 leds per set.

Note: Because of an engineering design flaw the star units were disabled by removing the wall transformers. By adding your own wall transformer, 5 - 6 Vdc, 800 mA or more, the units can be made functional. Because the circuitry may require some tweaking, the stars are being sold "as-is."

CAT# STR-8 \$6.50 each

FLASHLIGHTS and KEYCHAIN LIGHTS

VERSATILE 5-LED "HEADLAMP" / FLASHER

Wide beam, super illumination for "handsfree" use. Five ultrabright leds provide bright, long-lasting illumination in a compact battery-operated lamp. Adjustable elastic headband.

Switch setting for always on or on-off flashing. Lamp is removable from headband for independent use. Magnet on back of lamp allows attachment to car or other metal objects for use as a safety flasher. Shockresistant. Leds consume 90% less power than regular light bulbs. Operates on three AAA cells (not included).

CAT# HL-1 \$6.50 each

HIGH-INTENSITY LED KEYCHAIN

LIGHTS Long-lasting ultrabright, white LED provides ample light to read in the dark, find keyholes, read maps. Keyring and batteries included. An indispensable accessory. A great gift.

MOMENTARY PUSH-SWITCH-STYLE CAT# GL-11 \$2.50 ea. 10 for \$2.25 each 48 for \$2.00 each

SLIDE-SWITCH STYLE CAT# GL-2 \$3.50 ea. 4 10 for \$3.00 each 100 for \$2.35 each



SWITCHES

(brackets) indicate momentary position

SUB MINIATURE TOGGLE

0.2" diameter threaded bushing, 0.4" long bat handle,

S.P.D.T. ON-ON

Rated: 3 amp @ 125 Vac. Solder lug terminals. CAT# SMTS-4 \$1.35 each 10 for \$12.50 • 100 for \$110.00



D.P.D.T. ON-ON

Rated: 3 amp @ 125 Vac. Solder lug terminals. CAT# SMTS-8 \$1.75 each 10 for \$15.50 • 100 for \$135.00



MINIATURE TOGGLE

1/4-40 threaded bushing. 0.43" long handle unless otherwise noted

S.P.D.T. ON-ON

RATED: 6 amp @ 120 Vac. Solder lug terminals.CAT# MTS-4 \$1.00 each 10 for \$9.00 • 100 for \$75.00



S.P.D.T. ON-ON

RATED: 6 amp @ 120 Vac. P.C. terminals. CAT# MTS-4PC \$1.00 each 10 for \$9.00 • 100 for \$80.00 1000 for \$700.00



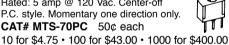
S.P.D.T. **ON-OFF-ON**

RATED: 3 amp @ 120 Vac Center off. Solder lug terminals. CAT# MTS-5 \$1.00 each 10 for \$9.00 • 100 for \$80.00



S.P.D.T. ON-OFF-(ON)

NON-THREADED BUSHING Rated: 5 amp @ 120 Vac. Center-off P.C. style. Momentary one direction only.





S.P.D.T. ON-OFF-(ON)

NON-THREADED BUSHING RATED: 5 amp @ 120 Vac. Momentary one direction only. Handle measures 1".



CAT# MTS-75PC 50¢ each 10 for \$4.00 • 100 for \$30.00

D.P.D.T. ON-ON

RATED: 6 amp @ 120 Vac. Solder lugs. CAT# MTS-8 \$1.25 each 10 for \$10.50 • 100 for \$85.00



DPDT ON-ON, **NON-THREADED BUSHING**

P.C. style. RATED: 5 amp @120 Vac. Extra long flat lever. Handle measures 1" long. **CAT# MTS-85PC** 75¢ each 10 for 65¢ each • 100 for 50¢ each



D.P.D.T. ON-OFF-ON

RATED: 3 amp @ 120 Vac Threaded bushing. Solder lug terminals. CAT# MTS-12 \$1.60 each 10 for \$13.00 • 100 for \$100.00



D.P.D.T. ON-OFF-ON

NON-THREADED BUSHING RATED: 5 amp @ 120 Vac. P.C. terminals. Center-off. \$1.50 each CAT# MTS-120PC 10 for \$13.00 • 100 for \$100.00



S.P.3.T. ON-ON-(ON)

ALCOSWITCH# MTA206TA Single-pole, 3 position. Momentary in one position. Rated 6 amps @ 125 Vac. Solder lug terminals. Requires external CAT# MTS-81 jumper.



\$2.00 each • 10 for \$18.50

S.P.3.T. ON-ON-(ON)

JBT Switch. Single-pole, three position miniature toggle switch. On in all three positions. Momentary in one position. 0.24" plain, non-threaded bushing. Right-angle pc terminals.



CAT# MTS-85RT \$1.75 each

3.P.D.T. ON-ON

Rated 6 Amps, 125 Vac. Solder-lug terminals. CAT# MTS-60 \$2.40 each



3.P.D.T. ON-OFF-ON

Rated 6 Amps. 125 Vac. Solder-lug terminals. \$ 2.60 each CAT# MTS-63



4.P.D.T. ON-ON

Rated 6 Amps, 125 Vac. Solder-lug terminals. CAT# MTS-70 \$ 3.25 each



STANDARD TOGGLE

SPDT TOGGLE SWITCH, 20 AMP

Standard toggle switch, S.P.D.T., ON-ON. Contacts rated 20 Amps @125 Vac. 15/32" threaded bushing mount. Solder-loop terminals, CSA, CE, CAT# STS-18 \$2.00 each



S.P.D.T. ON-OFF-ON

10 for \$ 1.75 each

Rated 6 Amps @ 125 Vac. S.P.D.T.. center-off switch with standard toggle actuator. Standard threaded 15/32" bushing. Screw terminals. UL, CSA. CAT# STS-19 \$2.00 each 10 for \$1.80 each



DUAL SPST TOGGLE SWITCH

Standard-size toggle switch rated 4 Amps @ 125 Vac. Looks like a DPST toggle switch, but it is actually two separate single pole switches. When one is open, the other is closed. 15/32" threaded bushing. Solder terminals. CAT# STS-20 \$1.00 each



DPDT ON-OFF-ON TOGGLE SWITCH

Rated 10 Amps / 125 Vac. Standard 15/32" threaded bushing. Screw terminals



CAT# STS-22 \$2.50 each

S.P.S.T. (ON) OFF

Arcolectric #3901BA, S.P.S.T. (ON) OFF momentary-on toggle switch. Standard 11/16" long bat handle. 15/32" threaded bushing mount. Rated 16 Amps/ 277Vac. 10 Amps / 72 Vdc, 1HP 250 Vac. 1/2HP 125 Vac. Screw-clamp terminals. UL, CSA,

CAT# STS-28 \$2.00 each

S.P.D.T. ON-OFF-ON

Arcolectric #3920BA, S.P.D.T., ON OFF ON center-off toggle switch. Standard 11/16" long bat handle. 15/32" threaded bushing mount. Rated 16 Amps/ 277Vac. 10 Amps / 72 Vdc, 1HP 250 Vac. 1/2HP 125 Vac. Screw-clamp terminals. UL, CSA, CAT# STS-30 \$2.65 each

DPDT (ON) OFF (ON) **TOGGLE SWITCH**

Arcolectric #3972BA. D.P.D.T., center-off momentary both directions, toggle switch. Standard 11/16" long bat handle. 15/32" threaded bushing mount. Rated 16 Amps/ 277Vac, 10 Amps / 72 Vdc, 1HP 250 Vac. 1/2HP 125 Vac. Screw-clamp terminals. UL, CSA, CAT# STS-25 \$4.00 each

DPDT ON-ON TOGGLE SWITCH

Arcolectric #3960BA, D.P.D.T. togale switch. Standard 11/16" long bat handle. 15/32" threaded bushing mount. Rated 16 Amps/ 277Vac, 10 Amps / 72 Vdc, 1HP 250 Vac. 1/2HP 125 Vac. Screw-clamp terminals. UL, CSA, CAT# STS-23 \$3.50 each

DPDT ON-OFF-ON

Arcolectric #3970BA. D.P.D.T., center-off toggle switch. Standard 11/16" long bat handle. 15/32" threaded bushing mount Rated 16 Amps/ 277Vac, 10 Amps / 72 Vdc, 1HP 250 Vac. 1/2HP 125 Vac. Screw-clamp terminals. UL, CSA, CAT# STS-24 \$3.75 each

4.P.D.T. ON-ON

Standard 11/16" long bat handle, 15/32" threaded bushing mount. Rated 10A/250Vac, 15A/125Vac. Screw terminals

CAT# STS-70 \$3.65 each

4.P.D.T. ON-OFF-ON

4.P.D.T., Center-off toggle switch. Standard 11/16" long bat handle, 15/32" threaded bushing mount. Rated 10A/250Vac, 15A/125Vac. Screw terminals.

CAT# STS-71 \$3.85 each

125 VAC LIGHTED ROCKER SWITCHES

120 VAC LIGHTED ROCKER

S.P.S.T. neon-lighted rocker switch. Contacts rated 20 amps @ 125 vac. Black bezel is 1.32" x 0.61" and has a white dot marking on-position. Red rocker. Switch snap-mounts into 1.1" x 0.5" cut out. Solder or qc terminals.

CAT# LRS-17 \$1.25 each • 100 for \$95.00

SPST ROCKER SWITCH with SIDE LIGHT

Arcolectric #C1500W/C0430AA. S.P.S.T. black rocker switch with green neon indicator light next to it. Switch is rated 16 Amps @ 250 Vac. Rectangular neon indicator operates on 115 or 230 Vac and is independent of the switch, but can be wired to operate with the switch. Black bezel around switch and light is 1.2" x 1". Assembly snap-mounts into 1.1" x 0.9" rectangular chassis cutout, 0.25" quick disconnect terminals, UL, CSA. CAT# LRS-22 \$1.20 each 100 for 90¢ each

S.P.S.T. LIGHTED ROCKER

Canal B series. Neon-lighted red rocker with black bezel. Rated 15 Amps @ 125 Vac. Snap-mounts in 1" x 0.5" rectangular chassis cut-out. 0.25" qc or solder terminals.

CAT# LRS-27

\$1.25 each • 10 for \$ 1.10 each

120 VAC LIGHTED ROUND **ROCKER SWITCH**

S.P.S.T., 120 Vac neon lighted rocker switch. Conveniently snap-mounts in 0.82" diameter hole. Round red rocker. Matte black bezel is 0.91" diameter. Switch rated 13 Amps @ 125 Vac. Solder / 0.187" qc terminals. CAT# LRS-25 \$1.35 ea. • 10 for \$1.15 ea.

ROCKER SWITCH WITH SIDE LAMP

Carling, S.P.S.T. black rocker switch with red neon indicator at its side. Rated 15 Amps @ 125 Vac. 120/240 Vac rectangular neon lamp is independent of switch but can be wired to operate with the switch. Black bezel around switch is 1.25" x 1.15". Switch snap-mounts into 1" square hole. 0.25" quick-connect/ solder terminals. UL, CSA. CAT# LRS-23 \$1.25 ea. • 60 for \$1.00 ea.

S.P.D.T. W/ 120V LIGHT

S.P.D.T. rocker rated 6 Amps @ 125Vac. White rocker with rectangular red lens on one side. Lighted by two 120V neon lamps. 1.58" x 0.9" chrome bezel. Snapmounts into 1.5" x 0.82" rectangular chassis cutout. Solder terminals. UL, CSA.

CAT# LRS-24 \$1.20 each

12V LIGHTED ROCKER SWITCHES

12 VDC LED LIGHTED **ROCKERS (ROUND)**

S.P.S.T., on-off rocker switches with LED indicators on one side of rocker. Built-in resistors allow operation on 12 Vdc. Can be wired to be always on, or only when contacts are closed. Round bodies conveniently snap-mount in round hole. Matteblack rocker and bezel. Bezel is 0.9" diameter. Conveniently snap-mounts in 0.8" diameter hole. Rated 16 Amps. 0.187" qc or solder terminals. Available with LEDs in red (R), green (G), amber(A) and blue (B).

CAT# LRS-28X (X=R,G,A or B) \$2.20 each

12 VDC LED LIGHTED **ROCKERS (OVAL)**

S.P.S.T., on-off, surface-mount rocker switches with LED indicators. Built-in resistors for 12 Vdc operation. Can be wired to be always on, or only on when contacts are closed. Surface mount switch with threaded bushing with nut, conveniently mounts in 0.48" diameter hole. Matte-black oval switch with LED on one side of rocker. Above panel dimensions are 1.22" x 0.78" x 0.63" high. 0.25" gc / solder terminals. Rated 20 Amps / 12 Vdc. Available with LEDs in four colors, red (R), green (G), amber (A) and blue (B). CAT# LRS-30X (X=R,G,A or B) \$2.20 each

12V LIGHTED ROCKER, RED LENS

S.P.S.T., on-off, 12 V incandescent lighted switches. Red lighted rocker in a matteblack bezel. Can be wired to be always on, or on when contacts are closed. Round bodies conveniently snap-mount in round hole. Two sizes available:



0.90" DIA BEZEL 0.6" diameter red rocker Snap-mounts in 0.8" diameter hole. Rated 16 Amps. Solder or 0.187" qc terminals. CAT# LRS-32 \$1.85 each

0.65" DIA. BEZEL, 0.45" diameter red rocker. Snap-mounts in 0.59" diameter hole. Rated 6 Amps. Solder-loop terminals.

CAT# LRS-31 \$1.95 each

ROCKER SWITCHES

Matte-black, single-pole rocker switches. Snap-mount in 0.8" diameter hole. 0.9" diameter bezel. 0.6" diameter round rocker. Rated 13 Amps / 125 Vac. Solder or 0.187" qc terminals. TUV. Three configurations available:

ON-OFF, S.P.S.T. CAT# RS-144 \$1.25 each ON-ON. S.P.D.T. CAT# RS-145 \$1.35 each ON-OFF-ON, S.P.D.T, center-off CAT# RS-146 \$ 1.40 each

DUAL ROCKER SWITCH S.P.S.T AND S.P.D.T. MOMENTARY

Two switches in one bezel. Black rockers in a black bezel. One S.P.S.T. on/off switch with 0 and I, on/off symbols in white. The other is a S.P.D.T. momentary rocker switch. Both switches are rated 6 Amps @ 125/250 Vac. The assembly snaps into a 0.88" x 0.78" cutout. 0.187" qc or solder terminals. UL, CSA. CAT # RS-127 75¢ each • 10 for 65¢ each • 100 for 50¢ ea.

ON-OFF-ON PADDLE SWITCH

Carling. S.P.D.T., center-off paddle switch. Switch lever mechanism is a wide black plastic paddle, 0.88" high, 0.64" wide at base. Has a good snap-action as it switches to each position. Rated 15 Amps @ 125Vac. Black bezel is 1.71" x 0.95". Snap-mounts into 1.45" x 0.82" chassis cutout. 0.25" quick-connect/ solder terminals. UL, CSA. CAT # RS-116 \$ 1.25 each 35 for \$ 1.10 each • 105 for 90¢ each

DPST ROCKER SWITCH

CTS T85 Small D PS T rocker switch. Matte black rocker and bezel. Rated 6 Amps @125/250 Vac. 0.84" x 0.6" bezel. Snap-mounts in 0.80" x 0.50" rectangular chassis hole. Solder/ 0.187" qc terminals. UL, CSA. CAT # RS-133 85¢ each

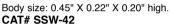
10 for 75¢ each • 100 for 55¢ each

SPDT CENTER-OFF ROCKER SWITCH W/DIODE

Defond. S.P.D.T., center-off rocker switch. Rated 15 Amps, 125 VAC. Prepped with a 10 Amp, 400 Volt diode between the two switching terminals. Diode is soldered on one end and wrapped on the other with no solder. Switch is designed for snap-mounting in 1.15" x 0.5" rectangular cutout. Gray rocker, black bezel. UL, CSA. CAT# RS-131 50¢ each

SLIDE SWITCHES

SPDT MINI-SLIDE SWITCH, RIGHT ANGLE, PC MOUNT



5 for 75¢ • 100 for 12¢ each

DPDT MINIATURE SLIDE SWITCH

Standard D.P.D.T. switch with mounting holes on 0.75" centers. Solder-loop terminals.

CAT # SSW-37 4 for \$1.00 100 for \$20.00 1000 for \$120.00

RIGHT-ANGLE DPDT SLIDE SWITCH

Mouser # 10SL009. DPDT right-angle, pc mount, slide switch. Slider is 0.19" dia. x 0.58" long metallic cylinder with black face. Switch body is 0.67" x 0.30". Six pc pins on 0.1" x 0.15" centers. CAT# SSW-38 3 for \$1.00 • 100 for 25¢ ea.

DPDT C-OFF SLIDE SWITCH Switchcraft, DPDT, center-off slide switch. Contacts rated 3 Amps @ 125 VAC, 0.5 Amp @ 125 VDC. Switch body is 1.2" long x 0.54" wide. Mounting holes on 1.4" centers. Solder-loop terminals. UL. Note: Solder terminals may have some discoloration or corrosion due to storage conditions. Guaranteed functional. CAT# SSW-41 3 for \$1.00 • 100 for 25¢ ea.

MINIATURE SPDT

ALPS # 302Y. S.P.D.T. micro detector switch with lever. Rated: 5A. 0.19" x 0.42" x 0.50" long body. PC leads. Similar in function to snap-action switch, but operates silently with no "snap" point.

CAT# SMS-204

\$1.00 each • 100 for 85¢ each



SNAP ACTION SWITCHES

LARGE BODY STYLE

15 AMP S.P.D.T. Unimax .
15 Amps @ 125/250 Vac.
Body size: 1.81" x 0.64" x 0.64". 0.25" qc / solder terminals. 3/8" dia. x 0.4" long

threaded bushing. 0.25" diameter plunger. UL, CSA.

CAT # SMS-203 \$ 1.50 each

10 for \$ 1.30 each • 100 for \$ 1.00 each

SPST N.O. SNAP-ACTION SWITCH W/ LEVER

Unimax WL series. S.P.S.T., normally-open snap-action switch. Contacts rated 15 Amps @ 125-250 Vac. 0.24" wide spring steel lever extends 0.6" beyond end of switch body. 1.75" x 0.63" x 0.68" body. Mounting holes on 1" centers.

0.25" qc terminals. UL, CSA. **CAT# SMS-208** \$1.00 each

2-POLE SNAP-ACTION SWITCH

GE # CR1070C123.
Two-pole, alternatingaction switch. When one
pole is closed, the other is open.
Relatively old switch (30 years or
more)with fairly large silver
contacts. Actual contact rating
unknown. Body is 1.25" x 0.5" x
0.5." Solder terminals are tarnished, but useable.
Made in USA. CAT# SMS-224 \$1.50 each

STANDARD BODY STYLE

BODY SIZE: 3/8" X 5/8" X 1 1/8"

LEVER WITH CURVED TIP

S.P.D.T., contacts rated 10 Amps @ 125/250 Vac. Metal lever with simulated roller tip extends 0.45" beyond end of switch. 0.25" qc / solder terminals. UL. CAT# SMS-223 \$1.25 each

S.P.D.T. W/ LEVER

10 for \$1.25 each

S.P.D.T., contacts rated
10 Amps @ 125/250 Vac.
Metal lever extends
0.45" beyond end of switch.
\(\text{\cappa}\).25" qc / solder terminals. UL.

CAT# SMS-222 \$1.10 each

S.P.D.T. 15 AMP

S.P.D.T. switch, no lever.

Rated 15 Amp @ 125/250 Vac.
0.25" qc / solder terminals. UL.

CAT # SMS-226 \$1.10 each
10 for \$10.00 • 100 for \$85.00

15 AMP SWITCH W/ LONG LEVER

Vabsco # BR15IS-QACM
S.P.D.T. snap-action switch
rated 15 Amps @ 125/250 Vac.
Lever extends 1.75" beyond end of
switch. 0.187" qc or solder terminals.
UL. CAT # SMS-196
\$ 1.60 each • 10 for \$ 1.35 each
100 for \$ 1.10 each

15 AMP SWITCH W/ LEVER

Vabsco # BR15IS-EACF S.P.D.T. snap-action switch rated 15 Amps @ 125/250 Vac. Lever extends 0.45" beyond end of switch. 0.25" qc or solder terminals. UL. CAT # SMS-195 \$ 1.40 each

10 for \$ 1.25 each • 100 for \$ 1.00 each

15 AMP SWITCH W/ ROLLER LEVER

Vabsco # BR15IL-QAJE-1.34. S.P.D.T. snapaction switch rated 15 Amps @ 125/250 Vac Lever with roller-tip extends 0.45" beyond end of switch. 0.187" quick-connect / solder terminals. UL.

CAT # SMS-197 \$ 1.65 each 10 for \$ 1.50 each • 100 for \$ 1.25 each

SPST SNAP-ACTION SWITCH W/ LEVER

Microswitch # V7-6C27D837-319
S.P.S.T., normally-open, snapaction switch. 15.1 Amp contacts.
0.36" wide metal lever extends
0.77" beyond end of switch. Standard
Microswitch body size: 1.13" x 0.63" x 0.4."
0.185" qc / solder terminals. UL, CSA.
CAT# SMS-213 \$1.10 ea. • 10 for 95¢ ea.

SPDT SNAP-ACTION SWITCH WITH SHORT ROLLER LEVER

Microswitch # V7-2S17D8-201. S.P.D.T. momentary, snap-action switch. Roller-tip lever ends at end of switch. Rated 0.1Amp @ 125 Vac. Body size: 1.14" x 0.63" x 0.40.

0.187" qc / solder terminals. UL, CSA. **CAT# SMS-225** \$1.15 each 10 for \$1.00 each

SMALL SIZE BODY

S.P.D.T. W/ LEVER

Metal lever extends to end of switch. Rated 5 Amps / 250 Vac. Body size: 0.78" x 0.25" x 0.42" high. Solder lug terminals. CE.

CAT# SMS-220 90¢ each

LEVER W/ CURVED TIP

S.P.D.T., Rated 5 Amps / 250 Vac.
Metal lever with simulated roller
tip extends 0.12" beyond end of
switch. Body size: 0.78" x 0.25" x
0.42" high. Solder-lug terminals. CE.
CAT# SMS-221 \$1.00 each

LEVER W/ ROLLER TIP

S.P.D.T., Rated 5 Amps / 250 Vac.

Metal lever with roller tip extends
0.15" beyond end of switch. Body size:
0.78" x 0.25" x 0.42" high. Solder-lug
terminals. CE. **CAT# SMS-219** \$ 1.30 each

MANUFACTURERS

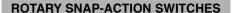
We Purchase Excess Inventories.
CALL, WRITE, E-MAIL
or FAX your list.



PUSH-TYPE SNAP-ACTION SWITCH

Microswitch # 1PB878-J.
S.P.D.T. momentary snap-action
switch in a plastic push-switch
assembly. 2" high x 0.75" x 0.37." Switch
base is 0.78" x 0.70." Turret terminals.

CAT# SMS-218 50¢ each



COUNTER-CLOCKWISE ACTION (USED)

Cherry E 53. S.P.D.T. Rated 0.1 Amp
@ 125 Vac. Prepped with wire lead on
the common terminal. UL and CSA
CAT # CCW-9 \$ 1.25 each

TACTILE PUSH BUTTONS

S.P.S.T. PC MOUNT

ALPS# SKHHAK409A. S.P.S.T. N.O. momentary pushbutton. 0.25" square X 0.19" high. Leads on 0.15" X 0.25" centers.
CAT# PB-126 4 for \$1.00 • 100 for \$22.50 500 for \$100.00 • 1000 for \$180.00

SPST TACTILE PUSHBUTTON

S.P.S.T. momentary, normally open mechanical push button switch. 0.23" square x 0.15" high body. Plunger stands 0.05" above body. Four PC leads on 0.15" x 0.25" centers, plus ground pin. CAT# PB-217 4 for \$1.00

100 for 22¢ each • 1000 for 18¢ each

S.P.S.T. PC MOUNT

E-Switch # TL 1105 A
S.P.S.T., momentary normally-open tactile
pushbutton. 0.24" square. Plunger height:
5mm above mounting plane. Four pc leads on
4.5mm x 6.5mm centers. 50mA @50Vdc rating.
CAT# MPB-132 4 for \$1.00

100 for \$22.00 • 1000 for \$180.00

TACTILE PUSHBUTTON WITH LONG PLUNGER

S.P.S.T., normally-open, momentary pushbutton. Plunger height is 13mm above pc mounting surface. 0.24" square body. Leads on 0.15" x 0.25" centers.

CAT# MPB-218 35¢ each 100 for 25¢ each

PUSHBUTTON SWITCHES

JUMBO PUSHBUTTONS

Durable plastic S.P.D.T. momentary pushbutton switch frequently found in arcade games. Useful in any application requiring a large, rugged pushbutton switch. Button operates a 3 Amp snap-action switch. Plunger is 0.86" diameter. Bezel is 1.33" dia. Threaded bushing is 1.1" dia. and will mount in panels up to 0.75" thick. Includes large plastic mounting nut.

RED SWITCH CAT# PB-211 \$3.75 each WHITE SWITCH CAT# PB-212 \$3.75 each BLUE SWITCH CAT# PB-213 \$3.75 each GREEN SWITCH CAT# PB-214 \$3.75 each BLACK SWITCH CAT# PB-216 \$3.75 each

MOMENTARY PUSHBUTTON, N.O., 10 AMP

S.P.S.T. normally-open, momentary pushbutton switch. Heavy-duty metal plunger. Snap-action tactile response. 15/32" threaded bushing mounts in panels up to 1/2" thick. Solder-loop terminals. Rated 10 Amps / 125 Vac.

CAT# PB-147 \$3.25 each N.O. MOMENTARY, 4 AMP

S.P.S.T. normally-open, momentary pushbutton switch. Heavy-duty metal plunger, suitable for foot switch applications. 15/32" threaded bushing mounts in panels up to 1/2" thick. Solder-loop terminals.

Rated 4 Amps / 125 Vac.

CAT# PB-142 \$ 2.75 each

NORMALLY-OPEN MOMENTARY (DOME)

Heavy-duty metal dome pushbutton switch. Normally-open, momentary action. Nickel-plated dome and bezel measure 0.86" diameter x 0.12" high.

Threaded bushing mounts in 0.75" diameter hole in panels up to 0.35" thick. Screw-clamp terminals. Rated 4 Amp / 125 Vac.

CAT# PB-143 \$ 3.95 each

NORMALLY-OPEN MOMENTARY (FLAT)

Heavy-duty metal pushbutton switch.

Normally-open, momentary action.

Nickel-plated button is flush with bezel in open position. Bezel measures 0.86" diameter x 0.05" high. Threaded bushing mounts in 0.75" diameter hole in panels up to 0.35" thick. Screwclamp terminals. Rated 4 Amps / 125 Vac.

CAT# PB-144 \$ 3.95 each

NORMALLY-CLOSED MOMENTARY (RED)

S.P.S.T. normally-closed, momentary pushbutton. 0.51" diameter red plunger, 0.74" diameter metal bezel. 0.62" diameter threaded bushing mounts in panels up to 0.15" thick. Solder lug terminals. Current rating unknown.

CAT# PB-145 \$1.75 each

S.P.S.T. PUSH-ON/PUSH-OFF SWITCH

S.P.S.T. N.O. push-on/push-off switch assembly. Spring-loaded plunger attached to a snap-action switch rated 25 amps. 0.13" square plunger extends 0.8" beyond mounting flange. Threaded mounting holes on 0.7" centers. Overall size: 2.35" long x 1.23" x 0.42". 0.25" quick-disconnect/solder terminals. UL.

S.P.S.T. MOMENTARY

Normally open switch with 1/4" bushing and plastic button. Ideal for most low current projects.

RED BUTTON CAT# MPB-1

35¢ each • 10 for \$3.25 • 100 for \$30.00

BLACK BUTTON CAT# MPB-1B 35¢ each • 10 for \$3.25 • 100 for \$30.00



SPST N.O. PUSHBUTTON

Single-pole, normally-open momentary switch. Attractive and functional dome-shaped pushbutton. 0.70" diameter black plastic bezel. 0.45" red plunger. Extends 0.3" above mounting plane. Threaded bushing mounts in 0.52" diameter hole. Solder terminals.

Red Button CAT# PB-138 \$1.00 each 10 for 85¢ each • 100 for 60¢ each

Black Button CAT# PB-139 \$1.00 each 10 for 85¢ each • 100 for 60¢ each

PUSH-ON/ PUSH-OFF SNAP-IN

SWITCHES Defond # DPE-1114-M T85. S.P.S.T., push-on / push-off switch. Contacts rated

14 Amps @ 125 Vac. Snap-mounts into rectangular chassis hole, 1.12" x 0.42." 0.38" diameter plastic plunger. Heavy-duty switch. May be suitable for footswitch applications. UL. 0.187" gc or solder terminals. Two plunger styles available.

0.75" PLUNGER

Black plastic plunger extends 0.75" above switch body. Extends through 0.61" diameter x 0.43" high bushing.



75¢ each • 10 for 60¢ each

1.25" PLUNGER

Brown plastic plunger with 0.45" diameter cap extends 1.25" above switch body. Extends through 0.61" diameter x 0.85" high bushing. CAT# PB-137

75¢ each • 10 for 60¢ each

D.P.D.T. ALTERNATING PUSHBUTTON

D.P.D.T. alternating pushbutton; push one side down and the other pops up. Snap-mounts into a 0.86" x 1.20' chassis cutout. Pushbuttons and top of switch are white plastic, 1,31" x 1.03" and stand 0.07" above mounting plane. No official specs. Contacts appear to be 6 Amps or better. 0.25" gc terminals.

CAT # PB-134 \$ 1.00 each 10 for 85¢ each • 100 for 70¢ each

PUSHBUTTON SWITCH

Judco model# J-188. SPST, push-on push-off. plastic pushbutton. Contacts rated 3 amps @ 125 Vac. Black body, actuator and panel nut. 3/8-27 threaded bushing. 4 1/2" stranded wire **CAT# PB-21** pigtails. UL listed. \$1.00 each • 100 for 70¢ each

KNIFE SWITCH

S.P.D.T., screw terminals. Rated 10 Amps / 12 Vdc. Base is 2.93" x 0.48" x 0.35" high. Two mounting holes on 1.80" centers.

CAT# SWS-10 \$2.25 each

PRESSURE SENSOR SWITCH

Signal Lux Type P1 pressure switch. Single-pole, normally open, 124 mbar switch rated 20 mA @ 250 Vac. Separate inlets for 4.0mm tubing for pressure or vacuum. 1.06" diameter x 0.62" plastic body. Solder/ pc pins on 0.5" centers. UL. CAT# PSW-12



JOYSTICK

Rugged, precision-engineered 8-way joystick. Smooth, spring return-tocenter stick controls four S.P.D.T. snap-action micro switches. Metal center shaft with heavy-duty black plastic stick and mounting plate. 3" x 3.5" mounting plate. Stick stands 3.75" above mounting plate. Switch mechanism extends 2" below plate. CAT# JS-5 \$11.95 each • 10 for \$10.50 each

REED SWITCHES

S.P.S.T. **NORMALLY OPEN**

Rated 1 Amp @ 50 Vdc. or 250 Vac. Hermetically sealed glass body is 1.4" long x 0.2" diameter. Lead length is 0.47". CAT# RSW-14 2 for \$1.00 • 100 for 40¢ each

REED SWITCH, N.O.

OKI Switch # ORD211. Tiny reed switch. Normallyopen Rhodium contacts rated 1 Amp/ 24 Vdc or 24 Vac. 0.4" long x 0.07" dia. (10mm L x 2mm D). 0.2" axial leads. CAT# RSW-27 2 for \$1.00 • 100 for 40¢ each

REED SWITCH, N.O.

Hamlin #MDCG-4 Normally-open contacts, rated 1 Amp 100Vac/dc. 0.5A switching current. 0.55" long x 0.08" diameter glass body. 0.5" long axial leads. One lead has right-angle bend at 0.2" CAT# RSW-28 2 for 90¢ • 200 for 35¢ each

LEVER-ACTUATED

Hamlin # 10-59600-054 S.P.S.T. normally-open reed switch with a spring lever. Ideal low-noise, low-operating force sub for rotary snap-action switches and other limit switches. Composite plastic body and lever assemblv. 1.24" x 0.655" x 0.69." Two mounting holes approximately, 0.9" apart. Two 2.5" wire leads. CAT# RSW-21 75¢ each

10 for 65¢ each • 100 for 50¢ each

HALL EFFECT POSITION SENSOR

Honeywell Micro Switch # SS19T. Detects the presence or absence of a magnetic field. Operates on 4.0 - 10.0 Vdc. Output @ 0 Gauss is 1.75 -2.25 Vdc with 5 Vdc input. Tiny surface mount package is 0.18" x 0.16" x 0.06" thick. Tape & reel packaging. CAT# SS-19T 2 for \$1.00 • 100 for 45¢ each

MINI HEXADECIMAL ROTARY SWITCH. PC MOUNT

NKK (Nihon Kaiheiki) # DR-AR16HB. Miniature hexadecimal encoded rotary switch. Right-angle, pc mounting. 6.2mm threaded bushing. Flatted 3mm x 10mm shaft. Switching Truth Table available in the "Spec Sheet" section of our web site. CAT# RS-140 \$1.00 each

B.C.D. SWITCHES

10 POSITION, BCD ROTARY SWITCH

Screwdriver adjust, slotted shaft. 0.43" x 0.28" x 0.4."high. 6 pc leads.

CAT # RS-109 2 for \$ 1.00 • 100 for 35¢ each



PUSHBUTTON THUMBWHEEL, BCD

Omron #A7D-206-S07-60-1 8-position (0-7) BCD encoded thumbwheel switch. Snap-mounts into 0.56" x 0.35" rectangular cutout. Prepped with four 5.7" leads, terminated with 6-pin (2x3) socket connector, 0.1" spacing. CAT# RS-143 \$1.00 each

ROTARY SWITCH

ROTARY SWITCH, 4 POLE 3 POSITION

One layer, 4 pole 3 position rotary switch. Contacts rated 0.3 Amps @ 30 Vdc. Threaded bushing with nut mounts in 0.35" diameter hole. 6mm split knurled shaft x 0.52" long. Solder lugs. CAT# RS-134 \$1.35 each 10 for \$ 1.15 ea. • 100 for 95¢ ea.

1 POLE 12 POSITION

1.03" diameter plastic body. 0.25" diameter x 0.38" long plastic shaft. 0.375" diameter threaded bushing. Solder terminals. CAT# RS-117 \$1.75 each • 100 for \$1.25 each



2-POSITION, D.P.D.T.

C&K #R202. D.P.D.T., 2-position rotary switch. 5 Amps @ 125 Vac. 3/8" diameter threaded bushing. 1/4" diameter x 1/2" long half-moon nylon shaft. 0.91" diameter plastic body. Solder terminals. UL. CSA.

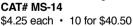
CAT# RS-142 \$1.25 each

10 for \$1.10 each 100 for 90¢ each

ALARM SWITCHES

STANDARD MAGNETIC **PROXIMITY SWITCH**

For closed loop alarm systems. Switch is closed when magnet is near. Cover hides screw terminals. Off-white switch and magnet. UL.



SPDT

Can be used on normally open or normally closed loop systems. Switch measures 2" long X 3/8".



CAT# MS-7

\$4.50 each • 10 for \$4.25 each



PRESS-FIT MAGNET SWITCH

Press-fit into 3/8" hole. Ideal for windows and doors. For normally closed systems. 0.75" operating gap. U.L. listed.

> CAT# MS-11 \$2.25 per set 10 sets for \$21.00

DIP SWITCHES

Two D.P.S.T switches in an 8 pin DIP. CAT# DWS-2P 2 for \$1.00 100 for 30¢ each

4 - S.P.S.T. switches per unit.

CAT# DWS-4 2 for \$1.00 • 100 for \$30.00

5 - S.P.S.T. switches per unit. CAT# DWS-5 4 for \$1.00

7 - S.P.S.T. switches per unit.

CAT# DWS-7 2 for \$1.00 • 100 for \$30.00

12 - S.P.S.T. switches per unit.

CAT# DWS-12 2 for \$1.00 • 100 for \$30.00

KEY SWITCHES

3-POSITION KEYSWITCH

2-pole, 3-position keyswitch. Key removable in left position only. 0.75" threaded bushing mounts in panels up to 0.75" thick. 0.88" diameter 0.25" thick chrome bezel. Solder terminals. 2" long (behind panel depth). Solder lugs. Includes two keys.

CAT# KSW-41 \$3.75 ea. • 10 for \$ 3.45 ea.

KEYLOCK MECHANISM

Illinois Lock Co Keylock tumbler with two keys. 0.75" diameter threaded bushing mounts in up to 0.65" thick panel. Keylock is designed to actuate a rotary switch or other device. 0.25" x 0.125" slot in bottom of keylock mates with switch or locking lever. Includes mounting hardware and two keys. CAT# KSW-42 \$1.50 each

ON-OFF ACE-STYLE KEY SWITCHES

S.P.S.T., on-off switch. Shiny, 0.59" diameter bezel. Mounts in 0.47" diameter hole in panels up to 0.43" thick. Solder-cup terminals. Includes two keys.



KEY REMOVABLE BOTH POSITIONS

CAT#	<u>each</u>	<u>100</u>
KSW-1077	\$3.25	\$2.45
KSW-40	\$3.25	\$2.45

KEY REMOVABLE IN ON-POSITION ONLY

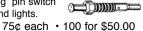
CAT#	<u>each</u>	<u>100</u>
KSW-1050	\$3.25	\$2.45
KSW-1015	\$3.25	\$2.45
KSW-1085	\$3.25	\$2.45
KSW-1022	\$3.25	\$2.45
KSW-1077B	\$3.25	\$2.45

EXTRA KEYS Use CAT# KEY-(four-digit switch code) to order extra keys, 65¢ each. 100 for 40¢ each. Extra keys not available for KSW-1022 and KSW-40

AUTO PIN SWITCH

Standard 1.93" long pin switch for auto security and lights.

CAT # PSW-2



HEAT SINKS

TO-3 HEATSINK

FG&G Wakefield #680-5A 1.82" x 1.82" x 0.51" high black anodized aluminum heatsink with mounting holes for TO-3 device. Heavy, 0.18" thick aluminum base

CAT# HS-108 \$1.00 each

1.67" x 1.67" x 1.38"

Aavid™ black anodized heatsink, 1.67" x 1.67" x 1.38" high. Hold-down spring clip. Cutout foam square with thermally conductive paste on bottom.



CAT# HS-115 \$1.25 each 10 for \$1.00 each

1.1" x 1.1 x 0.6" H Black anodized aluminum.

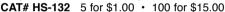
CAT# HS-130

75¢ each



DIP HEATSINK

Thermalloy THM 6010. 0.75" x 0.6" aluminum heatsink to dissipate heat from DIP parts. 0.2" wide center strip.





Black anodized aluminum heatsink for TO-220, tab-type semiconductors.

1.77" x 0.71" x 0.5" deep. CAT# HS-134 4 for \$1.00



TO-220 HEATSINK

Thermalloy THSW6107-4 Black anodized aluminum heatsink. 1" x 0.72" x 0.5" For TO-220 and similar tabbed devices.



CAT# HS-126 4 for \$1.00 • 100 for \$17.50

TRAPEZOID HEATSINK



Heavy-duty galvanized aluminum heatsink. Lots of surface area for high-efficiency cooling. Trapezoidal shape,

4" x 2.5" x 2.25" high. Base is 0.24" thick. 16 cooling fins are glued into slots in the base. CAT# HS-128

\$4.75 each

COPPER TAPE W/ ADHESIVE

3M #1181. 1" x 18 Yards. Adhesive backed copper foil tape. Shields against EMI/RFI radiation. Meets UL 510 requirements for flame retardancy. Solderable. Conductive through the adhesive.



CAT# CT-12

\$19.00 each • 9 for \$16.00 each

THERMAL SWITCHES

Thermal cut-off switches are normally-closed switches that open when temperature rises or falls to a specified temperature. They then reset when temperature returns to a specified temperature. The following are approximately 0.75" dia. and have mounting flanges with holes on 0.9" centers.

57C DEGREE (APPROX. 134F)

Thermodisc #36TV21 L57-8.5C. Resets when temp drops 8.5°. 0.25" qc / solder terminals.

CAT# THSW-57 2 for \$1.00

100 for 40¢ each

200F DEGREE

Selco #0A-200 Resets on drop to 181 degrees. UL. CSA.

CAT# THSW-201 2 for \$1.00



200F DEGREE

Elmwood L200. Solder terminals.

CAT# THSW-200 2 for \$1.00



NORMALLY-CLOSED, 335° F

Elmwood Sensors L335. Normallyclosed. Opens at 335 F degrees. Auto-reset. Ceramic body with metal base, 0.63" dia. 0.25" quickconnect/solder terminals.

CAT# THSW-335 2 for \$1.00



105° F SWITCH W/ NICHROME WIRE

Elmwood #8190-13 L105. Normally-closed. Opens on rise to 105° F. 0.63" dia. x 0.39." Attached to switch is a 4.75" coiled nichrome wire with woven protective covering (wire is pictured without covering). Wire resistance is 2 Ohms at room temperature. CAT# THSW-105 \$1.00 each

N.C. THERMAL SWITCH, 50° C T-key #050-15 Opens on rise to 50° C.

0.57" diameter. Mounting flange w/ holes on 0.9" centers.

CAT# THSW-107 2 for \$1.00



SILICONE THERMAL COMPOUND

2 GRAM PACKAGE **CAT# TG-21**

\$1.50 each

20 GRAM TUBE **CAT# TG-20** \$4.25 each





MANUFACTURERS

We Purchase Excess Inventories. CALL, WRITE, E-MAIL or FAX your list.



DC FANS

HIGH-EFFICIENCY HEATSINK

AND COOLING FAN ATS # 304731-001 Unusual heatsink with a solid copper bottom and an integrated cooling fan. 12 Vdc, 0.43 Amp fan is 70 mm (2.75") square x 15 mm (0.59") thick. The heatsink under the fan consists of "fan-folded" aluminum to achieve maximum surface area. The bottom surface of the heatsink is covered with a solid copper plate, 3,22" x 2,25 with a 0.3" thick raised center portion that is 1.4" (35mm) square. This is the

heatsink. A folding handle/ clamp sits atop the heatsink assembly. CAT# CF-215 \$ 7.50 each

effective mounting surface of the

12 VDC FAN W/ HEATSINK, 40 MM

Elina Fan KDA120410HB8P 12 Vdc, 60 mA fan attached to an aluminum heatsink with hold-down clips for use with processor. Overall size: 40 x 40 x 12 mm. 3.5" leads w/ 2-pin socket connector. 0.1" spacing. UL, CE, TUV. CAT# CF-255 \$ 4.50 each

12 VDC FAN W/HEATSINK, 60 MM

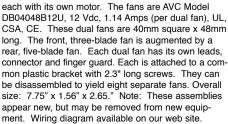
AVC # C6015B12L. Fan and aluminum heatsink assembly designed to cool microprocessors. 12 vdc ball bearing fan is 2.36" x 2.36" x 0.60" high (60mm x 60mm x 15mm). 0.15 amp, 3300 RPM, 10.03 CFM, 30.1 dB(A). Plastic frame and 11 blade impeller. Includes

easy-on clip. Three 5" wire leads terminated with 3 pin socket. Overall heatsink size: 2.45" x 2.37" x 1" high. Mounting face of heatsink is 60mm x 52mm. Prepped with patch of thermal compound on bottom of

heatsink. CAT# CF-231 \$5.50 each

SMALL HIGH-VELOCITY **FAN ASSEMBLY**

Unique, miniature fan assembly moves a lot of air for its size. Consists of four dual 12Vdc fans. Each fan is really two independent fans,



CAT# CF-224 \$15.00 each

TWO 5VDC 40MM FANS

Flina Fan #KDC050410MB8P New assembly with two fans wired to a two pin socket connector (0.15"





centers). Each fan has its own set of 12" leads. Fans are 40mm (1.59") square x 0.41" thick. 5 Vdc, 110 mA. UL. **CAT # CF-164** \$4.00 per set of 2 fans.

5 VDC 20MM FAN

Adda# AD2005LB-G73 5 vdc 0.08 amp. 0.80" square x 0.4" thick

Ball bearing fan. 8,000 RPM. 0.40 CFM airflow. Two 1.7" leads with 3-contact, sub-mini socket

connector (1mm spacing). CE. CAT# CF-251 \$4.50 each

5 VDC 20MM FAN

bottom view

Sunon # KD0501PFB3-8 5Vdc, 0.3W. 20mm square x 10mm (0.79" square x 0.4"). Three 1.75" leads w/ 3-contact socket connector (1.25 mm centers). CAT# CF-249 \$4.50 each

5 VDC 25MM FAN

Sunon #KD0502PFB3-8 5Vdc, 0.3W. 25mm square x 10mm (0.98" square x 0.4"). Two 1.5" leads w/ 3-contact socket connector (1.25 mm centers). UL. CAT# CF-248 \$4.65 each

40 MM, 12 VDC

Delta # EFB0412HHD 12 Vdc, 0.15A miniature cooling fan. 40 mm square x 20mm. Plastic frame and 5-blade impeller. Three 13" leads. UL, CSA, CE, VDE CAT# CF-252 \$3.00 each



12 VDC 40MM FAN

PSC Select #P1124020HB2A 1.58" square x 0.80." 12 Vdc, 1.44 W, 120 mA. Plastic frame and 7 blade impeller. Three 3.25" wire leads w/ 3 pin connector. UL, CSA CAT # CF-184 \$2.50 each



50MM 12VDC FAN

Sunon™ #KDE1205PFB2-8 Brushless DC fan. 50mm square x 10mm. (1.96" x 1.96" x 0.42"). 12 Vdc, 0.7W. 11.5" pigtail leads. U CAT# CF-247 \$2.50 each



12 VDC, 50 MM

Delta #EFB0512HA 1.96" square x 0.4". 12 Vdc, 0.15 Amp. DC brushless fan. 6" leads w/ 3-contact socket connector (0.1"). UL, CSA, CE. CAT # CF-203 \$2.50 each



12 VDC 60MM

Delta #EFB0612MA 12 Vdc, 0.12 Amp cooling fan. 2.36" x 2.36" x 0.39" (10mm). Three 12" leads with 3-conductor connector. UL, CSA, CE.



CAT# CF-208

\$ 2.50 each • 10 for \$2.25 each

HIGH-SPEED 12VDC 60MM FAN

AVC #DV06038B12S 60mm x 60mm x 38mm brushless, ball bearing cooling fan. 12Vdc, 2.85 Amps. 15,000 RPM. 69.4CFM. 62.0 dB-A. Plastic (UL 94V-0) frame and 5-blade impeller. Three, 12" leads. UL. CSA. CE. TUV.



CAT# CF-253 \$4.50 each

12 VDC 60MM SQUARE FAN

Nidec Beta V™ # TA225DC Model# B33399-55. 2.37" square x 1". 12 vdc 0.11 amp DC fan. 12 cfm, 17.2 dBA. Plastic frame and 7 blade impeller. 11" leads with 2-pin connector. UL, CSA. CAT# CF-183 \$3.75 each



12 VDC 80 MM

Nidec Beta V ® TA300 DC, Model D34869-55 12 Vdc, 0.08 Amp. 80 mm x 80mm x 25mm. Two 8" leads with 3-pin socket connector (0.10" spacing). UL, CSA. CAT# CF-256 \$3.50 each



12 VDC 80 MM FAN W/ FAN GUARD

Minebea Co., NMB model 3110KL-04W-B19 12 Vdc, 0.13 Amp. 3.15" x 3.15" x 0.99." Prepped with metal fan guard. Plastic frame and 7 blade impeller. Three 8" leads with 3-contact socket connector (0.1" spacing). UL, CSA, CE, VDE. CAT# CF-217 \$ 3.75 each 10 for \$3.25 each



12 VDC 80 MM

Delta #AFB0812HHD 12 Vdc, 0.26 Amps. 3.14" square x 0.79" thick brushless cooling fan. Plastic frame and 5-blade impeller, Three 10" leads with socket connector. UL, CSA, CE. CAT# CF-219 \$3.50 each



12 VDC 6.75"

Comair Rotron "Major™" JQ12ROX. 12 Vdc, 2.26 Amps. 6.75" x 5.92" x 2." 235 CFM ball bearing cooling fan. Four wires. Fuse and polarity protected. Metal housing. Polycarbonate impeller. UL, CSA, CE.



CAT# CF-221 \$18.50 each

12- 28 VDC 6.75" FAN W/ FINGER GUARD

Comair Rotron "Patriot" Model PQ24BQDNX 24 Vdc, 1 Amp, (12-28 Vdc) 3425 RPM, 200-235 CFM. 172 mm x 51.0mm (6.75" x 2.00") Metal housing. Polycarbonate impeller.

2-pin connector for solder or standard fan plug. UL, CSA, CE, TUV. Metal fanguard attached to one side. Removed from new equipment.

CAT# CF-244 \$15.00 each

24 VDC, 92 MM FANS

Nidec Beta V™ TA350DC 92mm x 92mm x 25mm (3.64" x 3.64" x 0.98") Brushless, ball bearing fan. UL, CSA, TUV. Three models:



Model M34261-16G6. Thermistor speed control mounted in front of fan blades. Causes fan to rotate faster as temperature rises. 24Vdc, 0.28 Amps. Two 4.5" leads with 2-contact socket connector (0.1" spacing).

CAT# CF-211 \$2.75 each • 10 for \$2.50 ea.

Model M34261-16C6. Thermistor speed control mounted on 4.5" leads with ring terminal to facilitate mounting. Causes fan to rotate faster as temperature rises. Two 4.5" wire leads with 2-contact socket connector (0.1" spacing).

CAT# CF-212 \$2.75 each • 10 for \$2.50 ea.

Model #M34691-33. No thermistor. Three 6" wire leads with 4-contact socket connector (0.1" spacing). CAT# CF-209 \$2.50 each • 10 for \$2.25 ea.

115 VAC 80 MM

EZ Fan# FP-108A-S-3. 3.13" square X 1.5". 110/120 Vac, 0.5 Amps. 17 CFM. Zinc housing with seven blade thermoplastic impeller. 12" wire leads. UL/CSA.



CAT# CF-117 \$14.00 each

120 VAC 120 MM

EZ Fan # FP-108-1-S3. 4.69" square x 1.5". 110/120 Vac, 0.11 Amps. 54 CFM. Aluminum housing with 5 blades. Terminals can be soldered or used with standard fan plug. UL, CSA. CAT# CF-120 \$14.00 each



CENTRIFUGAL BLOW

5 VDC MINI BLOWER

Adda # AB0405HB-G03 5Vdc. 0.21A DC brushless centrifugal blower.

0.55" diameter x 0.4" (40mm x

10mm). Three 2.3" wire leads with miniature 3contact female connector (1mm centers). Found in several models Dell Inspiron and Latitude computers. UL. CE. CAT# CF-250 \$ 5.75 each

12 VDC 97 MM BLOWER

NMB # BG0903-B045-00S. 1.20A. 3.82" x 3.68" x 1.30" (97.0mm x 93.5mm x 33.0mm). 12 Vdc centrifugal blower. UL, CSA, VDE, CE.

CAT# CF-216 \$ 7.50 each

24 VDC BLOWER, 95MM

Delta Electronics BFB1024H. 24 vdc 0.60 amp ball bearing blower. Operates on 7 - 27.6 Vdc. Plastic impeller and frame, 3.83" x 3.72" x 1.30" (97mm x 94mm x 33 mm). 3600 rpm 25.43 cfm 52 dB-A . UL/CSA

CAT# CF-228 \$7.50 each



12 VDC, 100 MM BLOWER

AVC #F9733B12LG 12 Vdc, 0.72 Amps. Ball bearing blower with plastic body and blades. 52db noise. Three 7" leads with 3-conductor socket connector (0.1" spacing). 4.12" x 3.85" x 1.42." UL, CSA, CE, TUV. Removed from new equipment. CAT# CF-246 \$7.50 each

24 VDC, 5" BLOWER

Japan Servo # SCBD24K7-611. 24 vdc 0.42 amp 10 watt brushless blower. Operates on 12 - 27.6 Vdc. Plastic impeller and frame, 5" x 4.96" x 1.54" (127mm x 126mm x 39mm), 3500 rpm 34 cfm 51 dB-A. UL/CSA. CAT# CF-229 \$10.95 each



12VDC 120MM

Nidec Gamma32 # A33445-68L. 12 Vdc @ 550 mA, ball-bearing 1.26" wide. 23 CFM air flow. 3 color coded 12" long leads. UL, CUL, TUV approved. CAT# CF-196

blower, 4.73" x 4.73" x \$11.95 each

12VDC SQUIRREL CAGE BLOWER

Comair Rotron # DE18-AL12PQX. 12 Vdc, 0.25 Amp. 4" (100mm) x 1.8" (46mm) black polycarbonated impeller. Ball bearing motor mounted on a triangular plate with three mounting holes on 3.62" centers.

Overall height of motor and impeller is 2.24". Five 12" leads, black & red for 12 Vdc. UL, CSA, CE.

CAT# CF-171 \$3.00 each

METAL FAN GUARDS

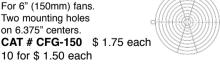
FOR 60 MM SQUARE FANS 9 CAT# CFG-60 \$1.00 each



FOR 118/120 MM SQUARE FANS CAT# CFG-120 \$1.60 each

GUARD FOR 150 MM FANS

Two mounting holes on 6.375" centers. CAT # CFG-150 \$ 1.75 each 10 for \$ 1.50 each



FAN CORDS

24" CORD WITH RIGHT-ANGLE PLUG CAT # CFC-8 \$ 1.00 each



THERMOELECTRIC COOLERS PELTIER JUNCTIONS

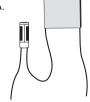
These incredible miniature solid state heat pumps raise or lower temperature in a small area almost instantly. Utilizing the Peltier effect these modules perform the same cooling or heating functions as freon based refrigerators but they do it with no moving parts, and are very reliable. Current applied to the device will produce heat on one side and cold on the other side, up to 68° C difference between the two sides. Modules can be mounted in parallel to increase the heat transfer effect or can be stacked to achieve high differential temperatures. Operate on 3-12 Vdc. Requires a heat sink to prevent overheating.

COOLERS w/ THERMAL CUT-OFF

New thermoelectric devices, prepped with a temperature cutoff switch. Originally intended for 12Vdc use in picnic and automotive coolers/ heaters. 127 thermocouples per device. deltaTmax=79degC, Thot=50degC, Vmax=16.1V.

30MM x 30MM x 3.3MM Qmax=38.7 Watts. Imax=3.9A. CAT# PJT-5 \$ 9.75 each 10 for \$9.00 each

40MM x 40MM x 3.8MM Qmax=56Watts, Imax=5.6A CAT# PJT-6 \$12.75 each 10 for \$11.75 each



40MM x 44MM x 3.3MM Qmax=80.6W. Imax=8.1A CAT# PJT-7 \$14.75 ea 10 for \$13.75 each

THERMOELECTRIC COOLER WITH

HEATSINK Originally designed for a drink warmer/ mini-cooler in _ recreational vehicles, this 12 Vdc heater / cooler assembly utilizes a Peltier device to create heat on one side and cold on the other. Operating at 13 Vdc, using cooling fan

to force air through the "hot-side" heatsink, we measured the cold side at 43 Deg F (6C). The heart of the unit, is a 40 mm x 44mm Peltier thermoelectric heat pump that operates on 12-13.6 Vdc @ 5.7-6.8 Amps. The hot side of the device is connected directly to a 5.97" x 4.68" x 1.95" heatsink. The cool side connects via an aluminum block to another heatsink that is 5.13" x 4.17" x 1.34". The overall thickness of the unit is 4.6". The Peltier device and the aluminum spacer are between the heatsinks, embedded within an insulating block 1.15" thick. Use a fan on the "hot-side" heat sink to get maximum cooling. See online "Spec Sheet" section for a disassembled picture. 12" wire leads. Weight: 3 lbs 7 ozs.

CAT# PJT-8 \$37.00 each

RESETTABLE CIRCUIT PROTECTORS

GENERAL PURPOSE CIRCUIT PROTECTOR, 0.65 - 1.3 AMP

Raychem "Polyswitch" # RXE-065S-1
Automatically reset when fault condition is cleared. Can be paralleled for higher ratings.
Current: 0.65 Amps. Trip Current: 1.3 Amps.
Max Voltage: 60 Volts. 0.33" diameter. UL, CSA.
CAT# RXE-065 3 for \$1.00 • 100 for \$ 20.00
500 for \$85.00 • 1000 for \$150.00

BATTERY PACK PROTECTOR

Raychem Polyswitch™ # LTP100S. 1 Amp, 24 Volt max. Hold: 1 Amp. Trip: 2.5 Amp. Resettable device provides overcurrent protection for rechargeable batteries. Weldable nickel leads and low profile design make them easy to install on the edge of battery packs. 0.9" long x 0.2" wide x 0.03" thick. UL, CSA, TUV.

CAT # CPX-100S

4 for \$1.00 • 100 for 15¢ each 1000 for 10¢ each • 2000 for 8¢ each

110 DEGREE C, NORMALLY CLOSED

Selco # UP61. Self-resetting snap-action switch with quick-make/ quick- break, fast sensing action.
Rated 4A @ 125 Vac. Reinforced PBT enclosure, 0.61" x 0.25" x 0.12." Open on rise at 110 degree C. 2.25" solid, uninsulated leads.

CAT # THSW-110 \$ 1.00 each 10 for \$ 9.00 100 for \$ 75.00

CIRCUIT BREAKERS

0.5 AMP PC MOUNT

Augat/ Alcoswitch #SC-0.50AR
For AC or DC circuits up to 24 Volts.
Able to withstand high transitory currents.
Since this is a thermal device relying on heat generated by an overload condition, response time is inverse to the degree of overload. 0.7" x 0.2" x 0.44" Right-angle pc board mounting.

CAT# SC-0.50AR 4 for \$1.00 • 100 for \$15.00

1 AMP CIRCUIT BREAKER

Airpax #PR11-2-1.00A-XX-V.
Rated 1 Amp 250 Vac / 50 Vdc.
1.35 Trip Amps. Threaded
bushing mounts in 3/8" diameter panel
hole. White indicator button pops-out
when breaker is tripped. Body is
1.35" x 0.68" x 1.92" long including 0.25" qc /
solder terminals. UL, CSA, CE, DVE.

CAT# CB-101 \$2.50 each

20 AMP CIRCUIT BREAKER

Airpax IELK1-1REC5-51-20.
20 Amp, single-pole circuit breaker with auxiliary S.P.D.T. switch.
Toggle handle. 10-32 studs with nuts for load. Mounts from rear in 1.45" x 0.75" cutout. 6-32 threaded mounting holes on 2" centers.

Auxiliary switch on back switches in unison but is electrically isolated from the breaker. Switch has 0.187" qc/ solder terminals. CE, VDE.

CAT# CB-23 \$2.75 each

1.5 AMP PC MOUNT

ETA # 41-04-PR. Resettable circuit breaker. 1.15" X 0.75" X 0.43" body. Three pc mounting legs. UL, CSA.



\$1.25 each • 10 for \$11.00

2-POLE 20 AMP CIRCUIT BREAKER

Potter & Brumfield# W68-X2Q12-20 Magnetic hydraulic circuit breaker. Series trip. Will hold 100% of rated current. Must trip at 125% of rated load. 2" x 1.5" x 1.63" deep (excluding toggles and terminals). Threaded mounting holes on 0.75" x

1.66" centers. 0.25" qc or solder terminals. UL,CSA. **CAT# CB-202** \$3.50 ea. • 72 for \$2.75 ea.

FUSE HOLDERS

AGC (3AG) FUSE HOLDERS (for fuses 1/4" X 1 1/4")

PANEL MOUNT

Screw style cap. Holder fits 3 AG (AGC) or MDL fuses.
Chassis mounting hole 0.59" (15mm) diameter.

CAT# FHPM-31 75¢ each
10 for \$7.00 • 100 for \$65.00

SNAP-IN AGC FUSE POST

AGC / 3AG fuseholder with twist-off bayonet cap. Rated 10A / 250V. Conveniently snap-mounts into panel holes of 0.56" diameter. Behind-panel depth of 1.65". 0.187" qc / solder terminals. Includes a 1 Amp fuse. UL, CSA. CAT# FHPM-30 65¢ each 10 for 60¢ each 100 for 50¢ each

IN-LINE AGC (3AG) FUSE HOLDER

For AGC (3AG) fuses.
Red wire. Fuse not included.

CAT# FHP-2 50¢ each • 10 for \$4.00

AGC IN-LINE WATERPROOF ==

In-line waterproof fuseholder for AGC / 3AG fuses (1/4" x 1 1/4"). Yellow rubber boot. Fuse ends crimp on to wire from #12 to #18 AWG. CAT# FHP-50 \$1.50 each • 100 for \$ 1.10 each

GMA FUSE HOLDERS

(for fuses 3/16" x 3/4")

PANEL MOUNT HOLDER FOR GMA FUSE

Alco GMA fuse holder for 3/16" x 3/4" fuses. Screw cap. Solder-lug terminals. Rated 10 Amps 250 Vac. **CAT # FHPM-45** 2 for \$ 1.00 • 100 for 35¢ each

ATC BLADE FUSE HOLDERS

Red 14 AWG wire with cover.

CAT# FHP-25

\$1.50 each





FUSE BLOCK FOR 9 ATC BLADE FUSES

Custom fuse block for 9
ATC fuses. 3.5" x 3.6" PC
board has two heavy-duty
copper terminals that will
accommodate up to six AWG 2
wires on input side of power bus.
an individual 0.25" male qc / solde

accommodate up to six AWG 2
wires on input side of power bus. Each fuse has
an individual 0.25" male qc / solder terminal on the
output side. Because bottom of pc board has
exposed solder points it requires mounting on
standoffs, for which six holes are provided.
Fuses not included.

CAT# FHP-34 \$4.25 each

FUSES

3 AG (AGC) FUSES



STANDARD FUSES 1/4" X 1 1/4"

<u>AMP</u>	CAT#	PACK OF 5	<u>100</u>
1/4	FS-025	1.00	\$15.00
1/2	FS-0.5	1.00	\$15.00
1	FS-1	.75	\$12.00
1.25	FS-1.25	.75	\$12.00
1.5	FS-1.5	.75	\$12.00
2	FS-2	.75	\$12.00
2.5	FS-2.5	.75	\$12.00
3	FS-3	.75	\$12.00
4	FS-4	.75	\$12.00
5	FS-5	.75	\$12.00
6	FS-6	.75	\$12.00
8	FS-8	.75	\$12.00
10	FS-10	.75	\$12.00
15	FS-15	.75	\$12.00
20	FS-20	.75	\$12.00
25	FS-25	.75	\$12.00
30	FS-30	.75	\$12.00

SLOW BLOW 3 AG (MDL) FUSES

1/4" X 1 1/4" SLOW BLOW FUSES ()

AMP 0.5 1 1.5	CAT# FSSB-0.5 FSSB-1 FSSB-1.5	PACK OF 5 1.75 1.75 1.75	100 \$30.00 \$30.00 \$30.00
2	FSSB-2	1.75	\$30.00
2.5	FSSB-2.5	1.75	\$30.00
3	FSSB-3	1.75	\$30.00
4	FSSB-4	1.75	\$30.00
5	FSSB-5	1.75	\$30.00
6	FSSB-6	1.75	\$30.00

GMA SIZE FUSES



MINIATURE FUSES 3/16" X 3/4"

AMP	CAT#	PACK OF	5 100
1/2	GMA-05	1.00	\$15.00
1	GMA-1	.75	\$12.00
1.5	GMA-1.5	.75	\$12.00
2	GMA-2	.75	\$12.00
3	GMA-3	.75	\$12.00
4	GMA-4	.75	\$12.00
5	GMA-5	.75	\$12.00
20	GMA-20	.75	\$12.00

1 AG FUSES



0.25" dia. x 0.62" long. AMP CAT# 2.5 1AG-2.5

PACK OF 4 100 1.00 \$15.00

8 AG FUSE, 6 AMP



1/4" X 0.9" CAT# 8AG-6 3 for \$1.00

ATC AUTOMOTIVE BLADE FUSES

Used in many current model automobiles. 3/4" X 1/8". Fits fuseholder FHP-25.

AMP	COLOR	CAT#	PACK OF 5	100	J.
3	VIOLET	FSA-3	\$1.00	\$15.00	
5	TAN	FSA-5	\$1.00	\$15.00	
10	RED	FSA-10	\$1.00	\$15.00	
15	TEAL	FSA-15	\$1.00	\$15.00	
20	YELLOW	FSA-20	\$1.00	\$15.00	
25	CLEAR	FSA-25	\$1.00	\$15.00	
30	GREEN	FSA-30	\$1.00	\$15.00	

AGU FUSES AND HOLDERS

GOLD AGU (5AG) FUSES

1.5" long x 0.41" diameter. Gold-plated fuses for high current applications.



Sold in packages of 5 pieces. 32 Volt max. 40 Amp CAT# AGU-40 \$2.95 per p

40 Amp CAT# AGU-40 \$2.95 per package 50 Amp CAT# AGU-50 \$2.95 per package 60 Amp CAT# AGU-60 \$2.95 per package

IN-LINE AGU FUSE HOLDERS

Waterproof, clear plastic holders with gold-plated pressure fittings at each end for AWG 4-10 wire. Interior O-rings provide moisture protection.

CAT# FHP-80

\$2.00 each 10 for \$1.75 each

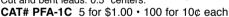


BULKHEAD MOUNT CAT # FHP-79 \$3.50 each 10 for \$3.00 each

PICOFUSE

1 AMP MINI-AXIAL PICOFUSE

Cut and bent leads. 0.5" centers.



4 AMP PICOFUSE With full leads.

CAT# PFA-4 3 for \$1.00 • 100 for \$25.00

10 AMP PC MOUNT FUSE

PC mount subminiature fuse. 10 Amps, 250 Volts. 0.33" diameter x 0.30" high. 0.19" lead spacing.

CAT# FSE-10 2 for \$1.00

100 for 35¢ each



HEATING ELEMENT

120 Vac heating element with in-line thermal cut-off switch and thermal breaker.
Approximately 29" of coiled nichrome wire is strung in a square pattern on crossed

fire-resistant strips. 4.9" x 5.9" x 0.88" overall.

Four 8-32 threaded L-brackets for mounting. 6" pigtail leads. Original purpose and specifications unknown.

CAT# HLT-1 \$ 3.50 each



BUZZERS, BEEPERS, AUDIO ALARM

PIEZOELECTRIC BEEPERS

High pitched piezo alarm signals with built-in oscillator circuitry. Low power consumption. Used in alarms, smokedetectors, electronic games, cameras and telephones.

3-16 VDC PIEZO BEEPER

#32S4120. Audible piezo alarm emits a solid. high-pitched tone of low to medium loudness. Operates on 3-16 Vdc. Rated at 12 Vdc. 4000 Hz @ 12 Vdc, 7 mA. 80 dBA/ 10 cm. 0.54" diameter x 0.3" high. PC leads on 0.25" centers.

CAT# SBZ-413 \$1.35 each 100 for 85¢ each • 500 for 75¢ each

4-28 VDC PIEZO BEEPER W/VOLUME CONTROL

Shoqvo #3650VC. Solid-state audio indicator emits a mediumloud, high-pitched tone. Screwdriver adjustable trimmer on back of device controls volume. Operates on 4-28 Vdc @ 6 mA. Black plastic face is 1.45" dia. x 0.16" thick, 1.25" dia. threaded mounting bushing with large plastic nut mounts in panels up to 0.5" thick. 0.187" qc or solder terminals. CAT# SBZ-365 \$3.95 each 10 for \$ 3.50 each • 100 for \$ 2.75 each

3-28VDC PIEZO BEEPER

Operates on 3-28 Vdc. Continuous tone. 103 db sound pressure. 1.14" diameter x 0.93" ABS plastic housing. Can be bulkhead mounted with tabs on 1.31" mounting centers, or can be mounted through a panel hole of 0.7" diameter via threaded bushing and panel nut. 5" wire leads. Black housing

\$3.75 each

4-15 VDC PIEZOELECTRIC BUZZER

TDK # PB2130UP002A. Soft to mediumloud high-pitched tone. 0.82" diameter x 0.63" high plastic case with mounting ears. Holes on 1" centers. PC pins on 0.5" centers. Resonant frequency: 3.3 kHz. Operating voltage: 4-15 Vdc. Current: 20mA. Sound pressure: 75 min.dB(A)/100cm CAT# SBZ-213 \$1.35 each

SIRENS

100 for 85¢ each • 600 for 75¢ each

12 VDC SIREN

CAT# SBZ-100

Crimestoppers # CS-194C Ear-piercing warble-tone siren for auto or home use. 3.75" dia. x 3.9" deep impact-resistant plastic horn. Adjustable metal mounting bracket. 3' wire leads. Suitable for outdoor use.

CAT # ES-1 \$ 9.50 each

XL MINI PIEZO SIREN

Small, painfully-loud two-tone piezo siren for auto or home security devices. Operates 6-12 vdc, 130 ma. 110dB output (30cm). 1.81" x 1.55" x 0.88" high black plastic body. Two mounting holes on diagonal 1.80" centers. 7" wire leads.

CAT# ES-10 \$4.50 ea. • 10 for \$4.00 ea.

DUAL-TONE PIEZO SIREN

OBO Piezoelectrics # 35D1 Loud dual-tone, piezo-electric siren. Operates on 6-24 Vdc. 1.64" diameter x 0.63" black plastic case with mounting holes on 1.95" centers. 4.5" color-coded leads. CAT# SBZ-351 \$2.75 ea. • 50 for \$2.25 ea.

METAL BUZZERS

"VINTAGE" 1.5 VOLT BUZZER

Classic, "old-school" metal buzzer, like one you might have seen on an old bicycle. Hinged metal enclosure with shiny chrome cover is 3.18" x 2.6" x 1.6" thick. Inside is a metal buzzer and holder for one C-cell battery. Medium loudness. Two mounting screws on back of buzzer on 1.5" centers. Battery not included.

CAT# BZ-12 \$2.00 ea. • 10 for \$1.70 ea.

6VDC (6-9V) BUZZER

6 - 9 Vdc. 1.94" diameter face. 1.68" diameter body. CAT# BZ-2 \$1.25 each

10 for \$1.00 each • 100 for 70¢ each

120 VAC 2" diameter buzzer. Nice loud, raspy sound. Ideal for noisy locations. CAT # BZ-120 \$1.50 each • 10 for \$1.35 each



0.6" DIAMETER

15 mm piezo disc. Two 4" pigtail leads. CAT # PE-45 \$ 0.75 each 10 for \$ 6.50 • 100 for \$ 50.00

PIEZO ELEMENT

0.86" diameter x 0.1" plastic housing with a ring of self-adhesive neoprene padding on the front face. 1.25" long leads. 0.79" diameter piezo element can be removed from case. CAT# PE-49 75¢ each

10 for 65¢ each • 100 for 50¢ each

50 MM PIEZO ELEMENT

Murata 7BB-50-1A10. Larger than usual, 50mm (2") diameter, piezo element. 6" color-coded leads. CAT# PE-50 75¢ each

10 for 65¢ each • 300 for 45¢ each

ENCASED PIEZO ELEMENTS

Plastic encased piezo elements are more resonant and louder than non encased piezo elements. They require external signal to produce sound.

1.19" DIAMETER X 0.29"

Shigma # SHI-1130. Black case. PC leads on 0.6" centers.

CAT# PE-34 75¢ each

10 for \$6.50 • 100 for \$50.00



AVX/ Kyocera # KBT-34SB-1A Piezo element encased in a black plastic resonant module. Designed for tone ringer in telephones, Mounting holes on 1.57" centers. 6" wire leads.

CAT# PE-35 75¢ each • 100 for \$50.00



PIEZO GREETING CARD SOUNDER

The "speaker" is a 1.1" diameter encased piezo disc. The disc can be removed from the assembly and used for other applications. Operates on one AG-3 button cell. Plays "Let Me Call



You Sweetheart." Sold "as-is.". \$1.00 per unit • 10 for \$7.50

CAT# PE-48

MINI TONE TRANSDUCERS

Used in paging, warning signals, metal detectors and alarm clocks. Miniature magnetic transducers require external signal source to produce sound.

16 Ohm mini-tone transducer (speaker). 0.47" diameter x 0.35" high. PC pins on 0.3" centers. CAT# PE-47 2 for \$1.00 • 100 for 40¢ each



RDI # DMT-1206. 48 Ohm audio tone transducer. 0.47" diameter x 0.34" high. PC pins on 0.25" centers.



0.47" diameter X 0.35" high. 5" wire leads. CAT # PZB-25



50¢ each • 100 for \$25.00

AVX/Kyocera # PCRT21BGX Black plastic front, vented metal back. Solder loop terminals. 0.82" dia. x 0.15"



CAT # PE-38 3 for \$1.00 100 for \$25.00 • 1000 for \$125.00

Hosiden # HMU0506. 32 Ohm mini speaker designed for surface mounting. 0.34" square x 0.12" plastic case. Two sound holes on the bottom of the device are sealed with a removable putty for protection during installation. CAT# PE-51 2 for \$1.00 • 100 for 30¢ each

NYLON STRAPS & BUCKLES

23" NYLON STRAP W/SPRING CLIP

Webbed nylon strap with a strong spring buckle for quick fastening and release. Strap is dark turquoise blue webbed nylon, 23" long x 0.6" wide. CAT# WS-6 \$1.00 each • 10 for 85¢ each

WEBBED NYLON STRAP W/ BUCKLE

1.5" wide black nylon webbed strap and nylon



buckle. Adjustable from 24" minimum to 44" maximum length. Buckle designed for quick fasten and release. Woven into the strap, in gray lettering, is "Ora Electronics." Strap is suitable for fairly heavy-duty fastening and lifting.

CAT# WS-9 \$1.85 each • 10 for \$ 1.70 each

23" STRAP AND BUCKLE



Heavy-duty 2" wide black nylon webbed straps (2 pcs), and nylon buckle. Buckle is designed for quick fasten, release and easy adjustment of strap length. Both straps are 23" long with hem on one end. Great for quick, easy load fastening.

CAT# WS-3 \$1.75 each • 10 for \$15.00

HOOK AND LOOP

COLORFUL HOOK-AND-LOOP WRAPPERS

Hook-and-loop strips, ideal for wrapping wire or other bundles up to approximately 1.75" dia. Each strip is 7" x 0.8." Package of six in assorted CAT# WR-2 \$2.75 per package of six

ADJUSTABLE HOOK-AND-LOOP STRAPS

28" x 1" wide hook & loop straps with a buckle at one end. Can be adjusted to fasten bundles up to 8" in diameter. Ideal for temporary fastening of fishing poles, tools, books or sports equipment. Two per package. CAT# WR-3 \$ 2.50 per package of two

HOOK & LOOP "WRAPPERS" REUSABLE CABLE TIES

12.5" long x 0.5" wide hook & loop strap ideal for bundling wire or for strapping together fishing poles, skis and other items.

CAT # WR-1 \$1.00 each • 10 for \$8.50

HOOK-END

SJ3526 Black. High-performance nylon hook material. 2" wide strip with pressuresensitive adhesive backing. Stiff nylon hooks stick to mating loop strips and other soft materials.

CAT# VCO-7 50¢ per ft 10' for 45¢ per ft • 150' for 30¢ per ft

VELCRO® TAPE, WHITE

White, 30" x 5/8" wide Velcro® strips. Non-adhesive: for sew-on applications. Cut to desired length and sew on. Washable. One hook strip. One loop strip.

CAT# VCO-13 \$2.50 per package

SELF-STICKING VELCRO® PATCHES

2" x 4" black Velcro® patches with industrial strength adhesive backing. Package of three sets of hook and loop strip.

CAT# VCO-11

\$3.50 per package

PADDED HANDLE WITH **WEBBED NYLON STRAP**

Foam-padded handle attached to 1" wide webbed nylon strap with a metal ring at the opposite end. Designed for use with exercise equipment, the handle and strap is substantial enough to hold quite a

bit of weight. Could be attached to any piece of equipment to facilitate lifting.

CAT# HDL-37 75¢ each 8" long strap 16" long strap CAT# HDL-38 \$1.00 each







HEADPHONES

LIGHTWEIGHT STEREO **HEADPHONES**

for audio and computer applications. Adjustable headband. 3.5mm phone plug with 4 foot shielded cord.

CAT# HP-100 \$1.75 each

10 for \$ 1.50 each • 100 for \$ 1.20 each

PADDED STEREO **HEADPHONES**

Stereo padded headphones with adjustable padded headband. Individual volume controls on each side. Stereomono switch. 32 Ohm impedance. 6 foot coil cord with 3.5mm phone plug. Includes adaptor from 3.5mm to 1/4" plug. CAT # HP-085 \$ 10.00 each



REDUCED

PRICE!

ULTRA LIGHTWEIGHT DYNAMIC HEADPHONE

For use with personal stereo systems, these comfortable, lightweight headphones rest behind your neck (instead of the old fashioned, over-the-head style). 46" long single-sided cord. Full range. 32 Ohm impedance, 3.5mm stereo plug. CAT# HP-40 \$7.95 each \$4.95 each

STEREO "EARBUDS"

For use with personal stereo systems. Lightweight, comfortable padded "ear bud" earphones. 18-32 Ohms. Includes convenient reel-up case and extra foam pads. CAT# HP-275 \$ 2.95 per set

HEADSET WITH BOOM MIC

Audiotronics # HS-31 Monaural headset with dynamic boom microphone designed for educational applications. Padded earpieces and headband. Adjustable boom and headband. 6 foot cable with separate 1/4" phone plugs for mic and earphones.

CAT# HP-42 \$ 4.00 each Case of 20 for \$3.50 each

IN-EAR EARPHONES

8 ohm earphone. Black. 6' cord. 3.5 mm mini phone plug. CAT# EP-9

8 Ohm earphone. Black. 4' cord. 3.5mm mini phone plug. **CAT # EP-10**

\$1.00 ea. • 10 for 85¢ ea. • 100 for 65¢ ea.

HEADPHONES WITH MICROPHONES

MULTIMEDIA EARPHONE AND BOOM MIC

Comfortable earphone with boom microphone for multimedia and internet telephone applications. Earpiece is held next to the ear with a plastic clip that



CELLPHONE / CORDLESS PHONE HANDS-FREE EARPHONE AND MIC

A good-quality earphone/ microphone for use with most cellphones and cordless home phones. Provides a safe, convenient way to use your phone while driving or working. Flexible 4 ft cord, terminated with a right-angle 2.5mm stereo phone plug. Opaque blue cord and headset.

CAT# PHN-37 \$2.50 each

10 for \$2.25 each

HEADSET FOR VOX MODULE

Maxon WTA-13G "Hands-free" headset with dual plug for voice activated (VOX) module below. 3.5mm and 2.5mm phone plugs on 3/8" centers

CAT# HP-41

\$3.00 each

VOX MODULE, MAXON

REDUCED PRICE! Maxon CA1482A VOX / PTT control. VOX control for Maxon 2-way radios. Designed for Models CP or SP5000. the unit will probably work on a variety of similar radios. Six foot coil cord with dual plugs (3.5mm and 2.5mm on 3/8" centers). Dual jacks (3.5mm and 2.5mm on 3/8" centers) for headset. VOX control allows you to switch between P-T-T and VOX operation. Belt clip. Includes rechargeable battery (installed in unit). Requires a 7.5 Vdc 100 mA wall transformer with a 2.5mm plug, tip positive (not included) CAT# VOX-2 \$3.50 each \$2.00 each

PARROTT TRANSLATOR -**HEADPHONE W/ BOOM MIC**

VXI Parrott Translator Headphone and electret mike with a black box with circuitry, requiring two AA cells to operate. Separate 3.5mm stereo mini phone plugs for the mike and headphone According to others selling the unit, the circuitry makes the headset "compatible with any PC soundcard allowing maximum voice recognition."

Can be used as a standard multimedia headset.

CAT# PHN-32 \$3.00 each





ELECTRET MICROPHONES

All of the electret microphones listed below, including those that are part of headphone microphone assemblies, require a low current voltage of 1.5 - 10 Vdc to operate. They will not function in applications that are not specifically wired for electret microphones.

ELECTRET MIC ELEMENTS

Hosiden # KUB2823. Tiny, omnidirectional microphone. 6mm dia. x 2.7mm height. 2.2K Ohm impedance. Operates on 2.2 Vdc, 0.5 mA. Sensitivity, -45 dB. PC pins on 0.05" centers.

CAT# MIKE-79 65¢ each

10 for 55¢ each 100 for 40¢ each

Electret mic condenser microphone mounted in a rubber shock-mount.

0.40" x 0.48" x 0.53" overall.

It can be trimmed with a knife or removed altogether.

The mic element is 0.23" dia. x

0.13" (6mm x 2.7mm) and has 1.5" leads.

CAT# MIKE-81 65¢ each 10 for 55¢ each • 100 for 40¢ each

20 for 40¢ each • 100 for 30¢ each

0.38" diameter x 0.23".

Prepped with 1.35" wire

leads with miniature 2-conductor female connector.

CAT# MIKE-74 2 for \$1.00

0.40" diameter x 0.18" electret microphone mounted in a 0.74" x 0.78" x 0.36" rubber, shock-absorbing assembly. Microphone is easily removed from assembly. 1.25" wire leads w/connector.

CAT# MIKE-109 2 for \$1.00 10 for 40¢ each 100 for 30¢ each

ELECTRET MIC WITH HEADBAND

Labtec LVA-7330
ClearVoice™
Head Microphone
with NCAT2™
(Noise Cancelling
and Amplification
Technology, Version 2)



ELECTRET DISK MICROPHONE

Multi-media-type electret microphone.
Beige mike, boom and adjustable
deskstand. Also has a holder for
attaching microphone to side of computer
or table. 5 foot cord with 3.5mm
stereo phone plug.

CAT# MIKE-75 \$2.50 each

MICROPHONE W/ VISOR CLIP

Electret microphone in
0.56" diameter x 1.39" long
cylindrical housing. Flexible
12' cord with 3.5mm
mini-phone plug. Includes visor clip.

CAT# MIKE-87 \$2,75 each

MIC W/ VISOR CLIP

Electret microphone in 0.59" diameter x 0.81" long cylindrical housing.
Flexible 12' cord terminated with a 2-pin molex-type connector.

CAT# MIKE-88 \$1.75 each

15 for \$1.50 each

ELECTRET MIKE w/ CLIP AND HOLDER

Beige electret mike with 8' cord terminated to a 3.5mm phone plug. Has plastic clip on body for attaching to visor or pocket. Includes an adhesive backed holder for attaching to computer. Overall dimensions: 1.19" x 0.53" x 1.92" h.

CAT# MIKE-54 \$1.25 each

MICROPHONES

MULTI PURPOSE MICROPHONE

Black ABS housing.
Dynamic, moving-coil element.
Uni-directional cardioid pattern.
600 Ohm impedance. 8' shielded cable. 1/4" phone plug.
Sensitivity: 76dB plus or
minus 3dB. Frequency response:

80-12kHz CAT# MIKE-100 \$6.50 each

DUAL IMPEDANCE MICROPHONE

600 Ohm and 50K 1kHz.
Unidirectional cardioid
pattern. Black diecast
construction Detachable,
15' low-loss cable with 1/4"
phone plug and
XLR connector.
Sensitivity:
73dB plus or

minus 3dB @ 1kHz. Frequency response: 100-13kHz. CAT# MIKE-175 \$20.50 each

MICROPHONE W/ ON-OFF SWITCH

Unidirectional microphone with on-off recorder switch. Five foot cord terminates to a 3.5mm mini-phone plug for the microphone and a 2.5mm mini-phone plug for the switch.

Includes a plastic desk-top stand. **CAT# MIKE-85** \$3.50 each

MIC W/ 1/4" PLUG

Unidirectional microphone. Five foot cord terminates to a 1/4" phone plug. Includes a plastic desk-top stand.

CAT# MIKE-84 \$3.50 each



INSULATED CRIMP TERMINALS

QUICK DISCONNECT MALE 1/4"

	CAT#	WIRE SIZE	COLOR	50 PCS	100 PCS	500 PCS	1,000 PCS
• 	2125	22-18	RED	2.50	4.50	20.00	32.00
	2225	16-14	BLUE	2.50	4.50	20.00	32.00
	2325	12-10	YELLOW	3.00	5.50	26.00	50.00

QUICK DISCONNECT FEMALE 1/4"

1125	22-18	RED	2.50	4.50	20.00	32.00
1225	16-14	BLUE	2.50	4.50	20.00	32.00
1325	12-10	YELLOW	3.25	6.00	27.50	52.00

QUICK DISCONNECT FEMALE 3/16"

CAT#	WIRE SIZE	COLOR	50 PCS	100 PCS	500 PCS	1,000 PCS
1150	22-18	RED	2.50	4.50	20.00	32.00
1250	16-14	BLUE	2.50	4.50	20.00	32.00

FULLY INSULATED MALE 1/4"

4125	22-18	RED	4.50	8.00	35.00	60.00
4225	16-14	BLUE	4.50	8.00	35.00	60.00

FULLY INSULATED FEMALE 1/4"

-6	CAT#	WIRE SIZE	COLOR	50 PCS	100 PCS	500 PCS	1,000 PCS			
	6125	22-18	RED	4.50	8.00	35.00	60.00			
	6225	16-14	BLUE	4.50	8.00	35.00	60.00			
DIOOV DAOK 4/4II										

PIGGY-BACK 1/4"

	сат# 3125	WIRE SIZE 22-18	RED	50 PCS 4.50	100 PCS 8.00	500 PCS 35.00	1,000 PCS 60.00
42	3225	16-14	BLUE	4.50	8.00	35.00	60.00

BUTT CONNECTORS

	сат# 5100	WIRE SIZE 22-18	COLOR RED	50 PCS 2.50	100 PCS 4.50	500 PCS 20.00	1,000 PCS 32.00
Ш	5200	16-14	BLUE	2.50	4.50	20.00	32.00
	5300	12-10	YELLOW	3.25	6.00	27.50	52.00

END CAPS

CAT# 0100	wire size color 22-18 NATURAL	50 PCS 2.50	100 PCS 4.50	500 PCS 20.00	1,000 PCS 32.00
0200	12-16 NATURAL	2.50	4.50	20.00	32.00
0300	16-14 NATURAL	2.75	5.00	23.00	40.00

FULLY INSULATED MALE BULLET CONNECTORS

CAT#	WIRE SIZE	COLOR	50 PCS	100 PCS	500 PCS	1,000 PCS
5400	22-18	RED	2.50	4.50	20.00	32.00
5500	16-14	BLUE	2.50	4.50	20.00	32.00

FULLY INSULATED FEMALE BULLET CONNECTORS

CAT# 560 570		RED			500 PCS 27.50 27.50	
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STUD SIZE 50 PCS

SPADE TERMINALS CAT# WIRE SIZE

COLOR

	9106	22-18	RED	6	2.50	4.50	20.00	32.00
\mathbb{N}	9108	22-18	RED	8	2.50	4.50	20.00	32.00
\Box	9110	22-18	RED	10	2.50	4.50	20.00	32.00
Л	9206	16-14	BLUE	6	2.50	4.50	20.00	32.00
\Box	9208	16-14	BLUE	8	2.50	4.50	20.00	32.00
	9210	16-14	BLUE	10	2.50	4.50	20.00	32.00
	9308	12-10	YELLOW	8	3.25	6.00	27.50	52.00
	9310	12-10	YELLOW	10	3.25	6.00	27.50	52.00

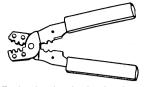
RING TERMINALS

9	8106 8108 8110 8206 8208 8210 82516 8308 8310	22-18 22-18 22-18 22-18 16-14 16-14 16-14 16-14 12-10 12-10	RED RED RED BLUE BLUE BLUE BLUE YELLOW YELLOW	8 10 6 8 10 5/16 8 10	2.50 2.50 2.50 2.50 2.50 2.50 3.25 3.25 3.25	4.50 4.50 4.50 4.50 4.50 4.50 4.50 6.00 6.00	20.00 20.00 20.00 20.00 20.00 20.00 20.00 27.50 27.50 27.50	1,000 PCS 32.00 32.00 32.00 32.00 32.00 32.00 52.00 52.00 52.00
	83516	12-10	YELLOW	5/16	3.75	7.00	30.00	55.00
	52263	8-0/4	RED	10 10	0/\$4.00	30.00	137.50	250.00

QUICK SPLICE

	7100 7200	wire size 22-18 16-14	COLOR RED BLUE			500 PCS 47.00 47.00	1,000 PCS 75.00 75.00
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CRIMP TOOL



For insulated and uninsulated solderless terminals, butt connectors and end caps. Also crimps D-sub and other connector pins. CAT# CT-1 \$8.75 each

TELECOM **CONNECTORS**

For 19- 26 AWG wire. Simply put wires in place and push button with pliers or crimping tool. Filled with silicone gel to insulate and improve conductance.

2-WIRE BUTT **SPLICE - YELLOW** CAT # UYC



10 for \$2.00 50 for \$7.50 100 for \$11.00

3 -WIRE BUTT **SPLICE - RED** CAT # URC



10 for \$2.50 50 for \$10.00 100 for \$14.00

TAP CONNECTOR

Allows user to tap directly into an existing wire without cutting.

CAT # UBC 10 for \$2.50 50 for \$10.00 100 for \$14.00

IN-LINE SPLICE CAT # BSL-2

1,000 PCS



10 for 75¢ 50 for \$3.00 100 for \$5.50

CABLE CONTROL KIT



Ten-piece assortment of clamps and clips to organize the flow of cables in your life. Flexible, reusable clips allow you to route and re-route cables. For cables and bundles up to 0.5" diameter. Includes double-stick tape to fasten clips to any solid, clean surface.

CAT# CCK-1 85¢ each 10 for 75¢ each

CABLE TIES CAT# LENGTH MIN. TENSIL COLOR MAX. BNDL 10 100 1000 STRENGTH DΙΔ 4" 15/16" \$15.00 TR-400 18 lbs 30 \$2.50 neutral TR-400B 4" 18 lbs black 15/16" .35 \$3.00 \$17.50 6" TR-600 30 lbs neutral 1 1/2" .50 \$4.00 \$30.00 TR-600B 6" 30 lbs black 1 1/2" 50 \$4.00 \$30.00 TR-800 8" .60 \$5.00 50 lbs neutral 1 3/4" \$40.00 8" TR-800B 50 lbs black 1 3/4" 70 \$6.00 \$50.00 TR-1100 11" 50 lbs neutral 3" .70 \$6.00 \$50.00 TR-1100B 11" \$60.00 50 lbs 3" \$7.00 black 80 15" neutral TR-1500 50 lbs 4" \$1.00 \$8.00 \$70.00

ADHESIVE-BACKED TIE MOUNTS

3/4" square 10 - 40 lbs ties CAT# TM-1 10 for \$1.20 1" square 18 - 50 lbs ties CAT# TM-2 10 for \$1.40 These tie mounts are used to hold the above tie wraps to a flat surface.

100 for \$9.50 1000 for \$85.00 100 for \$10.00 1000 for \$95.00

WIRING NUTS						
SIZE	COLOR	CAT#	50	100	500	1000
Fits 18-28 ga. wire	Grey	WN-1	\$2.00	\$3.50	\$15.00	\$25.00
Fits 18-24 ga. wire.	Blue	WN-2	\$3.00	\$5.50	\$25.00	\$45.00
Fits 16-22 ga. wire	Orange	WN-3	\$3.75	\$7.00	\$32.50	\$60.00
Fits 18-12 ga. wire	Yellow	WN-4	\$3.75	\$7.00	\$32.50	\$60.00

THREADED HEX STANDOFFS

(Male to Female) M-F STYLE



N=Nylon	S=Steel
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<u>Length</u>	<u>Dia.</u>	Mat.	<u>Style</u>	<u>Thread</u>	CAT #	<u>10</u>	<u>100</u>
0.57"	0.25"	S	M-F	4-40	SP-151	1.25	9.40
0.63"	0.25"	S	M-F	4-40	SP-157	1.25	9.40
0.69"	0.25"	S	M-F	6-32	SP-152	1.25	9.40
0.79"	0.25"	S	M-F	6-32	SP-149	1.50	12.00
1.75"	0.25"	N	M-F	6-32	SP-155	2.00	15.00
1.38"	0.25"	S	M-F	8-32	SP-153	2.00	15.00

BOX OF INSULATED STAPLES

WHITE 4MM Round staple CAT# CSI-6

White Oval staple for 0.125" X 0.200" For telephone, speaker, and flat cables. CAT# CSI-1

White Round staple for cable. For 1/4" dia. RG-59 co-ax cables. CAT# CSI-2

White Round staple for 0.30" dia. cable. Fits RG-6/U co-ax cable. CAT# CSI-3

all the above insulated staples 100 piece box for \$3.50 • 10 for \$24.00

4-40 JACKSCREWS

4-40, male-female standoffs for securing connectors. 0.17" overall length

CAT# SP-193 20 for \$1.00 • 100 for \$3.00

SPLIT-LOOM TUBING

Dress up auto and home installations with split-loom tubing. Allows exit or entry of wires at any point.

DIA.	COLOR	CAT#	PER FT	100 FT
1/4"	black	SLT-14	12¢	\$9.00
3/8"	black	SLT-38	15¢	\$10.00
1/2"	black	SLT-12	19¢	\$12.00
5/8"	black	SLT-58	25¢	\$18.00
3/4"	black	SLT-34	29¢	\$18.00

Minimum order 10' of one size.

NON-THREADED SPACERS



K = Bakelite

A = Aluminum N = Nylon Length Dia. Mat. Hole CAT# 10 100 1000 0.093" 0.25" 0.14 SP-186 0.40 3.50 15.00 0.25" SP-42 0.25" Ν #8 0.80 5.00 35.00 SP-190 0.25" 0.25 Κ 0.14" 0.80 4 50 30.00 0.28" 0.32" 0.2" SP-142 0.90 6.50 50.00 0.25" 0.14 SP-188 0.437K 0.80 4 50 30.00 0.437" 0.5" 0.257" SP-182 1.00 6.00 45.00 0.25" SP-58 0.50" #8 0.90 5.50 40.00 0.25" SP-189 0.50" 0.115" 0.90 5.50 40.00 0.625" 0.312" SP-181 0.50" Ν 1.00 6.00 45.00 SPC-5 0.6" 0 13" N 18awg 0.40 3 00 20.00 0.62" 0.25" #8 SP-66 0.95 5.75 42.50 0.625 0.25" 0.115" SP-191 0.90 5.50 45.00 0.25" 0.625 0.115" SP-175 0.90 5 50 45 00 0.625 0.31" K 0.18" SP-100 0.65 4 50 30.00 0.171" 0.75'0.312" N SP-180 1.00 6.00 45.00 SP-195 0.88" 0.30" Ν 0.18" 1 00 6.00 45.00 0.25" 1.5" Κ 0.14" SP-192 1.00 6.00 45.00

CUSHIONED LOOP CLAMPS

Carbon steel clamps with neoprene cushions except LCL-5 (which is aluminum).





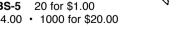
wedge-type

100
\$11.00
318.00
18.00
18.00

CIRCUIT BOARD SUPPORT

Nylon circuit board supports snap into 0.187" hole in chassis. 3/4" high.

CAT# CBS-5 20 for \$1.00 100 for \$4.00 · 1000 for \$20.00



FEED THROUGH BUSHINGS

Seal wall openings and protect cables. ABS plastic. Fits one RG-6 cable. 0.30" I.D.

CAT# FTH-1 5 for \$1.00

Fits one RG-59 cable.0.26" I.D. CAT# FTH-3 10 for \$1.00 • 100 for \$8.00

HEAT SHRINKABLE **TUBING & ACCESSORI**

STEINEL HEAT GUN

UltraHEAT™ #SV800 Dual temperature heat gun provides



CAT# HG-800 \$38.40 each

HEAT SHRINKABLE TUBING

Polyolefin heat shrinkable tubing shrinks to 50% of its original diameter when heated. It forms a tight mechanical bond even over irregularly shaped materials.

Size listed is expanded (pre-shrunk) diameter.								
	4 FOOT PIECE							
Dia.	Color	CAT#	Per 4'					
3/64"	BLACK	HUG-364B	\$1.15					
	RED	HUG-364R	\$1.15					
	WHITE	HUG-364W	\$1.15					
1/16"	BLACK	HUG-116B	\$1.20					
	RED	HUG-116R	\$1.20					
	WHITE	HUG-116W	\$1.20					
3/32"	BLACK	HUG-332B	\$1.25					
	RED	HUG-332R	\$1.25					
	WHITE	HUG-332W	\$1.25					
1/8"	BLACK	HUG-18B	\$1.35					
	RED	HUG-18R	\$1.35					
	WHITE	HUG-18W	\$1.35					
3/16"	BLACK	HUG-316B	\$1.60					
	RED	HUG-316R	\$1.60					
	WHITE	HUG-316W	\$1.60					
1/4"	BLACK	HUG-14B	\$1.90					
	RED	HUG-14R	\$1.90					
	WHITE	HUG-14W	\$1.90					
3/8"	BLACK	HUG-38B	\$2.15					
	RED	HUG-38R	\$2.15					
	WHITE	HUG-38W	\$2.15					
1/2"	BLACK	HUG-12B	\$2.40					
	RED	HUG-12R	\$2.40					
	WHITE	HUG-12W	\$2.40					
3/4"	BLACK	HUG-34B	\$3.15					
1"	BLACK	HUG-1B	\$4.50					
1 1/2"	BLACK	HUG-112B	\$8.50					

100 FOOT ROLL

	<u> 70 (</u>	<u> </u>	
dia	color	CAT#	100' roll
1/16"	Black	HSS-116B	\$21.00
3/32"	Black	HSS-332B	\$23.00
1/8"	Black	HSS-18B	\$25.00
3/16"	Black	HSS-316B	\$28.00
1/4"	Black	HSS-14B	\$33.00
3/8"	Black	HSS-38B	\$38.00
1/2"	Black	HSS-12B	\$45.00

HEATSHRINK TUBING 154 PIECE ASSORTMENT

Have the right piece of heat shrinkable tubing when you need it. Unbreakable clear plastic box with dividers contains 4 inch lengths of 6 different diameters: 1/16" - 56 pcs,

3/32" - 35 pcs. 1/8" - 28 pcs,

3/16" - 18 pcs, 1/4" - 9 pcs, 3/8" - 8 pcs.



ASSORTED COLORS:

black, red, clear ,yellow, green, blue, white CAT# HS-4900 \$11.95 per kit

BLACK ONLY: CAT# HS-4901 \$11.95 per kit

DUAL WALL HEATSHRINK TUBING KIT

Dual-wall adhesive-lined heatshrink tubing assortment. 4" black polyolefin with adhesive lining. Shrinks to



half its original diameter when heated, creating a moisture-resistant, tight, flexible protective seal. Unbreakable, clear plastic box with dividers. Contents:

1/8" 1/2" 4 pcs 12 pcs 1/4" 10 pcs 3/4" 3 pcs 3/8" 6 pcs 1" 2 pcs **CAT# HS-4903** \$15.95



HEATSHRINK CABLE MARKING KIT

1/2" pieces of black heatshrink tubing, numbered 0 to 9 for cable marking applications. Each number is supplied in sizes 1/8", 3/16",

1/4", 3/8", and 1/2". Also includes 60 pieces of colored heatshrink tubing in assorted sizes. Sorted by number in an unbreakable clear plastic box. Includes: 300 pieces 1/2" long numbered markers, assorted diameters. 60 pieces 1/2" long color markers, assorted diameters.

SMC TIUBRIT POLYURETHANE 0.0.1/4

CAT# HS-4902 \$11.95

POLYURETHANE TUBING (NOT HEAT-SHRINK)

SMC# TIUB 07B-20. 1/4"O.D. (6.35mm O.D., 4.23mm I.D.) black

polyurethane tubing for air or water. 20 meter (65 ft) roll. Polyurethane tubing offers improved abrasion resistance, flex-life, flexibility at low temperatures, tear strength, and higher working pressures. Additional benefits include: resistance to ozone, fuels, solvents, and longer life.

20 Meter Roll (65 ft) CAT# PUT-20

\$ 8.50 per roll 10 rolls for \$7.50 per roll

WIRE - CABLE - CO-AX

SHIELDED MULTI-CONDUCTOR JACKETED CABLES 100% FOIL SHIELD WITH DRAIN

For data communication, computer hook ups, audio and instrumentation. Stranded color coded conductors. Gray vinyl jacket.



CAT# 2CS22	COND. 2	GAUGE 22	o.d .170"	10' 2.10	^{50'} 10.00	100' 19.00	500' 90.00	1000' 160.00
3CS22	3	22	.180"	2.60	12.00	23.00	110.00	200.00
5CS22	5	22	.200"	3.20	15.00	27.00	115.00	220.00
10CS22	10	22	.264"	4.60	20.50	40.00	192.00	370.00

MICROPHONE CABLE

2 CONDUCTOR SHIELDED

22 ga. stranded conductor. Braided copper shield. Flexible black PVC outer jacket. 0.23" nominal O.D. **CAT# MC-2** 10 feet \$4.50

100 feet \$32.00 · 300 feet \$90.00

CO-AXIAL CABLE

RG-6/U, 75 OHM

18 ga solid center. Double shield, 100% foil shield, 60% aluminum braid.

CAT# RG-6U BLACK
CAT# RG-6UW WHITE

50 feet for \$9.00 • 100 feet for \$17.00 500 feet for \$70.00 1000 feet for \$ 160.00

RG-58/U COAX CABLE, 50 OHM

BLACK. 20 gauge solid center, 80% copper braid shield, 50 ohm impedance.

CAT# RG-58U 50 feet for \$11.00 100 for 19¢ per ft 500 for 17¢ per ft 1000 for 16¢ per ft

RG-174 MINI CO-AX

BLACK. 50 ohm impedance. 26 ga. stranded center. Braided copper shield. **CAT# RG-174** 10 ft. \$2.90 • 50 ft. \$13.50 • 100 ft. \$25.00 500 ft. \$115.00 • 1000 ft. \$195.00

COAX CABLE STRIPPER

Rotary coax cable stripper for RG58, RG59, RG62,RG6. **CAT # WS-60** \$12.50 each



STRANDED HOOK-UP WIRE 100 FOOT ROLLS

26 - 18 AWG stranded,
PVC insulated hook-up wire.
Colors: Black (BK), Red (RD),
White (WT), Green (GN),
Yellow (YL) and Blue (BL). To create
part number put in the two-letter
color abbreviation after the gauge.
ie: 24 gauge black wire is CAT# 24BK-100.
Available in 100 foot spools only.

26 AWG	CAT# 26xx-100	\$4.30 per spool
24 AWG	CAT# 24xx-100	\$4.60 per spool
22 AWG	CAT# 22xx-100	\$5.10 per spool
20 AWG	CAT# 20xx-100	\$6.60 per spool
18 AWG	CAT# 18xx-100	\$7.85 per spool

FLAT RIBBON CABLE 0.05" PITCH

0.050" pitch between conductors. 28 AWG stranded conductors. For use with IDC, insulation displacement connectors. 300 Volt rating. UL, CSA

GRAY OR BLUE INSULATION

with red marker stripe on one side. 3M 3365, Spectra Strip 191-2801-0xx,

Alpha 3580/xx, Belden 9L280xx or equivalent.

Conductors	CAT #	10 feet	100 feet
14	RCBL-14	\$2.00	14.00
16	RCBL-16	\$2.20	15.00
20	RCBL-20	\$2.80	16.00
26	RCBL-26	\$3.50	24.00
34	RCBL-34	\$4.30	30.00
37	RCBL-37	\$4.50	32.00
40	RCBL-40	\$4.80	36.00
50	RCBL-50	\$5.30	40.00

COLOR-CODED BAINBOW INSULATION

3M 3302, Spectra 135-2801-0XX, Alpha 3583/XX, Belden 9R280/xx or equivalent.

Conductors 10 feet 100 feet CAT # CCBL-10 10 \$1.75 15.00 16 CCBL-16 \$3 25 21.00 20 CCBL-20 \$3.85 30.00 26 CCBL-26 \$4.50 38.00 34 CCBL-34 \$5.30 47.00 40 CCBL-40 \$6.00 54.00 \$7.25 61.00 50 CCBL-50 \$8.25 60 CCBL-60 70.00 64 CCBL-64 \$8.50 74 00

HEAVY-DUTY TUBULAR COPPER BRAID

BELDEN #8668.

Tinned copper-braid cable

woven in a tubular configuration for high current grounding shielding and protective applications. Multi-stranded woven copper. 30 Amps current capacity. 120 x #34 stranding. Nom. O.D: 0.25". Nom. flattened width: 0.22". Nom I.D.: 0.20".

CAT # GS-16 3 feet for \$1.00 100 feet for \$25.00 • 1000 feet \$150.00

CATEGORY 5E CABLE, 4 TW PAIRS

4 unshielded twisted pairs (UTP). AWG 24 solid conductors. 350 mHz. Western Electric Standard color coding. UL, CSA listed.

CAT# CTE-5

50 feet for \$9.00 100 feet for \$16.00 300 feet for \$42.00 1000 feet for \$110.00



PLENUM CABLE

Belden #88723 002 Red.
2-pair Beldfoil™ shielded plenum cable.
22 AWG stranded (7 x 30) tinnedcopper, twisted pairs, individually
shielded. 24 AWG stranded drain wire.
Fluorinated Ethylene Propylene (FEP)
insulation. 0.14" nominal o.d. UL.

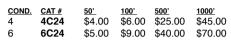
CAT# PLC-4 60¢ per ft

100 for 50¢ per ft • 1000 for 35¢ per ft

TELEPHONE STATION WIRE

ROUND STATION WIRE

AWG 24, solid wire.



FLAT TELEPHONE WIRE

AWG 28, stranded wire.

For use with crimp-on RJ11, RJ12 and RJ45 modular connectors. Color-coded.

COND.	CAT #	<u>50'</u>	<u>100'</u>	1000'
4	4CF	\$4.00	\$7.50	\$45.00
6	6CF	\$6.00	\$8.50	\$65.00
8	8CF	\$8.00	\$11.00	\$95.00

CRIMP-ON MODULAR PLUGS FOR DATA AND PHONE APPLICATIONS

For use with four and six conductor flat telephone wire. Eight pin plugs are for eight conductor flat cable or Category 5 and 5E round cable.



■

NEW LOWER PRICE, 2 PIN PLUG CAT # CMP-2 10 for \$1.00 • 50 for \$4.00 100 for \$6.00 • 1000 for \$ 40.00

4 PIN (6 x 4) RJ-11 MODULAR PLUGS CAT # CMP-4 10 for \$ 2.50 50 for \$ 10.00 • 100 for \$18.00

4 PIN (4 X 4) HANDSET PLUG CAT# CMP-40 35¢ each 100 for 25¢ each



6 PIN (6 x 6) RJ-12 MODULAR PLUGS CAT # CMP-6

10 for \$3.00 50 for \$12.50 100 for \$20.00



8 PIN RJ-45 MODULAR PLUGS

Category 5 connectors for round
Category 5 cable or 8-conductor flat cable.

CAT # CMP-8 10 for \$ 3.50

50 for \$ 15.00 100 for \$22.50

MODULAR PLUG CRIMP TOOL

Strips flat phone wire and crimps modular plugs.

For 4 or 6 pin modular plug. **CAT# MPCPT-6** \$14.00 each

For 8 pin modular plug. **CAT# MPCPT-8** \$7.75 each

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LAN/PHONE CABLE TESTER

Instant diagnosis of 4-pair, twistedpair and coaxial cables for continuity, opens, shorts, reversed, transposed and split pairs. Detachable remote unit for installed cabling. For cables with RJ-45, RJ-11, RJ-12 or coaxial BNC connectors. Requires 9 Volt battery.

PHONE ACCESSORIES

SURFACE MOUNT MODULAR WALL JACK

4 Conductor, RJ-11 jack Includes mounting screws and double-sided tape. For new construction or retrofitting.

CAT # MT-103 65¢ each 12 for 50¢ each • 96 pcs for 40¢ each

FLUSH MOUNT MODULAR

WALL PLATE Flush wall mount fits standard outlet box. 4 PIN MODULAR JACK

CAT# MT-107 \$1.10 each 10 for \$9.00 • 100 for \$70.00



DUAL FLUSH MOUNT MODULAR WALL PLATE

Two modular jacks on a flush mount plate which fits a standard outlet box.



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WHITE 4 PIN MODULAR JACKS **CAT# MT-109W** \$1.25 each

10 for \$1.00 ea. • 100 for 75¢ ea.

IVORY 4 PIN MODULAR JACKS
CAT# MT-109 \$1.25 each
10 for \$1.00 each • 100 for 75¢ each

T-ADAPTER FOR MODULAR JACK

For connection of two phones or one phone and one answering machine to one jack.

CAT# MT-101 \$1.10 each

10 for \$9.00 • 100 for \$70.00

1 TO 3 MOD PHONE JACK SPLITTER

Allows you to plug three phone devices into one jack. Modular phone plug to three modular phone jacks.

CAT# MT-110 \$1.45 each



TELEPHONE EXTENSION CORD

Male modular plug on one end, female on the other. 4 conductor - 25 feet.

CAT# MT-EX \$2.40 each 10 for \$20.00 100 for \$160.00



MODULAR CORD COUPLER

Couples two items with modular plugs together. CAT# MT-104 75¢ each • 10 for \$6.50 100 for \$45.00 • 1000 for \$300.00



Splits 2-line jacks into Line 1, Line 2 and Line 1 & 2. CAT # MT-105 \$1.50 each



SURFACE-MOUNT BACKBOX

Leviton # 41777-GBB. Design your own surface-mount box.

Communications, video, audio or ethernet flushmount faceplates attach to this backbox which can be screw or tape mounted to wall or furniture. Heavy-duty gray plastic. 1.5" deep. Knock-outs for side or rear entry. UL listed.



CAT# BB-4 \$1.10 each • 10 for 85¢ each

TELEPHONE NETWORK JUNCTION BOX

Heavy-duty plastic, surface-mount box provides an RJ-11, 4-conductor jack for testing of phone line. Also provides a way to disconnect while working on circuit.





RJ-11 MODULAR PHONE JACKS

4 PIN Hirose # TM5RA-64. Ivory 4 pin modular jack. Large quantity available. CAT # MT-4WT 5 for \$ 1.00 100 for \$ 12.00 • 1000 for \$ 80.00



6 PIN TOP ENTRY, BLACK CAT # MT-64 65¢ each

10 for 55¢ each • 100 for 45¢ each



MODULAR LINE CORDS

4 WIRE - MOD PLUGS BOTH ENDS (RJ-11)

phone-voice a				
DESCRIPTION	CAT#	1-9	10+	100+
7 Feet	MT-260	.50	.45	.40
15 Feet	MT-264	1.00	.85	.75
25 Feet	MT-261	1.50	1.25	1.00

6 WIRE - MOD PLUGS BOTH ENDS

Straight-wired for data application	CA / Simmond	/		
DESCRIPTION	CAT#	1-9	10+	100+
7 Feet	MT-363	1.25	1.10	.65
15 Feet	MT-366	1.55	1.30	1.00
25 Feet	MT-369	2.20	1.65	1.30

PHONE PICK-UP

Universal telephone pick-up Suction cup attaches to the earpiece side of a telephone handset. Picks up both sides of the phone conversation.

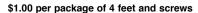
Terminates to a 3.5 mm plug. CAT# TPX-1 \$2.00 each



RUBBER BUMPERS

Rubber bumpers with mounting screws. Available in brown and gray. 0.50110 + 0.001111

Brown	0.53"D x 0.28"H	CAT# RF-41
Brown	0.75"D x 0.38"H	CAT# RF-42
Brown	0.87"D x 0.50"H	CAT# RF-43
Gray	0.50"D x 0.26"H	CAT# RF-44
Gray	0.71"D x 0.28"H	CAT# RF-45
Gray	0.75"D x 0.30"H	CAT# RF-46



TAPE AND SEALERS

3/4" WIDE ELECTRICAL TAPE

Black PVC - 60' CAT# PET-1

65¢ each • 10 for \$6.00



STRETCH-N-SEAL. COLD-SHRINK TAPE

DAFLEX ST250 cold shrinking Stretch-N-Seal tape provides a secure covering where the size and or shape of an object does not permit the use of



shrinkable tubing. Simply remove 2" to 3" of tape from the roll, remove the liner, stretch tape to 50% of the supplied width and wrap it spirally around the object with a 50% overlap. In minutes the tape will react with itself to form a mass which will provide protection from moisture, most chemicals, over 1KV per mil and will operate from -401/4C to 1301/4C. U/L Recognized: 1001/4C; Weather Resistant; Cold Resistant. Since the tape does not use mastic or adhesive it can be removed easily without leaving any residue. Black, 8' X 1" roll.

CAT# DF-250 \$9.95 each

COAX SEAL

A space-age plastic material which quickly and effectively seals all types of coax fittings from moisture and corrosion. Stavs flexible for years. Allows you to disconnect fittings and reseal them with the same material. The only sealer that adheres to vinyl and poly vinyl insulation.

60" x 1/2" wide roll suitable for 9 fittings.

CAT# COS-1 \$3.65 each

RUBBER BUMPERS / FEE

CLEAR BUMPERS / FEET

Clear, self-adhesive polyurethane bumpers apply quickly and easily wherever protection is needed against scratches, slippage or noise.

0.8" diameter x 0.4" high with 0.35" dia. recessed center. Sold in sheets of 24 pcs. CAT# RF-32

1 sheet (24 pcs) for \$4.50 per sheet 12 sheets (288 pcs) for \$3.80 per sheet

Solid cylindrical bumper, 0.4" diameter x 0.25" high. Sold in sheets of 50 pcs.

CAT# RF-33

1 sheet (50 pcs) \$3.50 per sheet 10 sheets (500 pcs) \$2.65 per sheet

1.46" DIAMETER RUBBER FEET

Hard rubber equipment foot. Countersunk, metal reinforced hole for #8 screw. Black. Two sizes:

1.46"diameter x 0.59" high

CAT# RF-615 4 for \$1.80 • 100 for \$30.00

1.46" diameter x 0.41" high

CAT# RF-605 4 for \$1.70 • 100 for \$28.00

"PRESS-FIT" BLACK RUBBER FOOT

Dome-shaped foot, 0.25" high. Fits 0.25" diameter hole. **CAT# RF-27** 4 for 75¢





RELAYS

KH STYLE (ICE CUBE)

14 PIN (ICE CUBE) relays. All have clear or opaque plastic dust covers. Relay Size: 1.1" X 0.82" X 1.34" high



12 VDC, 4PDT

12 Vdc, 160 ohm coil. 4PDT contacts rated 5 Amps @ 240 Vac/ 28 Vdc. Solder or socket mount terminals. UL, CSA. **CAT # 4PRLY-12** \$ 4.00 each 10 for \$ 37.50 • 100 for \$ 340.00

24 VDC 4PDT 24 Vdc, 650 ohm coil. 4PDT, 3 amp contacts. Solder or socket mount CAT# 4PRLY-24N \$4.00 each

24 VDC 4PDT 24 Vdc, 650 ohm coil. 4PDT, 3 amp contacts. Solder or socket mount. Removed from used equipment.

120 VAC, 4PDT

Kest # KR1205N. 120 Vac, 4500 ohm coil. 4.P.D.T. contacts rated 5 A @ 240 Vac. Red LED indicator lights when coil is actuated. Solder/socket mount terminals.

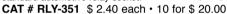
CAT # 4PRLY-120L \$4.00 each

CAT# RLY-24U \$1.85 each

AUTOMOTIVE / POWER RELAYS

SPDT 30 AMP Orinco # JD191E-1510.

12 Vdc, 88 ohm coil. N.O. contacts rated 30A. N.C. contacts rated 20 amps. Plastic enclosed relay, 1.1" x 1.2" x 1" high. Plastic flange for bulkhead mounting. Mounts in standard automotive relay socket.



12 VDC HIGH POWER AUTOMOTIVE RELAY

Matsushita# CB1F-P-12V-Y1-H18
12 vdc,S.P.D.T., 103 ohm coil high power
automotive relay. N.O contacts rated 40 amp. N.C.
rated 30 amp. 1.4 watt nominal operating power.
Sealed, flux-resistant type, 0.86" x 1.03" x 1" high
body. PC mount. UL. CAT# RLY-88 \$1.35 each
10 for \$ 1.25 each • 100 for \$1.00 each

12 VDC 30 AMP S.P.S.T.

American Zettler # AZ971-1A-12DE
Miniature 12 Vdc power relay designed
for high in-rush, automotive applications.
12 Vdc, 90 ohm coil. S.P.S.T. contacts
rated 30 Amps @ 30 Vdc. Vibration and shock resistant. Epoxy sealed polyester case. 1.03" x 0.83" x
0.82" high. PC pins. CAT # RLY-396
\$1.50 each • 10 for \$12.50 • 100 for \$90.00

DPST N.O. POWER RELAY

Magnecraft & Struthers-Dunn
W92S7D12-12. 12 vdc DPST,
normally-open, 30 amp power relay.
86 ohm coil. Epoxy sealed body,
2.06" x 1.33" x 1.04" high. PC mount.
UL recognized. CAT# RLY-636 \$ 3.50 each

12 VDC SPDT POWER RELAY

Siemens # VKP-35F42.
Sealed, pc mount power relay for high-current applications. 12 Vdc, 90 Ohm coil. SPDT contacts rated 30 Amps. 1.02" x 0.84" x 0.86" high.

CAT# RLY-451 \$1.35 each

CAT# RLY-451 \$1.35 each 10 for \$1.20 each • 100 for 90¢ each

12 VDC, 3 POLE - N.O.

Deltrol # 375P 3PST-NO 12 Vdc, 56 Ohm coil. 3PST, N.O. contacts rated 30 Amp @ 300 VAC/ 28 Vdc. Clear polycarbonate cover. 2.11" x (1.38" x 2" high. 0.25" qc terminals with pc pins. Can be pc mounted or used with connectors. UL, CE.

used with connectors. UL, CE. CAT# RLY-632 \$3.00 ea. • 10 for \$2.75 ea.

24 VDC POWER RELAY Omron # G7L-1A-TUB-CB

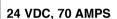
SPST, normally-open contacts rated 30Amps / 120Vac. 24 Vdc, 300 Ohm coil. 1.97" x 1.31" x 1.80" high (including terminals.). Bulkhead mounting flanges with holes on 2.35" centers. 0.25" nc / solder.

2.35" centers. 0.25" qc / solder terminals.
UL, CSA, VDE. **CAT# RLY-471** \$3.50 each
10 for \$3.25 each

24 VDC, 80 AMP AUTOMOTIVE RELAY

#TR94-24VDC-SC-C 24 Vdc, S.P.D.T., 80 Amp automotive relay. 292 Ohm coil. Standard automotive configuration with tab for bulkhead mount. Solder or socket mount. 0.25" qc terminals for coil, 0.375" qc terminals for switching. 1.18" square x 1" high (excluding tab and terminals).

CAT# RLY-472 \$2.95 each



Potter & Brumfield # VF7-11H12-Z02 Small S.P.S.T., normally-open relay with 70 Amp contacts. 24 Vdc, 280 ohm coil. Black polycarbonate dustcover, 1.01" x 1.01" x 0.98" high. PC leads.

CAT# RLY-383 \$1.85 each • 10 for \$17.00

24 VDC 10/20 AMPS

Aromat # JTIE-DC24V-H10
S.P.D.T. pc mount power relay.
24 Vdc, 637 Ohm coil. Contacts rated
N.C.,10 Amps/277VAC, N.O., 20Amps/
277Vac. Sealed plastic case, 1.25" x 1.05" x 0.77." UL.

CAT# RLY-459 \$1.35 each 10 for \$1.15 each • 100 for 95¢ each

24 VDC, SPDT

Small, open-frame, pc mount power relay. Similar P&B T90 style relays. 480 ohm coil. Estimated contact current rating: 15 Amps.(min). 0.9" x 0.71" x 0.72" high. PC pins.

CAT # RLY-275 50¢ each • 10 for \$4.50 100 for \$40.00 • 1000 for \$300.00

DIP RELAYS

Miniature mechanical relays with pin configurations to fit standard DIP socket configurations (0.1" X 0.3" grid). Some are sealed for PC bath with vents that should be clipped after installation.



3 VDC DPDT DIP RELAY

Kest# KS2E-M-DC3.

3 vdc 45 ohm coil. DPDT contacts rated 2 amps. Small sealed case, 0.8" x 0.38" x 0.4" high. Fits 16 pin IC socket DIP pattern. UL, CSA.

CAT# RLY-623 \$1.50 ea. • 10 for \$1.25 ea.

5VDC DPDT DIP RELAY

Kest# KS2E-M-DC5.

5 vdc 130 ohm coil. DPDT contacts rated 2 amps. Small sealed case, 0.80" x 0.38" x 0.40" high. Fits 16 pin IC socket DIP pattern. UL, CSA.

CAT# RLY-625 \$1.50 ea. • 10 for \$1.25 ea.

6 VDC DPDT

Hasco # HAS 112S DC6

6 Vdc, 64 Ohm coil. DPDT contacts rated 2 Amps. 0.8" x 0.4" x 0.5" high sealed case. Desoldered from new equipment.

CAT# RLY-468 \$1.00 each • 10 for 75¢ ea.

12 VDC DPDT DIP RELAY

Kest# KS2E-M-DC12.

12 vdc 740 ohm coil. DPDT contacts rated 2 amps. Small sealed case, 0.80" x 0.38" x 0.40" high. Fits 16 pin IC socket DIP pattern. UL, CSA.

CAT# RLY-622 \$1.50 ea. • 10 for \$1.25 ea.

24 VDC DPDT DIP RELAY

GI CLARE# LM44E00. 24 Vdc, 1450 Ohm coil. DPDT contacts rated 2 Amps. 0.795" x 0.385" x 0.492" high. Pins fit 16 pin DIP footprint. CAT# RLY-464 \$1.20 ea. • 25 for \$1.00 ea.

24 VDC DPDT Hasco # HAS 112S 2 DC24 24 Vdc, 1060 Ohm coil. DPDT contacts rated 2 Amps. 0.8" x 0.4" x 0.5" high sealed case. Desoldered from new equipment.

CAT# RLY-467 \$1.00 each • 10 for 75¢ ea.

MISCELLANEOUS RELAYS

3VDC DPDT DUAL COIL LATCHING RELAY

Siemens # V23079-B1208-B301. Miniature D.P.D.T. dual-coil latching relay. 2 Amp contacts, (5 Amp max switching). 3Vdc, 64.3 Ohm coil. Operates 2.25-6.50 Vdc. 0.57" x 0.28" x 0.4" high. PC pins on 0.1" x 0.2" matrix. Sealed case. UL, CSA.

CAT# RLY-440 \$1.35 ea. • 50 for \$1.15 ea.

MINIATURE 4.5 VDC DPDT

Aromat # TW2E-4.5V-H12
Ultra-small polarized relay with 2,500 V surge voltage. DPDT contacts rated 2 Amps @ 30 Vdc. 4.5 Vdc, 145 Ohm coil. 0.58" x 0.29" x 0.43" high. PC pins. UL, CSA.

CAT# RLY-452 \$ 1.25 each

4.5 VDC LATCHING RELAY, DPDT

Nais #TN2-L-4.5V. Tiny DPDT, 1 coil latching relay. 4.5Vdc, 202.5 Ohm coil. Set/ reset voltage, 3.38Vdc. Contacts rated 1 Amp @ 30 Vdc. 0.228" x 0.55" x 0.37" high. Sealed case. PC pins. UL, CSA. **CAT# RLY-450** \$1.25 each 10 for \$ 1.10 each • 100 for 80¢ each

4.5 VDC LATCHING RELAY, DPDT

NAIS # TQ2-L-4.5V. Sub-miniature DPDT
1-coil latching relay. 4.5 Vdc, 202.5 Ohm
coil. Contacts rated 1 Amp, 30 Vdc. 0.55" x
0.35" x 0.21" sealed case. PC pins. UL, CSA.
CAT# RLY-641 \$1.50 ea. • 50 for \$ 1.20 ea.

5 VDC REED RELAY

EAC #D1A05H-2. S.P.S.T.,
normally-open reed relay. 5 Vdc,
500 Ohm coil. 0.5 Amp contacts. Epoxy
molded, 8 lead DIP package fits 14 pin DIP socket.

CAT# RLY-635 65¢ each • 20 for 50¢ each

5VDC DPDT RELAY

American Zettler #AZ946-2CH-5D
Miniature PC mount relay. 5 Vdc,
42 Ohm coil. DPDT contacts rated
5 Amps. 0.854" x 0.63" x 0.65" high.
PC pins. UL, CUR. CAT# RLY-645
\$1.50 each • 25 for \$ 1.20 each

5VDC REED RELAY, SPST N.O.

Coto #9202 05 30. S.P.S.T., normallyopen reed relay with 50 Ohm coaxial shield for RF and Fast Rise Time Pulse switching. 5 Vdc, 150 Ohm coil. Switching current, 0.5 amps. Carry current: 1.5 Amps. Low-profile, 0.19" high package. 6 leads.

CAT# RLY-634 75¢ each 10 for 60¢ each • 100 for 45¢ each

ULTRA-MINIATURE 5VDC RELAY

Omron # G5V-1 5VDC. Highly-sensitive, ultra-minature SPDT relay for signal circuits. 5 Vdc, 167 Ohm coil. Contacts rated for up to 1 Amp @ 24 Vdc. Fully-sealed case, 12.5 x 7.5 x 10mm (L x W x H). 2.54mm terminal pitch. Conforms to FCC Part 68 requirements. UL, CSA.

CAT# RLY-470 \$1.20 ea. • 10 for \$1.10 ea. 50 for 90¢ each • 100 for 85¢ each

5 VDC LATCHING RELAY, DPDT SUB-MINI

NAIS # TQ2-L-5V. Sub-miniature DPDT 1-coil latching relay. 4.5 Vdc, 250 Ohm coil.
Contacts rated 1 Amp, 30 Vdc. 0.55" x 0.35" x 0.21" sealed case. PC pins. UL, CSA
CAT# RLY-640 \$1.50 ea. • 50 for \$ 1.20 ea.

6 VDC DPDT RELAY

Takamisawa (Fujitsu) # VB 6TCU-E 6 Vdc, 50 Ohm coil. DPDT contacts rated 5 Amps @ 240 Vac/ 24 Vdc. Sealed plastic case, 1.13" x 0.5" x 0.98" high. PC leads. UL, CSA, VDE, TV-3. CAT # RLY-642 \$ 1.35 each 10 for \$1.25 each 100 for \$ 0.95 each

9 VDC S.P.S.T. N.O. RELAY

OEG # OJ-SS-109TM. 9 Vdc S.P.S.T. normally open, 182 ohm coil. 3 amp contacts. 0.39" x 0.71" x 0.57" high. P.C. leads. UL. **CAT# RLY-409** 75¢ each • Tube of 25 pieces for 60¢ e

75¢ each • Tube of 25 pieces for 60¢ each 100 pieces for 50¢ each

9 VDC 10 AMP RELAY

FIC # FRS10A-S10. Miniature 9 Vdc relay.
S.P.S.T., normally-open contacts rated
10 Amps @ 125 Vac. 235 Ohm coil.
0.75" x 0.625" x 0.65" high sealed case. PC leads.
UL, CSA. CAT # RLY-426 \$ 1.00 each
Tube of 25 pieces for 75¢ each
100 for 65¢ each • 1000 for 50¢ each

12 VDC, SPDT RELAY

Fujitsu # FBR 211NA D012U-M.
Sealed pc mount relay. 12 Vdc,
320 Ohm coil. S.P.D.T. contacts rated
1 Amp @ 28Vdc resistive or 0.5 Amp @ 30 Vac
resistive. 0.65" x 0.46" x 0.42" high. UL, CSA.
CAT# RLY-461 \$1.00 each • 10 for 85¢ ea.

12VDC DPDT LATCHING **RELAY, PC MOUNT**

Aromat # TW2E-L-12V. Miniature single coil latching relay. 12 Vdc, 1440 ohm polarized coil. DPDT contacts rated 2 Amps. Body size: 0.58" x 0.28" x 0.427" high. PC pins. UL, CSA.. CAT# RLY-87 \$1.25 each 10 for \$ 1.10 each • 100 for 85¢ each

12 VDC RELAY, SPDT 8 AMP

Omron # G6R-1-DC12V. Compact pc mount relay with S.P.D.T. 8 Amp contacts. 12 Vdc, 655 ohm coil. 1.16" x 0.38" x 0.57" high sealed case. Printed circuit leads. UL, CSA, VDE.

CAT # RLY-428 \$1.75 each • 50 for \$75.00

12VDC DPST N.O. RELAY, PC MOUNT

Potter & Brumfield #RKA-7DZ-12. D.P.S.T., normally-open. 12 Vdc, 260 Ohm coil. Contacts rated 5 Amps @ 24Vdc/240Vac. 1.15" x 0.5" x 1" high. Sealed case. UL, CSA

CAT# RLY-441 \$1.25 each 10 for \$ 1.15 each



Omron #G6RN-1A-24VDC. Miniature heavy-duty relay. 24 Vdc, 2620 Ohm coil. S.P.S.T., normally-open contacts contacts rated 8 Amps continuous. 1.12" x 0.4" x 0.59" high. PC leads. Sealed case. UL, CSA, VDE. CAT# RLY-89 \$1.75 each • 50 for \$ 1.50 each

24 VDC D.P.D.T. 10 AMP

Kest # KRLY-2024. 24 Vdc, 625 ohm coil. D.P.D.T. 10 Amp contacts. KH "Ice cube" style, clear polycarbonate case. 1.1" x 0.83" x 1.37" high. Solder or 0.187" qc or solder terminals. CAT # RLY-2024 \$2.75 each



24 VDC, 12 AMP SPDT RELAY

Song Chuan # 812H-1C-C-24DC 24 Vdc, 1645 ohm coil. SPDT contacts rated 12 Amps @ 125 Vac, 7 Amps @ 30 Vdc. Flux-tight case, 0.82" x 0.63" x 0.64" high. PC mount. UL, CSA. CAT# RLY-381 \$1.35 ea.

24 VDC, 10 AMPS

American Zettler # AZ971-1A-24DE SPDT, 10 Amp contacts. 24 Vdc, 370 ohm coil. 1" x 0.81" x 0.83". PC pins.



24 VDC, 4PDT PC MOUNT RELAY

Hasco # HAS124-DC24. 24 Vdc, 1270 Ohm coil. 4PDT contacts. Sealed, pc mount flat-package, 1.18" x 0.94" x 0.43" high.



CAT# RLY-466 \$1.00 each • 10 for 85¢ ea.

120 VAC D.P.D.T. 10 AMP

Kest# KRLY-2120. 120 Vac, 5000 ohm coil. D.P.D.T. 10 Amp contacts. 1.1" x 0.83" x 1.37" high. Solder or 0.187" qc or solder terminals. CAT # RLY-2120 \$2.75 each



120 VAC D.P.D.T. 12 AMPS

Omron #LY2-LIA-006244 110/120 Vac coil. 3.87K Ohms. DPDT contacts rated 12 Amps @ 240 Vac. 1/2 HP. Clear polycarbonate case with mounting flange, 1.11" x 0.84" x 1.38" high. Mounting slots on 1.5" centers. Solder or socket



mount, UL, CSA, CAT# RLY-453 \$1.75 each

SOLID STATE REL

1A SOLID STATE RELAY

Grayhill #70YY14350. In-line solidstate relay. Output, 1 Amp / 120 Vac. Input not listed on part, but appears to be the typical 3-32 Vdc control voltage. 1.52" x 0.68" x 0.18" thick. UL.

CAT# SRLY-10 \$1.75 each 10 for \$1.50 each

24 VDC COIL, SOLID STATE

AP&C-PAM SD Relay. S.P.D.T. solid-state relay for 24 Vdc (18-32 Vdc) control voltage. Output is rated 12 Amps @ 125 Vac or 7 Amps @ 30 Vdc. Diode protected, polarity-sensitive input.

11" pigtail leads with an additional set of wires for redundant input voltage (circuit supervision pass through). Epoxy block, 1.5" x 1" x 1.78" high. UL.

CAT# SSRLY-70 \$9.50 each

KH RELAY SOCKETS

Fits all KH and KHU style, 14 pin relays except PC mount style (most relays starting with CAT# 4PRLY). Screw terminals for easy connections and changes. Can be surface mounted or snap-mounted to aluminum DIN rail. UL and CSA. 1.17" X 2.44" X 0.98".

CAT# MT14-PC

\$5.50 each • 10 for \$50.00

Solder lug terminals.

CAT# PRLY-S

65¢ each • 100 for 45¢ each 1000 for 30¢ each

PC pins for PC board mount. CAT# PRLY-SC 75¢ each

KH RELAY HOLD-DOWN SPRING

For use with KH style relays, including our CAT #s beginning with 4PRLY or 2PRLY. Holds relay securely in socket.

CAT# RSP-1 5 for \$1.00 100 for 12¢ each

8 PIN OCTAL SOCKETS

Screw terminals for easy connections and changes. Can be surface mounted or used with aluminum DIN rail. UL listed. CAT# OTO8-PC

\$2.50 each • 10 for \$22.50

PC mount socket for round base 8 pin relays and vacuum tubes. CAT# OCT-PC \$1.00 each 10 for 90¢ each 100 for 80¢ each





AUTO RELAY SOCKETS

Pre-wired sockets for use in

automotive alarms, door-locks,starterinterrupt, light circuits and other auto applications. Both have color-coded 12" long leads. Will fit our relay, CAT# RLY-351.

RELAY SOCKET 5 wire socket with two 18 AWG leads and three 14 AWG leads.

CAT # SRLY-2 \$2.00 each • 10 for \$ 15.00

DUAL RELAY SOCKET Dual 5 wire sockets designed for door-lock applications. **CAT # SRLY-4** \$ 3.00 each • 10 for \$ 25.00

ALUMINUM DIN RAIL

For use with



screw terminal sockets . An easy way to attach multiple relay sockets. Sockets snap-on and off of rail. DIN rails come in 1 meter (39") lengths with pre-drilled mounting holes every inch. Can be cut to shorter lengths.

CAT# C102P \$4.50 each • 10 for \$42.50

CONTACTORS

12 VDC POWER SOLENOID

Camdec Corp # 93285
12 Vdc, 4 ohm coil. Heavyduty, handles a 225 Amp load (300A inrush). Intermittent, 50% duty cycle. 10 seconds on. 1/4-20 copper studs. 1.86" x 3" base. Mounting holes on

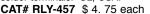
2.25" centers. 2.55" high. Includes hardware. **CAT # SOL-80** \$ 6.50 each

24 VDC, 20 AMP, 4-POLE

Omron #G2J-4442T-US-3
4-pole contactor. 24 Vdc,
262 Ohm coil. Contacts
rated 20 Amps / 240 VAC.
Fully-enclosed polycarbonate
case, 2.21" x 1.35" x 2.17" high.
0.25" qc/ solder terminals. UL, CSA.
CAT# RLY-456 \$ 5.50 each

24 VDC, 25 AMP, 4-POLE CONTAC-TOR (REMOVED FROM EQUIPMENT)

Potter & Brumfield # P41C47DHO103Z03 4-pole contactor. 24 Vdc, 84 Ohm coil. Contacts rated 25 Amps / 240 VAC, 35 Amps (resistive). Footprint (mounting plate) 3.75" x 2.5." 2.75" high. Removed from working equipment. 0.25" qc / solder terminals. UL, CSA.



SOLENOIDS

24 VDC D-FRAME SOLENOID

KGS # 15H17. 24 Vdc, 47 ohm coil. 2.49" x 1.18" x 1.49"
D-frame solenoid with 0.59" diameter plunger. Threaded mounting holes in one side of frame.

CAT # SOL-75 \$ 3.65 each

24-48 VDC SOLENOID

Guardian #A420-064504-00 24 to 48 Vdc continuous duty, D-frame solenoid. 1.85" x 1.2"



x 1.4". 5/16" diameter slotted shaft with pin.
Polarized, diode-protected coil. QC/ solder terminals.
CAT # SOL-85 \$1.25 each • 10 for \$10.00

3-6 VDC MINIATURE SPRING-RETURN SOLENOID

Deltrol Controls #56597-60 INT
Spring-return, push-pull solenoid.
2 Ohm coil. Operates on 3-6 Vdc.
Intermittent duty cycle. Metal-shielded body is 0.91" x 0.42" x 0.45" high. 0.1" diameter plunger extends 0.4" on each side of solenoid. One end of plunger has a 0.11" diameter nylon cap. Four pc pins on 0.75" x 0.2" centers. CAT# SOL-89
\$ 1.35 each • 100 for \$ 1.00 each

SOLENOID ASSEMBLY

Easily removable push-type solenoid attached to a PC board with two screws. Also on board is a slotted opto-switch and other components. 12 Vdc solenoid has a 34 Ohm coil. Mounted on a 1.92" x 1.15" x 1.30" bracket. Nylon-tipped plunger travels 0.43" when energized. 2" wire leads.

CAT# SOL-94 \$2.50 each

12 VDC SOLENOID W/ MAGNET ASSIST

Dormeyer #CB-2178

12 Vdc, 20 Ohm solenoid
designed for pulse duty cycle.
Built-in magnet gives plunger added
holding power when retracted. Body is
1.13" x 0.75" x 1.2" high (including
0.187" qc / solder terminals). 0.31" diar

0.187" qc / solder terminals). 0.31" diameter plunger. **CAT# SOL-98** \$1.95 each

12 VDC OPEN FRAME SOLENOID

Saia-burgess® Dormeyer® #C8-273-M-36
9.3 Ohm coil can operate continuously
at 6 Vdc or intermittently at
8.5 to 17 Vdc. 1.15" long x
0.74" wide x 1.44" high including
0.187" qc / solder terminals.
0.31" diameter plunger with
U-bracket at end. Two 6-32 threaded
mounting holes in bottom of bracket.

CAT# SOL-99 \$2.55 each

12 VDC D-FRAME SOLENOID

MSA 6693/0006. Heavy-duty
12 Vdc pull-type solenoid.
Continuous duty. 14 ohm coil.
2.2" x 1.65" x 1.45" box frame
with four threaded mounting holes in two
sides. 0.5" dia. slotted plunger with hole for pin
extends 1.25" when retracted. Solder lug terminals.

CAT # SOL-78 \$ 3.50 each

ROTARY SOLENOID, 2" DIAMETER

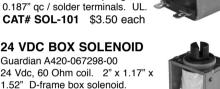
Lucas Ledex. High-torque 24 Vdc, intermittent duty solenoid. 8 Ohm coil. When activated, shaft rotates 45°. Heavy-duty return spring. 0.24" dia. flatted shaft is 0.65" long. Body is 1.95" dia. x 1.26" long. Three threaded mounting holes on face of solenoid. 6" long Teflon-insulated leads. CAT# SOL-87 \$3.90 each

24 VDC PULL-TYPE SOLENOID

Comm. Instruments Inc. Powerful pull-type solenoid with spring return. Intermittent duty, max 10%. 3.3-4.2 ohm coil. Designed for 22-26 Vdc use, but it works fairly well on 12 Vdc. Pull force, 3.7 lbs @ 24 Vdc. Body is 0.77" diameter X 1.82" long. 3" long plunger. 3.4" mounting bracket attached to body. CAT# SOL-58 \$1.50 each

24 VDC SOLENOID

Potter & Brumfield # S28-25-D-24 Open-frame, box solenoid. 24 Vdc, 50 Ohm coil. Intermittent duty cycle. 1.2" x 1" x 1.17" body. 5/16" diameter slotted plunger. 0.187" qc / solder terminals. UL.



24 Vdc, 60 Ohm coil. 2" x 1.17" x 1.52" D-frame box solenoid. 0.55" diameter, slotted plunger. Threaded mounting holes on one side of frame. 21" wire leads.



RIGHT-ANGLE MECHANISM

Developing Solenoid Assembly #FG5-8524-000. Box solenoid with a spring-return pivot mechanism that converts plunger movement to right-angle movement. 130 Ohm coil operates on 24 Vdc. Also works on 12 Vdc with less force. Overall dimensions of solenoid and mechanism, 2.45" x 1.15" x 1.2." CAT# SOL-128 \$ 4.00 each

24 VDC BOX SOLENOID

Solen #121E15420. 24 Vdc. 40 Ohm coil. 1.75" x 1" x 0.84" body. 0.32" diameter plunger with split end and pin. 2-pin connector with 3.7" leads.

CAT# SOL-127

\$3.25 each

24 VDC SOLENOID

Guardian # 11-C-24VDC. Continuous-duty, pull-type box solenoid. 24 Vdc, 128 Ohm coil. Body, 1.88" x 1.19" x 1.38." 0.31" slotted plunger with pin. 0.25" qc/solder terminals. Threaded mounting holes on two sides of frame.

CAT# SOL-95 \$3.50 each

SOLENOID, PUSH-PULL

Guardian # A420-064732-00. Continuous-duty, push-type box solenoid. 24 Vdc, 1.8K Ohm polarized coil. Body, 1.85" x 1.20" x 1.42." 0.31" diameter plunger extends from both sides of coil. Push-side is slotted with a pin through the slot. Threaded mounting holes in both sides of frame. CAT# SOL-96 \$3.50 each



120 VAC POWER SOLENOID

Guardian #18-I-120A 60HZ (A421-065210-07) Powerful intermittent-duty solenoid. 120 Vac. 8.8 Ohms, 1.9 Amp coil. 10% (180 seconds max) duty cycle. Holding force: 240 oz. Pull-force: 144 oz @ 1." 336 oz @ 0.125." Footprint, 2.5" x 1.375." 2.1" high. UL. CAT# SOL-97 \$9.70 each

NICKEL-CAD CELLS W/ SOLDER TABS

1.2 Volt cells with solder tabs. For building or re-building battery packs.



Туре CAT# Dimensions Capacity 10+ **NCB-SAA** 0.56" x 1.90" AA 900 mAH 2.50 2.25 Sub-C 0.90" x 1.69" NCB-SC 1800 mAH 4 00 3 50 4/5 Sub-C NCB-45SC 0.90" x 1.30" 1200 mAH 4.50 4.20

RECHARGEABLE NICKEL-CAD

AA CELL 1.2 Volt, 650 mAh CAT # NCB-AA \$1.25 each 10 for \$11.00 • 100 for \$90.00



NICKEL-CAD PACKS FOR CORDLESS PHONES

Rechargeable nickel-cadmium battery packs for cordless phones. NCB-300 and NCB-600 have a "universal" connector that can be configured to fit most phones. Pictures and instructions available on our web site.

2/3 AA PACK

3.6 Volts, 300 mAh. Three 2/3 AA cells.

CAT# NCB-300 \$3.00 ea. • 10 for \$2.75 ea.

USED 2/3 AA PACK

3.6 Volts, 270 mAh. Three 2/3AA cells. Used, good-condition. Non-universal connector fits Cobra, Code-a-phone, GE, GTE and Sanyo. CAT# NCB-23U \$1.00 each 10 for \$9.00

AA PACK

3.6 Volts, 600 mAh. Three AA cells. Universal connector. CAT# NCB-600

\$ 4.25 each • 10 for \$4.00 each



RECHARGEABLE NICD BATTERY PACK. 3.6V 850MA

Three flat-top 1.2 Volt. 850 mA cells in a series. Because cells are connected by solder tabs they are easy to use in other applications. Remove the shrink wrap outer cover to expose the individual cells with solder tabs.

1.93" x 1.67" x 0.59." 2003 date code.

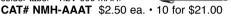
CAT# NCB-3AA \$3.20 ea. • 10 for \$2.80 ea.

RECHARGEABLE NICKEL METAL HYDRIDE

Nickel Metal Hydride batteries have double the capacity of standard nickel cadmium cells and can be charged faster without the "memory problems" associated with nickel cadmium batteries.

NI-MH AAA CELL W/ SOLDER TABS

Rechargeable Ni-Mh AAA cell with solder tabs. 1.2V 600 mAH.



AAA CELL

1.2 Volt. 550 mAh. 0.4 " dia. X 1.74" long.

CAT# NMH-AAA \$2.50 ea. • 10 for \$21.00

AA CELL, 2200 mAH



ULTRA-HIGH CAPACITY 1.2 Volt, 2200 mAH. 0.56" diameter x 1.99" long.

CAT# NMH-2200 \$2.75 each 12 for \$2.50 each • 50 for \$2.25 each

1.2V 900 mAH

Sanvo# TH-900F5 or Toshiba #F5. 1.2V. Flat, space-saving prismatic package, 0.85" x 0.55" x 0.28" Protruding nipple on positive end allows use in battery holder.

CAT# NMH-900 \$2.25 ea. • 10 for \$2.00 ea.

2.4V 15 MAH NIMH BATTERY PACK

Toshiba compatible back-up battery pack #P71035009115. Consists of two Varta V15H nickel-metal-hydride rechargeable button cells with 2" leads and a small two-pin connector. 0.93" x 0.54" x 0.15". CAT# NMH-15 \$1.25 each • 10 for \$1.00 each

7.2V 40MAH NIMH COIN CELL PACK

Varta #60906. Rechargeable nickel-metalhydride battery pack. Use as RAM backup battery in some Dell computers. Consists of 6 button cells in series. 2.65" x 0.48" x 0.24." 3" wire leads with 2-conductor socket connector, 1mm spacing. CAT# NMH-16 \$4.75 each

AA "FLAT-TOP" CELLS

Panasonic# HHR-110AA0. 1.2 Volt, 1100 mAh "flat-top" rechargeable AA cells for use in battery packs. 0.55" diameter X 1.95" long. Two styles:

REGULAR FLAT-TOP CAT# NMH-110



\$1.50 each • 40 pcs \$1.25 each 120 pcs \$1.00 each • 800 pcs 85¢ each

SOLDER-TABBED CAT# NMH-110T



\$1.75 each • 40 pcs \$1.50 each 120 pcs \$1.25 each • 800 pcs \$1.00 each

INDUSTRIAL ALKALINE BATTERIES

DURACELL® PROCELL®

AA CELL, 1.5 VOLT 2100 mAH CAT # PRC-1500 75¢ each



AAA CELL, 1.5 VOLT 1000 mAH CAT # PRC-2400 75¢ each

C CELL 1.5 VOLT 7000 mAH CAT # PRC-1400 \$ 1.50 each

D CELL 1.5 VOLT 14000 mAH CAT# PRC-1300 \$1.50 each

9 VOLT BATTERY 565 mAH CAT # PRC-1604 \$ 2.75 each

HIGH-CAPACITY AA ALKALINE **BATTERY. 8-PACK**

Alkaline powercells from Monster Cable. 2850 mAh. 25% more power than standard alkalines. Use by 2008.

CAT# HCAA-8 \$4.50 each

6 for \$4.25 each • 24 for \$4.00 each

12 VOLT ALKALINE BATTERY

0.41" diameter x 1.13" long cylindrical cell used in keychain alarm remotes and photo applications. CAT # BAT-12 \$1.25 each • 10 for \$ 10.00

RECHARGEABLE LI-ION BATTERIES

LI-ION BATTERY FOR PALM PILOT

Sony #LIS2106 Palm #169-2492. 3.7V, 1300 mAh rechargeable lithium-ion internal battery for i705 series Palm Pilot. 2.75" x 2.46" x 0.15" thick. Built-in chargeprotection circuit. 0.5" leads with sub-mini 4-conductor socket con-

nector. Ideal for projects requiring very thin rechargeable batteries, but please be aware of the possibility of fire hazard when battery is not used for original purpose. CAT# LBAT-42 \$5.95 each

RECHARGEABLE LITHIUM-ION PRISMATIC CELL

Polystor #340948. 3.7 Volt. 1200 mAh lithium-ion cell. Low-profile, high-density rechargeable cell, ideal for applications where space is a factor. 1.35" x 0.34" x 1.89" Can handle up to 2 Amp discharge

rate. Built-in shut-down separator and rupture vent. Spec sheet including charge and discharge rates on our web site. UL. CAT# LBAT-43 \$2.00 each 10 for \$1.75 each • 100 for \$1.25 each

LBAT-43 (ABOVE), WITH SOLDER TABS CAT # LBAT-43T \$3.00 each

10 for \$2.75 each • 100 for \$2.25 each

SILVER OXIDE BUTTON CELL

386S (silver oxide) replaces SG12/G12/SR43/ 386/ 548/6/RW24, 44 button cell. 0.45" dia. x 0.15" thick. For watches, calculators, cameras, games etc. CAT # BAT-8 75¢ each • 10 for \$5.00

1.5V ALKALINE BUTTON CELLS

AG-13 11.5mm diameter x 5.5mm. Cross to 357, AG-13, A-76, LR-44, V13GA and RW-82.



CAT# BAT-7 75¢ each • 10 for \$5.00

AG-3 Cross to AG-3, 392A, SR41, CX41, LR41W and others. 7.9mm diameter x 3.6mm. CAT# BAT-3 50¢ each • 10 for 40¢ each

AG-4 Cross to AG-4, 626A, 377A, CX66W and others. 6.8mm diameter x 2.6mm.

CAT# BAT-4 50¢ each • 10 for 40¢ each

HEAVY-DUTY CARBON-ZINC BATTERIES

The economical choice for low drain devices like remote controls clocks, smoke alarms. radios and flashlights.



AAA CELL CAT# HD-AAA 4 for \$1.00 100 for \$20.00 CAT# HD-AA 4 for \$1.00 100 for \$20.00 AA CELL C CELL CAT# HD-C 2 for \$1.00 96 for \$34.56 D CELL CAT# HD-D 2 for \$1.30 96 for \$38.40 9 VOLT CAT# HD-9V 85¢ each 96 for \$54.72

9 VOLT BATTERY SNAPS

Snaps onto standard 9 volt battery.

3" wire leads. CAT# BST-3

4 for \$1.00 • 100 for \$15.00

6" leads CAT # BST-61

3 for \$ 1.00 • 100 for \$ 20.00

18" wire leads. CAT# BST-71 2 for \$1.00 • 100 for 30¢ each

I-TYPE 5" leads. CAT# BST-51 2 for \$1.00 • 100 for 30¢ each

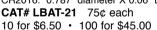


LITHIUM BATTERIES

Lithium batteries have a very long shelf life, typically ten years or more. Most of the cells in this section are designed for low current applications like memory backup. They are not normally used as a primary power source. They are not rechargeable.

3 VOLT, 75 mAh

CR2016. 0.787" diameter X 0.06" thick.



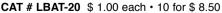


CR2025 LITHIUM BUTTON CELL

CR2025. 3 Volt 150 mAh. lithium button cell. 0.8" diameter x 0.1" thick.

CAT# LBAT-44 \$1.00 each • 10 for 75¢ ea.

3 VOLT, 180 mAh Toshiba# CR2032. 3 volt, 180 mAh. 0.8" dia.



LITHIUM COIN CELL, **DURACELL DL2450**



3V lithium coin cell. 24.5mm diameter x 5mm thick (0.96" x 0.19").

CAT# LBAT-47 \$1.50 each 10 for \$1.25 each • 100 for 95¢ each

PHOTO LITHIUM BATTERY

CR-1/3N. 3 Volt, 160 mAh lithium battery. 0.45" diameter x 0.42" long. CAT# LBAT-13N \$2.00 each \$1.50 each • 10 for \$1.25 each

REDUCED

CR123A

3 VOLT LITHIUM BATTERY CR123A

CR123A, 3 Volt lithium cell. Commonly used in photographic equipment and compact flashlights.

1.34" long x 0.65" diameter. CAT# LBAT-123 \$2.85 each • 10 for \$2.60 each 100 for \$2.35 each

COIN CELL HOLDERS

20mm Keystone # 103 Holds most lithium coin cell batteries of 20mm (0.8") diameter. PC leads on 0.8" centers.

CAT# BH-60 65¢ each 10 for 60¢ each 100 for 50¢ each

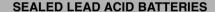
12mm For CR1220 and other 12 mm 😞 coin cells. Surface mount solder tabs. Overall dimensions, 0.71" dia, x 0.18" h.

CAT # BH-15 4 for \$ 1.00 100 for \$ 20.00 • 1000 for \$100.00

23/24 mm

M.P.D. #BH906S. PC mount holder for 23/24mm diameter coin cells (ie. CR2325, CR2330, CR2450). PC leads on 20mm centers.

CAT# BH-906 65¢ each • 100 for 50¢ each



Maintenance-free, rechargeable sealed lead-acid batteries. Can be used in any position and can be trickle charged for long periods of time. Excellent for alarms, communications

and back-up applications. WILL NOT LEAK.

6 VOLT, 1.2 AH BATTERY

3.8" x 0.93" x 2" high. CAT# GC-612 \$5.25 each • 20 for \$ 4.75 each

6 VOLT 4 AH 2.75" x 1.9" x 4" high. CAT # GC-64 \$ 9.00 each

6 VOLT 10 AH 5.95" x 2" x 3.65" high. CAT # GC-610 \$ 15.00 each

SPECIAL 12 VOLT 2.3 AH

7" x 1.35" x 2.37" high.

CAT # GC-1223 \$12.00 each

12 Volt 5 AH 2.75" x 3.53" x 4" high. 0.1875" quick-connect connectors. CAT# GC-125 \$15.00 each

12 Volt 7 AH 6" x 2.5" x 3.71" high. CAT# GC-1270 \$22.00 each

12 Volt 12 AH

5.95" x 3.85" x 3.7" high. CAT# GC-1214 \$ 36.00 each

12 Volt 17 AH

7.12" x 3" x 6.7" high.

CAT# GC-217 \$ 44.00 each



BATTERY HOLDERS - "UNBREAKABLE" PLASTIC

N-CELL H	OLDER & 2	2/3 A CELL HOLD	ER				
# OF CELLS	CAT#	TERMINATION S	TYLE	EACH	<u>10</u>	<u>100</u>	2
1	BH-50	Solder terminals N	I-cell	50¢	45¢	32¢	
1	BH-52	PC pins 2/3	A cell	75¢	65¢	50¢	
AAA BATT	ERY HOLE	DERS					A @-
1	BH-41	6" wire	Α	50¢	45¢	35¢	A
2	BH-42	6" wire	В	75¢	65¢	45¢	
4	BH-44	6" wire	С	\$1.00	85¢	75¢	J.
4	BH-442	6" wire	D	80¢	70¢	60¢	B
AA BATTE	RY HOLDE	ERS					
1	BH-31	Solder tabs	Α	60¢	45¢	35¢	*
2	BH-32	6" wire	В	70¢	60¢	45¢	C
4	BH-342	6" wire	D	80¢	70¢	60¢	
4	BH-341	6" wire	С	85¢	75¢	60¢	
4	BH-343	solid wire PC leads	С	80¢	70¢	60¢	
6	BH-361	9V battery snaps	E	\$1.00	85¢	65¢	
C BATTER	RY HOLDER	RS					D C
4	BH-241	8" wire	В	\$2.25	\$2.10	\$1.85	
4	BH-242	Snaps (wide config)	В	\$1.50	\$1.25	90¢	
4	BH-243	3" wire	В	\$1.90	\$1.75	\$1.20	E 🚕
D BATTER	RY HOLDER	RS					
2	BH-142	8" wire	В	\$1.00	85¢	75¢	
4	BH-141	6" wire	С	\$1.25	\$1.00	85¢	الله الله
8	BH-181	Snaps (wide config)	В	\$2.00	\$1.85	\$1.25	•

BATTERY CHARGERS

12 VDC 500 MA DUAL-STAGE CHARGER FOR LEAD ACID BATTERIES

Designed to maintain maximum performance from your sealed lead acid batteries. Dual stage output and regulated current control to insure that no damage occurs while battery remains on charger. "Fast-charge" cycle of 15Vdc, 500mA brings battery to fully charged state at which point the float-charge takes over, maintaining the battery at a constant 13.8 Vdc. LED indicators; red indicates fast-charge, green indicates power-on and float-charge. Screw terminals allow user to attach desired cable and connector. UL.

\$12.75 each

12VDC LEAD-ACID BATTERY CHARGER/ MAINTAINERS

CAT # BC-212

UPG #12BC2000 & 12BC4000 IC controlled 3-stage charger for lead-acid batteries. Stage one is a highcurrent, fast-charge.

Stage two is a topping charge. Stage three is a precision float charge which will maintain the battery at full charge for long periods of time. Voltage drop below 13 Volts returns the charger to stage one. Includes alligator clip leads and ring-terminal leads. Features: LED condition indicator, short-circuit protection, over-current protection, over-voltage protection, polarity reversal protection.

2A charger for up to 20 AH capacity **CAT# BC-122** \$42.95 each

4A charger for up to 40 AH capacity **CAT# BC-124** \$49.95 each

24 VOLT BATTERY CHARGER

Tecumseh # BC2432.

Designed to charge batteries in a cordless lawn mower, this charger is ideal for 24V batteries of 7AH or less.

Input: 120 Vac 60 Hz. 6' AC power cord.
6'output cord with 2.5mm i.d. coax dc

power plug (center +). Charging indicator lights. UL, CSA. Vented table-top case, $6.25" \times 3.80" \times 2.68"$ high. **CAT# BC-32** \$15.00 each

CHARGER FOR 4 AA CELLS, NIMH OR NICAD

Compact wall charger for two or four AA cells. Works for nickel-metal-hydride or nickel-cadmium. Charging status lights. UL.

CAT# GC-4AA \$3.25 each

CHARGER AND FOUR NI-MH
BATTERIES



CAT# BC-20 \$14.00 each





VIDEO CAMERAS, CABLES, CONNECTORS & ACCESSORIES

INFRARED SENSOR B&W CAMERA

This is a great buy on an inexpensive black and white miniature infrared camera, that is ready to go. 1/3" (8mm) B/W CCD. 320 lines of resolution. 0.1 Lux. Measures approximately 2 1/2" X 1 3/4" X 1 1/4" deep

including the lens. Includes a mounting bracket. Six infrared LED's mounted in the enclosure allow the camera to see in low light as well as total darkness. 9" leads with RCA jack for video output and 2.1 mm jack, tip +, for power. Operates on 9-12 Vdc between 100ma and 300 ma. Our power supply CAT# PS-1251 recommended.

2.1mm, center positive, coax power jack.

CAT # VC-303 \$31.95 each

WEATHERPROOF DAY/ NIGHT COLOR SECURITY CAMERA

Ready-to-use weatherproof color camera kit. Includes camera and mounting bracket. 33 feet (10 meters) of coax cable and power supply. 1/3" color CCD camera provides sharp, 380 line, pictures in daylight. At night, or in total darkness, the 11 infrared LEDs built into the front of the camera, illuminate the area up to 9' from the camera. The infrared

illuminated picture is black and white. Overall dimensions of camera, including sunshade is 2.85" long x 1.78" diameter. Plug into your video monitor or VCR and you're ready to go.

CAT# VC-21 \$ 95.00 each

GREAT PRICE MICRO CMOS PINHOLE CAMERA

Tiny color pinhole camera with audio. 0.99" x 0.79" x 0.67." NTSC. 380 line resolution. 1.5 lux. RCA jacks for video and audio output. 2.1mm coax (c+) jack for power input. Requires 12 Vdc power supply (our CAT# PS-1251 recommended).

CAT# VC-24 \$46.00 each

AUTOMOBILE REARVIEW COLOR CAMERA

Rearview color camera designed for use in automobiles and RVs. Provides

a reversed mirror-image to simulate the view in your rear-view mirror. Rugged black metal housing has a 0.98" diameter threaded bushing to mount in bumpers or panels up to 1.15" thick. Includes mounting hardware. Overall length, 2.16." 75 Ohm, RCA jack, video output. 2.1mm coax jack, center positive for 12 Vdc input. CMOS camera operates on 12Vdc 80 mA.

CAT# VC-20 \$ 65.00 each

CAMERA ACCESSORIES

12 VDC 500 MA REGULATED POWER SUPPLY

Ideal for 1 or 2 CCTV cameras or any device requiring a regulated output. 2.1mm co-ax plug, center positive. UL.

CAT# PS-1251 \$8.50 ea. • 10 for \$8.00 ea.

5" COLOR MONITOR FOR GAME

CUBE AND VIDEO
Intec Color Game
Screen for Gamecube™
Great little LCD
video monitor for
use in vehicle or home.
Designed for use
with Gamecube™

can be used for

portable DVD, VCR or video applications. 6" x 6" x 1.5" case has a swivel base that allows for stand alone table-top use or attachment to game. Headphone jack, volume and brightness controls. Heat-resistant to withstand high temperatures in automobiles. New, retail packaging with instructions. Operates on 12 Vdc. Includes auto cigarette lighter power cord, adaptors for RCA audo/video inputs and Gamecube adaptor cord.

CAT# MTR-9 \$54.95 each

VIDEO CAMERA EXTENSION CABLES



Power cable has 2.1mm coax male on one end, female on the other end. Audio and video cables have RCA plugs on both ends. Suitable for all of the cameras on page 40.

50' VIDEO AND POWER CABLE - dual cable CAT # CB-29 \$ 12.00 each

100' VIDEO AND POWER CABLE - dual cable CAT # CB-54 \$ 20.00 each

60' AUDIO, VIDEO & POWER CABLE - triple cable **CAT # CB-60** \$ 18.95 each

VIDEO/ RF MODULATOR

If you don't mind making a few cuts and splices, you can save some money on this video/rf

modulator. The video, audio and power inputs go through a mini-din

connector at the end of a 7' cable. Cut off the plug and make your connections directly to the cable; we supply a hook-up diagram. Requires a 4.5 - 6 Vdc, 50 mA power supply or wall adaptor (not included). Antenna-in female F-connector. Output is a male F-connector on a 1' cord.

CAT # MOD-6 \$3.00 each 10 for \$2.50 each

VIDEO RF MODULATOR

Video RF modulator enables use of standard television for video cameras, camcorders, video games, DVDs, VCRs and other



audio/video equipment. RCA jack inputs and outputs for stereo audio and video. Also has an S-Video input. 75 Ohm F connectors for Antenna-in and output to television. Selector switch to operate on Channel 3 or 4. Operates on 120 Vac. Complies with FCC standards. UL.

CAT # MOD-10 \$ 9.25 each

DUMMY CAMERA W/ BLINKING LIGHT

Large, realistic dummy video camera with flashing LED provides extra protection indoors or outdoors. 8.75" long x 3.35" diameter aluminum housing on a sturdy aluminum mounting bracket.

Authentic-looking camera lens is mounted behind the glass front panel. A red flashing led mounted above the lens requires 2 AA cells to operate.

CAT# CAM-4 \$29.95 each

AM-FM ANTENNA

Made by Terk for Philips / Magnavox, this great little antenna improves reception and brings in more stations, more clearly than the wire antennas that come with many AM/ FM receivers. Omnidirectional, Easy hook-up, Includes impedance matching transformers for 300 Ohm or 75 Ohm. Connects to F-connectors. screw terminals or spring terminals. 5.9" x 5.7" x 1". Gray / blue. Includes instructions. Retail packaged. CAT# ANT-30 \$6.95 each

Hi-8 VIDEO TAPE (USED)

(120 minute) video cassettes. Topof-the-line, Sony or Fuji (depending on availability), metal particle Hi-8 cassettes, used for a short time,



В A

then bulk erased. Includes plastic storage box.

CAT# VCU-8 \$2.50 each

10 for \$2.35 each • 100 for \$2.00 each

A-B VIDEO SWITCH

Lance Industries P4039. Pro-grade A/B pushbutton video switch. Low insertion loss, high isolation. Meets FCC requirements. DSS(r) compatible.

F-connectors for inputs and outputs. CAT# ABS-5 \$4.30 each

AMPLIFIERS

VIDEO AMPLIFIER, 10 DB

UHF / VHF / FM broadband amplifier. VHF gain 10 dB, UHF gain 7dB. Low-noise, heavy-gauge shielded case. Bandwidth 54-890MHz Impedance, 75 Ohm. 117 Vac power source.



CAT# AMP-656 \$8.95 each

IN-LINE AMPLIFIER FOR **DBS SYSTEMS**

RCA # D903. Satellite In-Line DBS Amplifier; 950-2050MHz. LNB amplifier provides 13-18dB gain to signal. Recommended for cable runs over 100 feet. Designed for indoor use. Powered by receiver via coax line. Power pass: 14-18VDC 25-40mA.

CAT# AMP-903 \$5.50 each \$3.50 each

VIDEO/AUDIO DUBBING CABLES

RCA style plugs each end.

VIDEO CABLES W/ RCA PLUGS

6 foot CAT# VMC-6

75¢ each • 100 for 45¢ each

12 foot CAT# VMC-12

\$1.65 each • 100 for \$1.05 each

25 foot CAT# VMC-25

\$3.00 each • 100 for \$2.20 each

STEREO VIDEO CABLES

75 ohm video cable with two audio cables for stereo dubbing.



Gold tipped RCA plugs. Suitable for DSS. SPECIAL!

CAT# AVS-31 \$ 2.25 each

100 for \$ 1.50 each

6' CAT# AVS-61 \$ 3.75 each CAT# AVS-212 \$ 5.95 each 12' CAT# AVS-251 \$ 8.85 each



S-VHS PATCH ADAPTERS

	CAT#	<u>each</u>	<u>10</u>
S-VIDEO JACK - RCA JACK	AD-151	2.25	2.00
S-VIDEO PLUG - RCA JACK	AD-152	2.25	2.00
S-VIDEO JACK - RCA PLUG	AD-153	2.25	2.00
S-VIDEO PLUG - RCA PLUG	AD-154	2.25	2.00
S-VIDEO JACK - S-V. JACK	AD-155	2.25	2.00

6' CAMCORDER CABLE, 3.5MM TO RCA PLUGS

High-performance video and audio cable for camcorders that have the 3.5mm, 4-conductor, output jack. 6' cable with right-angle 3.5mm plug on one end, three color-coded RCA plugs on other end. CAT# CB-219 \$2.50 each



S-VHS PATCH CABLES

10 for \$2.25 each



iviii iiatu	re 4 pin mini bin	plugs both enus.	6 `
6'	CAT# CB-376	\$2.50 each	(c
12'	CAT# CB-365	\$3.50 each	
25'	CAT# CB-270	\$5.50 each	
50'	CAT# CB-275	\$10.95 each	
75'	CAT# CB-280	\$14.65 each	
100'	CAT# CB-285	\$17.95 each	

S-VHS AND AUDIO CABLES

Low-loss, fully-shielded dubbing cables. 4-pin mini-DIN cable and dual RCA cables. Fully-molded, color-coded gold connectors.

6' CAT# CB-281 \$5.50 each 12' CAT# CB-282 \$8.50 each

S-VHS TO 2 RCA PLUGS



\$2.75 each • 10 for \$2.50 each

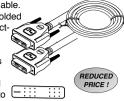
12' CAT# CB-128

\$3.25 each • 10 for \$2.80 each



6' DVI CABLE, SINGLE LINK

DVI Single Link TDMS Cable Shielded 6' cable with molded plugs and EMI/RFI protective ferrite beads at each end. Provides sufficient bandwidth for resolutions up to 2048 x 1536 pixels and supports high-speed digital transmissions up to



9.9 Gbps. Gold plated contacts Ideal for use with Digital CRT/Flat Panel Displays, HDTV & Projectors. CAT# CB-391 \$9.50 each \$5.75 each

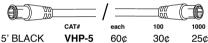
VIDEO HOOK-UP CABLES (WITH F CONNECTORS)



75 Ohm. RG-6U high-definition cable. Suitable for DSS, C/KU Satellite installations. Fully molded nickelplated F connectors. AWG 18 solid copper-clad steel center. Double Aluminum foil shield plus 67% tinnedcopper braid shield. UL-AWM style 1354 80° C, 300V.

			,	,	
FEET	COLOR	CAT#	each	10	100
3'	Black	VHR-3B	1.20	1.00	0.80
3'	White	VHR-3W	1.20	1.00	0.80
6'	Black	VHR-6B	1.60	1.35	1.15
6'	White	VHR-6W	1.60	1.35	1.15
12'	White	VHR-12W	2.45	2.20	1.90
25'	White	VHR-25W	4.00	3.60	3.20
50'	Black	VHR-50B	8.00	7.00	6.20
50'	White	VHR-50W	8.00	7.00	6.20
75'	Black	VHR-75B	11.00	10.00	9.00
75'	White	VHR-75W	11.00	10.00	9.00
100'	Black	VHR-100B	15.00	13.00	11.00
100'	White	VHR-100W	15.00	13.00	11.00

PUSH-ON "F" CONNECTORS



COMPONENT VIDEO CABLES

Component-video RCA interconnects provide high-definition video signal transfer between DVD players and high-end TVs or monitors. Heavy-duty goldplated RCA connectors. Colorcoded. Fully-molded construction.

6' CAT# CB-271 \$15.00 each 12' **CAT# CB-272** \$25.00 each 25 **CAT# CB-273** \$37.50 each

TOSLINK OPTICAL CABLE

Precision audio link between DVD, CD players, and A/V Receivers.



3 Foot Cable CAT# OCB-3 \$7.25 each 6 Foot Cable CAT# OCB-6 \$8.50 each 12 Foot Cable CAT# OCB-12 \$14.00 each

F CONNECTORS AND ADAPTERS



F-59 connector w/ separate crimp ring for RG-59 cable 5 for \$1.00 \$15.00



F-59 with attached crimp ring for RG-59 cable F-59R 4 for \$1.00 \$20.00

CAT# 100 price

Twist-on F-59 for RG-59 cable FTO-59R 4 for \$1.00 \$20.00

F-56 connector with heavy-duty attached ring. For RG-6U cable.

F-56R 4 for \$1.00 \$20.00

Twist-on F-56 for RG-6 cable FTO-56R

4 for \$1.00 \$15.00

Push-on F-59. Makes threaded F connector into a quick connect POF-SW \$40.00 2 for \$1.00

Right-angle F connector

FRT-2 1 00 each \$70.00

75 ohm terminator 3 for \$1.00 \$25.00

F-61. Chassis mount female F-61 3 for \$1.00 \$25.00

F-61. Chassis mount female w/ solder terminal. F-61A 20¢ each \$12.00

Splicer, female. Connects two male connectors 4 for \$1.00 \$20.00

Splicer, male. Connects two female connectors F-71 2 for \$1.50 \$55.00

75 OHM CABLE SPLITTERS

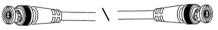


2 WAY SPLITTER 5-900 MHZ CAT# TWS-2 \$1.00 each

3 WAY SPLITTER 5-900 MHZ CAT# TWS-3 \$1.50 each



BNC CABLES



50 OHM, RG-58 MALE-MALE

<u>length</u>	cat#	each	10	100
3 foot	CBL-27	\$2.50	2.00	1.75
6 foot	CBL-28	\$3.25	2.75	2.25
15 foot	CBL-29	\$4.25	3.75	3.25
25 foot	CBL-25	\$5.50	5.20	4.00
50 foot	CBL-45	\$8.65	8.30	7.50

75 OHM. RG-59 MALE-MALE

\$3.25 2.75 CBL-30 6 foot 2.25 25 foot CBL-35 \$5.50 5.00 4.25

BNC CONNECTORS

CAT# #1-9 100+ 10-99 MALE CRIMP-ON 3-piece **BNC-59** RG-59/62 Cable .85 .70

.55 BNC-6 RG-6 .85 70 .55 **BNC-58** RG-58 Cable .55 .85 .70



CAT#	#1-9	10-99	100+
MALE TV	VIST-ON		

UG-260TW	RG-59/62 Cable			
	\$1.00	.85	.70	
UG-6TW	RG-6 Cable			
	\$1.00	.85	.70	
UG-88TW	RG-59 Cable			
	\$1.00	85	70	



BULKHEAD / PC MOUNT JACKS

50 Ohm vertical jacks. Threaded bushing with nut for panel mount. PC pins with two diagonal mounting posts for added stability.

Plastic body and mounting bushing

Amphenol #31-5493 Plastic body and mounting bushing BNC-16 1.50 1.25 1.00

BNC ADAPTERS

CAT#	<u>#1-9</u>	<u>10-99</u>	<u>100+</u>
UG-914	MALE COL	<u>JPLER</u>	

Female both ends .90 .75 UG-914 60



BNC COUPLER thru chassis Female both ends

UG-492 1.40



UG-491A/U FEMALE COUPLER Males both ends

BNC-BNC 1.80



UG-306 RIGHT ANGLE ADAPTER UG-306 2.40 1.60

UG-274 BNC SPLITTER BNC-T 1.50 1.25 1.00



BNC-T ADAPTER (3 female fittings) 1 75 1 40



RNC-T2 2 10

50 OHM BNC TERMINATOR BNC-50 1 20 1.00 RΛ



75 OHM BNC TERMINATOR 80 BNC-75 1 20 1.00

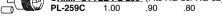
UHF CONNECTORS



REDUCER FOR RG-58 CABLE (Fits PL-259) UG-175 .30 .25 .20



CRIMP STYLE PL-259 (Fits RG-59/ RG-62) PL-259C 1.00 .90 .80



1.00



MALE COUPLER PL-258



UHF-UHF



10' RG-58U coax cable with PL-259 male one end, female on other end.

.80

.65

CB-336 2.25 1.65

ADAP	TERS		
CAT#	<u>1-9</u>	10-99	100±
F FEMALE to F-RCA	RCA MALE .75	.65	.50
F FEMALE to I F-BNC			.90
RCA FEMALE RCA-F		.80	.60
RCA FEMALE RCA-BNC		.70	.55
UHF FEMALE UHF-BNC			1.20
BNC FEMALE BNC-F		1.25	1.00
BNC FEMALE BNC-RCA			.60
BNC FEMALE	to UHF MA	LE	

AUDIO / POWER / SIGNAL PLUGS & JACKS

RCA PLUGS

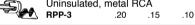
2 00

1 75

1 40

BNC-UHF

	CAT#	1-9.	10-99	100±
	RED PLASTIC I	.30	.25	.20
	BLACK PLASTI PPRP-B	C HAND .30	LE .25	.20
(1)	SHIELDED, ME	TAL .50	.45	.35
S	Uninsulated, r	netal R	CA	



RCA JACKS

(threads from the RCMJ		.35	.25
IN-LINE RED F PIRP-R	PLASTIC .30	.25	.20
IN-LINE BLAC PIRP-B	K PLASTIO .30	C .25	.20
IN-LINE META MIRJ	L .65	.55	.40
With N.C. switch Plain bushing. RCJ-65	ch. .20	.15	.10

3.5mm JACKS



STEREO, CHASSIS-MOUNT with 2 SPST N.C. switches. Threaded bushing with nut. Solder terminals. Large quantity available. .50 MJW-20 45 500 for 25¢ each • 1000 for 20¢ each



STEREO JACK w/ PC pins. Shiny 6mm plain (unthreaded) bushing. Large quantity available. .25 .15 1000 for 6¢ each • 5000 for 4¢ each



3.5MM STEREO JACK with two N.C. switches. Black plastic plain bushing. PC pins can be wrapped and soldered. MJW-12 .25 .09

	CAT#	1-9	10-99	100±
• •	SPECIAL PC I Jack with 2 N.C			
	MJW-9	.25	.15	.10
	MONO PLASTIC	C, IN-LIN	E 35	25
•	IVIOI	.45	.00	.23
	STEREO PLAS	TIC, IN-L	INE	
	SJI	.60	.50	.40

3.5mm PLUGS						
	CAT#	1-9	10-99	100+		
	MONO, PLASTIC PMP	.40	.35	.25		
	MONO, METAL MMP	.45	.40	.30		
	STEREO, PLAS' SMP	TIC .50	.40	.33		
□ □	STEREO, META SMPM	.65	.60	.55		
	MMP STEREO, PLAS' SMP STEREO, META	TIC .50 L	.40	.33		

2.5mm P	LUG		
MONO, PLAST PMMP	IC .40	.35	.30
STEREO, PLAS	STIC 1.35	1.25	1.00

1/4" JACKS - Reduced Prices!

	0,10,10			
	CAT#	<u>1-9</u>	10-99	100+
MONO, 2-CO	ONDUCTOR			
	N.C. switch.			
	PHJ-S	.60	.50	.40
	Enclosed P	lastic bushing	NC s	switch
	PHJ-3	.55	.50	.40
-3				
- 1 - Trans	Enclosed, N	letal bushing		
	PHJ-1	.55	.50	.40



PC mount / panel mount.
Two pole normally closed contacts.
PHJ-8 3 for \$1.00 • 100 for 25¢ each
500 for 20¢ each • 1000 for 15¢ each

MONO, IN-LINE



STEREO, 3-CONDUCTOR W/ N.C. SWITCH

3510-3		.73	.70	.00
Enclosed,	plastic	bushing	- SPE	CIAL!
SPHJ-1		.35	.30	.20

STEREO, UNSWITCHED

	Enclosed	- REDUCED PRICES!			
	SPHJ-2	.35	.30	.20	

JACK FOR UP TO 1" PANEL THICKNESS

The second	PHJ-14	1.50	1.25	1.00

STEREO, IN-LINE

No.	Plastic SPJ-17	.75	.65	.55
	Metal SPJ-18	1.40	1.20	.90

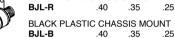
1/4" PLUGS						
	CAT#	<u>1-9</u>	10-99	<u>100+</u>		
	MONO, PLAST SPH	IC .50	.40	.35		
	MONO, METAL MPHM	.85	.75	.60		
	STEREO, PLAS	STIC				
	PHPS	.75	.65	.55		
	STEREO, MET	AL				
	MPHS	1.25	1.05	.80		
	BANANA I	PLUG	S			
	RED PLASTIC					
	BPL-R	.40	.35	.25		
	BLACK PLASTI	-				
	BPL-B	.40	.35	.25		
DUAL BANANA PLUG 0.75" spacing. Black or red plastic Color Subject to Availability.						
0) 5	BP-2 1.20)	1.00	.85		

BANANA JACKS / BINDING POSTS



CAT# 1-9 10-99 100+
6 BANANA JACK/BINDING POST
ASSEMBLY. Six banana jack/binding
posts on a PC mount assembly. Three
red and three black binding posts on a
2.53" x 1.81" plastic plate. The mounting
plate is constructed so that it would be
fairly easy to cut it into 2 pair and 1 pair
of jacks. PC terminals.

BP-60 1.00 .85 .60
RED PLASTIC CHASSIS MOUNT





5-WAY BLACK PLASTIC BINDING POST **5-BP-B** .65 .50 .40 5-WAY RED PLASTIC BINDING POST **5-BP-R** .65 .50 .40

RCA / PHONE PLUG ADAPTERS

RCA jack to RCA jack



CAT# AD-3 75¢ each

RCA plug to RCA plug



CAT# AD-33
75¢ each

RCA plug to two RCA jacks



RCA jack to two RCA plugs



RCA jack to CAT# RCA-3.5 75¢ each

3.5 mm mono jack to RCA plug

CAT# AD-12 75¢ each

3.5 mm stereo to 1/4" stereo



3.5 mm mono to CAT # ADMP-4 75¢ each

6" long molded Y-cable. 3.5mm stereo phone plug to two 3.5mm stereo phone jacks. **CAT# AD-54** \$1.35 each

3.5mm stereo plug to two 3.5mm stereo jacks CAT ADMP-5 \$1.20 each



3.5mm stereo plug to 2 RCA jacks CAT# CB-52 \$1.25 each



1/4" mono jack to RCA plug (CAT# 54-421 75¢ each

1/4" mono plug to RCA jack ODE

CAT# AD-5 75¢ each

1/4" stereo plug to **⇔D** 3.5 mm stereo jack

10 CAT# ADMP-1 75¢ each

1/4" plug to two RCA jacks CAT# AD-52 \$1.35 each





CAT# AD-55



COIL CORDS - 1/4" PHONE PLUGS

25' cord with right angle 1/4" plugs. CAT# CB-196 \$4.50 each 10 for \$4.00 each 100 for \$3.25 each



20' extension coil cord with 1/4" male to 1/4" female plugs.

CAT# CB-197 \$2.25 ea. @E 10 for \$2.00 each • 100 for \$1.65 each

MICROPHONE CABLES



1/4" Phone Plug to 3-pin XLR jack. Nickelplated zinc-alloy XLR connectors. Fully-shielded low-loss cable. Flexible black rubber jacket.

each 100 16' Cable **CAT# CB-289** \$3.50 3.25 2.75 20' Cable **CAT# CB-290** \$6.95 5.95 **CAT# CB-293** 60' Cable \$12.55 11 40

MICROPHONE EXTENSION CABLES



3-pin XLR plug to 3-pin XLR jack. Nickelplated zinc-alloy connectors. Fully Shielded low-loss cable. Flexible black rubber jacket.

<u>each</u> <u>10</u> 20' Cable CAT# CB-295 \$8.50 7.50 60' Cable **CAT# CB-298** \$13.50 12.00

3 PIN XLR CONNECTORS

1-9 10-99 100+ CHASSIS MOUNT FEMALE



Metal 1.42" x 1.05" mounting flange. Mounts in 0.94" dia. hole. Solder lugs. MIKE-3CF 2.00 1.75



Plastic 1.27" x 1.03" mounting flange. Mounts in 0.86" diameter hole. Black, break-resistant plastic. PC pins which can be hard wired and soldered. XLF-3 1.00 .85



CHASSIS MOUNT MALE

Metal 1.41" x 0.86" mounting flange. Mounts in 0.75" dia. hole. Solder lugs. MIKE-3CM 1.50 1.75

INLINE XLR CONNECTORS



XLR ADAPTERS



XLR Coupler Male to Male CAT# XLR-320 \$3.75



XLR Coupler Female to Female CAT# XLR-310 \$4.50



XLR Male To 1/4 Plug CAT# XLR-340 \$3.75



XLR Female To 1/4 Plug CAT# XLR-330 \$4.25

COAX DC PLUG ADAPTERS

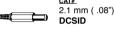
If your wall transformer doesn't have the correct coax power plug, these adapters may help. They will change the plug size, not the polarity. If you need to change polarity, cut off the plug, reverse the wires and resplice it.

CAT# DCA-1 CAT# DCA-2 CAT# DCA-3 CAT# DCA-4

Changes 2.5mm to 2.1mm Changes 2.1mm to 2.5mm Changes 2.1mm to 1.3mm Changes 2.1mm to 1.7mm

Any of the adapters above \$1.50 each

CO-AX POWER PLUGS



1-9 10-99 100+ 2.1 mm (.08") CO-AX PLUG .50 40 30

2.5 mm (0.1") CO-AX PLUG DCLID .50 30

D.C. "CO-AX" POWER JACKS

Normally closed shunt opens when plug is inserted. 10-99

2.1 MM MATES WITH CAT# DCSID



Normally closed shunt opens when plug is inserted. 2.1mm QUANTITY SPECIAL! pin (mates w/ DCSID) solder lugs. CAT# DCJ-1 .35 .30 500 for 16¢ each • 1000 for 12¢ each



2.1mm pin solder lugs with mounting ears DCJ-12 .35 .30



Panel mount DCJ-21 1.20 1.00 .85

2.5 MM MATES WITH CAT# DCLID



Panel mount DCJ-25 1.20 1.00 .85



2.5mm pin DCJ-11 .25 .20 .15 2.5mm pin.



Molded DC power jack. P.C. mount DCJ-4 .10 .08



1000 for \$45.00



2.5 mm pin. N.C. shunt. Mounts in 0.26" X 0.33" slot. Solder lugs. DCJ-16 .25 1000 for 10¢ each



2.5 mm. N.C. Shunt. PC mount. Large quantity available. Reduced price. .10 DCJ-17 .08 .05 1000 for 3¢ each

CABLE W/ 2.1MM CO-AX JACK

6' cable with molded jack.





CAT# CB-216 \$2.00 each 10 for \$1.90 each 100 for \$1.70 each

CABLES W/ 2.1MM CO-AX PLUGS

3' CABLE

Plugs both ends. Red/Black zip cord. CAT# CB-204 \$2.00 each

100 for \$1.65 each

6' CABLE Right-angle molded 2.1mm coax plug on black 2/20 zipcord. CAT# CB-340 \$2.50 ea.

6' CABLE W/ 2.5mm CO-AX POWER JACK

CAT# CB-296

\$2.25 each

10 for \$2.15 each • 100 for \$2.05 each

CABLES W/ 2.5MM SUB-MINI PHONE PLUGS AND JACKS

2 conductor, 22 AWG stranded wire, stripped ends.

- intelier **PLUGS**

6' CABLE **CAT # CB-326**

\$1.00 each • 10 for 75¢ each • 100 for 50¢ each

6'4" CABLE **CAT # CB-327**

\$1.00 each • 10 for 75¢ each • 100 for 50¢ ea.

CAT #CB-119 Large quantity available. 14' CABLE \$1.10 each • 10 for 85¢ each • 100 for 55¢ each

JACK M) 3.5' CABLE **CAT# CB-328**

\$1.20 each • 10 for \$1.00 each • 100 for 75¢ each

5 PIN DIN CABLES 180°

5-PIN DIN PLUG ON 6' CABLE

Molded 5-pin DIN plug one end. Black PVC jacket. Color-coded, stripped and tinned 20 AWG conductors. CAT# CB-330 \$1.50 each

10 for \$ 1.25 each • 50 for \$ 1.00 each

5-PIN DIN EXTENSION

6' coil cord with 5-pin DIN male and 5-pin DIN female.

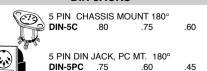


CAT# CB-344 BFIGF

\$2.35 each • 10 for \$2.00 each

DIN PLUGS						
	CAT#	<u>1-9</u>	10-99	<u>100+</u>		
	5 PIN	IN-LINE MALE	180°			
	DIN-5	.75	.65	.55		

DIN JACKS



TEST PROBE AND JACK

2mm diameter test probe with black plastic insulated handle.

CAT# TP-2 2 for \$1.00 • 100 for 35¢ each

Horizontal, pc mounting test jack. Gold-plated pins and internal contacts. CAT# TJ-2 3 for \$1.00 • 100 for 25¢ ea.



SHIELDED AUDIO CABLES

DUAL SHIELDED RCA CABLES



Shielded cables with molded color coded RCA pin plugs both ends. Used for stereo/audio hook-up.

	CAT#	1-9	10	100
3 FT	DCB-36	\$1.00	85¢	75¢
6 FT	DCB-72	\$1.30	\$1.10	85¢
9 FT	DCB-108	\$1.50	\$1.25	\$1.00
12 FT	DCB-144	\$2.50	\$2.00	\$1.50
25 FT	DCB-300	\$3.50	\$3.00	\$2.00

SINGLE **RCA CABLES**

Shielded one conductor audio cable with RCA style phone plug both ends.

	CAT#	1-9	10-99	100+
6 feet	ACB-6	.85	.75	.70
10 feet	ACB-10	1.00	.90	.75
25 feet	ACB-25	2.25	2.00	1.65

3.5MM STEREO PLUG TO TWO RCA PLUGS



portable audio players to home stereos and to connect speakers to computers.

Length	CAT#	<u>1-9</u>	10	100
5 feet	CB-42	1.50	1.25	1.00
6 feet	CB-390	1.75	1.55	1.30

12' SHIELDED DUAL RCA **EXTENSION CABLE**

Gold-plated RCA plugs and jacks. CAT# DEX-12

\$1.50 each



CABLES W/ 3.5MM MONO PLUGS

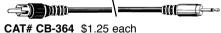
3.5 MM MONO PLUG BOTH ENDS

Shielded cables with molded plugs.

	 \ =			
	CAT#	1-9	10	100
2 foot	CB-352	1.00	.90	.65
6 foot	CB-3561	1.25	1.00	.80
10 foot	CB-3510	1.50	1.25	.95

3.5 MM MONO PLUG TO RCA

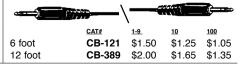
6 foot shielded cable.



10 for \$1.10 each • 100 for 90¢ each

CABLES WITH 3.5MM STEREO PLUGS

3.5MM STEREO PLUGS BOTH ENDS



6' COIL CORD WITH 3.5MM PLUG



Good-quality black coil cord. 6 feet extended length. 2-conductors (22 AWG) with a foil shield and drain wire, 7" uncoiled area at both ends. Molded strain relief 4.5" from stripped and tinned ends.

CAT # CB-386 \$ 2.00 each

10 for \$ 1.75 each • 100 for \$ 1.25 each

6' CORD W/ RT.ANGLE 3.5MM STEREO PLUG

Flexible 6' black cord. 0.09" diameter. with molded right-angle 3.5mm stereo phone plug. Four, color-coded conductors, litz-type wire. Two conductors connect to ring (lower portion of plug). CAT# CB-140 \$1.50 each

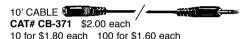
EXTENSION CORDS. 3.5MM PHONE PLUGS

3.5mm stereo plug to 3.5mm stereo jack. Shielded audio cables. Black PVC jacket. Molded plugs and jacks.



10' COILED EXTENSION CORD CAT # CB-185 \$ 2.65 each

10 for \$2.20 each • 100 for \$1.80 each



6' EXTENSION CABLE **CAT# CB-333**

\$1.60 ea. • 10 for \$1.45 ea.



6' Y-CABLE **CAT# CB-79** \$2.35 each

WEATHER-RESISTANT CONNECTORS



Mating, weather-resistant polarized connectors. 12" red and black. Stranded wire leads.

10 gauge CAT# CON-321 \$2.50 each 10 for \$2.25 each • 100 for \$1.75 each

18 gauge CAT# CON-320 \$1.50 each 10 for \$1.35 each • 100 for \$1.00 each

MULTI-PIN CONNE

LOCKING CONNECTORS

Mating pairs of polarized multi-pin connectors with wire leads. Pins on 2.5mm centers. Black nylon housing with

release on male side of connector. Female side of connector can be snap-mounted into a rectangular chassis mounting hole. 12" color-coded leads, 22 AWG stranded wire on both connectors.

CAT# CON-240 2-CONDUCTOR \$1.35 ea. • 10 for \$1.20 ea. • 100 for 95¢ ea.

CAT# CON-340 3-CONDUCTOR

\$1.45 ea. • 10 for \$ 1.30 ea. • 100 for \$1.05 ea. CAT# CON-440 4-CONDUCTOR

\$1.60 ea. • 10 for \$ 1.50 ea. • 100 for \$1.15 ea.

CAT# CON-640 6-CONDUCTOR \$1.80 ea. • 10 for \$1.75 ea. • 100 for \$1.35 ea.

JUMPERS W/ MATING HEADERS

3" jumpers with matching pc mount, snap-lock headers on both ends. 0.1" pin spacing. Color-coded leads. 24 AWG.

5 pin CAT# CON-55 ...

\$1.35 per set

8 pin CAT # CON-88 \$1.75 per set

6-PIN CONNECTOR AND HEADER

6-conductor socket connector with 5" color-coded leads and mating pc mount header. Pins on 2mm centers. 26 AWG.

CAT# CON-62

85¢ each • 10 for 70¢ each

PRE-WIRED CONNECTORS

WITH MATING HEADERS

Nylon connectors and mating pc mount,

snap-lock headers. Female socket connector is

pre-wired with 11" long color-coded stranded wire.



MATING CONNECTORS

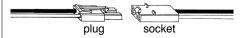


Male / female ends connected with 10" wires

# of C	ond. CAT#	<u>1-9</u>	<u>10-99</u>	100
2	CON-20	1.50	1.25	1.00
3	CON-30	1.75	1.50	1.20
4	CON-40	1.90	1.60	1.30
6	CON-60	2.25	1.85	1.50
9	CON-90	3.00	2.75	2.20

RC MODEL CONNECTORS

2 CONDUCTOR. RC BATTERY CONNECTORS



15 Amp, two-conductor locking nylon connectors. Industry standard for remote control cars. 5.5" silicon-rubber-insulated leads (16 AWG) are very flexible and heat-resistant.

CAT# CON-210P 75¢ each 10 for 70¢ each • 100 for 60¢ each

SOCKET CAT# CON-210S 75¢ each 10 for 70¢ each • 100 for 60¢ each

2 CONDUCTOR TRANSMITTER CONNECTORS

6" red & black leads. Flexible silicone rubber insulation, 22 AWG stranded wire, BEC-JST

Male, battery end CAT# CON-230P \$1.75 each 20 for \$1.50 each



Female -- Motor end

CAT# CON-230S \$1.75 each 20 for \$1.50 each



3 CONDUCTOR SERVO EXTENSION

Universal connectors fit both Futaba and Hi-Tec/JR(S). Male to female. Very flexible,22 AWG stranded wire. Black, red, white silicone rubber insulation.



Length	CAT#	Price	<u>20+</u>
4"	CON-404	\$2.60	\$2.30
6"	CON-406	\$2.75	\$2.40
12"	CON-412	\$3.25	\$2.85
18"	CON-418	\$3.65	\$3.20
24"	CON-424	\$3.95	\$3.45
36"	CON-436	\$4.50	\$3.95

12" Y-EXTENSION

Operate two servos from one receiver



\$4.50 each 20 for \$ 3.95 each



2-CONDUCTOR MINI BATTERY CONNECTORS

With 7.5" red and black leads. Frequently used on rechargeable battery packs like those



CAT# SBC-2 45¢ each 10 for 40¢ each • 100 for 27¢ each

0.1" HEADER, PC MOUNT CAT# SBH-2 20¢ ea. • 10 for 16¢ ea. • 100 for 10¢ ea.

CONNECTOR, 2MM SPACING CAT# SBC-1 45¢ each 10 for 40¢ each • 100 for 27¢ each

2MM HEADER, PC MOUNT CAT# SBH-1 20¢ ea. • 10 for 16¢ ea. • 100 for 10¢ ea.

0.1" SNAPPABLE HEADERS

.025" square header pins on 0.1" centers

DOUBLE ::				
DESCRIPTION	CAT#	1-9	10-99	100+
2 X 12 straight	DHS-12	40¢	35¢	20¢
2 X 13 right angle	DHR-13	20¢	15¢	10¢
2 X 16 straight	DHS-16	50¢	45¢	35¢
2 X 40 straight	DHS-40	\$1.25	\$1.00	85¢

HEADER WITH 3 SHORTING JUMPERS

12 pin (2 X 6 pins) double row snappable header prepped with three shorting jumpers, like our CAT # SJ-1. CAT # SJ-3 4 for \$1.00



SINGLE ROW

DESCRIPTION SHS-40 .40 40 pin straight 50 40 pin right angle SHR-40 1 25 1.00 85

SHORTING JUMPERS FOR HEADERS

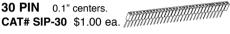
Designed for use with above double and single row headers. Used to short out adjoining posts on headers.

CAT# 1-9 10-00 100+ S.I-1 10 റമ 07



SNAPPABLE SIP SOCKETS

30 PIN 0.1" centers.



IDC SOCKET CONNECTORS

Mates with double row posts on .100" centers. Press mount on standard flat ribbon cable.

DESCRIPTION	CAT#	<u>1-9</u>	<u>10+</u>	/
10 pin (2 X 5)	RCSC-10	.55	.35	
14 pin (2 X 7)	RCSC-14	.60	.50	d
16 pin (2 X 8)	RCSC-16	.65	.45	
20 pin (2 X 10)	RCSC-20	.65	.45	
26 pin (2 X 13)	RCSC-26	.75	.55	
34 pin (2 X 17)	RCSC-34	.65	.45	

D-SUBMINIATURE CONNECTORS

SOLDER STYLE





	(10111410)	,		(IIIaie	7)
DESCRIPTION	CAT#	1-9	10-99	100+	
9 pin PLUG	DB-9P	.45	.35	.27	
9 pin SOCKET	DB-9S	.49	.39	.29	
Hood for DB-9	DB-9H	.39	.29	.22	
15 pin PLUG	DB-15P	.59	.45	.35	
15 pin SOCKET	DB-15S	.69	.49	.38	
Hood for DB-15	DB-15H	.39	.29	.22	
25 pin PLUG	DB-25P	.69	.50	.35	
25 pin SOCKET	DB-25S	.75	.55	.40	
Hood for DB-25	DB-25H	.39	.29	.25	

I.D.C. D-SUB CONNECTOR

Insulation Displacement Connector Press fit on flat ribbon cable.



DESCRIPTION CAT# 10-99 100+ 1.0 IDC-9P 9 pin PLUG \$1.39 \$1 19 95 9 pin SOCKET IDC-9S \$1.75 \$1.60 \$1.35

CENTRONICS CONNECTORS

Male 36-pin insulation displacement connector for use on ribbon cable. CAT# IDCON-36

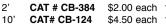


\$1.25 each • 10 for \$1.00 each

COMPUTER CABLES AND ACCESSORIES

A-A USB CABLES

For standard USB peripherals.





\$2.00 each 10 for \$15.00 \$4.50 each 10 for \$37.50

A-B USB CABLES

For standard USB peripherals.



3'	CAT# CB-392	\$2.00 each	10 for \$17.50
6'	CAT# CB-383	\$3.50 each	10 for \$25.00
10'	CAT# CB-125	\$4.50 each	10 for \$37.50

Version 2.0 high-speed.

CAT# CB-347 4.00 each 10 for \$35.00

USB GENDER CHANGERS AD-534 EACH CAT# 10 \$2.25 **ΔD-**530 Δ (M) to Δ (M) ¢0.75

, ((i v i) to , ((i v i)	AD 000	ΨΕ.7 Ο	Ψ2.20
A (F) to A(F)	AD-532	\$2.75	\$2.25
B(M) to B(M)	AD-534	\$2.75	\$2.25
A(M) to B(F)	AD-536	\$2.75	\$2.25
FIREWIRE CABLES			
3 FT	CAT#	EACH	10

9 PIN TO 9 PIN

4 PIN TO 6 PIN

6 FT			
4 PIN TO 4 PIN	CB-606	\$8.00	\$7.00
4 PIN TO 6 PIN	CB-706	\$8.00	\$7.00
6 PIN TO 6 PIN	CB-806	\$7.00	\$6.00

CB-703

CB-903

PARALLEL PRINTER CABLES

\$4.00

\$4.00

\$3.50

\$3.50



DB25 TO 36 PIN MALE - 6 FT. CAT# PCB-1 \$3.95 each • 10 for \$32.50

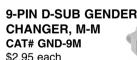
DB25P TO DB25P - 6 FT. CAT# PCB-3 \$4.50 each • 10 for \$40.00

DB25P TO DB25S - 6 FT. EXT. CABLE CAT# PCB-5 \$4.95 each • 10 for \$45.00

9-PIN MALE TO 25-PIN FEMALE. **D-SUB ADAPTER**

CAT# DB-925

\$3.95 each 10 for \$3.75 each



9-PIN D-SUB GENDER CHANGER, F-F CAT# GND-9F

\$2.95 each

25-PIN D-SUB GENDER CHANGER, M-M CAT# GND-25M

\$3.25 each

25-PIN D-SUB GENDER CHANGER, F-F CAT# GND-25F \$3.95 each



DB-9 SERIAL NULL MODEM CABLE

DB9P to DB9S molded connectors with thumbscrews. Contacts 2 and 3 are cross wired. All other pins are

wired straight-through. Blue connectors and cables. CAT# Lenath 10+ 1-9

10 Meter SNC-10 \$4.50 \$4.00

DB-9M TO DB-25F SERIAL ADAPTOR Thumbscrews on DB-25 side only.

CAT# AD-16 \$2.00 each 10 for \$1.75 each

VGA CABLES

Fully foil-shielded cables. DB15 HD molded connectors with thumbscrews.





	CAT#	<u>each</u>	<u>10</u>
6' Male-Male	VGA-6	\$5.75	\$5.00
10' Male-Male	VGA-10	\$6.50	\$5.75
6' Male-Female	VGA-62	\$5.75	\$5.00
10' Male-Female	VGA-102	\$6.50	\$5.75

3-BUTTON OPTICAL SCROLL MOUSE. PS-2

Smooth, accurate movement on almost any surface. Three

programmable buttons stream-line repetitive tasks, and the integrated scroll wheel speeds through long documents. No moving parts means no cleaning. PS/2 connection.

Windows 95/98/ME/2000/XP.

CAT# MSE-12 \$9.25 each

WINDOWS COMPATIBLE **USB KEYBOARD**

Cherry G81-3000. Standard

104 key PC keyboard. Durable, reliable,

high quality and easy to use. USB Interface. Beige. Individually boxed. Special, low price.

CAT# KBD-22 \$7.50 each

BAR CODE WAND

Standard, pen-type barcode wand. 0.5" diameter x 6" long. Coil cord extends to three feet. Terminated

with standard 5-pin DIN plug. CAT# BCW-2 \$16.00 ca.

\$8.00 each

48 CD WALL

Black ballistic nylon zippered case with protective sleeves for 48 data or music CDs.

CAT# CSE-48

\$5.35 each





REDUCED

CRYSTAL

Case Style CAT # 20 MHZ 2 for \$1.00 HC-49US CY-20



32.768 KHZ WATCH CRYSTAL

6 mm long x 2mm diameter. CAT# CRY-32 75¢ each

10 for 65¢ each • 100 for 55¢ each

CERAMIC RESONATORS

CAT# CER-4 \$1.00 each \$1.00 each 20 Mhz CAT# CER-20



Snap-off cartridge knife with three 8-segment blades. New blade conveniently slides into position when old blade is removed. Comfortable rubberized grip. Blades can be retracted when not in use.

CAT# KNF-2 \$2.25 each

BUNGI WATCH

Inexpensive, but functional digital watch on a small elastic bungi band. Watches work, but



batteries need to be replaced. Watch is 0.43" diameter x 1.36" long. Individually carded with instructions. We supply replacement battery. Requires a tiny screwdriver to replace battery.

CAT# BW-10 \$2.00 each \$2.00 each • 10 for \$ 1.50 each



CATEGORY 5E & 6 CABLES AND ACCESSORIES

Standard, straight-through Ethernet patch cables. 4-pair, AWG 24-stranded copper terminated with 8-contact RJ45 modular plugs. Suitable for 350MHz high-speed data applications. All cables are CAT-5E, except CB-614 which is CAT-6. UL, ETL.

<u>Length</u>	CAT#	<u>Ea</u>	<u>10</u>	100
3'	CB-53	2.35	1.95	1.45
6'	CB-560	3.90	3.40	2.90
14'	CB-614	5.50	4.95	4.00
25'	CB-525	6.85	6.20	4.85
50'	CB-550	11.35	10.50	7.20
75'	CB-575	15.75	14.75	9.36
100'	CB-500	18.55	17.00	11.20

RJ-45 COUPLER, PANEL MOUNT

Connects two CAT-5/6 cables. Straight-through connection.

Can be used alone or snap-mounted into single or double wall plates and patch panels.

CAT# MT-87 \$1.25 each

10 for \$ 1.00 each • 100 for 75¢ each

CAT-5E SURFACE-MOUNT JACK

UL certified surface mount RJ45 jack for CAT5E cables. Includes EIA/TIA 568A/B wiring diagram. Quick and easy installation with screw or doublesided tape. Hardware included. CAT# MT-80 \$3.85 each 10 for \$ 3.50 each

DSL / PHONE FILTERS

DSL filters eliminate any interference between your DSL line and analog telephone lines. The result is clear, clean lines for your telephones, fax machines, answering machines, caller ID and analog modems. Installs easily between phone jack and telephone device. Comply with FCC part 68. UL, CSA.

Cisco EZ DSL In-Line Microfilter For single-line telephones or devices. RJ-11 jacks on both sides. Includes 3" modular phone cord. CAT# FTR-100 \$1.50 each

10 for \$1.35 each • 100 for \$1.00 each

2Wire Wall Mount Filter

For single-line, wall-mounted telephones or devices. 7.0" x 3.3" x 0.85. 2.25" cable. Beige.

CAT# FTR-102 \$2.00 each 10 for \$1.75 each 100 for \$1.50 each



SURGE PROTECTORS

Protect computers, phone equipment, VCRs and other sensitive devices from electrical transients and glitches.

6 OUTLET STRIP **CAT# PW-101** \$7.50 each

SINGLE OUTLET

Belkin "MasterCube"™ Model F5C594. Grounded power surge protector with phone/fax/ modem protection. Compact, great for travel. 688 Joules. Includes 6' modular phone cord. UL CAT# PW-688 \$ 3.95 each



PORTABLE GFCI ELECTRICAL PROTECTION DEVICE

Technology Research Corp #25070A. An in-line GFCI and/or ELCI (one is for personal protection, the other for equipment protection). Has a standard IEC, 3-prong male on one

end and female on other. Rated 120 Vac, 10 Amp, 1200 W. Label on the device says, "For use with Xerox equipment. Use only with Xerox specified equipment." 6.5" x 1.96" x 1.85" with a 24" cord. UL, CSA, VDE.

CAT# GFCI-5 \$5.50 each



MAGNETS

POWERFUL NEODYMIUM RARE EARTH MAGNETS

Neodymium (NdFeB) magnets have ratings into the 45MGOe range far exceeding the Samarium Cobalt in the 32MGOe range and Alnico or Ceramics in the 8MGOe range. Because of the high strength of Neodymium magnets, and to prevent injury to people or equipment, care must be taken when handling these around other magnets or metal objects. CAUTION! These magnets are fragile and will shatter.

NEO-CYLINDER

Shiny, nickel plated neodymium cylinder. 0.25" diameter x 0.2" long.

CAT # MAG-76 2 for \$ 1.00 for 35¢ each • 100 for 25¢

50 for 35¢ each • 100 for 25¢ each

SMALL RECTANGULAR BLOCK

0.35" x 0.28" x 0.22" shiny-coated neodymium block. May have some chipped corners.

CAT # MAG-72 75¢ each • 10 for 50¢ each

0.32" DIAMETER x 0.12" THICK

Shiny nickel-plated neodymium button magnet. CAT# MAG-91 3 for \$1.00 • 100 for 25¢ ea.

NEODYMIUM BUTTON

Powerful little neodymium-35 button.
0.375" dia. x 0.20" thick. Nickel plated.

CAT # MAG-80 75¢ each • 15 for 60¢ each
105 for 45¢ each • 1050 for 30¢ each

NEO-RECTANGLE

Shiny, nickel-plated neodymium rectangle. 0.2" x 0.4" x 0.105."

CAT # MAG-74 2 for \$ 1.00

50 for 35¢ each • 100 for 25¢ each

SMALL SQUARE BLOCK

0.18" x 0.18" x 0.08" plated neodymium block.

CAT# MAG-82 4 for \$1.00 • 100 for \$18.00

0.7" DIAMETER NEODYMIUM RING

Shiny, nickel plated neodymium ring, 0.7" o.d., 0.38" i.d., 0.13" thick. CAT # MAG-77 85¢ each



IRREGULARLY SHAPED NEODYMIUM MAGNET

Aprox. 1.86" X 1.02" X 0.08" thick. CAT# MAG-26 \$1.50 each 25 for \$31.25 • 100 for \$100.00

2.05" x 0.50" x 0.30" BAR MAGNET

Black coated neodymium bar magnet. 2.05" x 0.50" x 0.30." **CAT# MAG-97** \$2.75 each



POWERFUL NEODYMIUM DONUT

Our newest, most powerful, neodymium rare-earth magnet. 2.83" diameter x 0.35" thick. 1" inner dia.



CAT# MAG-92 \$6.75 each

MAGNETIC NEODYMIUM SPHERES

Powerful "rare-earth" neodymium magnetic spheres. Shiny, plated finish. Available in four sizes.

Dia.	CAT#	<u>Price</u>
3/16"	MAG-101	\$1.50 each
1/4"	MAG-102	\$1.90 each
1/2"	MAG-103	\$3.50 each
1"	MAG-104	\$20.00 each



Because of its high strength, use caution when handling the 1" magnet around metal objects or other magnets.

CERAMIC MAGNETS

1/2" ROUND CERAMIC MAGNET

0.5" diameter x 0.2" thick ceramic magnet with 0.1" hole in the center. **CAT # MAG-68**

10 for \$1.00 • 100 for \$7.50

\bigcirc

CERAMIC MAGNET

0.7" diameter x 0.2" **CAT# MAG-99** 10 for \$1.00 • 100 for \$7.50



RUBBERIZED MAGNETS

0.40" x 0.44" x 0.22" rubberized magnetic block. CAT# MAG-89 10 for \$1.00 100 for 8¢ each • 500 for 7¢ each

RUBBERIZED MAGNETIC STRIP

1/2" x 30" flexible rubberized magnet strip with adhesive backing. Easy to cut with knife or scissors. Sticks to locker, refrigerator or tool box.

CAT# MAG-98 \$1.50 each

e Ch

TELESCOPING MAGNET



Facilitates retrieval of small metal parts.
Adjustable. Extends to 23" overall length.

CAT # MAG-31 \$2.50 each

33" FLEXIBLE ACTUATOR CABLE

Actuator cable designed for use in automotive application. Similar to, but more heavy-duty than, the brake or gear shift cable on a bicycle, movement at one end of the cable produces movement over the same distance at the other end. Could be used for robotics or other mechanical control application. Stranded galvanized actuator cable is contained within a flexible steel flat wrap conduit with a vinyl jacket and polyethylene liner. Bullet cable ends prevent unraveling and

liner. Bullet cable ends prevent unraveling and keep the cable within conduit. Plastic or nylon press-fit end on one end of cable. Conduit is 33.5" long x 0.2" diameter. Cable travel, 2.8."

CAT# FAC-1 \$1.50 each

10 for \$1.25 each

INTEGRATED CIRCUITS

VOLTAGE REGULATORS

POSITIVE REGULATORS					
CAT#	DESCRIPTION	CASE	each		
7805T	+5 VOLT 1 AMP (LM340T-5)	TO-220	.50		
78M05	+5 VOLT 500 MA (1/2 A)	TO-220	.50		
7806T	+6 VOLT 1 AMP (LM340T-6)	TO-220	.50		
7808T	+8 VOLT 1 AMP (LM340T-8)	TO-220	.50		
7812T	+12 VOLT 1 AMP (LM340T-12)	TO-220	.50		
7815T	+15 VOLT 1 AMP (LM340T-15)	TO-220	.50		
78L05	+5 VOLT 100MA	TO-92	.40		
78L12	+12 VOLT 100MA	TO-92	.40		

NEGATIVE REGIII ATORS

7905K	-5 VOLT 1 AMP (LM320K-5)	TO-3	1.75
7905T	-5 VOLT 1 AMP (LM320T-5)	TO-220	.50
7912T	-12 VOLT 1 AMP (LM320T-12)	TO-220	.50

ADJUSTABLE REGULATORS

LM317T	ADJ. POSITIVE (1.2-37V)	TO-220	.50
LM317LZ	ADJ. POSITIVE (1.2-37V)	TO-92	.50
LM337T	ADJ. NEGATIVE (1.2-37V)	TO-220	1.50
LM350T	ADJ. POSITIVE 3 AMP	TO-220	3.50

LOGIC				
CAT#	DESCRIPTION	# of pins	each	
7407	HEX BUFFER DRIVER	(14)	.45	
74HC00	2 IN NAND GATE	(14)	.30	
74HC139	DUAL 2:4 DECODE/DEMUX	(16)	.35	
74HC32	QUAD 2 IN OR GATE	(14)	.35	
74HC86	QUAD 2-IN EXCLUSIVE OR GATE	(14)	.35	
74HC373	OCTAL D LATCH	(20)	.45	
74LS08	QUAD AND GATE	(14)	.35	
74LS10	TRIPLE NAND GATE	(14)	.45	
74LS42	BCD TO DECIMAL DECODER	(16)	.75	
74LS47	BCD TO 7-SEG DEC/DRIVER (OC)	(16)	.90	
74LS75	QUAD LATCH	(16)	.65	
74LS125	TRI-STATE QUAD BUF.	(14)	.45	
74LS377	OCTAL D REGISTER	(20)	.80	
74LS259	8 BIT ADDRESSABLE LATCH	(16)	.47	
74LS279	QUAD SET-RESET LATCH	(16)	.50	
74ALS00	QUAD 2-INPUT NAND GATE	(14)	.35	
74ALS11	TRIPLE 3-INPUT AND GATE	(14)	.40	
74ALS30	8-INPUT NAND GATE	(14)	.40	
74ALS175	QUAD D-TYPE FLIP-FLOP W/CLEAR	(16)	.50	
74ALS240	OCTAL INVERTER LINE DRIVER	(20)	.40	
74ALS251	8-INPUT MULTIPLEXER	(16)	.60	
74ALS374	OCTAL D-TYPE FLIP-FLOP	(20)	.53	
74ALS574	OCTAL D-TYPE FLIP-FLOP	(20)	2.00	
74ALS688	8-BIT IDENTITY COMPARATOR	(20)	2.75	
4001	QUAD NOR GATE	(14)	.25	
4013	FLIP FLOP	(14)	.35	
4017	DECADE COUNTER / DIVIDER	(16)	.40	
4041	QUAD BUFFER	(14)	1.25	
4053	TRIPLE 2-CHANNEL MAX/DEMAX	(16)	.33	
4066	QUAD BILATERAL SWITCH	(14)	.35	

EEPROM

CAT#	DESCRIPTION	PIN	each	10
24LC01B	1K serial	8	.35	.30
AM2716-IDC	2K x 8	24	2.00	1.75
93C06	16x16 256 bit serial (5v)	8	.55	.47
93C46	64x16 1024 bit serial (5V)	8	.57	.48

CMOS PIC MICROCONTROLLER

CAT#	DESCRIPTION	# of pins	each
MC6802P	8-BIT MPU W/ CLOCK & RAM	(40)	\$7.50
MC6809P	8-BIT MPU W CLOCK (1MHZ)	(40)	\$3.50
PIC16C711-04	MCU w/ A-D 1K 4 mHz	(18)	\$2.25
PIC16C923	4K X 14. PLCC	(68)	\$3.00

FLASH MEMORY

CAT#	DESCRIPTION	# of pins	each
AT29C040A	Flash Memory	(32)	\$3.50

LINEAR SERIES

CAT#		# of pins	
TLO82	J-FET IN DUAL OP AMP	(8)	.70
ADM202EAN	LINE DRIVER RECEIVER	(16)	.75
SP232ACP	RS232 LINE DRV/RECEIVER	(16)	1.00
LM311	COMPARATOR	(8)	.50
LM324	QUAD OP AMP	(14)	.50
LM339	QUAD COMP	(14)	.60
LF353	DUAL BI-FET OP AMP	(8)	.50
LM358	DUAL OP AMP	(8)	.40
LM380	2 WATT AUDIO AMP	(14)	1.80
LM386N	AUDIO AMP .25 W.	(8)	.89
LM393	LOW POWER DUAL COMP	(8)	.30
LM555	TIMER	(8)	.75
ICM7555	CMOS TIMER "555"	(8)	1.00
LM556	DUAL (555) TIMER	(14)	.45
LM567	TONE DECODER	(8)	.90
LM741	OP AMP (MC1741)	(8)	.55
MC1458	DUAL OP AMP (MC4558)	(8)	.50
MC1489	QUAD LINE RECEIVER	(14)	.60
MC33078P	DUAL OP AMP	(8)	.40
MC3401	QUAD OP AMP EQUIV 3900	(14)	.45
LM3914	BARGRAPH DISPLAY DRIVER	(18)	1.75
ULN2003	DARLINGTON ARRAY	(16)	.75
75451	DUAL PERIP. AND DRIVER	(8)	.40
75452	DUAL PERIP. NAND DRIVER	(8)	.40
75453	DUAL PERIP. OR DRIVER	(8)	.40
		. ,	

ICS FOR SPECIALIZED APPLICATIONS

Specifications / hook-up sheets available on our web site.

LIQUID LEVEL ALARM

ST Microelectronics #L4620 Designed for liquid level control in automotive applications. 8-pin DIP.

CAT# L4620 75¢ each 50 for 55¢ each 45¢ each • 50 for 30¢ each

FAHRENHEIT TEMPERATURE SENSOR

REDUCED

PRICE!

Nat. Semi. LM34DZ. Precision temperature sensor whose voltage is linearly proportional to the Fahrenheit temperature. Operates on 5-30 Vdc. TO-92 package.

CAT# LM34DZ \$2.50 each

1A CURRENT-MODE PWM CONTROLLER

Micrel #MIC38C43BN. Pulse Width Modulation Controller. 8-pin DIP package. CAT# PWM-3 \$1.20 each

E-LAB "BUILDING BLOCK" ICS

18-pin DIP Integrated circuits for various applications

STEPPER MOTOR CONTROLLER ICS

interface a logic-level signal to a stepper motor.

for Unipolar Stepper Motors

CAT# EDE-1200 \$8.30 each

for Bipolar Stepper Motors

CAT# EDE-1204 \$8.30 each

SERIAL LCD INTERFACE IC

Allows text-based LCD module to be controlled via a one-wire data link.

CAT# EDE-702 \$8.95 each

KEYPAD ENCODER IC

Interface a matrix-type keypad (16 key or less) with a microcontroller or host processor. CAT# EDE-1144 \$7.50 each



OPTOISOLATORS

6 pin DIP package.

	1			11 11 "
CAT#	Description	1	10	100
IL2	NPN transistor output	.35	.30	.25
4N25	NPN transistor output	.35	.30	.20
4N26	NPN transistor output	.35	.30	.20
4N27	NPN transistor output	.45	.40	.30
4N33	NPN darlington output	.45	.40	.30
4N35	NPN transistor output	.50	.45	.35

OPTOCOUPLER W/ PHOTO-TRANSISTOR OUTPUT

Vishay Telefunken # CNY65. Optocoupler with phototransistor output in a 4-lead plastic package. Body size: 0.7" long x 0.37" x 0.24" high. PC pins. UL, VDE. CAT# CNY65 4 for \$1.00 • 25 for 20¢ each

IC SOCKETS

	10 000KL10				
SOLDERTAIL					
<u>PINS</u>	CAT#	1-49	<u>50-99</u>	_100+	
8	ICS-8	.20	.15	.10	
14	ICS-14	.20	.15	.10	111.
16	ICS-16	.25	.20	.15	
18	ICS-18	.30	.25	.20	
20	ICS-20	.40	.35	.30	
	Special Reduced Bricel				

Special Reduced Price!					
24	ICS-24	.15	.12	.10	
	1000	for \$50.0	0 (5¢ eac	h)	
28	ICS-28	.45	.40	.35	

HIGH RELIABILITY

(MACHINED PINS)

HRICS-22

22

24

SOLDERTAIL			Î
PINS	CAT#	1	<u>10</u>
8	HRICS-8	.50	.45
14	HRICS-14	.50	.45
16	HRICS-16	.55	.50

WIRE WRAP SOCKETS

		_	
PINS	CAT#	1-99	100+
8	WWICS-8	1.00	.85
14	WWICS-14	1.25	1.00
16	WWICS-16	1.25	1.00
36	WWICS-36	1.25	1.05

HRICS-24N (0.3" spacing)



100+ .35 .35

.40

35

.45

MPSW06

KSP8599

MPS8599

MPSA92

TIP29C

TIP31C

TIP32C

TIP2955

128P

159

159

288

291

291

292

50

.75

45

.65

FULL WAVE BRIDGE RECTIFIERS

1 1/2 AMP 400 PIV TO-5 case 3/8" dia. 3/16" high. GI# WO4M or equiv. CAT# FWB-15 2 for \$1.00

IN-LINE BRIDGE RECTIFIERS

Four leads on 0.2" center

Four leads on 0.2 centers.									
<u>Amps</u>	Volts	CAT#	<u>Price</u>	100	II				
4	600	FWB-46	2/\$1.00	100 \$35.00 \$65.00					
6	400	FWB-64	.85 ea	\$65.00	υĮ				
6	600	FWB-66	.90 ea	\$65.00					
8	1000	FWB-80	\$1 00 ea	\$85.00					

15 AMP, 600 VOLT BRIDGE

Fairchild GBPC1506W. 1.12" square x 0.43". Wire leads. UL. CAT# FWB-156W \$1.75 each • 10 for \$ 1.50 each



200 P.I.V.	CAT# FWB-252	\$2.50 each f
400 P.I.V.	CAT# FWB-254	\$3.00 each
600 P.I.V.	CAT# FWB-256	\$3.50 each



35 AMP BRIDGES 1 1/8" square.

200 P.I.V. CAT# FWB-352 \$2.50 each 10 for \$22.50 · 100 for \$175.00

400 P.I.V. CAT# FWB-354 \$4 00 each 600 P.I.V. CAT# FWB-356 \$4.50 each 800 P.I.V. **CAT# FWB-358** \$4.75 each

TRANSIS TORS

TO-18 TO-220







TO-92

TO-5 CROSS TO

TO-218

CAI#	NIE	TYPE	CASE	1-99	100+	1000+	
D33D30	92	NPN	TO-92	5 for \$1.00	.16	.12	
D45H5	378	PNP	TO-220	.75	.65	.50	
2SC1775A	90	NPN	TO-92	5 for \$1.00	.16	.12	
PN2222A	123AP	NPN	TO-92	5 for .80	.15	.13	
2N2222A	123A	NPN	TO-18	2 for 1.00	.40	.35	
MJE2370	242	PNP	TO-220	\$1.00	.85	.75	
2N2905	129	PNP	TO-5	2 for \$1.00	.35		
PN2905	159	PNP	TO-92	5 for .50	.08	.06	
2N2906	159	PNP	TO-18	2 for \$1.00	.35	.25	
PN2907	159	PNP	TO-92	5 for .75	.10	.08	
2N3055	130	NPN	TO-3	1.00	.85	.75	
Heavy-duty 2	N3055 16A	120 V					
2N3055HV		NPN	TO-3	1.25	1.00	.85	
2N3235	130	NPN	TO-3	\$1.00	.85	.75	
2N3235 PN3646	130 123AP	NPN NPN	TO-3 TO-92	\$1.00 5 for .75	.85 .08	.75 .06	
					.08		
PN3646	123AP	NPN	TO-92	5 for .75	.08	.06	
PN3646 2N3772	123AP 181	NPN NPN	TO-92 TO-3	5 for .75 1.50	.08 1.35	.06 1.20	
PN3646 2N3772 2N3773	123AP 181 284	NPN NPN NPN	TO-92 TO-3 TO-3	5 for .75 1.50 2.00	.08 1.35 1.20	.06 1.20 .95	
PN3646 2N3772 2N3773 2N3904	123AP 181 284 123AP	NPN NPN NPN NPN	TO-92 TO-3 TO-3 TO-92	5 for .75 1.50 2.00 5 for .75	.08 1.35 1.20 .13	.06 1.20 .95 .10	
PN3646 2N3772 2N3773 2N3904 2N3906	123AP 181 284 123AP 159	NPN NPN NPN NPN PNP	TO-92 TO-3 TO-3 TO-92 TO-92	5 for .75 1.50 2.00 5 for .75 5 for .75	.08 1.35 1.20 .13 .13	.06 1.20 .95 .10	
PN3646 2N3772 2N3773 2N3904 2N3906 2N4124	123AP 181 284 123AP 159 123AP	NPN NPN NPN NPN PNP	TO-92 TO-3 TO-3 TO-92 TO-92 TO-92	5 for .75 1.50 2.00 5 for .75 5 for .75 5 for .75	.08 1.35 1.20 .13 .13	.06 1.20 .95 .10 .10	
PN3646 2N3772 2N3773 2N3904 2N3906 2N4124 2N4400	123AP 181 284 123AP 159 123AP 123AP	NPN NPN NPN NPN PNP NPN NPN	TO-92 TO-3 TO-3 TO-92 TO-92 TO-92 TO-92	5 for .75 1.50 2.00 5 for .75 5 for .75 5 for .75 5 for .50	.08 1.35 1.20 .13 .13 .13	.06 1.20 .95 .10 .10 .10	
PN3646 2N3772 2N3773 2N3904 2N3906 2N4124 2N4400 2N4401	123AP 181 284 123AP 159 123AP 123AP 123AP	NPN NPN NPN NPN PNP NPN NPN	TO-92 TO-3 TO-3 TO-92 TO-92 TO-92 TO-92 TO-92	5 for .75 1.50 2.00 5 for .75 5 for .75 5 for .75 5 for .50 5 for .75	.08 1.35 1.20 .13 .13 .13 .08	.06 1.20 .95 .10 .10 .10	
PN3646 2N3772 2N3773 2N3904 2N3906 2N4124 2N4400 2N4401 2N5772	123AP 181 284 123AP 159 123AP 123AP 123AP 108/123AP	NPN NPN NPN NPN PNP NPN NPN NPN	TO-92 TO-3 TO-3 TO-92 TO-92 TO-92 TO-92 TO-92 TO-92	5 for .75 1.50 2.00 5 for .75 5 for .75 5 for .50 5 for .75 5 for .50 3 for 1.00 5 for .50	.08 1.35 1.20 .13 .13 .13 .08 .13	.06 1.20 .95 .10 .10 .10 .06	
PN3646 2N3772 2N3773 2N3904 2N3906 2N4124 2N4400 2N4401 2N5772 2SC2352	123AP 181 284 123AP 159 123AP 123AP 123AP 108/123AP 69	NPN NPN NPN PNP NPN NPN NPN NPN NPN NPN	TO-92 TO-3 TO-3 TO-92 TO-92 TO-92 TO-92 TO-92 TO-92 TO-92	5 for .75 1.50 2.00 5 for .75 5 for .75 5 for .50 5 for .75 5 for .50 3 for 1.00	.08 1.35 1.20 .13 .13 .13 .08 .13	.06 1.20 .95 .10 .10 .10 .06 .10	
PN3646 2N3772 2N3773 2N3904 2N3906 2N4124 2N4400 2N4401 2N5772 2SC2352 MPS3704	123AP 181 284 123AP 159 123AP 123AP 123AP 108/123AP 69 123AP	NPN NPN NPN PNP NPN NPN NPN NPN NPN NPN	TO-92 TO-3 TO-3 TO-92 TO-92 TO-92 TO-92 TO-92 TO-92 TO-92 TO-92	5 for .75 1.50 2.00 5 for .75 5 for .75 5 for .50 5 for .75 5 for .50 3 for 1.00 5 for .50	.08 1.35 1.20 .13 .13 .08 .13 .08 .29 .08	.06 1.20 .95 .10 .10 .10 .06 .10 .06 .25	

DARLINGTON TRANSISTORS

NPN

PNP

PNP

PNP

NPN

NPN

PNP

PNP

TO-92

TO-92

TO-92

TO-220

TO-220

TO-220

TO-218

TO-237

4 for \$1.00

5 for .50

5 for .50

3 for \$1.00

.60

.65

.65

.65

.18

.08 .06

.08 .06

.28 .24

.40 .35

.40 .35

.25 .35

.30

CAT#	CROSS TO NTE	TYPE	CASE	1 - 99	100+
GES-5307	46	NPN	TO-92	5 for 50¢	.08
MJ10009	98	NPN	TO-3	\$1.25 each	.95
MPSA13	46	NPN	TO-92	5 for 50¢	.08
TIP110	261	NPN	TO-220	3 for \$1.00	.25
TIP120	261	NPN	TO-220	75¢ each	.65

S.C.R.

SPECIAL

0.8 amp 100 volt S.C.R. TO-92 case. CAT# 2N5062 4 for \$1.00 100 for 15¢ each • 500 for 12¢ each 1000 for 10¢ each



0.8 amp 200 volt S.C.R. TO-92 case CAT# 2N5064 3 for \$1.00 • 10 for 30¢ each

TRIAC								
CAT# HTA06-600	AMP 6	_{VOLT} 600	CASE TO-220	PRICE .95	10 .70			
111A00-000	U	000	10-220	.93	.70			

BILATERAL TRIGGER (DIAC)

CAT # DB-3 28-36 volt 3 for \$1.00 100/\$27.00

SILICON BILATERAL SWITCH

TO-92 CAT# MBS4991 75¢ ea. • 100 for 60¢ ea.

J FETS

J176 P-CHANNEL TO-92 CAT# J176 5 for \$1.00

2N4856 N-CHANNEL TO-18

CAT# 2N4856 4 for \$1.00 • 100 for 18¢ ea.

POWER MOSFETS TO-220 CASE

BUZ71A N-CHANNEL

12 Amps, 60 Volts, 0.107 Ohms. TO-220 case. CAT# BUZ71A 75¢ each

10 for 65¢ each • 100 for 53¢ each

IRF3205 N-CHANNEL

110 Amps, 55 Volts, 0.008 Ohms CAT# IRF3205 \$1.60 each 50 for \$1.40 each 100 for \$1.10 each

IRF3710 N-CHANNEL

57 Amps. 100 Volts. 0.023 Ohms CAT# IRF3710 \$1.75 each 50 for \$1.55 each 100 \$1.30 each

IRF740 N CHANNEL

10 Amps, 400 Volts, 0.550 Ohms, CAT # IRF740 \$1.50 each 50 for \$1.25 each • 200 for \$1.00 each

IRF830 N-CHANNEL MOSFET 4.5 Amp, 500 Volt, 1.5 Ohm. TO-220, tab-style case. CAT# IRF830 75¢ ea. • 50 / 60¢ ea. • 200 / 55¢ ea.

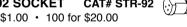
RFP12N10L N CHANNEL

12 Amps, 100 Volts, 0.2 Ohms. CAT # RFP12N10L 75¢ ea. • 50 for 60¢ ea. 200 for 55¢ each • 500 for 50¢ each

TRANSISTOR HARDWARE

TO-92 SOCKET CAT# STR-92

4 for \$1.00 • 100 for \$20.00



TO-3 MOUNTING KIT Aavid Thermalloy #4804M Hardware kit for mounting of TO-3 devices. Includes mica insulator, shoulder washers, screws, nuts and solder terminal. Each kit is individually packaged.

CAT# TRS-2 65¢ each • 10 for 50¢ each

NYLON SHOULDER WASHERS

For mounting and insulating semiconductors

CAT# SHW-3 0.13" ID, 0.22" OD

50 for \$1.00 500 for \$6.00 1000 for \$10.00

0.15" ID. 0.24" OD CAT# SHW-1 50 for \$1.00 500 for \$6.00 1000 for \$10.00

0.16" ID, 0.32" OD CAT# SHW-2

50 for \$1.00 500 for \$6.00 1000 for \$10.00

0.25" ID, 0.44" OD CAT# SHW-4

50 for \$1.00 500 for \$6.00 1000 for \$10.00

0.25" ID, 0.37" OD CAT# SHW-5

50 for \$1.00 500 for \$6.00 1000 for \$10.00

40 AMP 600 VOLT RECTIFIERS

D0-5 case stud-mount rectifier.

1N1190A Cathode case \$ 3.50 each 1N1190AR Anode case \$ 3.50 each

HIGH VOLTAGE RECTIFIER

CAT# VOI T AMP **PRICE** 100 1000 R6000 6000 0.2 .50 40.00 300.00

SCHOTTKEY DIODES

CAT#	amp	PIV	price	100	1000
1N5817	1	20	3/\$1.00	27.00	230.00
1N5819	1	40	3/\$1.00	27.00	230.00
1N5822	3	40	3/\$1.25	35.00	300.00

GERMANIUM DIODES

1N60A germanium diode. DO-7 case style. 40 V. CAT# 1N60 2 for \$1.00

1N270 80 PRV germanium diode. DO-7 case. CAT# 1N270 2 for \$1.00 • 10 for 40¢ each 100 for 30¢ each • 1000 for 20¢ each

RECTIFIER DIODES

CAT#	VOLT	AMP	PRICE	100	1000
1N4001	50	1	15/\$1.00	5.00	40.00
1N4002	100	1	12/\$1.00	6.00	50.00
1N4003	200	1	10/\$1.00	8.00	70.00
1N4004	400	1	9/\$1.00	9.00	75.00
1N4005	600	1	8/\$1.00	10.00	85.00
1N4007	1000	1	6/\$1.00	12.00	100.00
1N4937	600	1	10 / 90¢	6.00	45.00
1N5400	50	3	3 / 60¢	12.50	100.00
1N5402	200	3	3 / 70¢	15.00	110.00
1N5404	400	3	3 / 80¢	17.00	130.00
1N5408	1000	3	3/\$1.00	30.00	250.00
D620	200	6	2/ 90¢	40.00	350.00
D660	600	6	2/\$1.00	45.00	400.00
GI851	600	3	4 / \$1.00	15.00	110.00
P600M	1000	6	2/\$1.00	45.00	400.00

1 WATT ZENER DIODES

All Zeners listed are 4 OF ONE VALUE \$1.00 100 OF ONE VALUE \$20.00

CAT#	VOLTAGE	CAT#	VOLTAGE	CAT#	VOLTAGE
1N4728	3.3	1N4735	6.2	1N4744	15
1N4730	3.9	1N4737	7.5	1N4745	16
1N4731	4.3	1N4739	9.1	1N5891	C 140
1N4733	5.1	1N4740	10	(1/2 w	att)
1N4734	5.6	1N4742	12	`	

SWITCHING DIODES

			-
CAT#	PRICE	100	1000
1N914	15 for \$1.00	\$5.00	\$35.00
1N916	15 for \$1.00	\$5.00	\$35.00
1N4148	15 for \$1.00	\$5.00	\$35.00

PHOTO-DIODES

Ledtech # LT4W55-2120-EA Black, side-looking photo diode.

CAT # PD-2 2 for \$ 1.30 • 50 for \$ 25.00

PHOTO-TRANSISTOR

Ledtech # LT9593-91-0125.

Water-clear T 1 3/4 with flat face. CAT # PTR-1 2 for \$1.30 • 50 for \$25.00





WALL TRANSFORM



VOLTS

AMPS

TERMINATION







A.C. WALL TRANSFORMERS

<u>VOLTS</u>	AMPS_	TERMINATION	STYLE	CAT#	PRICE	100 +
NEW 8 Vac	2 amp	2.1 mm co-ax	Α	ACTX-821	\$5.50	\$4.60
10 Vac	500 ma	2.1 mm co-ax	С	ACTX-1050	\$3.00	\$2.00
15 Vac	2.4 amp	2.5 mm co-ax	С	ACTX-152	\$4.25	\$3.25
16 Vac	20VA	Screw terminals	D	ACTX-1620	\$6.25	\$5.50
16 Vac	40VA	Screw terminals	D	ACTX-1640	\$8.25	\$7.75
24 Vac	830 ma. (20VA)	Screw terminals	D	ACTX-2420	\$6.50	\$5.85
24 Vac	1.6 amp (40VA)	Screw terminals	D	ACTX-2440	\$8.50	\$7.95

A Note on Wall Transformers: A.C. and D.C. Wall Transformers are not regulated unless otherwise stated. They provide a specified voltage at a specified load. If the load is lower than specified, the voltage will be higher then specified. With a higher load, the voltage will drop below that specified. For example, a 12 volt 500 ma. wall transformer may read 20 volts with no load or 9 Volts with a 600 ma. load.

D.C. WALL TRANSFORMERS CENTER

STYLE

CAT#

PRICE

<u>100+</u>

	3 Vdc	100 ma	2.5mm phone plug	negative	С	DCTX-31	\$1.35	\$1.00
	3 Vdc	200 ma	3.5mm phone plug	negative	С	DCTX-320	\$2.00	\$1.25
	3 Vdc	300 ma	3.5mm phone plug	positive	С	DCTX-330	\$2.25	\$1.35
	5 Vdc	1200 ma	2.5mm co-ax	positive	С	DCTX-512	\$3.50	\$2.50
		(regulated 5	Vdc)					
	5 Vdc	2 amp	bare wire		С	DCTX-5200	\$3.75	\$2.75
	6 Vdc	300 ma	1.3 mm co-ax	positive	С	DCTX-633	\$2.50	\$1.75
	6 Vdc	700 ma	1.3 mm co-ax	positive	С	DCTX-671	\$3.20	\$2.20
	6 Vdc	800 ma	2.5 mm co-ax	positive	С	DCTX-681	\$3.50	\$2.25
	6 Vdc	1 amp	2.1 mm co-ax	positive	С	DCTX-61	\$4.00	\$3.00
	6 Vdc	1.4 amp	2.5 mm co-ax	positive	С	DCTX-614	\$4.25	\$3.25
	6 Vdc	1.5 amp	2.5 mm co-ax	positive	С	DCTX-615	\$4.25	\$3.25
	7.5 Vdc	1.2 amp	2.5 mm co-ax	positive	С	DCTX-7512	\$4.25	\$3.25
	7.5 - 9	500-300ma	2.1 mm co-ax	negative	С	DCTX-4175	\$3.75	\$2.75
	9 Vdc	150 ma	2.1 mm co-ax	negative	С	DCTX-915	\$2.50	\$2.00
	9 Vdc	300 ma.	1.3 mm co-ax	positive	С	DCTX-936	\$2.85	\$2.10
	9 Vdc	300 ma.	2.1 mm co-ax	positive	С	DCTX-937	\$2.85	\$2.10
	9 Vdc	800 ma	2.1 mm co-ax	negative	С	DCTX-980	\$4.00	\$3.00
	9 Vdc	1 amp	2.1 mm co-ax	positive	С	DCTX-910	\$5.50	\$4.50
	9 Vdc	1 amp	2.5 mm co-ax	negative	С	DCTX-919	\$4.00	\$3.00
	10 Vdc	600 ma	2.1 mm co-ax	negative	С	DCTX-106	\$3.75	\$2.75
	12 Vdc	100 ma	2.5 mm phone plug	positive	С	DCTX-1211	\$3.00	\$2.00
NEW	12 Vdc	200 ma	2.5 mm co-ax	positive	С	DCTX-120	\$3.25	\$2.25
NEW	12 Vdc	300 ma	2.1 mm co-ax	positive	С	DCTX-123	\$3.50	\$3.00
	12 Vdc	300 ma	1.7 mm co-ax	positive	С	DCTX-1234	\$3.50	\$2.50
	12 Vdc	400 ma	2.1 mm co-ax	positive	С	DCTX-124	\$4.00	\$3.50
	12 Vdc	500 ma	2.1 mm co-ax	positive	С	DCTX-1256	\$4.50	\$3.75
	12 Vdc	500 ma	2.1 mm co-ax	positive	С	PS-1251	\$8.50	\$8.00
_		(regulated 12	2 Vdc for video camera	s)				
NEW	12 Vdc	800 ma	2.1mm co-ax	positive	С	DCTX-1280	\$5.50	\$5.00
	12.5 Vdc	410 ma	2.5mm co-ax	positive	С	DCTX-12410	\$3.75	\$2.75
	13.5 Vdc	1 amp	2.1mm co-ax	positive	С	DCTX-1351	\$5.50	\$4.50
	16 Vdc	1 amp	2.1mm co-ax	positive	С	DCTX-161	\$6.00	\$5.25
	24 Vdc	500 ma	2.1mm co-ax	negative	С	DCTX-2450	\$4.50	\$3.50
	24 Vdc	600 ma	2.1 mm co-ax	positive	С	DCTX-2460	\$4.50	\$3.50

DC POWER PLUG CONVERTER Converts 2.1mm coax plugs to 2.5mm. **CAT# DCA-7** \$1.50 each for others see page 45



TRANSFORMERS

120 VAC - 220 VAC - 110 VAC STEP-UP / STEP-DOWN

AUTOFORMER --CAN BE USED EITHER WAY Convert 110 Vac to 220 Vac, or 220 Vac to 110 Vac. Includes adaptors and/or switches to allow use either way. Cord with 2-prong Euro plug on 220V side and universal 2-conductor socket on 120V side (except TC-1300 which has American 3-prong cord on one side and both Euro and American sockets on other side). Includes adaptors for 110 or 220V use. 100-500W models have mounting feet for internal use in equipment. For use in the UK, CAT # CP-3 adaptor required (CAT# CP-3 \$2.75 each).

max. wattage 100 WATTS 200 WATTS 300 WATTS 500 WATTS 1300 WATTS 2000 WATTS 3000 WATTS	weight 3 lbs. 4 lbs. 5 1/2 lbs. 8 1/2 lbs. 16 1/2 lbs. 29 lbs. 45 lbs.	size 2 3/4" X 3 1/2" X 3 1/4" high 2 3/4" X 4" X 3 1/4" high 3" X 4" X 3 1/2" high 3 1/4" X 5 1/2" X 4" high 4 3/4" X 7" X 5 1/2" high 4 3/4" X 7" X 5 1/2" high 8" X 13" X 7 1/4" high	CAT# TC-100 TC-200 TC-300 TC-500 TC-1300 TC-2000 TC-3000	Price \$20.00 \$27.00 \$37.50 \$50.00 \$110.00 \$130.00 \$190.00		
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POWER TRANSFORMERS

All power transformers have 115 vac 50/60 hz primaries unless otherwise noted.

12.6 V.C.T. @ 1 AMP 1.71" h. X 1.55" X 1.36". CAT# TX-121 \$5.00 each

12 V.C.T. @ **2 AMP** 1.625" high X 2" X 1.5". **CAT# TX-122** \$6.25 each

12 V.C.T. @ 3 AMP 2 1/3" h. X 2 3/4" X 2 1/4". **CAT# TX-123** \$8.25 each

12 V.C.T. @ 4 AMP 2" high X 2 11/32" x 2". **CAT# TX-124** \$8.60 each

12 V.C.T. @ 5 AMP 2 1/4" h. X 2 3/4" X 2 1/4" CAT# TX-125 \$11.00 each

24 V.C.T. @ 1 AMP 1 5/8" high X 1 5/8" X 2". CAT# TX-241 \$6.25 each

24 V.C.T. @ 2 AMP 2" high X 2 3/8" X 2". **CAT# TX-242** \$10.10 each

24 V.C.T. @ 3 AMP 2 1/4" X 2 3/4" X 2 1/4". **CAT# TX-243** \$13.50 each

24 V.C.T. @ 4 AMP 2.60" high x 3.10" x 2.12". (Mounting holes 3.50" centers) **CAT # TX-244** \$17.00 each

24 V.C.T. @ 5 AMP 3 1/2 high X 3" X 3". **CAT# TX-245** \$19.50 each

40 VCT @ .25 AMPS TRANSFORMER 1.95" x 1.8" x 1.66" h. Mounting holes on 2.35" centers. **CAT# TX-4025** \$2.25 ea. • 80 for \$ 1.75 ea.

VARIACS

Input: 110 vac
Output: 0 - 130 vac
Fully enclosed variable
transformers in ventilated steel
cases with 6' power cord,
3 prong grounded receptacle,
output voltage meter,
on/off switch, fuse and power
cord. Portable or mountable.



3 AMP VARIABLE TRANSFORMER 5.35" X 4" X 5.5" high. Weight: 6.5 lbs. CAT # SC-3M \$60.00 each

5 AMP VARIABLE TRANSFORMER 4.75" X 7" X 6" high. Weight: 8 lbs. **CAT # SC-5M** \$120.00 each

10 AMP VARIABLE TRANSFORMER 6.5" x 9" x 6" high. Weight: 20 lbs. CAT # SC-10M \$155.00 each

20 AMP VARIABLE TRANSFORMER 6.5" x 9" x 7.5" high. Weight: 22 lbs. **CAT # SC-20M** \$198.00 each

TELEPHONE COUPLING TRANSFORMERS

600 OHM

Atech Technology # ATS-166
Designed to reflect 600 Ohms on primary with 365 Ohm load on secondary. Primary: 150 Ohms.
Secondary: 140 Ohms. 1.1" x 0.77" x 0.51" high.
Pc pins on 1.0" x 0.41" centers. Spec sheet available on our web site. CAT# TCTX-12 \$1.00 each

10 for 85¢ each • 100 for 60¢ each

600 OHM

Datatronic #LM72019. 600 Ohm line matching transformer for telecommunication and modem applications where flat frequency response is required. 0.86" x 0.91" x 0.47" high. PC leads on 0.5" x 0.6" centers.

CAT# TCTX-13 \$1.00 each

10 for 85¢ each • 100 for 60¢ each

600 OHM

CET Technology # CT-1629

Designed to reflect 600 Ohms on primary with 365 Ohm load on secondary.

Primary: 150 Ohms. Secondary: 140 Ohms.

1.2" x 0.77" x 0.52" high. Pc pins on 1.0" x 0.41" centers. Spec sheet available on our web site.

CAT# TCTX-14 \$1.00 each

CAI# ICIX-14 \$1.00 each 10 for 85¢ each • 100 for 60¢ each

600 OHM: 600 OHM

Shogyo # TTC-02. 0.76" x 0.56" x 0.48" high. PC leads on 0.3" x 0.5" centers.

CAT # TCX-2 \$1.00 each

10 for 90¢ each • 100 for 75¢ each

POWER SUPPLIES

1 AMP SWITCHING POWER SUPPLY WITH SELECTABLE OUTPUT

The perfect power supply for small appliances and breadboard projects up to 1 Amp. Provides all of the popular voltages between 3 and 12 Vdc, and it's regulated, so the voltage doesn't fluctuate when the load varies. Includes a set of seven of the most popular power connectors.

CAT # PS-10 \$12.95 each

ADJUSTABLE POWER SUPPLY 0 - 15 VOLTS DC 30 AMP

Zurich # DS-304M. 0 - 15 Vdc fully adjustable bench supply. 25 Amps continuous. 30 Amps peak. 1% line load regulation. Short circuit and overload protection. Switchable meter for volts and amps. Lighted power switch. Binding-posts, spring level terminals, and cigarette lighter socket outputs. 6.5" H x 6" W x 8.38" D. Wt 19 lbs.

CAT # PS-2512 \$165.00 each

0-30VDC +5VDC +12VDC LAB POWER SUPPLY/LCD DISPLAY

Three output power supply.

0-30 Vdc, 3 Amp -adjustable voltage and current. 12 Vdc, 1.2-1.6 Amp 5 Vdc, 1.2-1.6 Amp

Digital LCD displays for Voltage and Current

(for adjustable supply). Current limit indicator. Ripple and noise < 5 mV. Short circuit protected. Fused 6" x 5.75" x 12" 4.5 Kg.

CAT# PS-613 \$155.00 each

SWITCHING POWER SUPPLIES MUST BE TESTED UNDER LOAD!

LAMBDA SWITCHING POWER SUPPLY

POWER SUPPLY
Lambda
SCQ12003054848.
Input: 100-240 Vac.
Outputs: 3.3 Vdc @ 7 A,
5 Vdc @ 3 Amp, 48 Vdc @ 1Amp,
-48 Vdc @ 1 Amp. (Max output w/30 CFM
forced-air cooling). Open-frame switching power supply, 7" x 4" x 1.73". Molex-type headers for input and output. UL, CSA. CAT# PS-337 \$5.00 each
20 for \$ 4.50 each • 100 for \$ 4.00 each

5V/8A, 3.3V/4A, 2.5V/2A POWER SUPPLY

Power-One # SP637.
Input: 100-250 Vac.
Output: 5 Vdc @ 8 amp.
3.3 vdc @ 4 amp. 2.5 vdc @
2 amp. Open-frame switching
power supply, 5" x 3" x 1.28" high.
60W max. continuous output power with
300LFM at 50 degree C. 43 W max. convection. UL,
CSA, TUV. CAT# PS-637

\$6.50 each • 14 for \$ 5.50 each

POWER SUPPLY, 5V/7A & 3.3V/15A

Lambda # PWG0079D.
Input: 100-240 VAC @ 2 Amp
Output: 5 Vdc 7 A,
3.3 Vdc 15 A.
Open-frame
switching power
supply. 8" x 3.5" x
1.25" high. Prepped
with 4" leads on input
and 6" leads on output with

12 pin female socket connector (0.156" spacing). UL, CSA. CAT# PS-79 \$3.50 each 10 for \$ 3.00 each 100 for \$ 2.00 each

222 WATT POWER SUPPLY

Teapo Model# TP511B-4 Input: 100-240 Vac Outputs: 5.1VDC @ 32A, 12VDC @ 6A, -5VDC @ 0.3A, 3.3VDC @ 24A. Enclosed, fan-cooled

computer power supply. Push on/off power switch on 12" cord. Has special power harness in addition to the common Molex-type power connectors. IEC power inlet. 5.9" x 5.5" x 3.4." UL, CSA. CAT # PS-511 \$10.00 each • Case of 8 for \$9.00 each

POWER SUPPLY, 5V/22A, 12/6A, -12V/.3A, 5V/1.5A, 3.3V/12A

Delta Electronics
DPS-200PB-125A.
Input: 100-240 Vac.
Outputs: +5V / 22A,
+12V / 6A, 3.3V / 13A,
+5VSB / 1.5A, -12V / 0.3A.
Fan cooled SSI 1U/2U server

power supply. Dimensions: 10.5" (including fan) x 3.3" x 1.6". 3-prong IEC power inlet. Power cord not included. UL listed. **CAT# PS-4160** \$24.00 each

3-OUTPUT 24VDC POWER PLATFORM

NPI Series PB1005AC

Input: 115/230Vac 50/60Hz, 20/10A Outputs: 24Vdc / 500W, 24Vdc / 150W, 24Vdc / 150W

Dimensions: 10.5" x 7" x 1.7"

Bank of three 24Vdc power supplies in a low-profile, fan-cooled unit. New units in original condition. UL, CE, TUV. Spec sheet available on our web site.

Voltage Adjustment: A customer has provided information on how to change voltages of the three supplies in this unit to the 11-27 Vdc range with the addition of resistors to specific points on the pc board. This information can be found on our web site with the Spec Sheets for the supply.

CAT# PS-017 \$95.00 each



560 WATT POWER SUPPLY

AcBel #API1FS39 (IBM P/N 49P2138) (FRU P/N 49P2139) Input: 100-240 Vac DC Output: +5V / 35A, +3.3V / 20A, +12Vp / 16A, +12Vd / 14A, -12V / 0.5A, +5Vsb/ 3.0A. Fan-cooled

server power supply. 12.36" x 7.82" x 2.52" vented metal chassis. Mounting flanges with holes on 13" centers. IEC power inlet. (cord not included). UL, CE. Note: Requires an external signal provided by the server to power-up. We do not currently have that information. CAT# PS-2138 \$20.00 each

560W REDUNDANT POWER SUPPLY

Artesyn Cage Model: 7000669-0100.
Hot-swappable, redundant power supply for IBM eServer xSeries 235.
Consists of two identical 560W supplies (IBM P/N 49P2038 / 49P2020) plugged into a single backplane in a rack-

mount case with mounting holes on 13" centers. Both supplies are fan cooled and use independent IEC power supply cords (power cords not included). Overall dimensions are 12.37" W x 14" L x 2.55." UL, CE, TUV. Input: 120/240 Vac, 8/4 Amp. Outputs: 12.0V/ 30A, 3.3V / 20A, 5.0V / 35A, -12.0V / 0.5A, 5Vsb / 3.0A.

Note: Requires a shorting jumper in order to power up. See customer comments on our website for more information. Also, these supplies use custom connectors inside of the rack-mount case which may require modification if supply is used outside of case.

CAT# PS-2157 \$40.00 each

SINGLE OUTPUT SWITCHING POWER SUPPLIES

Ideal for scanners, cameras and sensitive equipment requiring a constant, regulated output. All of the following table-top and wall plug-in switching power supplies operate on 120-240 Vac. UL, CSA.

5 VDC 1 AMP Delta Electronics, Inc #ADP-5JB. 2.57" x 1.97" x 1.02" box. Removable Panasonic-style, power cord. 4' output cord with molded ferrite bead for RFI/EMI noise suppression, terminates to a 2.5mm coax power plug, center positive. UL, CE. CAT# PS-502 \$5.50 each

5 VDC 1 AMP

Ericsson # BMLU101001-4. 6 foot cord terminated with 8-pin modular phone plug. There are four color coded 22 gauge stranded conductors inside the cord. The red and black leads are +5 Vdc; the yellow and white are ground. CAT# PS-513 \$4.50 each

10 for \$ 4.00 each • 100 for \$ 3.00 each

5 VDC, 1 AMP

PRS Model# HP-5V2. 58" output cord with 1.3mm coax plug, center positive. UL listed. CAT# PS-504 \$5.50 each

5 VDC 1.6 AMP

NAZ Technology Co # NSA-0181F05B US. 52" output cord with 1.3mm coax plug, center positive. UL, CE listed.

CAT# PS-506 \$5.50 each



5 VDC 2 AMP

Interex #EPA-101MU-05B 6' cord with 2.5mm coax power plug, center negative. UL. ITE.

CAT# PS-528 \$5.75 each

5 VDC 2 AMP

On-Tech™
Model J-10W-050UL1.
6' cord with 1.7mm coax power plug, center positive. ETL listed.
CAT# PS-523
\$5.75 each

5VDC 3.7AMP

P/N: 180-0005-037 YHi Model: YC-1018-B05-U Input: 100-120V, 60Hz, 0.5A Output: +5, 3.7A 5' output cord with 2.5mm coax

power plug, center positive. Ferrite RFI/EMI filter on cord.

UL listed. **CAT# PS-537** \$4.75 each 45 for \$4.50 each • 90 for \$4.20 each

5VDC 3.7A

YHi Model: 912-053700-E05 Input: 100-240 Vac, 47-63 Hz, 40 Va. Output: 5V, 3.7A 5' output cord with 2.5mm coax power plug, center positive. Ferrite RFI/EMI filter on cord. Detachable two-prong input power cord included. UL, CE. CAT# PS-5372 \$5.75 each

6.5 VOLT 700 MA

Phillips Type FW 7221 6 foot cord terminated with a 1mm I.D., 3mm O.D. coax power plug. Tip positive. Fused. CAT # PS-657 \$3.50 each

AC/DC TRAVEL CHARGER W/ CIGAR LIGHTER SOCKET

Allows indoor charging or use of devices with automobile power cords.
Wall plug-in switching power supply (not a wall transformer) rated 12 Vdc @ 0.5 Amps. Actually provides 13.5Vdc, which is more like actual automobile voltage. UL listed.
CAT# PS-1205 \$ 4.95 each

10 for \$4.75 each • 100 for \$ 3.95 each

9 VDC, 1.3 AMP

Unifive # US100913. Wall-plug-in switching power supply. 6' cord with 2.5mm coax power plug. Tip positive. UL.

CAT# PS-913

\$6.25 each • 10 for \$5.90 each

12 VDC 2.6 AMP

I.T.E. Model # NSA-0361F12B US. 52" output cord with 1.3mm coax plug, center +. UL. CE listed. **CAT# PS-1226**



12 VDC 3.5 AMP

Samsung # AD-4212L 6' 18 AWG output cord with coax power plug 1.7mm i.d., 4mm o.d., and ferrite bead RFI/ EMI suppressor. Removable IEC power cord on input. 4.5" x 2.1" x 1.2." UL, CE. CAT# PS-1231 \$15.85 each • 10 for \$ 15.00 each

15 VDC, 2.4 AMP

Delta Electronics # ADP-24KB. 6 ft cord with ferrite bead. Coax power plug (C+) is non-standard.UL.

CAT# PS-1524 \$12.50 each



20 VDC 3 AMP

Pihong # PSA60W-200. 6 ft output cord with 2.1mm coax power plug, center positive. Ferrite RFI/FMI filter on cord. Detachable



two-prong input power cord included. 4" x 2.5" x 1.28". UL, CE. **CAT# PS-231** \$14.00 each 30 for \$13.25 each • 90 for \$12.25 each

24 VDC 1.67 AMP

Gilat# E040105E. 6' two conductor 18 AWG cord with right angle 2.1mm co-ax power plug, center positive. UL listed.

CAT# PS-2416 \$10.95 each



ULTRASONIC TRANSDUCER

Matsushita #0D24K2. 0.95" diameter x 0.38" metal case. 0.65" long pc leads on 0.4" centers.

CAT# XDR-24 \$1.25 each

10 for \$ 1.00 each



SOLAR CELLS

SOLAR CELLS WITH CHARGING CIRCUIT

Here's a great start for a solar cell project. These assemblies for sun-powered garden lights consist of two glass photo-voltaic cells mounted on a plastic bracket with a charging circuit, two rechargeable AA cells, and LEDs. Between the solar cells is a photoresistor to sense light and dark conditions. In daylight the solar cells charge the battery. When it gets dark, the LEDs light. These are working units but the batteries are old and may not take a charge. Solar cell surface area is 3.78" x 1.98". Cells provide 2.6 Vdc @ 25mA in bright sunlight. The following assemblies differ only in the amount and color of LEDs:

Three red LEDs CAT# SPL-05

\$4.50 each 10/ \$4.25 ea. 100/\$4.00 ea.

CAT# SPL-06 One amber LED

\$4.00 each 10/ \$3.75 ea. 100/\$3.50 ea.

CAT# SPL-07 One red LED

\$4.00 each 10/ \$3.75 ea. 100/\$3.50 ea.

GAMEBOY ADVANCE POWER PLATFORM SOLAR PAK™ #GEGBASP

A portable, rechargeable, day or night platform for the original GameBoy Advance. Features a solar cell, rechargeable 3.6V NiMH battery pack and four ultra-bright

white LEDs. LED indicators for Power and Charging. DC power jack. The solar cell and LED illuminator can be adjusted for optimum position in sunlight or at night. 5.56" long x 3.62" wide x 2" high when folded. Solar cell provides 4.5 Vdc @100 mA or 6 Vdc with no load in bright sunlight.

We are selling these "as-is," as a source of solar cells and LEDs. They are brand-new and unused. There may be the occasional dead cell in the battery pack. In most cases, if you put it in bright sunlight for a day, you will have a functioning GameBoy Advance power station.

CAT# SPL-08 \$8.85 each

SOLAR BATTERY CHARGERS

Water-proof, corrosion-proof solar cell arrays with adjustable mounting stands and alligator clip leads. UV-proof polycarbonate plastic case. Built-in blocking diode to prevent discharge at night.

6 VOLT

630 mW max power. Maximum voltage, 9 Volts (no-load). Current, 60-70 mA. 5.9" x 3.5" x 0.67" CAT# SPL-606

\$15.00 each

12 VOLT

1260 Mw max power. Max voltage, 18 Volts (no-load). Current, 60-70 mA. 6.8" x 6.2" x 0.68"

CAT# SPL-6012 \$28.85 each





FERRITE SPLIT BEADS WITH SNAP SLEEVES

Ferrite split beads are used to suppress RFI, EMI and unwanted spurious signals. Easy to install. Self-locking plastic snap sleeve holds ferrite form in place.

0.25" I.D. Black plastic case, 1.27" x 0.73" x 0.75."

CAT# FB-64 \$1.25 each 10 for \$1.00 each 100 for 80¢ each

ach

0.27" I.D. - White. 1.27" long x 0.75" x 0.7" **CAT # FB-57** \$1.25 each 10 for \$1.00 ea. • 100 for 80¢ ea.

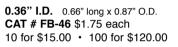
0.28" I.D.

1.28" long x 0.83" diameter.

CAT# FB-53

\$1.75 each • 10 for \$1.60 each

0.3" I.D. 0.7" long x 0.92" wide. **CAT # FB-48** \$1.25 each





0.4" I.D. 0.93" x 0.92" x 1.3" long. **CAT # FB-29** \$ 2.00 each

0.43" I.D.1.43" X 0.85" X 0.75" **CAT# FB-58** \$1.25 each
10 for \$ 1.00 each • 100 for 75¢ each



INDUCTORS

0.676 MICRO HENRY ADJUSTABLE CHOKE 0.375" X 0.375" X 0.75" high coil

with adjustable ferrite. PC leads on 0.38" (10mm) centers. **CAT# RC-676** 3 for \$1.00 • 100 for \$25.00



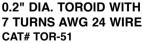
3.9 MICROHENRY COIL

J.W. Miller # 4608
3.9 uH, 1000 mA axial inductor.
0.21" diameter x 0.75" long with 1.5" leads.

CAT# CA-4608 2 for \$1.00 • 100 for \$35.00

220 MICROHENRY DRUM CHOKE

CAT # CR-220 4 for \$ 1.00 for 20¢ each \$ 600 for 10¢ each \$ 200 uf 5% @ 100 KHz



5 for \$1.00 • 100 for 15¢ each

22 UH, 4 AMP CHOKE

CTC Coils Ltd. #CH1016NT-220K-08
Radial inductor, 22 uH, 4 Amps. Ferrite
bobbin is 10mm diameter x 16mm high.
Tinned leads on 0.2" centers. CAT# CR-224
2 for \$1.00 • 25 for 40¢ each
250 for 30¢ each • 1000 for 20¢ each

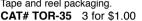


0.55" TOROIDAL TRANSFORMER

0.55" diameter toroid with two windings on a pc mount platform with 8 pins.
Only 4 pins are wired. No specs available.
CAT# TOR-52 3 for \$1.00

SURFACE-MOUNT TOROID

BI Technologies # HM00-94883-A Surface-mount toroid in 0.56" square x 0.34" thick package. Four terminals. Tape and reel packaging.





FERRITE CHOKE OR 9' OF AWG 20 COPPER WIRE

1.03" diameter x 0.67" ferrite core wound with 9 feet of 20 AWG solid, enameled copper wire. Wire can be

salvaged fairly easily. A customer reports measuring the inductance as 470 uH.

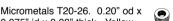
CAT# CC-20 2 for \$1.00 • 100 for \$40.00

CHOKES ALL VALUES IN MICRO-HENRYS (uH)

<u>Value</u>	Cat#	<u>Price</u>			
1	CC-1	3 for \$1.00			
2.2	CC-202	3 for \$1.00			
10	CC-10	3 for \$1.00			
12	CC-12	3 for \$1.00			
15	CC-15	3 for \$1.00			
390	CC-390	3 for \$1.00			

FERRITE BEADS

0.41" o.d. x 0.13" h x 0.05" i.d. **CAT# FB-65** 10 for \$1.00 • 100 for \$8.00



0.5" o.d. 0.10" high. 0.30" i.d. Charcoal. **CAT# TOR-23**



10 for \$1.00 • 100 for 6¢ ea.

0.5" long x 1" o.d. x 0.47" i.d. **CAT # FB-45** 50¢ each

0.54" long x 0.56" o.d. x 0.24" i.d. **CAT # FB-49** 50¢ each

CAI # FB-49 50¢ each

0.73" o.d. 0.38" i.d. 0.41" high. **CAT# TOR-42**

2 for \$1.00 • 100 for 40¢ each 500 for 32¢ each • 1000 for 24¢ each

1.12" long x 0.74" o.d. x 0.44" i.d. **CAT # FB-60** 65¢ each



Ho Sung International. EI-2820 nylon bobbin. Core is 10 mm x 13 mm x 10 mm high. Top is 18.5 mm x 21.5 mm. Base is 22 mm x 26 mm. Four leads, 15 mm and 20 mm spacing.

CAT# BN-1 200 pieces for \$5.00 1000 pieces for \$20.00





METERS

PM89 SERIES PANEL METERS

3.15" x 2.5" x 2" depth.
2.5% accuracy. Large clear scale, black lettering on white



background. Available in a variety of ranges.

DC MICROAMMETERS

	CAT #	EACH	10+
0 - 100 uA DC	PMD-100UA	\$12.00	\$10.00

DC MILLIAMMETERS

	CAT #	EACH	10+
0 - 1 mA	PMD-1MA	\$12.00	\$10.00
0 - 25 mA	PMD-25MA	\$12.00	\$10.00
0 - 50 mA	PMD-50MA	\$12.00	\$10.00
0 - 100 mA	PMD-100MA	\$12.00	\$10.00

DC AMMETERS

	CAT #	EACH	10+
0 - 1 A	PMD-1A	\$12.00	\$10.00
0 - 5 A	PMD-5A	\$12.00	\$10.00
0 - 15 A	PMD-15A	\$12.00	\$10.00
0-25A *	PMD-25A	\$12.00	\$10.00
0-30A *	PMD-30A	\$12.00	\$10.00
0-50A *	PMD-50A	\$12.00	\$10.00
0-100A *	PMD-100A	\$12.00	\$10.00
0-200A *	PMD-200A	\$12.00	\$10.00
*SHUNTS REQ	UIRED FOR ALI	L METERS 2	25 AMPS
AND GREATER	}		

DC VOLTMETERS

0 - 10 V	PMD-10V	\$12.00	\$10.00
0 - 15 V	PMD-15V	\$12.00	\$10.00
0 - 30 V	PMD-30V	\$12.00	\$10.00
0 - 50 V	PMD-50V	\$12.00	\$10.00
0 - 100 V	PMD-100V	\$12.00	\$10.00

AC AMMETERS

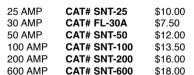
0 - 1A	PMA-1A	\$12.00	\$10.00
0 - 5A	PMA-5A	\$12.00	\$10.00
0 - 15A	PMA-15A	\$12.00	\$10.00

AC VOLTMETERS

0 - 150V	PMA-150V	\$12.00	\$10.00
0 - 300V	PMA-300V	\$12.00	\$10.00

SHUNTS

For use with DC Ammeters where external shunts are required. Adjusted for 50 mV drop.



100MA FULL SCALE PANEL METER

Prime Instruments Model 60
Attractive 100 ma full scale edgewise panel meter. Can be mounted vertically or horizontally. Scale is partitioned vertically 0-6250. Labeled WATTS AT 125V. White face with black lettering and indicator line. Clear plastic housing 0.75° x 1.94" high x 1.82" deep. 0.25" solder/quick-disconnect

terminals. Mounts in 1.84" x 0.76" rectangular cutout.

CAT# MET-65 \$ 3.25 each

AC VOLT METER

Small 0-200 Vac meter for monitoring AC line voltage. Scale is partitioned into three sections with 0-90V in silver, 95-120V in green and above



120V in red. Black face, silver lettering, white indicator line. Clear plastic housing is 1.56" square x 0.87" deep. Display portion of meter is 1.41" x 0.82". **CAT # MET-63** \$1.75 each

EDGE-STYLE PANEL METER (FUEL) 100 uA

100 uA = FS. Fuel gauge, E-F scale with 1/2 mark. Black letters on gold background. Front mount through 1.85" x 0.76" rectangular cutout. CAT# PM-455 \$3.50 each



DIGITAL PANEL METERS

3 1/2 DIGIT LED PANEL METERS

Features: 5 Vdc operation.
Common Ground - Can
monitor own voltage
0.56" figure height
Automatic Polarity Indication
Zero reading for 0 Volt input.
Automatic Polarity Indication
High input impedance (>100M Ohm)
Measuring Method: Dual Slope

Integration. A-D converter system. Reading rate time: 2-3 readings per second. Accuracy: 0.5%.

Bezel: 2.75" x 1.26" x 0.25"

 200 mVDC
 CAT # PM-122
 \$15.00 each

 20 VDC
 CAT # PM-120
 \$15.00 each

 200 VDC
 CAT # PM-121
 \$15.00 each

LOW COST 3 1/2 DIGIT LCD DISPLAYS

LCD display size: 1.84" x 0.78". Character height: 0.5". Bezel dimensions: 2.65" x 1.60". Flat-black

bezel and body are one unit. Snap-mounts from front into 2.12" x 1.50" chassis cutout. 9 Vdc operation. Auto polarity indication. Now available in three ranges. 200 mV $$ CAT # PM-200 \$7.00 each

20 V **CAT # PM-21** \$9.00 each **CAT # PM-22** \$9.00 each

SHOE-PHONE

Realistic, blue suede sneaker-phone. A promotional item for "Sports Illustrated," this touch-tone

phone plugs into any standard modular phone cord.
Ringer hi/low, on/off switches, redial, flash and mute buttons, volume

adjustment and a lcd digital display. Display is programmable for date, time, call-records and other info. Keypad lights when

shoe is picked-up. **CAT# PHN-38** \$11.65 each

30K THERMISTOR

Keystone (Similar to #RL0503-17-56K-96-MS) 30K ohms @ 25 degree C (77 degree F.). Negative temperature coefficient. 0.2" long X 0.09" dia., epoxy insulated bead. 1.13" long teflon insulated AWG#30 wire leads. Prepped with 0.75" long metal tabs.

CAT# THR-19 2 for \$1.00 264 for \$79.20 (30¢ each)



POTENTIOMETERS

POTS WITH 6MM SHAFT

All of the following pots have 6mm diameter shafts and 7mm diameter bushings unless otherwise noted.

				. 0 .	9
<u>Resistance</u>	<u>Taper</u>	Shaft length and Style	CAT #	Price each	<u>100</u>
10K	Audio	0.5" flatted shaft. 8mm bushing. Dual.	AP-10K	2/\$1.00	\$0.40
10K	Linear	0.35" knurled shaft.	LPS-10K	75¢ each	\$0.45
15K	Audio	0.45" round shaft.	AP-15K	2/\$1.00	\$0.40
25K	Linear	0.40" round shaft	NLP-25K	2/\$1.00	\$0.40
50K	Linear	0.35" knurled shaft	NLTP-50K	3/\$1.00	\$0.25
50K	Linear	0.32" knurled shaft. Dual Pot	DLP-50K	2/\$1.00	\$0.40
100K	Linear	0.35" knurled. Dual Pot.	DLP-100K	2/\$1.00	\$0.40
100K	Linear	0.35" knurled shaft	LPS-100K	75¢ each	\$0.50
100K	Linear	0.35" round shaft	NLP-100K	2/\$1.00	\$0.40
500K	Audio	0.35" long shaft. 8mm threaded bushing.	AP-500K	2/\$1.00	\$0.40
1M	Audio	0.25" round shaft. 7mm bushing.	AP-1M	2/\$1.00	\$0.40

75K SLIDE POT

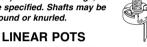
75K resistance. Linear taper. 2.05" long. 1.5" travel. CAT# LSP-75K



2 for \$1.00 • 100 for 40¢ each

POTS WITH 1/4" DIA. SHAFT

All of the following pots have 1/4" dia. shafts and 3/8" dia.(3/8-32) threaded bushings. unless otherwise specified. Shafts may be full-round, half-round or knurled.



Values: 100, 50K, 10 Meg. CAT# LTP-xxx 50¢ each (xxx = value)

2 MEG AUDIO TAPER

1/4" full round shaft, 3/8" long. ATP-2MS 3 for \$1.00 • 100 for \$25.00

20K LINEAR POT WITH SWITCH

0.25" D X 0.33" flatted nylon shaft. 10 mm threaded bushing. S.P.S.T on-off switch.

CAT# LTPS-20K

75¢ each • 10 for \$6.50

10K POT WITH SWITCH

10K audio taper potentiometer with on-off switch. Off-position is full left. 1/8" diameter x 0.27" long flatted shaft. 0.25" threaded bushing. Solder-lug terminals.

CAT# APS-10K \$1.00 each

5K AUDIO TAPER

Allen-Bradley. 1/8" diameter x 0.25" long shaft. 1/4-32 threaded bushing.

CAT# APT-5K

\$1.00 each

AB POTS W/ SPDT ON/OFF SWITCH

Series 70 Allen Bradley modular pots. 1/8" diameter x 0.25" long shaft. 1/4" threaded bushing. Switch detent operative when pot is fully clockwise. Switch removable.

1K LINEAR CAT # LPS-1K 50K LINEAR CAT # LPS-50K

\$1.00 each • 10 for \$8.50







16 OHM 5 WATT WIREWOUND POT

1/4" diameter x 0.38" long shaft. CAT# PWT-16 75¢ each

10 for 65¢ each • 100 for 50¢ each



PC MOUNT POTS

6mm diameter shafts. 0.5" long minimum. Non-threaded bushing.



Resistance 10K 10K 10K 10K 10K 50K	Taper Linear Audio Linear Linear Linear	Center detent Dual pot	CAT # LPB-10K APT-10K LPC-10K NDLP-10K LPB-50K
100K	Audio	Multi-taps	AP-100K

All pots above are 4 pcs of one CAT# for \$1.00 100 pcs of one CAT# \$ 15.00 (no mixing)

MOTORIZED POT

DUAL 20K LINEAR TAPER

Shokai # WHE1604A 2 X 20KB Dual 20K linear pot. At 6 Vdc the pot varies from minimum to maximum resistance, or vice versa in about 8 seconds. Pot and motor assembly are approximately 1.7" deep, behind mounting

plane. 6mm flatted shaft is 0.7" long. 9 mm threaded bushing. These are new pots, prepped with 2.5" wires and a connector.

CAT# MPOT-20K \$4.00 ea. • 10 for \$ 35.00

PRECISION MULTI-TURN TRIMMERS

RECTANGULAR TRIMMER

0.75" X 0.19" high. 3/4 watt. Comparable to Bourns 3006P, Beckman 89PR, Weston 830P. 5K, 20K CAT# RTP-xxx

\$1.00 each (xxx = resistance)



BI Technologies #68XR-10K 3/8" square, side-adjust, 20-turn precision trimmer. In-line pc pins on 0.1" centers. CAT# PTR-10K \$1.25 each

50K MULTITURN TRIMMER

Spectrol 64Y-50K-K. 25 turn, top-adjust cermet trimmer. CAT# PTM-50K \$1.25 each



SINGLE TURN TRIMMERS

VERTICAL THUMBWHEEL

25K Ohms. 3/16" spacing between outer leads. CAT# VTP-25K 10 for \$1.00

5/16" spacing between outer leads. 100, 250, 50K, 500K CAT# TPK-xxx 10 of one value \$1.00



SPECIAL !!! 500K trimmer CAT# TPK-500K 200 for \$10.00 (5¢ each)

100 OHM TRIMMER POT

0.26" square, screwdriver adjust potentiometer. Unusual lead configuration. The two outside leads are 0.82" long while the center lead is a standard length pc lead. The two rear leads are on 0.15" centers.

CAT# TP-100 10 for \$1.00 • 100 for \$7.00

HORIZONTAL THUMBWHEEL

200. 250K. CAT# HTP-xxx 10 of one value \$1.00 (xxx = resistance)



10K TRIM POTENTIOMETER

BI # 25SR10K. 0.28" square, side-adjust, pc mount trim pot. Single-turn, screwdriver adjust. PC leads in triangle pattern, outer leads 0.2" centers. CAT# TR-10K 2 for \$1.00 • 50 for 35¢ each

47K TOP SCREW ADJUST CAT# HMTP-47K 10 for \$1.00

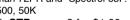


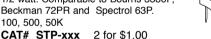
50K SIDE ADJUST

3/8" square X 3/16" thick. **CAT# TTP-50K** 2 for \$1.00



TOP ADJUST 3/8" square X 3/16" high. 1/2 watt. Comparable to Bourns 3386P. Beckman 72PR and Spectrol 63P. 100, 500, 50K





100K CARBON TRIMMER

Matsushita #EVND4AA00B15. 7mm square trimmer. 5mm lead spacing. CAT# TP-100K 10 for \$1.00



500 for 8¢ each 1000 for 7¢ each

KNOBS FOR 1/4" SHAF

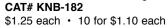
Black plastic knob for 1/4" round shaft with raised red face, serrated circumference and raised white pointer line down one side. 0.52" dia. x 0.60" high. Brass insert and set screw.



CAT# KNB-124 75¢ each • 10 for 65¢ each

0.6" DIAMETER W/ POINTER DOT

Black plastic knob with white pointer dot on face. Brass insert with set screw. 0.6" diameter x 0.57" high.



KNOBS FOR 1/4" HALF ROUND SHAFT

1.1" diameter x 0.645" high plastic knob. Crinkle, matte finish. Small black pointer line on one edge. Push-on knob with metal insert for half-moon 1/4" knobs. Available in white and ivory.

WHITE CAT # KNB-129 2 for \$1.00 10 for 45¢ each • 100 for 35¢ each

CAT # KNB-130 IVORY 2 for \$1.00 10 for 45¢ each • 100 for 35¢ each

For 1/4" half-round shaft. Black plastic knob. 0.93" dia. skirt at base, 0.81" dia. at top, 0.65" high. Serrated circumference. Recessed face with raised pointer line.

CAT # KNB-122 3 for \$ 1.00 100 for 25¢ each • 1000 for 18¢ each

Same as KNB-122 (above) but rim and pointer line

are light gray. CAT# KNB-123 3 for \$1.00 100 for 25¢ each • 1000 for 18¢ each

KNOBS FOR

Good-quality black plastic knobs for pots and controls with 1/8" diameter shafts. All of the following have brass inserts and set screws.

Tiny black plastic knob for 1/8" round shaft. Raised white pointer line. 0.45" diameter skirt at base, 0.31" dia. at top, 0.40" high. CAT# KNB-127 50¢ each • 10 for 45¢ each

POINTER KNOB, 0.72" diameter x 0.74" high. Serrated circumference with raised white pointer line down side. Brass insert is recessed 0.25" from base of knob.

CAT # KNB-135 75¢ each • 10 for 60¢ each

POINTER KNOB.

0.73" diameter x 0.58" high. Serrated circumference with raised pointer with white line down side.



CAT # KNB-139 75¢ each • 10 for 60¢ each

SKIRTED KNOB.

0.71" diameter x 0.75" high ribbed body. 1.15" diameter skirt with white pointer line. Brushed aluminum face.

CAT# KNB-134

75¢ each • 10 for 60¢ each

Raytheon # GPK-17-1. 0.66" diameter x 0.56" high knob with a ridged body and brushed aluminum face. White pointer line down one side. Brass insert is recessed 0.15" from bottom of knob.



CAT# KNB-154 75¢ each • 10 for 60¢ each

Raytheon # TRA7011. 0.72" diameter x 0.58" high knob with a serrated body and brushed aluminum face.



75¢ each • 10 for 60¢ each

Raytheon # TR7021. 0.72" diameter x 0.75" high knob with white pointer line on black face. Serrated body. 0.25" recessed brass insert. CAT# KNB-158 75¢ each • 10 for 60¢ each







Raytheon # TR5011. 0.52" diameter x 0.50" high knob with brushed aluminum face. Serrated body. **CAT# KNB-150** 75¢ each • 10 for 60¢ each



Raytheon # MKP-24-1 0.78" dia. x 0.63" high matte black knob with white pointer dot on face. 0.93" diameter skirt. Ridged body. Brass insert is recessed 0.15" from base.

CAT# KNB-147 75¢ each • 10 for 60¢ each

Raytheon #TSA70-3WL-1.
0.75" diameter x 0.50" high.
0.9" diameter skirt. Fluted, black plastic knob with brushed aluminum face. White pointer line. Brass insert with set screws. Insert recessed 0.1."



CAT# KNB-146 75¢ each • 10 for 60¢ each

6MM KNURLED SHAFT

Dark gray rubberized pointer knob for 6mm knurled shaft. Light grey raised pointer line and base. 0.40" diameter top, 0.52" diameter skirt, 0.70" high. **CAT# KNB-126** 50¢ each • 10 for 45¢ each



Black plastic knob for 6mm knurled shaft. Raised red face with black pointer line. 0.38" dia. top, 0.52" diameter base, 0.65" high. CAT# KNB-125 50¢ each • 10 for 45¢ each



1.1" diameter. Black plastic knob for 6mm diameter knurled shaft.
Textured matte-black face with a large 0.3" high pointer on top.
Knob overall height is 0.87".
CAT# KNB-160 65¢ each



SLIDE POT KNOB

Chrome knob with flat black rectangular face. Mounts vertically. 0.58" X 0.31" X 0.65" high. Doesn't fit our CAT# LSP-75K.



CAT# KNBS-2 5 for \$1.00

CLAMP KNOB

Three-sided, matte-black, crinkle-finish, clamp knob. $0.72" \times 0.72" \times 0.72" \times 0.50"$ high. Threaded 8-32 brass insert.



CAT # KNB-30 50¢ each

METAL OXIDE VARISTORS

Matsushita / Panasonic 7K180. 0.32" dia. x 0.13" thick. 0.2" lead spacing. CAT# MOV-180



Harris #24Z50. Metal oxide varistor. 19.2 - 26 VDC. Max clamping voltage, 43Vdc, 20 Amps. 100 Joules. 0.85" diameter x 0.15" CAT# MOV-50

575 V RMS, 120 Joules, 4500 Watts Peak Current. 0.62" diameter x 0.22" thick radial package, UL. **CAT# MOV-40**

1000 V RMS, 220 Joules, 4500 Watts Peak Current. 0.62" diameter x 0.30" thick radial package. UL. **CAT# MOV-80**

above varistors are 2 for \$1.00 • 100 for 35¢ each

KEYPADS

12-KEY KEYPAD WITH LETTERS

12 button matrix encoded keypad. Can be mounted through a 2.25" x 1.82" cutout. Mounting holes on 2.32" x 1.8" centers. 7-pin header, 0.1" centers. White buttons with black characters. 7-pin header, 0.1" centers.



CAT# KP-28 \$4.00 each • 10 for \$3.00 each

12 BUTTON KEYPAD

12 button matrix-encoded keypad. Tactile buttons. Black housing, 2.7" x 2." x 0.21". White buttons with black numerals. Contacts rated 30 mA @ 12 Vdc. Mounts from top. Four stabilizing pins on 1.7" X 2.4" centers. 7-pin header, 0.1" centers.



CAT # KP-22 \$7.50 ea. • 10 for \$7.00 ea.

12 key keypad with numerals 0 –9, * and #. Matrix encoded with one common terminal. Contacts rated 20 mA @ 24 Vdc. 2.01" x 2.24". Black with white buttons. Mounting holes on 1.8" x 2.24" centers. Can be rear-mounted through a 2.25" X 1.81" cutout.



CAT# KP-12 \$ 4.95 each

16 BUTTON INDOOR/OUTDOOR KEYPADS

Fully-sealed, tactile snap-dome contacts. Contacts rated 30 mA @ 12 Vdc. Ten black keys numbered 1 to 0 (and A to J). Five blue keys with up-down arrows (also right-left), CLEAR, HELP and ENTER. One red key labeled 2ND. TTL, MOS and DTL compatible. Two styles available:

2 x 8 buttons (4.7" x 1.7" x 0.36") and 4 x 4 buttons (2.7" x 3" x 0.36"). 9-pin headers, 0.1" spacing. See spec sheet on our web site for more info.

CAT # KP-23 4 x 4 Keypad \$12.50 each 10 for \$11.50 ea.



CAT # KP-24 2 X 8 Keypad \$13.25 each 10 for \$12.50 ea.



COMPACT FLUORESCENT LAMP

Osram Dulux S/E CF9DSE827 (Generic # CFT9W/2G7/827). 4-pin plug-in-type compact fluorescent lamp. 5.65" long x 1.04" x 0.48." New lamp, removed from fixture.

CAT # FL-16 \$ 2.50 each

LINKABLE HALOGEN

25 Watt halogen fixtures designed to snap onto zip cord to provide brilliant white light for kitchen counters, home office or studio. Each fixture is 4.68" x 3.21" x 1.65" thick. White. Replaceable G8/M3 bipin lamps





TERMINAL STRIPS

DUAL ROW TERMINAL STRIPS

UL94V-0 black thermoplastic. Brass, tin-plated terminals. Steel, Ni-plated screws.



DUAL ROW 20 AMP

Rated 20 Amps @ 300 Volts. Accepts wire from 22 to 14 AWG. 0.375" (9.5mm) centers. 0.85" wide x 0.52" high. Mounting holes on 8mm centers.

CAT#	<u>Circuits</u>	<u>Length</u>	<u>Ea</u>	<u>25</u>	<u>100</u>
TS-202	2	1.42"	.74	.61	.43
TS-203	3	1.79"	.84	.70	.49
TS-204	4	2.16"	1.02	.85	.59
TS-205	5	2.53"	1.31	1.10	.76
TS-206	6	2.91"	1.58	1.31	.92
TS-207	7	3.29"	1.63	1.36	.95
TS-208	8	3.66"	1.94	1.62	1.13
TS-209	9	4.03"	2.14	1.78	1.25
TS-210	10	4.40"	2.33	1.94	1.37

DUAL ROW 25 AMP

Rated 25 Amps @ 300 Volts. Accepts wire from 22 to 12 AWG. 0.438" (11mm) centers. 1.1" wide x 0.55" high. Mounting holes on 10.7mm centers.

CAT#	<u>Circuits</u>	<u>Length</u>	<u>Ea</u>	<u>25</u>	100
TS-302	2	1.62"	.77	.65	.45
TS-303	3	2.05"	.98	.81	.57
TS-304	4	2.48"	1.39	1.16	.81
TS-305	5	2.91"	1.54	1.28	.90
TS-306	6	3.34"	1.82	1.51	1.06
TS-307	7	3.78"	2.19	1.82	1.28
TS-308	8	4.20"	2.31	1.93	1.36
TS-309	9	4.65"	2.54	2.13	1.50
TS-310	10	5.08"	2.78	2.33	1.64

DUAL ROW 30 AMP

Rated 30 Amps @ 600 Volts. Accepts wire from 22 to 10 AWG. 0.563" (14mm) centers. 1.34" wide x 0.63" high. Mounting holes on 13mm centers.

CAT#	Circuits	Length	<u>Ea</u>	25	100
TS-402	2	2.04"	1.07	.85	.71
TS-403	3	2.60"	1.58	1.26	1.06
TS-404	4	3.13"	1.91	1.52	1.28
TS-405	5	3.68"	2.39	1.91	1.60
TS-406	6	4.24"	2.76	2.21	1.85
TS-407	7	4.80"	3.29	2.62	2.21
TS-408	8	5.33"	3.56	3.20	2.85
TS-409	9	5.89"	3.90	3.27	3.13
TS-410	10	6.45"	4.24	3.38	2.84
TS-1330	13	8.25"	4.00	3.50	3.00

15 POSITION, 15 AMP

Black phenolic barrier strip. Screws on 0.31" centers. Accept wire to 16 AWG. 6.32" I. 0.875" w x 0.40" high. **CAT# TS-1540** \$3.20 each

SINGLE ROW BARRIER STRIPS

5 AMP PC MOUNT STRIPS

Augat/ RDI Type 3PCV. Screw-clamp strip for 18-22 AWG wire. Rated 5 Amps @ 150 Volts. Terminals on 0.25" centers. Closed back to protect field wiring. 0.55" x 0.50" high. PC pins. UL, CSA. 2 SCREW 0.56" long CAT# TER-92 2 for 50¢ 22 SCREW 5.56" long CAT# TER-220 \$1.25 each

2 SCREW - Beau 1200 series. Dark green thermoplastic. 1.41" x 0.56" x 0.45" high. Screws on 3/8" centers. Mounting holes on 1.08" centers. 0.1" dia. PC terminals for heavier current applications. CAT # TER-200 5 for \$ 1.00

CAI # IER-200 5 for \$ 1.00 100 for \$ 12.00 • 1000 for \$ 80.00

EUROSTYLE TERMINAL STRIPS

For connecting stripped wires from 8 – 22 AWG depending on the block size. Flexible white (natural) Nylon 66 body, 94V2 rated for 105° C. 400 Volts

All metal parts are completely recessed in the housing to prevent shorts. Each strip has 12 circuits, with a mounting hole between each circuit. Can be easily shortened with a knife or saw.

7 AMP For 22-18 wire. 3.78" x 0.67" x 0.57" high. 0.32"(8mm) terminal centers. UL, CSA, VDE. **CAT # TB-7** \$2.00 each 10 for \$1.80 each • 100 for \$1.60 each

20 AMP For 18-14 wire. 4.6" x 0.80" x 0.67" high. 0.39"(10mm) terminal centers. UL, CSA, VDE. **CAT # TB-20** \$2.25 each

10 for \$2.10 each • 100 for \$1.80 each

35 AMP For 14-10 wire. 5.51" x 0.93" x 0.74" high. 0.47"(12.2mm) terminal centers. UL. **CAT # TB-35** \$2.70 each 10 for \$2.45 each • 100 for \$2.15 each

50 AMP For 20-8 wire. 6.25" x 1.00" x 0.99" high. 0.53"(13.5mm) terminal centers. UL. **CAT # TB-50** \$3.25 each

10 for \$2.95 each • 100 for \$2.60 each

INTERLOCKING PC MOUNT TERMINAL STRIPS

PC mount screw-clamp blocks with terminals on 5mm (0.197") centers. Interlock two or three position blocks to provide strips of any required length. Accepts up to 14 AWG wire. Rated 10 Amps, 300 Volts.

Side
wire entry 0.55" high

COND. CAT# EACH 100
2 TER-202 45¢ 30¢ each
3 TER-203 60¢ 45¢ each

2-TERMINAL "HIGH-BOY" INTERLOCKING STRIP

Weco Series 150. 2-screw, side entry terminal strips. "High-boy," 1.34" high x 0.40" x 0.42"

CAT# TER-402

45¢ each · 8 for 40¢ each



TIE POINTS

Phenolic strip with seven solder lugs. One lug is grounded. 1.82" I x 0.56" h.

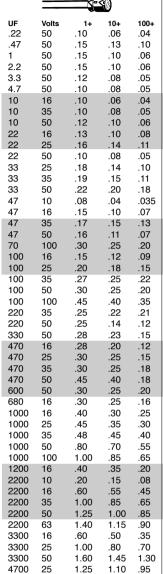


CAT# TP-70

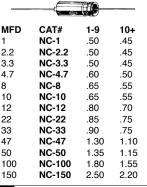
10 for \$1.00 • 100 for \$8.00 • 500 for \$30.00

CAPACITORS

RADIAL ELECTROLYTIC



100 VOLT NON-POLARIZED CAPS



HIGH VOLTAGE CAPS

33 UF 300 VOLT ELEC-TROLYTIC CAPACITOR

Rubycon 300 RGV M-MLS. 0.015" x 0.05" x 0.3" long leads,



mounted on a plastic base, bent over for surface-mounting. Body size: 0.72" dia. X 0.6" high. Leads can be easily unbent & used in through-hole applications. CAT# 33-300RS 60¢ each • 125 for 30¢ each

130 UF 400 VOLT

0.72" diameter x 1.25" long. 0.3" lead spacing. 105° C. CAT# 130-400R

\$1.20 each 10 for 95¢ each

100 for 75¢ each 180 UF 400 VOLT

Nippon Chemicon CE (M) 105° C. 0.87" dia. x 2" long. Right-angle radial leads on 0.3" centers

CAT # CR-184 \$ 1.25 each 10 for \$ 1.00 each

470 UF 400 VOLT

200 for 85¢ each

Nippon Chemicon KMH 105° C. 1.40" dia. X1.83" long. Right angle radial leads on 0.35" centers.

CAT# CR-474 \$2.75 each 100 for \$2.20 each

450 V ELECTROLYTIC CAPACITORS



MFD	CAT#	EACH	<u>10</u>
6.8	6.8-450R	0.35	0.30
10	10-450R	0.65	0.55

680 UF 40 VDC **SWITCHING POWER** GRADE CAPACITOR

Cornell Dubilier #300681M040JE8 Long life, ultra-low ESR capacitor. 20% tolerance. 105° C. 1" dia. x 1.23" high. Three leads for stability and reverse-proof mounting.

CAT # EC-684 2 for \$1.00 10 for 40¢ ea. 100 for 30¢ ea.

OTHER NON-POLARIZED CAPS



SNAP-IN CAPACITORS

150 UF 450 VDC

Matsushita HB CE 105° C 1.9" diameter x 1.25" high.

CAT# EC-1450 \$2.00 each

10 for \$ 1.75 each 330 UF 450 VDC

CDE 380LX 330 uF. 450 WV. 85 deg. C 1.4" diameter x 1.6" high CAT# EC-3345 \$2.75 each

390 UF 450 VDC

Nippon Chemi-Con 04F04L 450 V. 390 uF. 85 deg. C. 1.4" diameter X 1.85" high. CAT# EC-3945 \$3.00 each

1000 UF 200 VDC

Nippon Chem. 2731-720. 1.19"dia. x 2.02" high. PC leads on 0.4" centers. 105° C. CAT # EC-1021 \$1.25 each 10 for \$1.00 each

2200 UF 63 VDC

BC Components. 2200 uf 63 vdc snap-in capacitor. 0.91" diameter x 1.21" high. 0.4" pin spacing. CAT# EC-2263 \$1.40 each 10 for \$1.10 each 100 for 90¢ each

RADIAL SPECIALS

470MFD 16V CAT# 470/16VR

100 for 12¢ each 1000 for 8¢ each

470MFD 25V CAT# 470/25VR

100 for 15¢ each 1000 for 11¢ each

3300MFD 16V CAT# 3300/16VR

100 for 35¢ each 400 for 25¢ each 1000 for 19¢ each

1 FARAD 5.5 VOLT **MEMORY BACK-UP CAP**

1 Farad, 5.5 Volts. High-capacitance, memory back-up capacitor. Slowly



releases its charge to provide backup power in temporary shut-down situations. 0.78" diameter x 0.30" thick. PC leads on 0.2" centers.

CAT# CBC-17 \$3.50 each 10 for \$3.25 each 100 for \$ 2.75 each

AXIAL TANTALUM

1 UF 20 VOLT

Kemet # T322A105K020AS. 0.095" dia. x 0.26" long. 10% tolerance. **CAT # AT-120** 50¢ each • 10 for 42¢ each

2.2 UF 20 VOLT

Kemet 110A225K020AS. Hermetically sealed, 10%. 0.13" dia. x 0.32" long. **CAT# AT-225** 65¢ each 10 for 50¢ each

6.8 UF 15 VOLT

0.11" dia. x 0.29" long. Cut and bent leads. 0.5" lead spacing. CAT # AT-685C 35¢ each 10 for 30¢ ea. • 100 for 25¢ ea.

12 UF 6 VOLT

0.11" dia. X 0.29" long. Tarnished leads. CAT# AT-12 20¢ each 100 for 16¢ each

22 UF 35 VOLT

Kemet T110C226K035AS
Hermetically sealed axial tantalum capacitor. 22 UF 35 V, 10%. 0.29" diameter x 0.73" long.
CAT# AT-226 \$1.25 each
10 for \$1.00 each

TRIMMER CAPACITORS

2 - 18 PF

0.25" square x 0.35" high.
PC leads on 0.2" centers.

CAT # VCAP-18 2 for \$1.00
100 for \$40.00 (40¢ each)
700 for \$210.00 (30¢ each)

5 - 65 PF PC MOUNT

0.38" diameter x 0.42". Three pc leads.

CAT # VCAP-15

\$1.00 each

10-62 pf Screw adjust. 1" X 0.47" CAT# VCAP-12

\$1.25 each



AXIAL CERAMIC CAPACITORS

KEMET #C410C or AVX #SA102
CAT#

		CAI#
33pF	100V	SA-330
100pF	100V	SA-101
150pF	100V	SA-151
820pF	100V	SA-821
2200pF	50V	SA-224
56.000pF	50V	SA-563

All of the above are 10 for \$1.00 100 for \$7.00 (10 pc min. per item)

CERAMIC DISC CAPACITORS

CAT #	Capacitance	Voltage	<u>10</u>	<u>100</u>	1000
5D3K	5 pf	3000	.10	.08	.06
100D50	10 pf	50	.06	.05	.035
220D50	22 pf	50	.06	.05	.035
470D50	47 pf	50	.06	.05	.035
101D50	100 pf	50	.06	.05	.035
151D50	150 pf	50	.06	.05	.035
201D1K	200 pf	1000	.10	.08	.06
221D50	220 pf	50	.06	.05	.035
221D1K	220 pf	1000	.10	.08	.06
271D50	270 pf	50	.06	.05	.035
331D50	330 pf	50	.06	.05	.035
471D50	470 pf	50	.06	.05	.035
561D50	560 pf	50	.06	.05	.035
681D250	680 pf	250	.10	.08	.06
821D50	820pf	50	.06	.05	.035
102D50	.001 uf	50	.06	.05	.035
222D50	.0022 uf	50	.06	.05	.035
332D1K	.0033 uf	1000	.10	.08	.06
472D50	.0047 uf	50	.06	.05	.035
103D50	.01 uf	50	.06	.05	.035
223D50	.022 uf	50	.06	.05	.035
473D50	.047 uf	50	.06	.05	.035
104D50	.1 uf	50	.10	.08	.065

10 piece per item minimum

224 PC CERAMIC CAP SET - 14 VALUES 10PF-220nF

224 ceramic disc capacitors. Values from 10pf to 0.22uf. 21 pieces of 10pf, 100pf, 0.001uf, 0.01uf, 0.1uf. 14 pieces of 22pf, 47pf, 220pf, 470pf, 0.0022uf, 0.0047uf, 0.022uf, 0.047uf. 7 pieces of 0.22uf. CAT# CK-1 \$14.80 each

120 PC ELECTROLYTIC CAP SET 10 VALUES 1UF-1000UF



120 radial electrolytic capacitors. Values from 1 uf to 1000 uf. 15 pieces of 1uf, 2.2uf, 4.7uf, 10uf, 22uf, 47uf, 100uf (50 Vdc). 5 pieces of 220uf, 470uf, 1000uf (25Vdc)

CAT# CK-2 \$13.50 each

0.1UF 50V AXIAL CERAMIC

AVX # SA105E104ZAA.

Conformally coated, epoxy,

axial leaded capacitor. Tape-and-reel packaging. **CAT# AM-104** 10 for 90¢ • 100 for 6¢ each

CAT# AM-104 10 for 90¢ • 100 for 6¢ eac 1000 for 4¢ each • 7500 for \$ 0.025 each

RADIAL CERAMIC CAPACITORS

Epoxy coated, radial leaded multi-layer ceramic capacitors.

100 pf, 50V

CAT# CM-101 10 for 60¢ • 100 for 4¢ each

4700 pf. 50V

CAT# CM-472A 10 for 75¢ • 100 for 5¢ each

4700 pf, 100V, 10%, X7R AVX SR211C472KAA **CAT# CM-472** 10 for 90¢ • 100 for 8¢ each 500 for 7¢ each • 1000 for 6¢ each

DIPPED TANTALUM

Value	Voltage			
<u>MFD</u>	VDC	CAT#	<u>Price</u>	<u>100</u>
1	35	DT-25	3 for \$1.00	25¢ each
3.3	10	DT-35	5 for \$1.00	13¢ each
4.7	16	DT-40716	4 for \$1.00	17¢ each
10	16	DT-1016	3 for \$1.00	25¢ each
10	25	DT-1025	2 for 80¢	30¢ each
10	35	DT-1035	2 for \$1.00	40¢ each
15	6	DT-156	4 for \$1.00	17¢ each
15	25	DT-1525	2 for \$1.00	40¢ each
22	25	DT-2225	75¢ each	50¢ each
100	6	DT-4	75¢ each	50¢ each

100 VOLT POLYESTER

			,	_	
MFD	CAT#	1+	10+	100+	1000+
.001	RMC-102	.10	.08	.06	.05
.0015	RMC-152	.10	.08	.06	.05
.0047	RMC-472	.10	.08	.06	.05
.01	RMC-103	.12	.09	.07	.06
.022	RMC-223	.12	.09	.07	.06
.027	RMC-273	.15	.11	.08	.07
.047	RMC-473	.15	.11	.08	.07
.068	RMC-683	.17	.12	.09	.08
.082	RMC-823	.17	.12	.09	.08
.1	RMC-104	.17	.12	.09	.08
.15	RMC-154	.20	.13	.10	.09
.22	RMC-224	.25	.19	.17	.15
.47	RMC-474	.40	.32	.29	.25

0.22 UF 250 VOLT POLYESTER FILM CAPACITOR

Illinois Capacitor. 0.22 Uf, 250 Volt metallized film. Radial leads on 0.5" centers. 0.64" x 0.38" x 0.22."

CAT# RMF-224 5 for \$1.00 100 for 12¢ each • 1000 for 9¢ each

MYLAR CAPACITORS

(AXIAL	STYL	.E) _		
MFD	VOLT	TOL	CAT#	PRICE
.0015	100	20%	AMC-3	4 for \$1.00
.0022	100	10%	AMC-5	4 for \$1.00
.0047	200	20%	AMC-8	4 for \$1.00
.0068	200		AMC-10	4 for \$1.00
.022	100	1%	AMC-17	4 for \$1.00
.0274	160		AMC-181	4 for \$1.00
.033	100		AMC-77	4 for \$1.00
.04	100		AMC-191	4 for \$1.00
.047	100	10%	AMC-20	4 for \$1.00
.082	100	5%	AMC-25	4 for \$1.00
.1	100	10%	AMC-27	3 for \$1.00
.18	160	10%	AMC-49	3 for \$1.00
.22	50	5%	AMC-33	4 for \$1.00
.47	200	10%	AMC-38	3 for \$1.00
.68	50	5%	AMC-72	3 for \$1.00
.68	100	10%	AMC-43	3 for \$1.00
1.33MF.	250		AMC-46	2 for \$1.00

RADIAL MYLAR

NEW LOWER PRICING ON **MOST RADIAL MYLARS!**

			11 11
MFD	VOLT	CAT#	PRICE
.0033	100	RMC-45	6/\$1.00
68pf	50	RMC-1	7/\$1.00
.0299	50	RMC-315	6/\$1.00
.039	50	RMC-100	6/\$1.00
.15	200	RMC-185	6/\$1.00
.2	50	RMC-19	6/\$1.00
1	250	RMC-316	3/\$1.00
1.5	200	RMC-150	3/\$1.00

POLYPROPYLENE

20 UF 400 VDC ASC. ±10%. 2.25" long x 1.40" x 1.1". Twin wire leads.

CAT # MKP-204 \$ 3.00 each 10 for \$2.75 ea. • 100 for \$2.25 ea.

4700PF 500V SILVER MICA CAP

CMO6FD 472J03. 0.66" x 0.18" x 0.42." CAT# DMCP-472



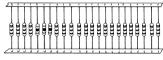
2 for \$1.00 • 100 for 35¢ each

1/4 & 1/2 WATT RESISTORS 5% CARBON FILM

1/4 WATT				(E)		
RESISTORS	1.0	20	300	3.9 K	51 K	680 K
Minimum order is	1.5	24	330	4.3 K	56 K	750 K
10 PIECES OF	1.8	27	360	4.7 K	62 K	820 K
	2.0	30	390	5.1 K	68 K	910 K
ONE VALUE.	2.2	33	430	5.6 K	75 K	1.0M
10 PIECES of ONE VALUE 50¢	2.4	36	470	6.2 K	82 K	1.1 M
	2.7	39	510	6.8 K	91 K	1.2 M
100 PIECES of ONE VALUE \$3.00	3.0	43	560	7.5 K	100 K	1.3 M
200 PIECES of ONE	3.3	47	620	8.2 K	110 K	1.5 M
VALUE \$4.00	3.6	51	680	9.1 K	120 K	1.6 M
	3.9	56	750	10 K	130 K	1.8 M
1,000 PIECES of ONE VALUE \$10.00	4.3	62	820	11 K	150 K	2.0 M
	4.7	68	910	12 K	160 K	2.2 M
1/2 WATT	5.1	75	1.0 K	13 K	180 K	2.4 M
	5.6	82	1.1 K	15 K	200 K	2.7 M
RESISTORS	6.2	91	1.2 K	16 K	220 K	3.0 M
Minimum order is	6.8	100	1.3 K	18 K	240 K	3.3 M
10 PIECES OF	7.5	110	1.5 K	20 K	270 K	4.7 M
ONE VALUE.	8.2	120	1.6 K	22 K	300 K	5.1 M
10 PIECES of ONE	9.1	130	1.8 K	24 K	330 K	5.6 M
VALUE 50¢	10	150	2.0 K	27 K	360 K	6.2 M
100 PIECES of ONE	11	160	2.2 K	30 K	390 K	6.8 M
VALUE \$3.50	12	180	2.4 K	33 K	430 K	7.5 M
200 PIECES of ONE	13	200	2.7 K	36 K	470 K	8.2 M 9.1 M
VALUE \$4.50	15	220	3.0 K	39 K	510 K	
1,000 PIECES of ONE VALUE \$12.00	16 18	240 270	3.3 K 3.6 K	43 K 47 K	560 K 620 K	10 M

610 PIECE 1/4 WATT RESISTOR ASSORTMENT

10 each of 61 resistance values from 10 Ohms to 1 Meg. 5% tolerance. CAT # RES-61 \$11.50 per package



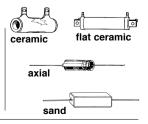
POWER RESISTORS

POWER	<u>ohms</u>	watts	style	<u>ohms</u>	watts	<u>style</u>
	.1	10	sand	20	7	sand
RESISTOR	.2	5	sand	20	10	sand
PRICING	.22	3	sand	50	25	ceramic
	.33	3	axial	75	15	sand
1 - 5 watts	.47	2	sand	75	22	sand
3 for \$1.00	.5	3	axial	80	10	ceramic
	.5	4	axial	82	5	axial
6 - 10 watts	.5	5	axial	165	5	sand
2 for \$1.00	.51	5	axial	220	3	axial
	.75	5	axial	300	5	sand
11 - 25 watts	.75	5	sand	300	10	sand
\$1.00 each	1.2	4	axial	390	7	sand
	1.3	5	axial	400	20	sand
50 watts	1.5	2	axial	430	5	sand
\$2.00 each	1.5	5	sand	470	10	sand
	1.8	2	sand	600	7	sand
100 watts	2	10	axial	600	25	sand
\$3.00 each	2	25	ceramic	1K	3	axial
	10	25	ceramic	1K	5	axial
220 watts	12	3	sand	1K	5	sand
\$3.75 each	12	5	axial	1K	15	sand
	16	5	sand			



Metal Dale resistor. **CAT# 2-25D** \$1.25 each





SPEAKERS

20 MM, 32 OHM SPEAKER

Hosiden # HDR0990, 20mm (0.80") dia, x 0.10" thick. 32 Ohms. Peel-off adhesive ring of tape on speaker face. Solder leads. CAT# SK-230 85¢ each



100 for 65¢ each • 700 for 40¢ each

20 MM, 150 OHM SPEAKER

Hosiden HDR960, 20mm. 150 ohm dynamic element. 0.79" diameter x 0.1" thick. Large quantity available. CAT# SK-215 85¢ each 100 for 65¢ each • 1000 for 40¢ each

1" SPEAKER WITH POLYPROPYLENE CONE

8 ohm, 0.1 watt speaker with clear polypropylene cone. Only 0.15" thick. Good sound quality for its size. Large quantity available. CAT # SK-218 2 for \$1.00 • 100 for 40¢ ea. 500 for 35¢ each • 1000 for 25¢ each

2", 8 OHM SPEAKER

8 Ohm speaker. 1.78" diameter paper cone. 1.27" diameter ceramic magnet. Prepped with a 0.75" diameter foam pad on back of speaker and 1.7" wire leads with a miniature 2-conductor female connector. CAT# SK-820 \$1.20 each

100 for 85¢ each • 400 for 70¢ each

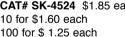
2 1/4" SPEAKER, 8 OHM CAT# SK-214 \$1.25 each

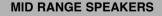
2 1/4" SPEAKER, 32 OHM 0.38" thick. CAT# SK-232 75¢ each • 100 for 55¢ each 1000 for 25¢ each



4 1/2 INCH SPEAKER, 24 OHM

4.5" paper cone speaker with 5.6" metal mounting frame. 2.6" deep. Mounting holes are on 3.75" centers. CAT# SK-4524 \$1.85 ea.





5.25" 50 WATT MIDRANGE SPEAKER

5.25" dia. closed back midrange speaker, 8 ohms, 0.75" voice coil. 10 oz magnet. Rolled foam edge. 50 Watts RMS. 550 - 15 KHz. 92 dB @ 1W/ 1m.



CAT# GM-658 \$5.50 each

5.25" 60 WATT MIDRANGE SPEAKER

5.25" dia. closed back midrange speaker. 8 ohms. 1" voice coil. 12 oz magnet. Poly-mica cone with rolled foam edge. 60 Watts RMS. 500 - 15 KHz. 96 dB @ 1W/ 1m.



CAT# GM-858 \$6.95 each

WOOFERS

\$7.50 each

4" 40W SHIELDED WOOFER, 8 OHM

8 ohm impedance. Rolled foam edge with poly laminated cone. Shielded for use with computers or video. 11 oz magnet. 1" voice coil. 40 Watts / 70 Watts max. 70 - 10 KHz frequency response. 83 dB @ 1W/ 1m.



SPECIAL

CAT# GW-2048

4" 8 OHM WOOFER

8 Ohm woofer with 10 oz magnet. Treated paper cone with rolled foam edge.

CAT# SK-480 \$ 5.50 each

5.25" 70W SHIELDED

WOOFER, 8 OHM 8 ohm impedance. Rolled foam edge with poly laminated cone. Shielded for use with computers or video. 16 oz magnet. 1" voice coil. 70 Watts / 130 Watts max. 62 - 9 KHz frequency response. 84 dB @ 1W/ 1m.

CAT# GW-2058 \$8.50 each

6.5" 90 WATT WOOFER, 8 OHM

Poly-mica cone with rolled rubber edge. 20 oz magnet. 1.5" diameter hi-temp voice coil. 90 Watts / 170 Watts max. 41 -8 Khz frequency response. 85 dB @ 1W/1m.

CAT # GW-6028 \$ 16.50 each

6.5" 90 WATT WOOFER, 8 OHM

Polymer laminated cone with rolled foam edge. 20 oz magnet. 1.5" diameter voice coil. 90 Watts / 180 Watts max. 56 - 8 Khz frequency response. 88 dB @ 1W/ 1m.

CAT # GW-2068 \$ 11.95 each

8" 100W WOOFER, 8 OHM

8 ohm impedance. Rolled foam edge with poly laminated cone. 20 oz magnet with vent and bumper plate. 1.5" voice coil. 100 Watts / 200 Watts max. 45 -6 KHz freq. response. 87 dB @ 1W/ 1m.

CAT# GW-2088 \$12.95 each

8" 100W WOOFER, 8 OHM

8 ohm impedance. Rolled rubber edge with poly-mica cone. 20 oz magnet with vent and bumper plate. 1.5" voice coil. 100 Watts / 190 Watts max. 35 - 8 KHz freq. response. 84 dB @ 1W/ 1m.

CAT# GW-8028 \$17.50 each

10" 110W WOOFER, 8 OHM

8 ohm impedance. Rolled foam edge with poly-laminated cone. 20 oz magnet with vent and bumper plate. 1.5" voice coil. 110 Watts / 220 Watts max. 40 - 5 KHz freq. response. 90 dB @ 1W/1m.

CAT# GW-2108 \$15.95 each







10" 130W WOOFER, 8 OHM

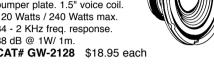
8 ohm impedance. Rolled rubber edge with poly-mica cone. 30 oz magnet with vent and bumper plate. 1.5" voice coil. 130 Watts / 250 Watts max. 29 - 7 KHz freg.

response. 86 dB @ 1W/ 1m. CAT# GW-1038 \$31.75 each

12" 120W WOOFER, 8 OHM

8 ohm impedance. Rolled foam edge with poly laminated cone. 20 oz magnet with vent and bumper plate. 1.5" voice coil. 120 Watts / 240 Watts max. 34 - 2 KHz freq. response. 88 dB @ 1W/ 1m.

CAT# GW-2128



12" 150W WOOFER, 8 OHM

8 ohm impedance. Rolled rubber edge with poly-mica cone. 40 oz magnet with vent and bumper plate. 2" voice coil. 150 Watts / 290 Watts max. 18 -5 KHz freq. response. 87 dB @ 1W/1m.

CAT# GW-1248 \$37.95 each



TWEETERS

3.75" SQUARE DOME TWEETER

3.75" square tweeter. 8 ohm. Pure titanium dome. 8 oz magnet. 1" voice coil. 60 Watts @ 5KHz. 3.5 - 25 KHz. 94 dB @ 1W/ 1m. CAT# GT-322 \$7.50 each



3 5/8" ROUND DOME TWEETER

3 5/8" diameter tweeter. 8 ohm. Pure titanium dome. 8 oz magnet. 1" voice coil. 60 Watts @ 5KHz. Frequency response, 3.5K - 25 KHz. 94 dB @ 1W / 1m. CAT# GT-324 \$7.50 each

3.25" SQUARE PIEZO

3.25" square, wide dispersion © tweeter. 50 Watts RMS. Frequency response, 3.5K - 27 KHz. 94 dB @ 1W/ 1m. CAT# GT-1005 \$3.75 each



3.5" ROUND PIEZO

3.5" diameter, wide dispersion piezo tweeter. 60 Watts RMS @ 5 KHz. Frequency response, 3.5 - 30 Khz. 96 db @ 1W/ 1m.

CAT# GT-1056 \$3.50 each

3" X 7" PIEZO TWEETER HORN

3" X 7" wide dispersion horn tweeter. 60 Watts RMS. Frequency response, 1.8K -30 KHz. 90 dB @ 1W/ 1m. CAT# GT-1025 \$4.25 each



AMPLIFIED STEREO COMPUTER SPEAKERS

Lexpro #LX720 Stereo sound output for computers. Built-in amplifier. Power and volume controls earphone jack. Magnetically



phone plug input. Power source: standard 120 Vac wall outlet. 7.25" high x 4.10" x 3.50". Taupe.

CAT# SK-150 \$7.85 per pair

MOTOROLA FRONT PANEL WITH SPEAKER ONLY

20 Ohm impedance. Mounted in the front panel of a Motorola Radius M120.



These are new parts from disassembled equipment. \$2.00 each CAT# EX-33

SPEAKER TERMINALS

Red and black spring loaded terminals, marked - and +. Mounts in 1.85" diameter hole. Solder or quick connect terminals. CAT# SLT-2 75¢ each • 10 for \$6.50

SPRING LEVER 2-TERMINAL

Quick-release spring loaded terminals. Red/black polarity. Accepts up to 12 AWG wire. 2.17" x 0.95". Mounting holes on 1.75" centers. Solder/ 0.2" qc terminals extend

CAT# SLT-22 50¢ each • 100 for 38¢ each

SPEAKER TERMINAL. **GOLD BANANA JACKS**

0.4" behind mounting surface.

3" round recessed assembly. Knurled, gold plated knobs and jacks. Knobs have color stripe for polarity. Can be used with dual banana plugs or up to AWG 12 wire. Fits 1.94" diameter cut out. Four screw mounting. Foam gasket. CAT# SWT-500 \$2.25 each

QUAD SPEAKER TERMINALS Four spring-loaded terminals, 2 red, 2 black. For PC mount. Black plastic assembly 1.3" X 1.36" H X 0.7" thick. Two mounting holes on 1.33" centers.

CAT# QRS-4 \$1.00 each 10 for 75¢ each • 100 for 60¢ each

INEXPENSIVE 2 WAY CROSSOVERS

2.75" x 2.75" x 0.65". Specs unknown. CAT # LX-156 75¢ each 10 for 60¢ each • 100 for 40¢ ea.



TRIM RING FOR 3.5" SPEAKER

Black plastic ring with silver circumference. Designed for 3.5" speakers or tweeters. Four countersunk mounting holes on 2.25" centers. 3.83" O.D., 2.56" I.D. CAT# TR-35 2 for 50¢ • 100 for \$18.00

BLACK MESH GRILL FOR 4" SPEAKER

Good-looking black steel mesh grill for 4" speakers. Plastic outer ring is 5.3" diameter. Four countersunk mounting holes on 3.25" centers.

CAT# SG-4 \$1.00 each 10 for 75¢ each • 100 for 55¢ ea.



BLACK STEEL SPEAKER WAFFLE GRILLS

Grills have rubber edge to reduce vibration

SIZE	CAT#	PRICE
5 1/4"	SWG-5	\$1.75
6 1/2"	SWG-6	\$2.20
8"	SWG-8	\$2.35
10"	SWG-10	\$3.25
12"	SWG-12	\$3.75



Mounting Clips for above speaker grills. 4 required for each grill.

CAT# GF-4S 4 for 80¢



INFRARED DEVICES

IR DETECTOR

Nicera infrared detector module. Also known as a pyrosensor, the device detects ir radiation, especially body-heat. Applications include intrusion alarms, automatic light switches. Hermetically-sealed TO-5 package, 0.36" diameter x 0.18" high. Gold-plated bottom and leads. CAT# IRD-10 \$3.95 each

MYSTERY INFRARED DEVICE

Probably an infrared receiver/ transmitter for use with televisions or other remotecontrolled equipment. Made for OnCommand™. it consists of a small black box. 2" x 1.95" x 0.6" with



a dark-red plastic ir window on one side. Inside is a small pc board with four clear LEDs and a module that looks like an IR receiver. There is a 3.5mm phone jack and a 6' 6-conductor phone cord with a modular phone plug.

CAT# IR-13 \$2.00 each

IR MOTION DETECTOR W/ KEYCHAIN REMOTE

Motion-sensing alarm. Easy to install - no wiring necessary. Can be table mounted or wall mounted on adjustable swivel bracket. Dual mode.



Alarm mode: High-pitched warble alarm sounds when motion is detected. Delay feature allows entry and exit without alarm.

Chime mode: Electronic chime sounds when motion is sensed - not as loud or irritating as alarm

Keychain remote arms and disarms the device. Flashing red light indicates readiness. Requires three AA batteries (not included) for main unit and four LR44 batteries (included) for remote control. CAT# PIR-4 \$11.00 each

CABINET CORNERS

STEEL CABINET CORNER

Heavy-duty black steel corner. Protects and supports cabinets and equipment. Three hole mounting.

CAT # COR-303 65¢ each

METAL MINI-CORNER

Protective metal corner. Two-hole mounting. Holes wrap approximately 0.8" from corner. Textured black powder finish.

CAT# COR-300 4 for \$1.00 • 100 for 20¢ ea.

RACK & CABINET HANDLES

RECESSED FLIP HANDLE

Heavy-duty black steel "flip" handle. Spring-loaded handle remains flat when not in use. 6.37" x 4.25." Recessed 0.25". CAT # HDL-16 \$3.50 each



STEEL CABINET HANDLE

Heavy-duty black steel recessed handle for PA cabinets and other large cabinets and equipment. 8.63" x 6.32" x 2.28" deep. CAT # HDL-17 \$4.50 each



1.5" HANDLE

3/16" dia. nickel-plated brass handle. 1.25" high. Threaded for 04-40 screws on 1.50" centers. CAT# HDL-30 50¢ each

1.5" ALUMINUM HANDLE

RAF Electronic Hardware. Brushed aluminum handle, 0.187" diameter aluminum stock. 0.75" high. 6-32 internal thread. 1.5" mounting centers. CAT# HDL-35 2 for \$1.00 • 100 for 35¢ each

2" HANDLE

0.87" high. 0.187" diameter aluminum stock. Threaded for 4-40 screws on 2" centers CAT # HDL-12 50¢ each

3" BLACK ALUMINUM HANDLE

Black aluminum handle, 1" high. 6-32 threaded holes on 3" centers. 0.25" diameter aluminum stock.

CAT# HDL-34 65¢ each • 10 for 50¢ each

6.75" STEEL HANDLES

Heavy-gauge metal handle, 6.75" long x 1.46" wide x 0.78". Mounting holes on 6.0" centers. Flat black finish. CAT# HDL-33 \$1.25 per pair



CONCEALED DRAWER PULL

Southco (r) 67-99-116 Used in place of a handle in drawers and doors, especially when handle would be intrusive. Pull stays folded away



inside of slot. Pivots out when needed. Installs into a 3" x 0.6" x 1.15" deep slot in a drawer or door. Charcoal grey plastic handle and bezel is 3.21" x 0.82. Includes mounting hardware. CAT # DP-2 \$1.00 each • 10 for 75¢ ea. • 100 for 55¢ ea.

PROJECT ENCLOSURES

HAMMOND MANUFACTURING TO

MINI-ABS CASES

Black or gray ABS plastic with interlocking lid. Integral standoffs for pc board mounting. Lid held in place with self-tapping #4 screws (included).

1.97" x 1.38" x 0.8"

CAT # 1551-GGY Gray \$ 1.65 each **CAT # 1551-GBK** Black \$ 1.65 each

2.36" x 1.38" x 0.8"

CAT # 1551-HGY Gray \$ 1.95 each **CAT # 1551-HBK** Black \$ 1.95 each

3.15" x 1.57" x 0.8"

CAT # 1551-KGY Gray \$ 2.10 each **CAT # 1551-KBK** Black \$ 2.10 each

GENERAL PURPOSE CASES

Black ABS cases with countersunk lid secured with self-tapping screws. Slots for mounting pc boards.



CAT #	Dimensions w/o lid	<u>1-9</u>	<u>10+</u>
1591-MSBK	3.3" x 2.2" x 0.8"	2.80	2.45
1591-ASBK	3.9" x 2.0" x 0.8"	3.10	2.80
1591-BSBK	4.4" x 2.4" x 1.1"	3.35	3.00
1591-CSBK	4.7" x 2.6" x 1.4"	3.55	3.20

INSTRUMENT CASES

Gray ABS plastic.
Two piece tongue and groove construction.
0.064" brushed aluminum front and rear panels.
Integral pc standoffs.



Front and rear vertical pc board guides.

CAT #	<u>Dimensions</u>	<u>1-9</u>	<u>10+</u>
1598-ASGY	6.1" x 3.65" x 1.36"	7.25	6.50
1598-BSGY	5.26" x 5.3" x 2"	8.00	7.20

CASES w/ BATTERY COMPARTMENTS

Black ABS plastic cases with removable front panels and panel for battery compartment.Integral

pc board standoffs. Includes self-tapping screws.

CAT #	Dimensions	1-9	10+
1593-PBK	2.6" x 3.54" x 1.1"	3.00	2.80
1593-QBK	2.6" x 4.4" x 1.1"	3.40	3.05
1593-SBK	2.6" x 3.6" x 0.83"	2.80	2.60
1593-TBK	2.6" x 4.35" x 0.83"	3.25	3.00
1593-YBK	2.6" x 5.45" x 1.1"	3.90	3.55

4.72" x 2.55" x 1.57" TRANSLUCENT

Clear, red and blue semi-clear polycarbonate enclosures. Allows parts inside box to be visible. Lap-joint construction.



Clear CAT# 1591-CTCL \$6.50 each
Blue CAT# 1591-CTBU \$6.50 each
Red CAT# 1591-CTRD \$6.50 each

ABS PROJECT BOX

Hammond # 1593LBK
2.6" x 1.06" x 3.59" black ABS
plastic case with removable front
panels. Integral pc board standoffs.
Includes self-tapping screws.

CAT# 1593-LBK \$2.40 ea. • 10 for \$2.25 ea.

ECONOMY PROJECT BOXES

Black ABS plastic project enclosure. Interlocking lid secured with self-tapping screws. Interior slots for pc boards. Includes hardware.



3" x 2" x 1.1"

CAT# MB-163 \$2.25 ea. • 10 for \$2.00 ea.

4" x 3" x 1.6"

CAT# MB-173 \$3.00 ea. • 10 for \$2.65 ea.

5" x 3" x 1.6"

CAT# MB-033 \$3.15 ea. • 10 for \$2.75 ea.

5.3" x 3" x 1.9"

CAT# MB-113 \$4.50 ea. • 10 for \$4.00 ea.

3.75" X 1.88" X 1.46"

CAT# MB-093

\$3.00 each • 10 for \$2.65 each



4.25" X 2.36" X 1.73"

CAT# MB-103 \$4.75 ea. • 10 for \$4.20 ea.

SNAP-TOGETHER PROJECT BOXES

Two or three piece black ABS enclosures.

1.46" x 1.06" x 0.67"

Bottom snap-fits tightly into place.
0.71" x 0.22" slot in one side.

CAT# MB-95 90¢ each 10 for 80¢ each



2.1" x 1.61" x 0.89"

3-pieces. Bottom and one (long) side snap-fit in place. Mounting ears with holes on 2.6" centers. **CAT# MB-96** \$1.55 each

10 for \$1.35 each



3.56" x 1.50" x 1.20"

Bottom snap-fits into place. Mounting ears with holes on 3.9" centers. 0.25" x 0.43" opening near the bottom of one long side.

CAT# MB-97 \$1.95 each 10 for \$1.70 each



ENCLOSURES W/ ALUMINUM COVERS

Heavy-duty 3/32" molded plastic boxes with brushed aluminum covers. Built in stand-offs for P.C. or perf boards. Includes screws. Solderable perf boards PC-1, 2, 3, 4 on page 73 fit these cases.

2.7" x 1.7" x 1.2" H

CAT# TB-1 \$1.75 each 10 for \$1.60 each

3.3" x 2.1" x 1.4" H

CAT# TB-2 \$1.95 each 10 for \$1.75 each

4.2" x 2.7" x 1.6" H

CAT# TB-3 \$2.50 each 10 for \$2.25 each

5.3" x 3.3" x 1.6" H

CAT# TB-4 \$3.30 each 10 for \$3.00 each



BREADBOARDS

Design and change circuits quickly and cleanly. Breadboards accommodate all sizes of dips and discrete components with lead diameters up to 0.32". Interconnect with solid hook-up wire (#22 AWG recommended). Wires and components can be used and re-used many times without damage to board or components.

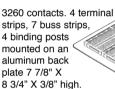
400 tie points. 300 contacts on main board and 50 contacts on each of two power distribution strips. Distribution strips are removable. **CAT # PB-400** \$3.00 each



840 contacts. 1 terminal strip and two power buss strips. 2 5/8" X 6 7/8" X 3/8" high

2 5/8" X 6 7/8" X 3/8" high **CAT# PB-840** \$5.50 each

1680 contacts. 2 terminal strips, 4 buss strips, 3 binding posts mounted on an aluminum back plate 5 1/8" X 6 7/8" X 3/8" high. CAT# PB-1680



\$13.50 each

CAT# PB-3260 \$25.00 each

JUMPER WIRE SETS

Pre-formed jumper wires for use with solderless breadboards. 14 color-coded lengths. AWG 22 solid wire. Unbreakable clear plastic storage case.

140 PIECE ASSORTMENT10 of each size **CAT # JW-140**

\$ 6.25 each

350 PIECE ASSORTMENT

25 of each size CAT # JW-350 \$ 11.95 each

SOLDERABLE PERF BOARDS w/ SOLDER PADS AND BUSS STRIPS

6.3" x 3.94" multilayer epoxy boards with copper pattern on one side. Five useful patterns for SIP and DIP components. Holes on 0.1" centers.

SINGLE HOLE PADS CAT # ECS-1 \$5.50 each TWO HOLE PADS
CAT # ECS-2 \$5.50 each

THREE HOLE PADS
CAT # ECS-3 \$5.50 each



SOLID LINE PATTERN CAT # ECS-4 \$5.50 each



IC PATTERN WITH PADS AND BUSS STRIPS CAT # ECS-5 \$5.50 each



PC MATERIALS

MAKE PC BOARDS IN MINUTES From PHOTOCOPIER or LASER PRINTER

Thousands of people have discovered the easiest and quickest way to transfer pc board patterns to copper-clad board is **PRESS-N-PEEL** by Techniks. Works great with CAD and PCB



layouts as well as artwork from magazines and books. No need for photochemicals or darkroom; use a photocopier or la

darkroom; use a photocopier or laser printer to transfer your design to the special **PRESS-N-PEEL** film. Then, simply iron the design onto a clean copper-clad board with a household iron. Peel off the film, and the board is ready for etching (etchant solution not included). Trace widths of 5 mil and less are possible with this method. We've seen excellent results with this system.

PRESS-N-PEEL consist of five 8 1/2" X 11" sheets of transfer film and complete instructions.

CAT# TEK-5 \$11.95

2 packs (10 sheets) \$17.50 5 packs (25 sheets) \$37.50

DRY CONCENTRATED ETCHANT

1/4 lb. of anhydrous ferric chloride. Makes one pint of etch solution, enough to etch 200 square inches of copper-clad board.

CAT# ER-3 \$5.00 each

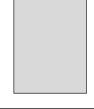
COPPER CLAD BOARDS

SINGLE-SIDED PC BOARDS

4" X 6" X 0.062" thick. **CAT# PCB-46** \$2.00 each

6" X 12" X 0.062" thick.

CAT# PCB-612 \$5.00 each



SOLDERABLE PERF BOARDS

Perf board with mounting holes designed to fit our project enclosures TB-1,2,3 and 4. Boards have holes on 0.1" matrix to fit most standard components and have copper solder rings on one side.

1 1/2" X 1 3/4". Fits TB-1 enclosure. **CAT# PC-1** 75¢ each

1 7/8" X 2 1/4". Fits TB-2 enclosure. **CAT# PC-2** \$1.00 each

2 1/2" X 3 1/8". Fits TB-3 enclosure.

CAT# PC-3 \$1.50 each

3" X 4 1/4". Fits TB-4 enclosure. **CAT# PC-4** \$2.00 each

MANUFACTURERS

We Purchase Excess Inventories.
CALL, WRITE, E-MAIL
or FAX your list.

SOLDERING IRONS AND ACCESSORIES

SOLDERING IRONS AND STATIONS

VARIABLE TEMPERATURE 16-30 WATT SOLDERING IRON



Xytronic Model 258

Professional soldering iron with temperature control on handle. Temperature can be adjusted from 250-450 degrees C (500-800 deg.F), 16-30 Watts. LED hi/ low temperature indicator. Includes longlasting, chrome plated, iron-clad, pretinned tip (PL-404). 3-conductor grounded power cord. UL. CAT# IR-258 \$23.95 each

THERMALLY BALANCED SOLDERING IRONS



Xytronic 200GX series. Thermally balanced, professional irons with hi-efficiency nichrome heating element. Fast heat-up and recovery time. Comfortable silicone rubber grip. Includes longlasting chrome-plated, iron-clad, pretinned tip (PL-404). 3-conductor grounded power cord. UL.

25 WATT IRON 430 DEG. C (810 DEG. F)

CAT # IR-225 \$18.00 each

30 WATT IRON 480 DEG. C (900 DEG. F)

CAT # IR-230 \$18.00 each

IR-360 SOLDER STATION

Xvtronic 168-3C Variable temperature from 300-800 deg. F. Tip is maintained within 6 deg. F of preset temperature. 45 second heat-up time. Analog temperature meter. Transient voltage protection. 3-conductor power grounded power cord. Includes pretinned

chrome-plated, iron-clad tip (PL-404). UL.

CAT # IR-360 \$95.00 each

SOLDERING TIPS For Xytronic irons and station above. 1.6 MM PENCIL TIP **CAT# PL-404** \$5.50 each **5 MM CHISEL TIP CAT# PL-410** \$5.50 each 0.8 MM PENCIL TIP **CAT# PL-401** an a \$5.50 each (1/32")3.2 MM CHISEL **CAT# PL-405** 3 2mm (1/8")\$5.50 each

ECONOMY - 30 WATT SOLDERING

IRON ______ U.L. listed. 30 watt soldering iron. Ideal for P.C. work.

CAT# IR-30 \$4.50 each

ACCESSORIES

SOLDER STAND

Spring steel soldering iron holder. Includes replaceable pad for cleaning iron tip.

CAT# 50B-205 \$4.00 each



SOLDER SUCKER



High performance cleaning tool which offers excellent suction for solder removal. CAT# 50B-410 \$5.00 each

SOLDER SUCKER

Extrapowerful

desoldering pump with Teflon nozzle. Lightweight. large capacity spring-loaded cleaning tool offers excellent suction for solder removal.

CAT# SSR-1 \$4.50 each

HELPING HAND with MAGNIFIER

Will hold P.C. board or other small items and allow both your hands freedom to work. Magnifying lens makes work easy to see.

CAT# HELPH-M

\$4.50 each



SOLDERING PASTE / FLUX

PHILMORE # 50-4002. 2 oz. can. CAT# SP-44 \$2.00 each



DE-SOLDERING WICK

For easy removal of parts from P.C. boards. Top quality solder wick. 5 feet per spool. 1/16" wide. CAT# SWK \$1.00 per spool

SOLDER

60/40 SOLDER 110" TUBE

18 ga. 60/40 rosin core. Solder in a convenient tube. 110". CAT# TS-110 \$1.25 each

1/2 POUND ROLL .032 dia. CAT# SOL-564 \$6.75 / roll

1 POUND ROLL .032 diameter CAT# SOL-064 \$12.50 / roll



TOOLS

13 PC HOBBY KNIFE KIT

Hobby knife set contains 3 blade handles plus 13 assorted and interchange-



able blades. Handy knife set for workshop, home or garage. Includes plastic storage case.

CAT# 813PK \$3.75 each

HEMOSTATS

Hemostats are great for clamping onto small components while soldering or desoldering. Stainless steel.

5" STRAIGHT TIP CAT# HM-1 \$1.25 each



5" CURVED TIP CAT# HM-2 \$1.25 each

(USED) CARBIDE DRILL BITS

9 carbide bits varying in size from # 71 to 1/16". All bits have 1/8"shanks with collars. The assortment is random and may include more than one of

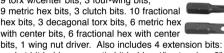


 $\bigcirc \bigcirc \bigcirc$

a particular size. CAT# DRB-9 \$4.50 Per Set

100 PIECE SCREWDRIVER BIT SET

Large assortment of the most 0000 commonly used bits in electronic 0000 equipment: 8 phillips bits, 8 pozzi bits, 4 square bits, 8 slotted bits, 4 antenna remover bits, 9 torx bits, 3 tri-wing bits, 9 torx w/center bits, 3 four-wing bits,



socket bit holder, magnetic bit holder, 1" extension, 2" CAT# BT-100 \$11.95 each extension.

MINI PLASTIC SCREWDRIVER

1 3/4" long plastic screwdriver. Ideal for adjusting trimmer pots and caps. CAT# PSS-1 4 for \$1.00 • 100 for \$15.00

SPEED CHUCK FOR DREMEL TOOL

Allows you to quickly and easily change accessory bits on Dremel and similar rotary tools without changing collets. It will accept all accessory bits with 1/32" to 1/8" shanks.



CAT# CHK-1 \$5.00 each

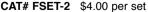
4 1/2" FLUSH CUTTER

Trim leads on PC boards. Thin cutting edge for hard to reach areas. Insulated handle. Spring return. CAT # FC-12 \$3.00 each



10 PIECE NEEDLE FILE SET

Assortment of 10, 5 1/2" long needle files including round, flat, triangular and half-round files. Includes handy pocket-size storage pouch.



WIRE STRIPPER

Stripper and cutting tool. Stripper adjusts from 24 to 12 ga wire. Spring-loaded to open after each usage. Plastic grips CAT# WS-150 \$2.50 each



HOT MELT GLUE GUN

Ideal for quick repairs and assembly. Uses standard glue sticks. Includes two 2.9" sticks. UL

CAT # GN-1

\$4.75 each



7/16" dia. X 8" glue stick σ for above gun and other standard glue guns.

CAT# HMG-2 3 for \$1.00

METAL DETECTOR

Comb beaches, sweep hillsides, and construction sites with this inexpensive metal detector for beginning prospectors. Also good around the house for locating pipes and studs in walls. This one is sensitive enough to detect a coin at a depth of up to 6" and deeper for larger objects. Volume and sensitivity controls. A "find" is indicated by a meter and change in speaker volume. 1/4" headphone jack. Adjustable stem. Requires six AA volt batteries (not included).

CAT# MDR- 2 \$37.95 each

10X X 21MM TRIPLET ROUND LOUPE, CHROME

21mm triplet jeweler's loupe. 10X magnification. A valuable magnifying tool for close examination of jewelry, stamps, coins, watches, machinery or electronic components. Chrome plated assembly folds into itself for protection when not in use. Eyelet for neck chain. Leather storage box included.

CAT# MGL-10 \$15.75 each

HEAD-MOUNTED MAGNIFIER

Keeps your hands free while enhancing your vision. 3-level acrylic lens system provides a variety of magnification levels up to 4.8x. 2.2x fixed lens. 1.1x interior flip-down lens and 1.5x swivel loupe.

Magnifier assembly can be flipped up out of your way when not in use. Wide body allows for glasses. Adjustable hook-and-loop headstrap.

CAT# HD-MAG \$4.95 each

SAFETY GLASSES

Jamerco. One-size-fits-all. durable, clear plastic safety glasses. CAT# SG-2 \$2.75 each



5 PIECE BRUSH SET

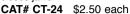
Five wood-handle brushes for cleaning, deburring, burnishing. Set consists of

- 1 -- 8" steel detail brush
- 1-- fiber nail brush



24" CLAW PICK-UP TOOL

4 Prong retractable steel claws. Flexible and strong spring shaft allows for easy reach in tight places. Finger grip opens and closes jaws.



100 PIECE ROTARY TOOL ACCESSORY KIT

Assortment of accessories for polishing, drilling, grinding, cutting. Includes sanding drums, sanding disks, flap wheels, polishing wheels, cutting tools, wire wheels, drills and other

accessories with 1/8" shank. Convenient wood storage/ carry case.

CAT# DK-91 \$10.50 each

INSPECTION MIRROR

Non-conductive plastic handle. Individually wrapped dental-type mirror. Ideal for inspecting hard-to-reach places. CAT# MIR-7 2 for \$ 1.00

5 1/2" SCISSORS FOR HOME OR OFFICE

Stainless steel blades. CAT# SC-55 \$1.25 each



20 CC PLASTIC SYRINGE

Plastic syringe and plunger. 20 cc capacity. Ideal for dispensing liquds.

CAT# SYR-1 \$1.00 each 10 for 75¢ each



33 PC SECURITY BIT SET

Assortment of popular security bits and a 1/4" hex magnetic bit holder/ adaptor.

Includes:Torx: 8, 10, 15, 20, 25, 27, 30, 35, 40 Hex: 5/64", 3/32", 7/64", 1/8", 9/64", 5/32"

Hex: 2, 2.5, 3, 4, 5, 6 Tri-wing: 1, 2, 3, 4 Fork: 4, 6, 8, 10 Four-wing: 6, 8, 10

CAT# BT-33 \$9.95 each



3.75" LONG NYLON SPRING CLAMPS

Hold down your work-in-progress with these rugged nylon spring clamp. Swivel jaws stay parallel on materials of varying thickness.

3.75" long CAT# SCL-20 2 for \$1.00 4.75" long CAT# SCL-40 \$1.00 each

6.50" long CAT# SCL-60 \$1.50 each

6 1/2" DIAGONAL CUTTER PLIERS

Drop forged High Carbon Steel. Heat treated, Matte finished cushion grips



CAT# PLR-651 \$3.00 each

6.5" LONG NOSE LOCKING PLIERS

Nickel plated, Heat Treated, Drop Forged CAT# PLR-12 \$3.50 each



TEST CABLES & CLIP

ECONOMY TEST LEADS

Replace broken or intermittent test leads. Red and black lead set with banana plug on

one end and pin probe on other end. 3 ft. long. CAT# TL-100 \$2.00 per set

30" TEST LEADS, RT ANGLE **BANANA PLUG TO PROBE**

Set of two test leads for most standard multimeters. Right-angle shrouded banana plugs on one end, pin plug probes on



other. Right-angle banana plugs reduce strain on leads. Rated 1000 V, 15 A. 3 ft. length, including probe. Includes protective plastic caps for pin and banana plugs. One each, red and black.

CAT# TL-2 \$5.75 per set 10 for \$ 5.50 per set

3" INSULATED ALLIGATOR CLIPS

30 amp alligator clips. One Red One Black CAT# ALG-3



\$1.00 per set

ALLIGATOR CLIP

2 1/4" long alligator clip with screw and red plastic handle. CAT# ALG-R 5 for \$1.00



2" NON-INSULATED ALLIGATOR CLIP

CAT# ALG-M 7 for \$1.00



28 PIECE ELECTRICAL CLIP KIT

Repair broken leads on test equipment and chargers. Make your own low-voltage jumper leads. Includes: Six 2" insulated alligator clips. Six 1 1/2" insulated alligator clips Ten 2" alligator clips Two 30 Amp charging clips Two 25 Amp charging clips Two 10 Amp charging clips

CAT# ALG-28 \$4.95 each



COIL CORD WITH ALLIGATOR CLIP

Light-gray cord. Insulated 1" alligator clip on one end. Very durable and flexible cord. 20 gauge stranded wire, stripped and tinned. 6 feet extended.

CAT# ALG-12 \$1.00 each

100 for 80¢ each • 500 for 65¢ each

INSULATION-PIERCING TEST CLIPS AND LEADS

Mueller/ JS Popper clips with red and black insulating boots. Insulation piercing mechanism in middle of clip allows measurement through insulated wire. Jaws at front of clip grab and hold securely to plugs or terminals. Clip with boot is about 3.75" long. "Like-new" condition. Cut from new major brand, telephone test sets.

SINGLE-SPIKE CLIPS

Short piece of wire needs to be removed before re-use. Leads attach via screw and put



CAT# ALG-11 \$2.50 per set

10 for \$2.25 per set • 50 for \$2.00 per set

5 1/2" HOOK TEST PROBES

5 1/2" long spring-loaded hook test probes can reach further and hook onto slightly larger items than the minihooks above. These have

a thumbscrew terminal which can easily be connected to a banana plug, pin plug or a piece of wire. Sold in sets of two, one red, one black.

CAT# MTC-21 set of 2 for \$3.00

JUMPER TEST LEADS

MINI JUMPERS
10 TEST LEADS- 1" CLIPS
2 each of 5 colors.

CAT# MTL-10 \$2.50 per set

REGULAR JUMPERS

5 TEST LEADS 2" CLIPS

CAT# HDTL-5 \$2.50 per set

MINI-HOOKS AND JUMPERS

Mini-hooks are great for connection to parts in high-density areas. They give a firm, insulated connection

1 1/2" MINI-HOOK JUMPERS

Two 18" long mini-hook patch cords. One black, one red, with 1.5" long mini-hooks on each end.

CAT# MTC-2 set of 2 for \$2.75

2" MINI-HOOK JUMPERS

Five 18" long mini-hook patch cords. Black, red, white, green and yellow. **CAT# MTC-5** set of 5 for \$6.00



PRECISION DIGITAL POCKET SCALE

DigiWeigh DW-250BS. Ideal portable pocket scale for weighing small components, gems or jewelry up to 250 grams (8.82oz). Backlit digital readout provides resolution to 0.1g or 0.01oz. Self-contained 3" x 5" x

0.8" case with lid to protect platform and controls when not in use.

"Tare" function allows use of external container for liquids or extremely small items. Auto power-off, 60 seconds. Includes 4 AAA cells.

Capacity: 250g, 8.82oz, 160.8dwt, 3857gn Resolution: 0.1g, 0.01oz, 0.1dwt, 1gn Repeatability: 0.1g, 0.01oz, 0.1dwt, 1gn Linearity: 0.2g, 0.02oz, 0.2dwt, 2gn CAT# DW-250 \$27.75 each

TACHOMETER

This non-contact tachometer detects light reflected off an object and reads out RPM value. Micro computer technology with laser beam gives accurate and fast,

once per second, readings. Stores and recalls the last, maximum and minimum RPM readings. Readings remain in memory until the next measurement. 2.5 to 99,999 RPM range. Large 5-digit LCD display. CE certified. Operates on 4 AA cells, included. Storage case included.

CAT# TCH-4 \$47.75 each

TONE GENERATOR AND PROBE

Tone generator and amplifier probe helps locate and trace single or pairs of cables. Tone generator provides tip and ring identification, line condition and verification and functions as a continuity tester. Also checks telephone line (RJ-11) polarity.



Alternating hi-lo (900-1000 Hz) or solid tones (900 Hz). Amplifier probe has built-in 1 inch speaker with adjustable volume control. Recessed on-off switch. Rugged impact-resistant ABS case. Includes 9 Volt batteries and Nylon carrying case with belt-clip. **CAT# TGP-2** \$49.95 each

TEMPERATURE PROBE, 10K

Sears # 9-82397. Designed for use with Sears Multitesters 9-82402 and 9-82404. Will work with most meters requiring a 10K Ohm thermistortype probe. 6" plastichandle probe. 38" leads with banana plugs.

CAT# TP-397 \$4.00 each

TEST EQUIPMENT AND ACCESSORIES

PORTABLE OSCILLOSCOPE

Its high sensitivity - down to 5mV/div - and extended scope functions make this unit ideal for measurements on audio equipment, digital signals, all kind of sensors, signal analysis, car stereo, etc... Features:

- ts is all and a so
- * 10MHz sampling rate
- * Up to 2MHz analog bandwidth * Full auto set up
- * 5mV to 20V/div sensitivity in 12 steps
- * 200ns to 1hour/div time base in 32 steps
- * Trigger mode: run, normal, once, roll, slope +/-
- * X & Y position signal shift
- * DVM readout with x10 option
- * Audio power calculation (rms and peak)
- * dBm, dBV, DC, rms ... measurements
- * Signal markers for Volt and Time
- * Frequency readout (through markers)
- * Recorder function (roll mode)
- * Signal storage (2 memories).
- * Includes 60 mHz probe. Operates on 5 AA batteries. Use alkaline or rechargeable NiCad or NiMH. Built-in charger circuit. Requires 9 Vdc 500 mA regulated power supply, we suggest our CAT# PS-10.

CAT # HPS-10 \$ 159.95 each

SCOPE PROBE SETS

Probe with BNC connector.
Comes with ground lead,
retractable hook tip, pin tip
with IC lead cover and standard cover.



60 MHz **CAT # PR-60** \$19.50 each 100 MHz **CAT # PR-100** \$29.50 each

CHECK THIS OUT! 3 1/2 DIGIT LCD MULTIMETER WITH BACKLIGHT

Velleman # DVM850BL For features, accuracy and ruggedness, this is the best inexpensive multimeter we've ever seen. DC current (10 A), DC and AC voltage (600 V), resistance (2 M ohm), diode, transistor tester,



audible continuity and hold button. Protective rubber shell and test leads included.

CAT # DVM-850BL \$17.95 each

3 1/2 DIGIT LCD MULTI-METER

Velleman # DVM890
An incredible array
of features at a
great price.
20A DC current,
1000 DC Volts.
20A AC current,
700 AC volts.
Resistance to 20 M.
Capacitance from
2000pF to 20uF.



measurement to 20kHz.

Frequency

Temperature measurement: -58° F to 1832° F with K-type thermocouple. Low battery indication, overload protection and auto power off function. Protective rubber shell, test leads and thermocouple included.

CAT# DVM-890 \$45.00 each

ECONOMY DIGITAL MULTIMETER

Velleman #DVM810.
Economical and compact
multimeter with a 3 1/2 digit
LCD for measuring DC and
AC voltages, DC currents,
resistance, diodes and transistors (hFE). Features overload protection. Ranges:
DC and AC voltage,
500 volts, DC current,

load protection. Ranges:
DC and AC voltage,
500 volts, DC current,
0.2 A (fused), 10 A (not fused),
resistance to 2M. Ideal for hobbyists,
for use in the field and workshops.
Test leads, instruction book included.
3.70" x 1.81" x 1.03" high.

CAT# DVM-810 \$7.95 each

DIGITAL CLAMP METER

Velleman # DCM266L.
3.5 digit LCD display with automatic polarity indication.
Data-hold function.
AC current measurements up to
1000 Amps.
AC Volts measurement to 750 V.
DC Volts measurement to 1000 V.
Resistance measurements to 20K ohm.
Includes test leads



CAT# DCM-266L \$29.75 each

DIGITAL LC METER

and protective bag.

GME # LC200. Portable inductance and capacitance meter. Four-digit LCD display. Auto zero adjustment. Over-range indicator. L (inductance ranges) 2mH, 20mH, 20mH, 200mH, 2H, 20H. C (capacitance ranges) 2nF, 20nF, 200nF, 2uF, 20uF, 200uF, 1000 uF Includes alligator test clips, instructions and 9 Volt battery.

CAT # LC-200 \$ 58.00 each

DIGITAL CAPACITANCE METER

GME #C350. Portable capacitance meter with large LCD readout. 9 capacitance ranges for values from 0.1pF to 20,000uF. Less than 5 second sampling time. Includes alligator test leads, instructions and 9 Volt battery.

CAT # CP-350 \$45.00 each



DIGITAL MULTIMETER

Right Tech 9202. Here's a great deal on a compact digital multimeter. Perfect for the technician or student, it has an LCD readout with 0.8" high digits. Features found on more expensive meters including a transistor and diode tester and audible continuity checker.

Overload protection and low battery indicator. Protective rubber jacket prevents accidental damage. Includes test leads and battery. Ranges to: 1000 Volts DC, 750 Volts AC, 10 Amps DC.

Resistance to 2000K Ohms

CAT# DMM-9202 \$9.95 each 10 for \$ 9.25 each



ROTATING PARTS (GEARS, PULLEYS, BELTS, O-RINGS)

MINIATURE ROLLER CHAIN



25 roller chain.

Works with 1/4" pitch chain sprockets below. CAT # CHN-25 \$ 2.50 per foot

MASTER LINK for # 25 roller chain CAT # ML-25 \$1.00 each

MATING GEARS

All of the following nylon or plastic gears and sets of gears, with the exception of CAT # GR-6 and GR-15, mate with one another.

5 GEAR ASSORTMENT

Five matched break-resistant plastic gears ranging from 0.44" dia.(10 teeth) to 2.02" (50 teeth). Gears are molded with 0.15" (4mm) bores and come with inserts which reduce the bore to 0.065" (2mm) diameter. CAT# GR-5

\$2.75 per set - includes 5 gears and 5 inserts

10 sets for \$20.00

60 COG AND 22 COG

1.46" D x 0.2" 0.32" flatted bore. 0.56" D x 0.47," 0.32" flatted bore.

CAT# GR-45 \$1.75 per set

32 COG AND 20 COG

1.32" D x 0.19." 5/16" flatted bore.

0.86" D x 0.19," 1/4" bore, 0.2" collar. CAT# GR-11 \$1.75 per set

TWO BEVELED GEARS

Black nylon beveled gears. 31 cog: 1.28" diameter x 0.35" and 24 cog: 1" diameter x 0.35". Both have 0.24" bores. CAT# GR-15 \$1.75 per set

COMPOUND GEAR 21 AND 14 COG

0.77" D x 0.46" 0.53" D x 0.28" 6mm bore. CAT# GR-78 50¢ each



36 COG AND 20 COG

1.48" D x 0.24" On a 0.32" dia. axle attached with a



removable C-clip to a plastic arm. 0.86" D x 0.2," 0.24" bore, 0.2" collar. CAT# GR-22 \$1.75 per set

NYLON GEARS WITH AXLE

Two 22-cog, 1.17" diameter nylon gears with



5.8" stainless steel axle. The 0.25" dia. axle is attached to one gear. The other end is flatted and mates with the other gear.

CAT# GR-40 \$1.00 per set

3 GEAR SET

Compound gear with 0.86" D, 20 cog gear and 1.91"D 59 cog gear with 0.4" dia. bore with brass insert. Overall width. 0.75." Two different pitches: The 20 coa gear mates with the 29 cog gear. The 59



cog gear mates with the 25 cog gear. 29 cog gear is 1.2" D x 0.34" and is attached to a 0.24"D x 2.3" long axle. 25 cog gear is 0.84" D x 0.23" and has a 0.25" flatted bore. 0.2" collar.

CAT# GR-47 \$2.50 per set

3 PAIRS OF GEARS

Three pairs of nylon gears. Each gear mates with its twin (not quite identical twins), but not with gears of other pairs. Includes 2 of each size: 60 cogs -- 1.47" diameter x



0.2" thick. 5/16" diameter flatted bore. 22 cogs --0.56" diameter x 0.35" thick. 5/16" diameter flatted bore. Compound gear with 36 cogs, 0.75" diameter x 0.32" thick and a beveled gear with 29 cogs, 1" diameter x 0.43" thick with 5/16" flatted bore.

CAT # GR-6 \$ 1.75 per set

28 AND 36 COG PULLEYS WITH COG BELT

1.33" D x 0.56." 0.4" dia. flatted bore with set screw. 1.02" D x 0.43," 0.33" dia. flatted bore. 12" circumference cogbelt.

CAT# GR-48 \$ 3.50 per set

SMALL COGBELT W/ 3 GEARS

4.5" circumference x 0.25" wide cogbelt with 0.075" pitch between cogs. Includes an 18 cog, 0.44" diameter metal pulley with 0.24" flatted bore and a plastic compound cogpulley and gear that mates with another plastic gear. The compound cogpulley is 0.68" diameter with a 0.32" flatted bore. It has 28 cogs. It is attached to a 1.18" gear with 28 cogs and mates with another plastic 0.82" diameter gear with 20 cogs. It has a 0.25" bore.

CAT # CGB-34 \$3.50 per set

SHAFT W/ ROLLER, GEAR AND CAMS

5.14" x 0.24" diameter axle with two cams. a rubber roller attached to a spring and a gear. The cams are 0.95" x 0.78" with serrated rubber tread. They have some play in them, by design. The rubber

roller is 1" diameter x

1.18" long. The white nylon gear is 0.7" diameter. The gear and roller are connected by a spring. They each rotate freely on the axle in opposite directions and are fixed in the other direction. Original purpose unknown.

CAT# GR-51 \$2.60 each

5 PIECE COGBELT AND GEAR SET

Two compound gears with cogbelt pulleys and conventional gears, two other mating gears and a cogbelt. All of the conventional gears mate with



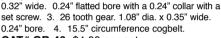
each other. Compound gear #1: 28 tooth gear $(1.17\text{"d} \times 0.27\text{"})$ with 29 cog cogbelt pulley $(0.69\text{" d} \times 0.30\text{"})$ with 0.32" bore. Compound gear #2: 22 tooth gear $(0.92\text{" d} \times 0.34\text{"})$ with 24 cog cogbelt pulley $(0.59\text{"d} \times 0.34\text{"})$ with 0.24" bore. 38 tooth gear: 1.58" d $\times 0.24\text{"}$ 0.25" flatted bore with a 0.25" collar. 30 tooth gear: 1.25" d $\times 0.31\text{"}$ 0.24" $\times 0.25\text{"}$ collar. 30 tooth gear: 1.25" d $\times 0.31\text{"}$ 0.24" $\times 0.25\text{"}$ long flatted bore. Cogbelt: 12" circumference $\times 0.2\text{"}$ wide.

CAT# GR-49 \$ 4.00 per set

4-PIECE COGBELT AND GEAR SET

1. Compound gear with a 27 cog cogbelt pulley and 18 tooth conventional gear. 0.78" dia. x 0.76" overall width. 0.32" bore.

Metal 18 cog cogbelt pulley. 0.44" diameter x



CAT# GR-46 \$4.00 per set

SYNCHRONOUS DRIVE "XL" GEARBELT 1/5" PITCH 1/4" WIDE

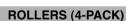
40 Teeth 80XL025 CAT # CGB-40 85¢ each



GEARBELTS FOR ELECTRIC SCOOTERS

HTD 550-5M-15
550mm circumference
15mm wide. 5mm pitch
CAT# CGB-550 \$7.75 ea.

3M 384 02 03 384mm circumference 12mm wide. 3mm pitch CAT# CGB-384 \$6.50 ea.



0.98" diameter x 0.52" wide black nylon rollers. Rotates freely on 0.24" diameter x 1.42" long metal axle.



CAT# WH-14 \$1.25 per pk. 10 for \$ 1.00 per pack

SCOOTER WHEEL WITH LEDS

100 mm polyurethane wheels for motorized scooters with red, green and blue LEDs that light when the wheel is in motion. No batteries; the wheel generates its own power when spinning. Wheels include ABEC-5 bearings. Wheels are clear, with a black hub embedded in the polyurethane. Leds are mounted on the hub. Wheels are 100mm diameter x 25mm thick. Bore is 8mm. Wheels sold individually.

CAT# WH-18 \$5.00 each

100 mm (4") SCOOTER WHEELS

4" dia. x 0.95" thick polyurethane wheels for "Razor-type" scooters. Clear with multi-color flakes. 0.86" dia. bearing races fit ABEC-5 bearings. Bearings not included.

CAT# WH-15 \$1.00 per wheel

PLASTIC WHEELS

Rugged, break-resistant plastic wheels like those found on golf-bags or baby carriages. White spokes and rim/black tire. Two sizes. Both have 11/32" diameter x 1.1" bore.



SPRING WRAPPED SLIP COUPLINGS

Sterling Instr., (SDP/SI) Stainless steel spring wrapped couplings for connecting shafts of two different sizes.

0.25" AND 0.375" BORES

S9941Y-SWC13A46. 1.43" overall length. Outside diameter: 1.25".

0.62" bore depth. Slip at 48 oz in. 6-32 set screws.

CAT# FC-13 \$2.50 each

0.1875" AND 0.25" BORES

\$9941Y-SWC10A34. 1.26" overall length. Outside dia.: 1". 0.550" bore depth. Slip at 20 oz in. 4-40 set screws. CAT # FC-10 \$2.50 each

3" THRUST BEARING

INA BEARING CO # FC66141.6 40 roller bearings in race with outer ring. Dimensions including outer ring: 3.03" O.D. x 2.2" I.D. x 0.16" high. CAT# BR-9 \$ 1.50 each



DC MOTORS

TINY VIBRATING MOTORS

Low voltage, low current miniature vibrating motors. Offset weighted shaft is used in cell phones and pagers for vibrating alert signal. Black rubber boot surrounds the motor and provides a flat mounting surface. Rubber boot is removable. Two styles:

0.24" diameter x 0.5" long without the rubber boot. Shaft adds 0.21" to overall length. Prepped with 0.42" long metal tabs. Operates on 1.5-3Vdc @ 62mA.

CAT # DCM-204 \$1.25 each

CAT # DCM-204 \$1.25 each 10 for \$10.00 100 for \$75.00

10 for \$10.00 100 for \$75.00

0.20" diameter x 0.4" long without rubber boot. Shaft adds 0.26" to overall length. Metal tab terminals. Operates on 1.5-3Vdc @ 110 mA CAT# DCM-255 \$1.25 each



1.5 - 3 VDC MOTOR

Dual shaft motor operates well on 1.5 to 3 Vdc. 3/32" diameter shaft is 0.58" long on one side and 0.4" long on the other. Motor is 1.08" dia.X 1.47" long. Solder loop terminals.

CAT# DCM-75 \$1.35 each • 10 for \$11.50

1-6 VDC MOTOR

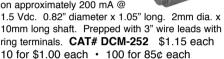
Mabuchi #RF-310T-11400. Smooth, quietrunning DC motor. Typical applications, audio or visual equipment, cd or dvd player. Operates on 1-6 Vdc. 2800 RPM @ 2.5 Vdc @ 0.017 Amps (no-load). 0.96" dia. x 0.84". 0.08" (2mm) dia. x 0.88" long shaft. 6 tapped holes in motor face, M2.0x0.4. Solder-lug terminals. CAT# DCM-230 \$2.75 each • 10 for \$ 2.50 each

DC MOTOR, MABUCHI RE-280

Mabuchi RE-280 SA/ 2865. DC motor typically used in radio-control models and small home appliances. No-load specs: 14,000 RPM @ 6 VDC, 0.28 Amps. 0.95" diameter x 1.35" long. Shaft is 2mm dia. x 12.2mm long. Prepped with wire leads. CAT# DCM-246 \$2.25 each 10 for \$ 2.00 each • 100 for \$ 1.50 each

1.5 - 3 VDC MOTOR

Mabuchi RE-14 (RE-140) 1.5-3 Vdc motor. Operates on approximately 200 mA @



1.5 - 6 VDC MOTOR

KIP # 7E3023L. Low-profile DC motor operates on 1.5 - 6Vdc. 3.5 Vdc / 20 mA no-load rating. 0.98" diameter x 0.42" thick. 0.05" diameter shaft is 0.1". 3.5" wire leads.

CAT# DCM-269 80¢ each • 10 for 70¢ each

1.5 - 6 VDC PRECISION MOTOR

Mabuchi FF-N20PN. Small 1.5 - 6Vdc motor designed for audio, video, photographic and other precision applications. 0.48" x 0.39" x 0.59" long. Shaft is 1mm diameter x 4mm long. No load rating: 14,600 RPM @ 5 Vdc, 0.043 Amps. Solder terminals.

CAT# DCM-254 \$1.35 each 10 for \$1.20 each • 100 for \$1.00 each

3 - 6 VDC MOTOR

Mabuchi RS-550PF.
Good-quality motor with internal cooling fan.
No-load rating: 9000 RPM @
6 Vdc, 1.3 Amps. 1.47" diameter x 2.25" long.
0.13" diameter shaft is 0.63" long.
CAT # DCM-104 \$3.50 each

3-6 VDC MOTOR

Smooth running DC motor, probably designed for cassette player or other audio application. 1.18" diameter x 0.87". 0.08" (2mm) diameter shaft with brass pulley. Solder-holes. Six threaded mounting holes in face of motor.

CAT# DCM-260 \$1.50 ea. • 10 for \$1.25 ea.

3-9 VDC MOTOR W/ GEAR

Johnson Shigoto #350
4.5 Vdc / 290 mA no-load rating.
1.07" diameter x 1.29" long.
Shaft: 0.09" diameter x 0.37" long.
0.29" dia. gear is press-fit onto shaft.
Solder-lug terminals. CAT# DCM-271
95¢ each • 10 for 75¢ each



3-12 VDC MOTOR

Johnson Motor
Powerful permanent magnet
motor. Works well from
3 Volts DC. 1.47" dia. x 2.53" long.
Shaft, 0.125" dia. x 0.37" long. 12,000 RPM @
6 Vdc. 1.2 Amp. Solder lug / 0.187" qc terminals.
CAT # DCM-229 \$3.50 ea. • 10 for \$3.00 ea.

3-24 VDC MOTOR

Johnson Motors 3C4141
High-speed motor with
internal cooling fan for
cordless tool applications.
1.47" diameter x 2.58" long.

cordiess tool applications. 1.47" diameter x 2.58" long. 0.13" dia. x 0.37" long shaft. Operates on 3-24 Vdc. No load specs: 18,500 RPM @12Vdc @ 1.45A.

3-24 VDC MOTOR

Johnson Motors 3E3732 High-speed motor with internal cooling fan for cordless tool applications. 1.47" diameter x 2.85" long.

0.13" dia. x 0.37" long shaft. Operates on 3-24 Vdc. No load specs: 15,200 RPM @ 12Vdc @ 1.0A.

CAT# DCM-266 \$3.50 each

CAT# DCM-267 \$3.50 each

6-12 VDC FAN-COOLED MOTOR

Smooth, powerful DC motor with internal cooling fan. Operates on 3-12 Vdc. 11,500 RPM @ 6Vdc, 1.35 Amps. 1.45" dia. x 2.25" long. 0.125" diameter flatted shaft is 0.7" long. Two threaded mounting holes on face of motor on 1" mounting centers. Solder lug terminals. CAT# DCM-231 \$3.75 each 10 for \$ 3.50 each • 75 for \$ 3.00 each

12-42 VDC DUAL SHAFT MOTOR

Mabuchi#RS-365SH 12-42 Vdc motor. Nominal no-load rating: 10,500 RPM @ 24Vdc, 0.08 Amps. 1.09" dia. x 1.5"

long body. 0.09" dia. shaft extends 0.66" from one side and 0.35" from other side of motor. Two tapped holes (M2.6 x 0.45) on face of motor on 0.63" centers. Solder terminals prepped with 5" leads.

CAT# DCM-234 \$1.75 ea. • 10 for \$1.50 ea.

DC BRUSHLESS MOTOR

12 Vdc, 150 mA (no-load) motor.

Operates efficiently 6-18 Vdc.

Plastic base with metal rotor.

Base is 1.45" diameter with two mounting ears. 1.8" mounting centers. Metal rotor is 1.48" dia.

Overall height of motor, excluding shaft is 0.9." 0.12" diameter shaft x 3.03" long extends from both ends of motor.

CAT# DCM-270 \$3.50 each

6-20 VDC MOTOR

Mabuchi # FK-280PM
1.2" long x 0.95" x 0.72."
0.07" (2mm) dia. x 0.6" long shaft
Operates smoothly over a 6-20 Vdc range.
40 mA @ 12 Vdc. Solder tab terminals.

CAT# DCM-261 \$2.00 each
10 for \$1.85 each • 100 for \$1.60 each

PRECISION DC MOTOR

Faulhaber 2342.39054 Quiet, powerful little DC motor. Operates effectively 3-30 Vdc. 12 Vdc, 70 mA no



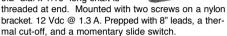
load rating. Overall length without shaft. 48mm. Motor is incased in a black aluminum, heat-sinking sleeve with a 30mm square mounting bracket on one end.

Mounting holes on 25mm centers. 2mm dia. shaft extends 12mm on one end of motor. Other end has 11mm diameter gear with 18 teeth. 90mm wire leads.

CAT# DCM-274 \$6.00 each

12 VDC MOTOR

HTI #HTBRR04206705B-0001 Powerful 12 Vdc motor. 1.7" dia. x 2.62" long. 0.2" dia. x 1.16" long shaft is



CAT# DCM-251 \$3.75 ea. • 10 for \$3.50 ea.

13.2 VDC MOTOR

1.35" diameter x 0.84" DC motor, probably designed for cassette player or other audio application. Motor is wrapped in three layers of a thin metal shield. 0.08" (2mm) dia. shaft with plastic pulley.

Solder-hole terminals. Six threaded mounting holes in face of motor.

CAT# DCM-236 \$1.50 ea. • 10 for \$ 1.25 ea.

12-30 VDC MOTOR

Johnson #340. Operates between 12 and 30 Vdc. 24 Vdc @ 50 mA. no-load rating. 0.94" dia. x 1.15" long. 2mm diameter x 7mm long shaft. Solder lug terminals. CAT# DCM-272 \$1.15 each • 100 for 85¢ each



Operates smoothly on 3-36 Vdc. 24 Vdc, 40 mA, no-load rating. 1.6" long x 0.91" x 0.71. 0.08" (2mm) diameter x 0.53" long shaft.

Solder terminals. CAT# DCM-268 \$1.35 each

AC / DC BRUSH MOTOR

Thermally protected, plastic encased brush-type motor. Rated 120 Vac, 60 Hz, 50W, 0.42 Amps. Operates



CAT# DCM-258 \$4.50 ea. • 10 for \$4.00 ea.

POWERFUL 18 VDC MOTOR

Johnson Electric 700 series High-torque, high-speed motor with internal cooling fan for cordless tool applications, 1.76" dia, x 3.00" long. 0.16" diameter x 0.33" long shaft. No load specs:

22,900RPM @ 18Vdc/ 2.68 Amps. Operates as low as 2Vdc. 0.187" qc / solder terminals. 2 M4.0 tapped holes on motor face on 1.104" centers.

CAT# DCM-265 \$3.50 each

TWO-SPEED VIBRATING MOTOR

3 Vdc (1.5-6 Vdc) motor with a relatively heavy offset weight which vigorously shakes the motor when voltage is applied. Motor is prepped with a 3-position slide switch with positions for off, slow and fast.

Also included are elements of a battery holder. Motor is 1.35" long x 0.94" x 0.72." Shaft is 2mm (0.07") dia. x 0.4" long. Weight is removable from motor shaft.

CAT# DCM-185 \$1.25 ea. • 10 for \$1.00 ea. 100 for 85¢ each • 500 for 65¢ each

DUAL DC MOTORS W/ RUBBER WHEELS

Two motor/ wheel assemblies in white nvlon housings. The bottom part of the wheel outside of the housing. The motors drive 2.5" dia. x 0.75" soft rubber wheels



The wheels have 1.75" diameter metal disc on one side to provide momentum. Housings are 3.4" wide x 2.47" high and are held together with selftapping screws. The two wheels are wired together on 15" leads with a 3-position slide switch in the middle providing two speeds and an off position. At 6 Vdc they turn at approximately 9700 RPM.

CAT # DCM-224 \$4.50 per assembly

DC GEAR

BUHLER DC GEARHEAD MOTOR

Compact, smooth-running Buhler gearhead motor. Operates from 3 - 24 Vdc. No-load rating: 140 RPM @ 18 Vdc / 140 mA. Body: 1.91" x 1.59" x 1.14." 3mm diameter shaft is 0.4" long. 8" wire leads. Three threaded mounting holes on face of motor.

CAT# DCM-257 \$15.00 each

HIGH-TORQUE GEAR MOTOR

Small hightorque gear motor for automotive application made by Denso.



This reversible motor was probably for power windows or seats. The final output is 162 RPM @ 12 Vdc / 1.5 Amps, no-load measurement. The drive shaft is 0.35" diameter x 1.25" long. Overall length is 7.50." 3.75" wide x 2" thick at widest and thickest points. Three tapped mounting holes around the drive shaft. 16" wire leads. The motor is available in LH (left-hand) and RH (right-hand) configurations.

CAT# DCM-243L LH style \$16.95 each CAT# DCM-243R RH style \$16.95 each

3-6 RPM DC GEARHEAD MOTOR

Powerful little 6-12 Vdc gearhead motor. 2.43" long, excluding shaft. 1.3" diameter x 1.15" long gearbox. Flatted 0.2" diameter x 0.39" long offset shaft. Three tapped

mounting holes on motor face. No-load ratings: 3 RPM, 6 Vdc, 75 mA. 6 RPM, 2 Vdc, 85 mA.

CAT# DCM-245 \$13.75 each



WINDSHIELD WIPER MOTOR WITH AUTO-STOP FEATURE

Valeo 15094704 Powerful 12 Vdc windshield wiper motor. 65 RPM @ 12 Vdc, 2.5 Amps

(no-load rating). Diecast metal housing with plastic circuit

housing is 7.75" long x 5" x 3.5." A metal arm with a ball-joint is affixed to the 5/16" drive shaft with a nut. A 10-pin connector and plastic housing containing circuitry are attached to one side of the motor. An interesting and possibly useful feature of this motor is that it always stops in the same position when the power is switched off. If a momentary connection is made, the motor will rotate exactly one revolution. See our web site for diagram of connector and instructions.

CAT# DCM-249 \$16.75 each

AUTOMOTIVE MIRROR ADJUSTER

ASSEMBLY

Automotive sideview mirror assembly consists of two small 12 Vdc



80 RPM, 12 VDC GEAR MOTOR

80 RPM motor operates on 12 Vdc @ 50 mA (no load). Great for displays, robotics and mechanical projects. 0.25" diameter x 0.78" long flatted drive shaft. The shaft extends 1.8" through the back of the gearbox. Attached to the shaft is some kind of electromagnetic or inductive mechanism with its own set of wires. It has no effect on the motor when not energized. Gearbox is 2.73" x 3" x 0.55." Removable composite plastic cover 2.93" x 3.94" x 2.4" deep. Four 10" long wire lead (gn-yel for motor, blk-wht for mystery mechanism).



TWO-SPEED WORM GEAR MOTOR

back cover

removed

Powerful windshield wiper motor for 2000 -2001 Saturn L series automobiles. Two speeds; high speed is 106 RPM at 12 Vdc, 4 Amps. Low speed is 41 RPM at 12 Vdc, 0.91 Amps. 3/8" threaded drive shaft with nut. A 2.25" lever with a universal joint, attached to the shaft, is easily removable. 7" overall length x 3.5" x 4".

CAT # DCM-171 \$15.95 each

AC GEAR MOTORS

30 RPM, 120 VAC MOTOR

HTI # 111-0057. 120 Vac, 3 Watt timing-style motor, 1.95" dia. x 0.81" thick. 12" long wire leads. Mounting ears on two sides. 0.16" square shaft is 0.27" long. UL recognized.

CAT # ACM-105 \$2.50 each

30 RPM AC GEARMOTOR

Merkle-Korff# 3728UP-525 Powerful shaded pole 30 RPM gearmotor. Intermittent duty cycle. Thermally protected. Runs for approximately two minutes before shutdown. 115 Vac, 60 Hz. Idle Amps, 3.8. CCW rotation, facing shaft.



3/8" diameter x 1.1" long shaft. End 0.5" portion of shaft has 5/16" diameter thread. Gearbox is 4" x 2.87" x 0.58" thick with three mounting holes. Motor extends 3" behind gearbox. 0.25" qc/ solder terminals. UL.

CAT# ACM-121 \$12.00 each

145 RPM AC MOTOR

Molon Motor & Coil Corp. 115 Vac, 60 Hz, approximately 100 mA AC gear motor. Approximately 30 Oz/in torque @ 145 RPM Capacitor run motor, supplied with a 1 UF 250 V capacitor. Gearbox is 2.38" square with 4mm threaded

holes in two corners. Shaft is 0.25" diameter (flatted) x 0.45" long. Overall depth of motor body is 1.8." New motor, prepped with connector on 4" leads. CSA.

CAT# ACM-122 \$8.75 each

EPPER MOT

AIRPAX™ # LB82773-M1

2-Phase, bipolar stepper motor. 5 Vdc, 6.25 Ohms/ coil. 7.5 degrees/ step. Four wires. 2.25" diameter x 1". 0.25" dia. x 0.75" long flatted shaft with a

gear attached. Mounting flange with holes on 2.6" centers. Detent torque, 100 g/cm. Holding torque, 1080 g/cm. CAT# SMT-75 \$2.75 each

EPSON STEPPER MOTOR

Unipolar, 6 lead stepper motor. 0.98" diameter x 0.60" high body. 0.08 (2mm) diameter x 0.39" long shaft. Oval mounting flange has holes on 1.30" centers. 5" long leads. CAT# SMT-65 \$1.00 ea. 10 for 85¢ each • 100 for 65¢ each

STEPPER MOTOR W/ **POLYGON MIRROR**

Copal Elec PD60FRB type EX-618-03. Stepper motor with 8 facet (polygon) mirror mounted to the shaft. Designed for laser scanner. 6V DC to 12V DC; 3000 RPM to 11,000 RPM; 0.3 to 0.7 amps. Motor size: 2-1/2" dia x 2"

with a center mounting flange 2 13/16". Flange has four 3/16" mtg holes. Eight leads. Limited data. See our spec sheets for a diagram that describes a drive circuit using Darlington transistors.

CAT# SMT-88 \$6.75 each



0-6 RPM STEPPER / GEARHEAD MOTOR

Airpax # K82239-P2. Pear-shaped, clock-motor-style stepper motor with gearhead. 3600 steps per rev, 6 RPM max.12VDC, reversible. 2.41" x 1.85" x 0.98" thick. Mounting flanges with holes on 1.87" centers. 0.125" diameter x 0.5" long shaft. Eight 7" leads. CAT# SMT-82 \$ 7.00 each

STEPPER MOTOR, 1.8 DEG/STEP

Applied Motion Products # HT17-127.
Precision, high-torque stepper motor. 1.8 Degrees per step.
200 steps per revolution. 8-leads, can be wired in series or parallel.
4 Vdc, 0.95A. 4.2 Ohms.
1.66" square x 1.30" high. Shaft, 0.2" diameter x 0.4" long. Threaded

4-40 mounting holes on four corners of body. **CAT# SMT-87** \$9.25 each

EPSON # SMM-6C

Unipolar, two-phase, 6 lead stepper motor. 0.98" dia. x 0.60" high body. 0.08" (2mm) dia. x 0.39" long shaft is fitted with 0.31" diameter gear with 12 teeth. 15 degree per step. Oval mounting flange has holes on 1.60" centers.16" long leads.

CAT# SMT-42 \$1.50 each

FUJI #SMS40-2401-A

12 Vdc, six-wire, unipolar stepper motor. 70 Ohm coils. Motor is 1.65" diameter x 0.58" thick. 0.12" (1/8") dia. x 0.42" long shaft. 1.65" square mounting bracket. 19" leads. CAT# SMT-76 \$ 1.50 each

AIRPAX #M82101-P1

5Vdc, two-phase, unipolar stepper motor. 20 Ohms/coil.
7.5 Degrees/step. 1" diameter x
0.5" thick. Mounting flange w/holes on 1.35" centers. 6 leads, 2" in length.
2mm (0.08")diameter shaft is 0.35" long. 0.32" dia. x
0.15" bushing. CAT# SMT-80 \$3.00 each

NIDEC # 44F5098007

Unipolar, four phase stepper motor. 25 steps, 14.40 degrees/step. 1.95" diameter x 0.9" high.
Attached to 0.22" long x 0.15" (4mm) diameter shaft is a 0.58" diameter aluminum pulley. Nine, two inch wire leads.

CAT# SMT-56 \$1.50 each

PRECISION HIGH-TORQUE STEPPERS

Lin Engineering Mfg # 4118S-62-07 1.8 Degrees per step, 2-phase stepper motor. 24 VDC, 2.5 Amps. 0.6 Ohm per phase. Phase Inductance, 0.93 mH. Torque 45.0 Oz-In. Shaft 0.190" diameter x 0.5" long. NEMA size 17 frame, 1.67" square x 1.33" high. Four 12" leads. Weight 0.50 Lbs.

CAT# SMT-86 \$ 9.50 each

Lin Engineering Mfg # 4218L-01-11
1.8 Degrees per step, bi-polar
stepper motor. 24 VDC. 2.0 Amps.
1.2 Ohm per phase. Phase
Inductance, 2.0 mH. Torque 75 Oz-in.
Flatted shaft: 0.190" dia. x 0.9" long.
NEMA size 17 frame, 1.67" square x
1.83" high. Four 12" leads. Weight, 0.75 lbs.

CAT# SMT-85 \$12.40 each

UNIPOLAR 2-PHASE STEPPER MOTOR

Minebea, NMB # PM55L-048.

20 Ohms per phase. 48 steps
per revolution (7.5 deg per step).

2.17" diameter x 0.98" body. Mounting
flanges with holes on 2.55" centers. 0.16" dia.

shaft extends 0.84" on one side of motor and 0.4" on
other side with brass gear attached. Six 8" wire leads.

See our web site for wiring diagram and other specs.

CAT# SMT-81 \$3.00 each

LINEAR ACTUATOR FOR AUTO DOOR LOCK

12 Vdc motor-drive actuator for automotive door locks. Nylon plunger moves 0.75". Push or pull, depending on polarity. Includes mounting hardware and a 10" metal extension rod which fits through the hole in the end of the plunger. Overall dimensions of actuator assembly (retracted): 8.42" x 2.35" x 1.15". Rubber boot protects against moisture and dust. Pigtail leads. CAT # DLA-1 \$5.50 each

PURETRONICS CLEANERS & SPECIALTY PRODUCTS

CONTACT CLEANER Quick penetrating, zero residue contact cleaner removes oils, greases, grime, dirt silicones, fluxes and other contaminants. Evaporates quickly. Safe on plastics and metal materials. Ozone friendly containing no CFCs or HCFCs.

5 5 07

CAT# PTR-3000 \$4.50 each 12 cans \$50.40 (\$4.20 each)

12.25 oz

CAT# PTR-3500 \$6.60 ea. 12 cans \$75.60 (\$6.30 each)

CONTACT CLEANER AND LUBRICANT, 13 0Z

Removes oils, dirt and other contaminants and leaves a thin coating of silicone to lubricate and protect. Safe on plastics. Ozone friendly. 13 oz aerosol can.

CAT# PTR-5000 \$6.50 each

CIRCUIT FREEZE

Helps locate thermal intermittent defective resistors, capacitors and semiconductors. Helps locate cold solder joints and pc board cracks. 10 oz trigger-control spray can.

CAT # PTR-7400 \$ 8.50 each

FLUX REMOVER, 13 OZ CAN

Removes most types of flux including rosin and rosin based no-clean flux. Dissolves and flushes away fluxes, oils, grease, grime, dirt, silicones and other contaminants. Evaporates quickly. Safe on plastic and metal surfaces. 13 oz aerosol can.

CAT# PTR-6000 \$6.35 each

MANUFACTURERS

We Purchase Excess Inventories.
CALL, WRITE, E-MAIL
or FAX your list.



LIQUID CRYSTAL DISPLAYS (LCDs)

16 CHARACTER X 1 LINE

Varitronix #MDL16166 16 character x 1 line. 5 x 8 dot characters. 2.55" x 0.51" viewing area. Module size, 3.17" x 1.43". Includes hook-up sheet.

CAT # LCD-100 \$5.00 each

16 CHARACTER X 1 LINE LCD W/ LED BACKLIGHT

ODT, Orion or Truly Brand. 16 character x 1 line LCD with LED backlight. Module size: 3.16" x 1.42". Display size: 2.6" x

0.56". Prepped with a 2" ribbon cable terminated with a 15 pin, single row socket connector (0.1" spacing). Removed from new, working equipment. Some minor scratches. Includes hook-up sheet.

CAT# LCD-106 \$6.75 each

16 CHARACTER X 4 LINE

Samsung# UC16401 Module size: 3.42" x 2.36" x 0.42". Viewing area: 2.43" x 1".

Character size: 4.75mm x 2.95mm. 5 x 8 dot format. Includes hook-up diagram.

CAT # LCD-87 \$11.25 each

20 X 1 LARGE CHARACTER LCD

Samsung # UC-20102-GNAR5 Large 5 x 7 dot



characters, 0.46"H x 0.26" W. Blue characters on gray background. 6.1" x 0.64" viewing area. 7.38" x 1.32" module size. Includes hook-up sheet.

CAT # LCD-76 \$ 6.00 each

20 CHARACTER X 4 LINE W/ LED BACKLIGHT

Samtron UC 20402 TLAT5-H Module size: 3.88" x 2.37" x 0.47". Viewing area: 3" x 1". Character size: 4.7mm x 2.90mm

LED backlight. Includes hook-up diagram.

CAT # LCD-89 \$ 24.80 each

24 CHARACTER X 1 LINE

Wintek # WDC2401P-1GNNA. Module size: 4.25" x 0.79" x 0.3" Display size: 3.5" x 0.4" Built-in driver. 14 pin

male header, pins on 0.05" centers. Includes hook-up diagram.

CAT# LCD-111 \$1.85 ea. • 10 for \$1.50 ea.

24 CHARACTER X 2 LINE LCD W/ EL BACKLIGHT, USED

Module size, 1.53" x 4.7". Includes a detachable 7" ribbon cable



connector. 5" leads on the el terminals. Removed, in good condition, from used equipment.

CAT# LCD-107 \$4.00 ea. • 10 for \$ 3.50 ea.

24 CHARACTER X 2 LINE LCD WITH

EL BACKLIGHT

EDT (Emerging Display Technologies) # EW24210BFW



LCD color, blue. EL backlight. Includes hook-up sheet. CAT# LCD-113 \$7.00 each

40 CHARACTER X 2 LINE LCD

Goldentek # GC-4002C0. Yellow/areen reflective LCD. 5x 7 dot character. 3.20 mm wide x 5.55mm high characters. 7.15" x 1.28" x 0.27" thick. 6" x 0.65" viewing area. Prepped with 8" long ribbon cable terminated with standard 14 cond. (7x2) socket connector. Includes spec/hook-up sheet.

CAT# LCD-105 \$6.50 each

40 CHARACTER X 2 LINE W/ EL BACKLIGHT

Deneitron LM24B2C40ECB-HT Module size: 7.18" x 1.32" x 0.38".

Viewing area: 6.08" x 0.64". Electroluminescent backlight. Includes hook-up diagram.

CAT # LCD-90 \$ 14.00 each

40 CHARACTER X 4 LINE LCD

Hantronix # HD40416C-5-S00F 5 x 7 dot characters. Module size: 7.42" x 2.13." Display size: 5.78" x 1.15." Includes spec/ hook-up sheet. CAT# LCD-112 \$ 8.00 each

256 X 64 GRAPHIC LCD PANEL

Epson # EG2404Y-AR Module size: 7" x 2.74" x 0.4". Viewing area: 5.47" x 1.5". Includes hook-up diagram. **CAT # LCD-92**

\$12.00 each

256 x 128 LCD PANEL

Hvundai # HG25604 5.8" x 4.58" graphic display module with SED1330F onboard controller. Viewing area is 5" x 2.75". 5 Vdc logic. 18 Vdc

LCD voltage. Includes hook-up diagram.

CAT # LCD-101 \$18.50 each



640 x 400 LCD W/ EL BACKLIGHT

Matsushita #EDM-LG64AA44D
8.25" x 5.2" graphic
display module
with electroluminescent
backlight. Monochrome display
was originally
built for a military
application 9.64" x 5.95" module size.

Includes hook-up diagram.

CAT # LCD-103 \$ 7.75 each

640 x 480 LCD W/ CCFT BACKLIGHT & INVERTER

Seiko Epson # ECM-A0526 7.07" x 5.3" graphic display module with 2-lamp CCFT (cold cathode fluorescent



tube) backlight. Includes inverter to drive the backlight. Module size: 10" x 6.25"

CAT # LCD-104 \$ 11.00 each

KITS

A NOTE ABOUT KITS

Kits cannot be returned or exchanged once assembly has begun.

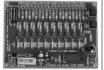
All parts supplied EXCEPT batteries.

L.E.D. FLASHER KIT

Two L.E.D.'s flash in unison when a 9 volt battery is attached. This kit includes a p.c. board, all the parts and instructions to make a simple flasher circuit. A quick and easy project for anyone with basic soldering skills. CAT# LEDKIT \$2.25 each • 100 for \$2.00 each

10 CHANNEL LIGHT EFFECT GENERATOR

Velleman # K8044. Create eyecatching effects for advertisement lighting, parties, discos, etc. Kit provides 10 12 Volt



400 mA outputs to control light bulbs, LEDs, or solidstate relays. 10 pre-programmed, selectable light patterns, push-button controlled. Adjustable speed. Number of channels adjustable. LED indication for every output. Power consumption, 4 Amp max. 5.5" x 3.9" x 1.1" Requires 12 Vdc power supply, solid-state relays for large loads.

CAT# MK-44 \$36.95 each

LED CHASER KIT

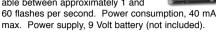
Build this variable speed led chaser. 10 leds flash sequentially at whatever speed you set them for. Easy to build kit includes pc board, parts and instructions. Ideal for special lighting effects, costumes, etc. Operates on 3 to 9 volts. PC board is 5" X 2.25".

CAT# AEC \$6.50 each

10 for \$62.50 • 100 for \$600.00

DUAL WHITE LED STROBOSCOPE KIT

Velleman Kits# MK-147
Two bright white LEDs flash to create a great attention grabber for displays, parties, scale models, to observe moving parts, etc. Slow/ fast selector and speed adjustment trimmer. Adjustable between approximately 1 and



CAT # MK-147 \$10.95 each

DC TO PULSE WIDTH CONVERTER

Velleman # K8004

Ideal for the accurate control of DC motors, lighting levels and small heaters as well as other applications. The circuit converts DC voltage into a series of pulses, the duration of which is directly proportional to the voltage. Minimizes power loss in the control circuit. Overload and short circuit protection. Input Voltage: 2.5 - 35 VDC. Maximum output 8-35 Vdc, 6.5 Amps.

CAT # MK-804 \$22.95 each

INTERVAL TIMER KIT

Velleman # MK111. For intermittent operation of circuits and equipment. Use for blinking light control, slide projector control etc. Pulse time adjustable between 0.5 and 5 seconds. Pause time adjustable between 2.5 and 60 seconds. 3 Amp output relay. Power supply 12-15 Vdc @ 100 mA (not included).

CAT # MK-111 \$ 9.95 each

STROBE KIT

Variable rate strobe kit, flashes between every 2 or 3 seconds. Our kit will operate on either 12 Vdc or 4.5 to 6 Vdc depending

upon how you decide to wire the circuit. Comes complete with P.C. board and full instructions for easy assembly. **CAT# STROBE-1** \$7.50 each

STEPPER MOTOR CONTROLLER KIT

Vary the speed and direction of a stepper motor. Moves the motor one step at a time or maintains a



constant speed. A row of leds visually indicates the stepping motion of the motor. Includes PC board, parts, stepper motor and instructions. Requires external 12 Vdc power source (not included). Ideal for robotics and rotating displays.

CAT# SMKIT-2 \$25.00 each

RUNNING MICROBUG

Velleman# MK-127 Bug-shaped miniature robot. Driven by two miniature motors, its photocell sensors seek light. Stops in total darkness. LED eyes



indicate driving direction. 3.93" x 2.36." Operates on two AAA cells (not included).

CAT # MK-127 \$14.95 each

MOTOR SPEED CONTROL MODULE

For 3-6 Vdc motors @ 0.5 amps. Features a pulse width modulation design that can vary motor speed from 5% to 95% with little loss of power. Use with any 3-6 Vdc power source. Does not include batteries or motor.

CAT# EM-114 \$3.50 each

CRAWLING MICROBUG

Velleman# MK-129 Two-speed miniature robot. Driven by two miniature motors, its photocell sensors seek light. Stops in total darkness LED eyes indicate driving direction. 4.5" x 3.43." Operates on two AAA cells (not included). CAT# MK-129 \$19.95 ea.

GEARBOX 2 IN 1, MOTOR GEARS & ACCESSORIES

Velleman Kits # KNS7. Fun with gears and motors. Small DC motor, metal bracket and axles, and an assortment of small plastic gears and collars to produce a gear train of various ratios. CAT# GR-84 \$9.75 each

STEREO PRE-AMPLIFIER KIT

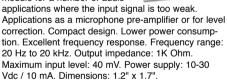
Low-noise stereo pre-amplifier. Boosts input signal in audio applications. 1K ohm input impedance. Frequency range 40Hz-30Khz(-3dB). Adjustable gain, 40 dB max.

PCB dimensions: 1.7" x 2.6." Requires 10-30VDC/ 5 mA power supply (not-included).

CAT# MK-2572 \$17.50 each

UNIVERSAL MONO PRE-AMPLIFIER KIT

This kit was developed as a premodule for a number of audio



CAT# MK-1803 \$9.98 each

DC MOTOR SPEED CONTROL KIT

Easy to build kit allows you to control the speed and direction of 6-12 vdc electric motors or control the intensity of 6-12v incandescent lamps. Includes pc board, parts, instructions and dc motor.

ADJUSTABLE LED FLASHER KIT

Two potentiometers adjust the flash rate of two LEDs. 9V operation. Battery not included. CAT# MK-1021

CAT# MSC-6 \$15.00 each

\$4.95 each

SOLDERLESS KITS FOR KIDS

WALKING DINOSAUR KIT

This dinosaur walks, wiggles its head and tail and blinks its LED eyes. May require adult supervision, since it has a lot of parts including a motor and gears. It's fun to watch and can be painted to suit your taste. Operates on 2 AA cells (not included). CAT # MK-103 \$ 9.95 each

BIG WHEEL RACER KIT

Easy to build racer kit provides hours of enjoyment. The car is over 6" long and is designed to be assembled without soldering. The front and rear wheels have rubber tires. It can go

straight or in circles. The small DC motor is powered by two AA batteries (not included).

CAT # MK-102 \$6.95 each

CRYSTAL RADIO KIT

How long has it been since you've seen a crystal radio?

An excellent educational toy, the following radio kit makes a great gift for children ages 8 and older. Built on a plastic breadboard, they

don't require soldering and are fun to listen to.

CAT# SK-103 \$5.95 each

INFRARED REMOTES

Pioneer #CU-PD048 New infrared remote control for Pioneer multi-play cd player. Requires two AAA batteries (not included).

CAT# IR-14

\$2.00 each

Dell W3000. New, IR remote control for Dell W3000 LCD television. Requires two AAA batteries (not included).

CAT# IR-15

\$4.75 each

IR REMOTE CONTROLS

Multi-button infrared remotes. Unknown application. Good source of parts, IR led, hand-held case with buttons and battery compartment for two AAA cells. Two styles:

Black, 7.37" x 1.97" x 0.64" **CAT# IR-16**

2 for \$1.00

Taupe, 6.45" x 1.91" x 0.62" **CAT# IR-18** 2 for \$1.00



AC POWER CORDS

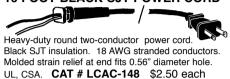
2 CONDUCTOR

12 FOOT BLACK POWER CORD

12 foot black 18/2 conductor power cord. SPT-2. 105 deg insulation. Molded polarized plug. Hanked. UL, CSA.

CAT# LCAC-141 \$1.00 ea. • 10 for 85¢ ea. 100 for 65¢ each • 1000 for 50¢ each

16 FOOT BLACK SJT POWER CORD



2-CONDUCTOR POWER CORD WITH THUMBWHEEL SWITCH

7 foot black 2 cond./18AWG power cord. SPT-2 insulation. In-line thumbwheel switch rated (6 Amps / 125 Vac) is 16" from the end of the cord. Molded polarized plug one end. Stripped and tinned ends. Hanked. UL, CSA. CAT# LCAC-142 90¢ each · Case of 250 70¢ each

2 CONDUCTOR UNIVERSAL POWER CORD

Fits many laptops and video games. Sometimes referred to as "Panasonic-type" cord. Two holes on 0.335" centers. 7 Amps.

1000 for 55¢ each

6' White cable, polarized. CAT# LCAC-126 \$2.00 each 10 for \$1.75 each

◂ polarized

SPECIAL! - 6' Black cable, polarized. CAT# LCAC-144 \$1.75 each 100 for \$1.35 each • 500 for \$1.15 each 1000 for 90¢ each

6' Black cable, non-polarized. CAT# LCAC-390

 \odot non-polarized

\$2.00 each • 10 for \$1.75 each

IEC POWER CORD W/ EURO PLUG

6' black, 3-conductor power cord. Standard IEC socket on one end. SP-24L, European two pin plug on other end.

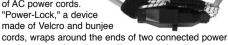
CAT# LCAC-159

\$3.25 each

10 for \$3.00 each • 100 for \$2.50 each

CORD DISCONNECT PROTECTOR

Prevents disconnection \(\) of AC power cords. "Power-Lock," a device made of Velcro and bunjee



cords to keep them from pulling apart when in use. Ideal for power tools.

CAT# ST-133 \$1.00 each

3 CONDUCTOR



3 FT POWER CABLE, 14/3 BEIGE

14/3 SJT. Molded three-prong grounded plug one end. Stripped, pigtail leads other end. 0.37" nominal o.d.. UL, CSA. CAT# LCAC-151 \$2.50 ea. 10 for \$ 2.25 each • 100 for \$ 1.75 each

7' FLAT POWER CABLE, BEIGE 18/3

18/3 SPT-3 flat cord. Molded three-prong. right-angle plug one end. Other end prepped with 0.25" female quick-connects and ring terminal on ground. 60 C degree. UL, CSA. CAT# LCAC-152 \$2.50 ea. 10 for \$ 2.25 each • 100 for \$ 1.75 each

DETACHABLE POWER CORDS



Standard IEC (SPH-386) power cord. IEC female connector one end, standard 3 prong grounded a.c. plug other end.

5' BLACK 18/3 CAT# LCAC-115 \$2.50 ea. 10 for \$20.00 • 100 for \$150.00

6' BLACK 18/3 SVT, UL, CSA. CAT# LCAC-60 \$3.00 each 10 for \$25.00 • 100 for \$175.00

IEC EXTENSION CABLES

3' black 18/3 SJT cable. Male IEC to female IEC. 0.32" o.d. UL, CSA. CAT# LCAC-135 \$1.50 each 10 for \$1.25 each 100 for \$1.00 each

4' black 18/3 cable. Right-angle plug one end. UL, CSA. CAT# LCAC-138

\$2.50 each 10 for \$2.00 each



10' 16/3 EXTENSION CORD

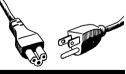
Grounded. Water-resistant. Suitable for use with outdoor (appliances. SJTW insulation. Low-profile, right-angle plug one end, standard socket on other end. Rated 13 Amps, 125 Vac.

1625 Watts. UL, CSA. CAT# EXT-10 \$3.95 ea. 10 for \$ 3.75 each • 40 for \$ 3.45 each

3-CONDUCTOR LAPTOP POWER CORD

6 ft., 3-conductor, grounded power cord. UL, CSA.

CAT# LCAC-166 \$3.00 each 10 for \$2.50 each



3 PRONG AC PLUG

Leviton # 515PR. Black 15 Amp grounding 3-wire AC plug. Rubber body is dirt and moisture resistant.

Tough elastomeric husk. Built-in cord grip adjusts to 0.245" to 0.655" cords,

18-3 to 12-3. UL, CSA.

CAT# ACP-8 \$2.50 each • 10 for \$2.25 each

A.C. SOCKETS

15 AMP GROUNDED OUTLET

Leviton# 1374-001 or equiv.
Black, three-conductor outlet. Snapmounts in 1" square cutout. Rated
15 Amps @ 125Vac. Two 6" 14 AWG leads
and one 6" 16 AWG ground lead. UL, CSA.

CAT# ACS-31 \$1.20 each • 100 for 95¢ ea.

3-PRONG GROUNDED SOCKET

Leviton # 114. Heavy-duty 3 prong socket for AC power cords.
For 0.396" to 0.562" diameter cords. 18-14 AWG stranded conductors. Rubberized shell resists chemicals and remains flexible even in low temperatures. UL. CSA.

CAT # ACS-27 \$3.50 ea. • 10 for \$3.15 ea.

SNAP-IN NEMA 15-5 RECEPTACLE

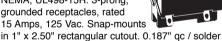
Power Dynamics # PD-15-2. NEMA 5-15 receptacle for use with 14 or 16 AWG wire. Black nylon two-piece receptacle. Insulation displacement terminals automatically make contact with 14-16 AWG solid

wire when back is clamped on. Or, can be used with 4.8mm to 5mm Faston tab terminals on 14 to 16 AWG stranded or solid wire. Snap-mounts into 24mm square chassis cutout. Rated 15 Amps / 125 V. UL, CSE.

CAT# ACS-39 \$1.00 each • 10 for 90¢ ea. 100 for 80¢ each • 1000 for 55¢ each

DUAL AC RECEPTACLE, SNAP-IN

Inalways #0719. Black thermoplastic dual AC receptacle. NEMA, UL498-15R. 3-prong, grounded receptacles, rated 15 Amps, 125 Vac. Snap-mount



terminals. UL, CSA. **CAT# ACS-40** \$1.35 each

100 for \$1.00 each • 500 for 75¢ each

STRAIN RELIEFS

Prevent	power cords		9	• •			
from pulling, pushing, or twisting in chassis hole.							
CAT#	WIRE TYPE	HEYCO# or equiv.	HOLE SIZE	PRICE			
SR-40	flat 18/2 SPT-1	4P-4	.45"	10/ \$1.00			
SR-60	flat 18/2 SPT-2	4N-4	.50"	10/ \$1.00			
SR-35	flat 18/2 SPT-2	4K4	.50"	10/\$1.00			
SR-50	18/2, 18/3, SV, SVT round	5L-1	.50"	10/ \$1.00			
SR-18	round, 0.2" dia.	5P3-4	0.5"	10/ \$1.00			
SR-70 S\	18/2, 18/3, 16/2, 6 /T, SJO round	6/3 SV, 6N-4	.65"	10/ \$1.50			
SR-80 SJ	18/3, 16/3, SJ, IT, SJO round	6N3-4	.625"	10/ \$1.50			
SR-34	flat up to 0.29" X	0.65" SR34-2	0.875"	2/\$1.00			
SR-52	Flat SPT-2, HPN	SR 5W-1	0.562"	10/\$1.00			
SR-54	Right-angle. For f	lat SPT-1.					

SR 13-1 0.437" 10/\$1.00

ADAPTORS

AC PLUG ADAPTER

RATED: 125 Vac @ 15 amps. Turns 3-prong AC plugs into a 2-prong, polarized plug. CAT# ACP-2 2 for \$1.00



GROUNDED THREE OUTLET ADAPTOR

Hard rubber, 3-way grounded power tap. Rated 15 Amps @ 125 Vac. UL, CSA. CAT# TPA-1 \$2.00 each • 10 for \$ 1.85 each

RFI / EMI FILTERS

1 AMP FILTER

Schurter #5110.0143.1. Snap-in IEC power entry module with 1 Amp RFI filter. Snap-mounts in 1.1" x 0.85" cutout. New modules, prepped with wire leads. UL. CAT# FTR-40 \$1.50 each 10 for \$1.30 each • 100 for \$1.05 each

10 AMP FILTER

Corcom 10EB1. Filter with IEC power entry module.
Rated 10 Amp, 120/250 V 50-60 Hz.
1.09" x 0.80" x 2" long (length includes 0.25" qc/ solder terminals). New filter, prepped with easily removable wire leads. UL, CSA, DVE.

CAT# FTR-43 \$ 2.25 each

OPTO SENSORS

OPTICAL SWITCH WITH INTERRUPT MECHANISM

Omron U-shaped opto-switch with a 0.2" gap. A spring-loaded plastic arm with a kind of flag at the end interrupts the switch beam. The arm

slides back and forth through a teflon channel.
Assembly mounted on a metal bracket, 2.32" x 1.1."

CAT # OSU-45 75¢ each

Telefunken# TCST 5123. 0.12" gap. 0.25" high. CAT # OSU-37 4 for \$ 1.00 Tube of 60 for \$ 9.00



PHOTOCELL DUSK/ DAWN LIGHT SWITCH

GE Model #5216-9D.
Raintight outdoor, photoelectric light control turns
lights on at dusk, off at dawn.
For 120 Vac, 1200W maximum

incandescent, 1000 VA max ballasted lighting. Swivel mount. Standard threaded bushing mount fits most electrical junction boxes. 4" x 1.5" x 1.25." UL listed. CAT# PC-6 \$4.25 each

OPTO INTERRUPTER, SHARP GP1S525

Sharp GP1S525. U-shaped, slotted opto sensor with phototransistor output. 5mm gap. PC leads. CAT# OSU-55 2 for \$1.00



AUTOMOTIVE POWER CORDS W/ CIGARETTE LIGHTER PLUGS

3' CIG-LIGHTER EXTENSION WITH BATTERY CLIP

Fused cigarette lighter plug on a 3' cord with a cia-lighter socket and U-shaped-type battery clip at the opposite end. Battery clip fits some 12 Volt lead-acid batteries. Wire is black 18/2, SPT-1.



CAT# CLP-78 \$3.00 each

12' HEAVY-DUTY CORD

Very heavy-duty black neoprene coil cord. Stretches up to 12 feet. 16 AWG, two-conductor cord with cigarette lighter



plug on one end. Nominal o.d. is 0.24." Cord terminates to a 25" non-coiled cord with 1.25" stripped and tinned pigtails. CAT# CLP-69 \$7.50 each • 60 for \$ 6.75 each

CIGARETTE POWER COIL CORD W/3 **COAX PLUGS**

Cigarette lighter power cord with three of the most popular coax power plugs, 1.3mm, 2.1mm and 2.5mm I.D.s The coax power plugs are on 3.75"cables with



polarized connectors that mate with the connector on the main cord. The coil cord stretches to 6 feet and has a fused plug with a red LED indicator.

CAT# CLP-75 \$3.85 each

10 for \$ 3.50 each • 100 for \$ 2.50 each

15 FT AUTO **POWER CORD**

15 foot, 16 AWG, 2-conductor, SPT-2 cord. CAT# CLP-76 \$3.75 each



CELL PHONE CASES

CELLPHONE CASE, CACHET

Attractive, ballistic nylon case fits most cell phones, small digital cameras and MP3 players. Includes a removeable carabiner that lets you attach keys or other items to the case. A nylon clip on the back of the case can be used as a belt

clip or attachment to a purse. Multiple pockets allow you to carry more than just a phone perhaps your MP3 player, or other electronic devices. Magnetic front pocket flap for easy access. Larger middle pocket has a zipper for more security.

CAT# CSE-44 \$3.50 ea. • 10 for \$3.00 ea.

CELLPHONE CASE, SAMSUNG

Small leather cell phone case protects your Samsung SGH-X426/ SGH-X427 cellular phone! Features a removeable swivel belt clip that really stays on your belt!

CAT# CSE-43 \$1.25 each

CELLPHONE CASE

Protect your cell-phone with this durable leather case. Made for Sony and Ericsson but fits most cell/flip phones up to 4" long. Large, hook-and-loop closing flap. Smooth inner-lining. Metal belt clip. CAT# CSE-42 \$2.50 each



LEATHER CELL PHONE CASE

With clear plastic face, belt-clip and braided nylon strap with clip. Designed for a non-flip style Motorola cell phone. It works fairly well for the small Nokia and other similar phones less than 4.75" long.

CAT # CSE-30

2 for \$1.00 • 10 for \$4.00



12 VDC BEND-A-LI

Turn any 12 Vdc automotive receptacle into a flexible light source. Black lamp with 360° turning capability. Multi-direction flexible neck. On / Off switch. Easy to replace 5W halogen bulb. 23" long gooseneck.

CAT# BL-23 \$12.95 each

800 MA

Run audio, communications equipment and other battery operated devices from your car cigarette lighter. Regulated DC-DC

converter supplies selectable voltages from 1.5 to 9 Volts. Includes six different coax power plugs to fit most devices. Plugs are stored in compartment inside converter

CAT# APC-803 \$6.75 each

12 VDC 2.5 AMP POWER ADAPTER

Provides regulated 12 Vdc @ 2.5 Amps. Plugs into automobile cigarette lighter socket. 6 foot cord with 2.1mm coax power plug, center positive. CAT# ACP-25



NOKIA 5100/6100 "HANDS-FREE" CAR UNIT

Ora #THFN61 Travel Talk™. Speakerphone for Nokia 5100 and 6100 series cellphones.

Charges and powers your phone

while it is in your car. Features a high-powered speaker and a highquality built-in microphone to enable clear, sharp

conversations. Includes a phone cradle and instructions. Note: These are brand-new units that have not been retail packaged.

CAT# NOK-12 \$3.75 each



"CLAM SHELL" MOUNTING BRACKET

A heavy-gauge steel bracket designed for mounting communications equipment in a vehicle. Adjustable over 90 degrees. Pre-drilled holes in top and bottom plates. Includes screws.



CAT# CMT-2 \$ 1.50 each

FLEXI-GOOSENECK MOUNTING BRACKET

Ora "Flexineck™" #CTS 802. 8" high flexible metal mounting bracket. Ideal for automotive audio or communications equipment. The threaded mounting base accepts the gooseneck from the top and side, allowing for vertical or horizontal positioning. Bottom plate has raised feet for installation on carpeted surfaces. Includes a removable top plate and mounting hardware.

CAT# FMB-11 \$8.50 each

SATELLITE DISH MOUNTING BACKET

Sturdy metal bracket for satellite dish (or any other device) with 2" pole diameter (actual o.d. is 1.67"). Curved adjustable arm extends 18" max. from mounting surface. Mounting footprint is 5.25" x 7.00." Grey enamel finish.

CAT# BKT-3 \$4.95 each

AUTOMOBILE CD TO CASSETTE ADAPTOR

O O If you have a cassette player in your car, this device allows you to play your portable CD player, IPOD or MP3 player through your car radio. Plugs into the cassette slot and transfers the audio signal through the tape heads.

CAT# CAS-3 \$4.50 each

MODULAR CD RACK

Organize your CDs or CD ROMs with these highimpact, black plastic CD storage racks. Slots for 12 jewel cases. Each 12 CD module can interlock vertically and horizontally with other modules. Can be freestanding or wall mounted.

CAT# CDR-3 \$2.50 ea. • 10 for \$2.20 ea.

MULTI-MEDIA RACK

Desktop flip rack keeps all of your important media in one place. CD's 3.5" floppies and ZIP discs all can be stored in the same rack. Outer rails hold

16 CD/CD ROMs.

Inner rails hold 20 3.5" floppy discs, or 3 ZIP discs and two M.O. discs. Individually boxed.

CAT# CDB-18M \$1.75 each

10 for \$1.50 each

MICA SHEET

2.25" x 1.77" x 0.035" thick mica composite sheet. An old-school electrical insulating material, also used as window material in wood-burning



stoves. Also known as "isinglass." The opaque blotchy, brownish-gold look might be useful in art/decorative applications. Six piece minimum. CAT# MCA-2 6 for \$2.00 • 100 for \$25.00

LUBRICANTS FOR BRASS AND WOODWIND INSTRUMENTS

Light-duty "Premium" lubricants by Buffet and Besson for brass and woodwind musical instruments. A clear oil, ideal for any light-duty metal-on-metal lubrication. The Key Oil appears to be of heavier

viscosity than the others. 1.6 fl oz. plastic bottles

CAT# KOL-1 BORE OIL 75¢ each CAT# KOL-2 **KEY OIL** 75¢ each CAT# KOL-3 SLIDE OIL 75¢ each

PADDED NYLON CD CASE

Ballistic nvlon case will hold three CDs in their plastic jewel cases (more in slim-line case or sleeves). Padded on all sides. "ThinkPad" logo engraved in leatherette closure flap. Flap is secured with hook & loop fastener strip. Interior dimensions:

5.65" x 5.75" x 1.25." Black.

CAT# CSE-41 \$1.65 ea. • 10 for \$1.50 ea.

SEATBELT COVER AND **CELLPHONE CASE**

A synthetic sheepskin padded cellphone case that can be attached to an auto seatbelt or a luggage strap. Made by Samsonite™, it has a net pocket suitable for cellphones. Black leatherette and nylon front. 6" x 3".

CAT # SBC-20 75¢ each 10 for 60¢ each • 100 for 45¢ each

64 CD WALLET, TARGUS

cdProjects™ by Targus #CCBS64. Rugged zippered case with 64 sleeves for CDs. Good-looking blue/black/grey color scheme.

11.75" x 6.75" x 2.25." CAT# CSE-64

\$6.95 each 3 for \$6.45 each



LANYARD WITH QUICK-RELEASE **KEYRING**



Black nylon lanyard with 1" diamete keyring on quick-release buckle. CAT# LND-1 \$1.50 each





PRECISION MICRO AIR PUMP

Sensidyne # AA060INSNF40VC2.
Precision, miniature air pump.
Operates on 6 Vdc, 80 mA (no load). Minimum free flow,
1460 cc / min. Minimum Vacuum
@ dead head, 9.1" HG (307 mbar).
1.55" x 1.22" x 0.68." Ports for 1/8"
(3.2mm) ID tubing.



CAT# PMP-6 \$14.75 each

DC - DC CONVERTER

TDK # CE-0381 Input: 5 Vdc Outputs: -10 Vdc, -19 Vdc, -26 Vdc, and 6 Vac w/ center tap. 1.23" x 0.9". Includes hook-up diagram.

CAT # DC-32

2 for \$1.00 • 100 for \$25.00



E

23" 5-SECTION ANTENNA

5-section telescoping antenna. 23" extended. 7" contracted length. 180 degree swivel base. CAT# ANT-31 \$1.15 each 10 for \$1.00 each • 100 for 75¢ each

LOW WATER ALARM

Designed to let you know when the water on your Christmas tree is getting low, there are probably



lots of other applications for this device related to fish tanks or hydroponics. It can be strapped to the trunk of your tree with cable ties; loops on the unit are provided for this purpose. When the two-pronged probe is in water, nothing happens. When the water evaporates, and the probe is dry, a piezo beeper sounds and a red LED flashes. Operates on two AAA cells (not included).

CAT# LWA-1 \$3.50 each

TIMERS

24 HOUR LAMP/APPLIANCE TIMER

GE #5116N. Convenient, table-top
24 hour timer. Turns lamps or
appliances on and off at
programmed daily
settings. Programmable in 30-minute
intervals. Decorative
and protective cover.
Override switch for "alwayson." Rated 120 Vac,
960 Watts. UL listed.

CAT# TMR-12
\$7.50 each

DIGITAL ON-TIMER

Digital timer from Mr. Coffee™, coffee maker. Ideal for use in any product that needs to be turned on automatically at a specific time. Operates on 120 Vac. Switch loads ups to 10 amps. Can be switched manually.

White plastic face. 2.48" X 1.77", with four digit LED clock. Overall size: 2.48" X 2.17" X 1.88" deep behind face. 0.25" qc terminals. Easy to connect and operate. Includes instruction sheet.

CAT# MCT-3 \$5.00 each

INDEX

A.C./D.C. Adapters	.55,	57
A.C. Line Cords		88
A.C. Sockets	.88.	89
Adapters	42 -	45
Alarms & Accessories15, 22,		
Amplifier, Video		41
Audio Cables		
Automotive 21, 22, 32, 35, 51,	90	91
Auto Power Cords		
Barrier Strips		65
Batteries		
Battery Chargers		
Battery Holders	.30,	39
0 ,		
Breadboards		
Bridge Rectifiers		
Buzzers	.22,	23
Cables		
AC Power		89
Audio		46
BNC-Cables		
Category 5E / 6	.29,	50
Cigarette Lighter, Auto		90
Computer	48 -	50
F-Cables, Video		
Firewire		
Microphone		
Optical, Toslink	,	42
RC Model		
Telephone, modular		
USB Cables		
Video/ Audio		
VGA		
Wire - Cable		
Cable Ties		
Cameras, Video, Accessories		
Capacitors		
Cases		
CD Accessories		91
Cell-Phone Accessories	.90,	91
Ceramic Resonators		50
Chassis Boxes		72
Chemicals / Cleaners 16,		
Chokes, Inductors		60
Circuit Breakers		20
Computer Accessories		
Connectors & Adapters		
Contactors		35
Crimp Terminals		
Crystals		
Crossovers		70
DC to DC Converters		
Diac Diodes		
Displays, LED, LCD 4, 5,		
Door Lock Actuator		
Electrical Supplies		
Electrical Tape		31
Electroluminescent Backlights		
Enclosures		
Fans and Accessories		
Fasteners		
Ferrite Beads		
F.E.T		54
Filters	.50,	89
Flash Assemblies		
Flashlights		
Fluorescent lamps		
Fuses & Fuse Holders		
Gear Motors		

Gears and Pulleys	Soldering Irons and Accessories 74
Hall Effect Sensor14	Solderless Breadboards
Hardware23, 26 - 28, 71, 73, 79, 91	Solid State Relays34
Headers	Solenoids
Headphones	-
Heating Element	Spacers
•	Speakers and Accessories 69 - 71
Heat Shrinkable Tubing	Split Loom Tubing
Heat Sinks	Spring Lever Terminals 70
Indicator Lights	Standoffs
Inductors	Stepper Motors
Infrared Devices	Strain Reliefs89
Integrated Circuits	
Inverters	Strobe Lights86
Jacks	Surge Suppressors50
Joystick	Switches
Keyboard	Alarm Switch
Keypads	B.C.D
Kits	Dip
Knobs	Key Switch
Lamps	
Lamp Holders 6, 7	Lighted Rocker
LCD Displays85, 86	Magnet
L.E.Ds	Pressure Sensor14
L.E.D. Holders	Push Button
	Reed14
Line Cords	Rocker
Magnets	Rotary Switches
Metal Detector	-
Meters, panel61	Slide
Microphones	Snap-action12, 13
Modulator, Video/RF40	Toggle9, 10
Monitor, Video 40	Tachometer
MOSFETS54	Telephone Accessories 30, 31
Motors	Terminals, Crimp
Motors, Gear 82, 83	Terminal Strips65
Motors, Stepper	Test Jumper
Opto Electronics	Test Equipment
Panel Meters61	Thermal Breakers
P.C. Board Material73	
Peltier Devices	Thermistors
Perf Boards	Thermoelectric Coolers
Photo Diodes and Transistors54	Tie Wraps
Photovoltaics59	Timers
Piezo Elements22, 23	Tools
Plugs	Toroids 60
Potentiometers	Transducers
Power Cords	Transformers
Power Supplies	Transistors
Printed Circuit Supplies73, 74	Triacs
Project Boxes	Trim Capacitors
Pumps92	
Rack Handles	Tubing
Rechargeable Batteries	T.V. Accessories
Relays	Tweeters
Relay Sockets	Ultraviolet Lamps7
Remote Controls	Variacs
Resistors	Varistors (MOV)
Resistors, Variable (Pots)	Video Accessories40 - 42
RFI/EMI Filters89	Video Cameras
	vidoo odinordo
	Video Tanos
Ribbon Cable29	Video Tapes
Ribbon Cable	Voltage Converters 220/110 56
Ribbon Cable 29 Rotation Components .79, 80 Rubber Feet .31	Voltage Converters 220/110
Ribbon Cable 29 Rotation Components .79, 80 Rubber Feet .31 S.C.Rs. .53	Voltage Converters 220/110 .56 Voltage Regulators .52 Wall Transformers .55
Ribbon Cable 29 Rotation Components .79, 80 Rubber Feet .31 S.C.Rs. .53 Semiconductors .53, 54	Voltage Converters 220/110
Ribbon Cable 29 Rotation Components .79, 80 Rubber Feet .31 S.C.Rs. .53 Semiconductors .53, 54 Shrink Tubing .28	Voltage Converters 220/110 .56 Voltage Regulators .52 Wall Transformers .55
Ribbon Cable 29 Rotation Components .79, 80 Rubber Feet .31 S.C.Rs. .53 Semiconductors .53, 54 Shrink Tubing .28 Shunts, meter .61	Voltage Converters 220/110 .56 Voltage Regulators .52 Wall Transformers .55 Wheels .80 Wire, cable .29, 30
Ribbon Cable 29 Rotation Components .79, 80 Rubber Feet .31 S.C.Rs. .53 Semiconductors .53, 54 Shrink Tubing .28 Shunts, meter .61 Sirens .22	Voltage Converters 220/110 .56 Voltage Regulators .52 Wall Transformers .55 Wheels .80 Wire, cable .29, 30 Wiring Nuts .27
Ribbon Cable 29 Rotation Components .79, 80 Rubber Feet .31 S.C.Rs. .53 Semiconductors .53, 54 Shrink Tubing .28 Shunts, meter .61 Sirens .22 Sockets	Voltage Converters 220/110 .56 Voltage Regulators .52 Wall Transformers .55 Wheels .80 Wire, cable .29, 30 Wiring Nuts .27 Woofers .69, 70
Ribbon Cable 29 Rotation Components .79, 80 Rubber Feet .31 S.C.Rs. .53 Semiconductors .53, 54 Shrink Tubing .28 Shunts, meter .61 Sirens .22 Sockets .22 Lamp .6, 7	Voltage Converters 220/110 .56 Voltage Regulators .52 Wall Transformers .55 Wheels .80 Wire, cable .29, 30 Wiring Nuts .27
Ribbon Cable 29 Rotation Components .79, 80 Rubber Feet .31 S.C.Rs. .53 Semiconductors .53, 54 Shrink Tubing .28 Shunts, meter .61 Sirens .22 Sockets .22 Lamp .6, 7 I.C .53	Voltage Converters 220/110 .56 Voltage Regulators .52 Wall Transformers .55 Wheels .80 Wire, cable .29, 30 Wiring Nuts .27 Woofers .69, 70
Ribbon Cable 29 Rotation Components .79, 80 Rubber Feet .31 S.C.Rs. .53 Semiconductors .53, 54 Shrink Tubing .28 Shunts, meter .61 Sirens .22 Sockets .22 Lamp .6, 7 I.C .53 Relay .34, 35	Voltage Converters 220/110 .56 Voltage Regulators .52 Wall Transformers .55 Wheels .80 Wire, cable .29, 30 Wiring Nuts .27 Woofers .69, 70
Ribbon Cable 29 Rotation Components .79, 80 Rubber Feet .31 S.C.Rs. .53 Semiconductors .53, 54 Shrink Tubing .28 Shunts, meter .61 Sirens .22 Sockets .22 Lamp .6, 7 I.C .53 Relay .34, 35 Transistor .54	Voltage Converters 220/110 .56 Voltage Regulators .52 Wall Transformers .55 Wheels .80 Wire, cable .29, 30 Wiring Nuts .27 Woofers .69, 70
Ribbon Cable 29 Rotation Components .79, 80 Rubber Feet .31 S.C.Rs. .53 Semiconductors .53, 54 Shrink Tubing .28 Shunts, meter .61 Sirens .22 Sockets .22 Lamp .6, 7 I.C .53 Relay .34, 35 Transistor .54 Tube .34	Voltage Converters 220/110 .56 Voltage Regulators .52 Wall Transformers .55 Wheels .80 Wire, cable .29, 30 Wiring Nuts .27 Woofers .69, 70
Ribbon Cable 29 Rotation Components .79, 80 Rubber Feet .31 S.C.Rs. .53 Semiconductors .53, 54 Shrink Tubing .28 Shunts, meter .61 Sirens .22 Sockets .22 Lamp .6, 7 I.C .53 Relay .34, 35 Transistor .54	Voltage Converters 220/110 .56 Voltage Regulators .52 Wall Transformers .55 Wheels .80 Wire, cable .29, 30 Wiring Nuts .27 Woofers .69, 70

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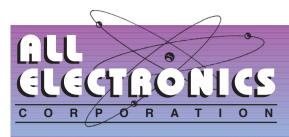
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CAT# INV-300

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