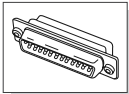


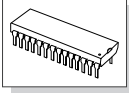
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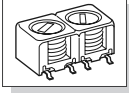
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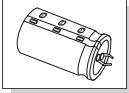
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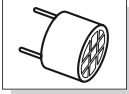
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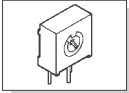


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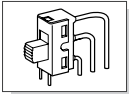
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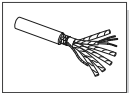
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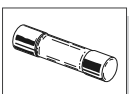
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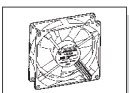
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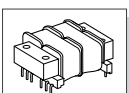


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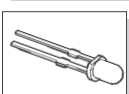
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O

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Panasonic Extra Heavy Duty Carbon Zinc Batteries

FEATURES: • Unsurpassed Leakage Resistance for a Longer Service Life • Discharge Characteristics Suited for All Applications • Excellent Storage Life

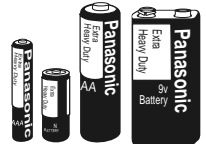
Panasonic Extra Heavy Duty battery is composed of: manganese dioxide for the positive-activating substance, zinc for the negative-activating substance, and an aqueous solution of neutral salts such as zinc chloride and ammonium chloride for the electrolyte.

APPLICATIONS: • Transistor radios, tape recorders, portable TVs, interphones, transceivers, electronic calculators, clocks and watches, communications equipment,

measuring instruments and various other electronic products • Flashlights, pen lights and various other lighting devices • 8mm cameras and other photographic products • Gas and oil equipment, toys, etc.

Also available in tabbed version of D, C, and AA cell batteries; denoted by "T" suffix in Digi-Key part number.

Digi-Key is not approved by any state or federal agency as an authorized supplier of product for medical, life support or life sustaining devices or systems.



Size	(V)	Dimensions - In. (mm)		Weight* Oz. (grams)	Capacity (to 0.9V/Cell)	Digi-Key Part No.	Each	Pricing Pkg.	Carton	Panasonic Part No.
		Dia.	Height							
AAA	1.5	0.571 (14.5)	1.988 (50.5)	0.67 (19)	110 hrs. (1000 cont.)	P103-ND	.51	20.40/60	153.00/600	UM-3NX
AA	1.5	0.473 (12.5)	1.752 (44.5)	0.34 (9.7)	39 hrs. (1000 cont.)	P266-ND	.36	17.00/50	510.00/2000	R03NPA/BK
N	1.5	0.472 (12.0)	1.189 (30.2)	0.23 (6.55)	30 hrs. (1000 cont.)	P266-ND	.36	12.00/50	360.00/2000	UM-5NX
9V	9	1.91 x 1.04 x 0.69	(48.5 x 26.5 x 17.5)	1.34 (38)	2.5 hrs. (1000 cont. to 5.4V)	P104-ND	1.77	14.16/12	531.00/600	006PDX
Lantern †	6	2-11/16" x 2-11/16" x 4-1/16"	(68.26 x 68.26 x 103.19)	20.0 (567)	Heavy duty type battery	P206-ND	3.73	40.23/12	40.23/12	W4PDPDA
AA	Tabbed Version					P103T-ND	.87	34.80/60	261.00/600	UM-3NX

* See "How To Order" for note on shipping charges on prepaid orders. † Spring top type.

Panasonic Alkaline Batteries

FEATURES:

- Large Current and Large Capacity for an Excellent Performance
- Stable Voltage and Current
- Unsurpassed Resistance to Leakage
- Excellent Storage Life

The cylindrical alkaline battery is composed of: manganese dioxide for the positive-activating substance, zinc powder for the negative-activating substance, and caustic alkali for the electrolyte.

APPLICATIONS:

- 99% MERCURY FREE
- Headphone stereo, radio-cassette recorders, strobes, cameras, electronic calculators, 8 mm cameras, electric shavers, tape recorders, high-power flashlights, toys and other cordless products.

Also available in tabbed version of D, C, and AA cell batteries; denoted by "T" suffix in Digi-Key part number.

Digi-Key is not approved by any state or federal agency as an authorized supplier of product for medical, life support or life sustaining devices or systems.

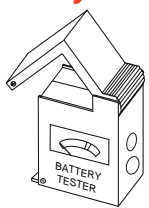
MADE IN U.S.A.



Size	(V)	Dimensions - In. (mm)		Weight* Oz. (grams)	Capacity (to 0.9V/Cell)	Rated Drain (mA)	Digi-Key Part No.	Each	Pricing Pkg.	Carton	Panasonic Part No.
		Dia.	Height								
D	1.5	1.346 (34.2)	2.421 (61.5)	4.76 (135)	1200 hrs. (1000 cont.)	320	P105-ND	1.74	23.20/20	174.00/200	AM-1PIX
C	1.5	1.031 (26.2)	1.969 (50.0)	2.29 (65)	380 hrs. (1000 cont.)	300	P106-ND	1.29	17.20/20	129.00/200	AM-2PIX
AA	1.5	0.571 (14.5)	1.988 (50.5)	0.85 (24)	170 hrs. (1000 cont.)	130	P107-ND	.57	15.20/40	171.00/600	AM-3PIX/2S
AAA	1.5	0.473 (12.5)	1.752 (44.5)	0.42 (12)	65 hrs. (1000 cont.)	25	P146-NDT	.66	22.00/50	165.00/500	AM-4PIX/2S
N	1.5	0.472 (12.0)	1.189 (30.2)	0.32 (9)	48 hrs. (1000 cont.)	25	P147-NDT	1.08	17.28/24	324.00/600	AM5X
9V	9	1.93 x 1.04 x 0.69	(49.0 x 26.0 x 17.5)	1.66 (47)	6 hrs. (1000 cont. to 5.4V)		P145-ND	2.22	17.76/12	319.68/288	6AM-6PIX/1S
D	Tabbed Version						P105T-ND	2.10	28.00/20	210.00/200	AM-1PIX
C	Tabbed Version						P106T-ND	1.65	22.00/20	165.00/200	AM-2PIX
AA	Tabbed Version						P107T-ND	.93	24.80/40	279.00/600	AM-3PIX/2S

* See "How To Order" for note on shipping charges on prepaid orders. † Made in Japan.

Battery Tester



Tests D, C, AA, AAA, N and 9-Volt and button cell batteries under load — a true test of terminal voltage!

CEC-2-ND.....\$8.95

Panasonic Sealed Lead-Acid Batteries

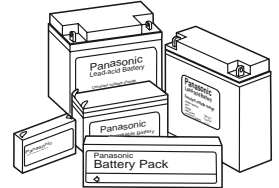
GENERAL FEATURES: "DO NOT LEAK!!"

High Quality & High Reliability: The LCR battery has stable and reliable capacity. 100% tested on line for voltage, capacity, and seals. And all vents are 100% visually inspected during the final assembly process.

High Power Density: These batteries save installation space, while providing full and reliable power for the equipment, and many have been designed for rapid recharge, or for high power output. **Leak-resistant Structure:** The LCR battery uses an absorbed electrolyte system. The LCR batteries have exceptional leak resistance, and can be used in any position. **Long Service Life; Flat or Cyclic:** The LCR battery has long life in float or cyclic service. **Easy Maintenance:** There is no need to check the specific gravity of the electrolyte or to add water during the service life. Totally sealed, and needs only charging for maintenance. **No Corrosive Gas Generation:** There is no corrosive gas generation during normal use. **Exceptional Deep Discharge Recovery:** LCR batteries have exceptional deep discharge recovery and charge acceptance, even after deep or prolonged discharge. **DOT & IATA Approval:** Transportation; The SLA batteries should be handled as common cargoes for both air and boat shipping. **UL Component Recognition:** U.L. Component

Recognition under UL924, Section 38, for Emergency Lights and Power Supplier (not UPS), requires that the battery safely vent when overcharged, and tested under mineral oil. It further requires that the equipment and battery be submitted together for formal UL approval. **(UL Component Recognition does NOT remove this requirement for complete package testing).** The manufacturer suggests peak charging all sealed lead acid batteries before use and intermittently during storage.

Digi-Key is not approved by any state or federal agency as an authorized supplier of product for medical, life support or life sustaining devices or systems.



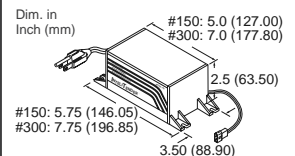
CROSS REFERENCE ABBREVIATIONS: EP=Eagle-Picher; YU=Yuasa; PS=Power Sonic; PA=Panasonic

Cap. 20h Rate (Ah)	Dimensions - In. (mm) L x W x H	Weight * lbs. (grams)	Digi-Key Part No.	1	Pricing 10	Carton	Panasonic Part No.	Panasonic Replacement Battery Cross Reference (see above for mfg. abbreviations)
6 1.3	3.82 x 0.94 x 1.97 (97.0 x 24.0 x 50.0)	0.66 (300)	P128-ND	9.23	82.00	303.40/40	LC-R061R3PU	YU: NP1-2-6; PS: PS-612
6 2.4	2.60 x 1.30 x 3.88 (66.0 x 33.0 x 98.5)	1.15 (520)	P262-ND	16.36	145.40	322.79/24	LC-R062R4PU	—
6 3.2	2.60 x 1.30 x 4.69 (66.0 x 33.0 x 119.0)	1.46 (660)	P129-ND	15.86	141.00	313.02/24	LC-R063R2PU	—
6 3.4	5.28 x 1.34 x 2.36 (134.0 x 34.0 x 60.0)	1.37 (620)	P166-ND	16.31	145.00	321.90/24	LC-R063R4PU	EP: CFV62-6; YU: NP3-6; PS: PS-626
6 4.0	2.76 x 1.85 x 4.02 (70.0 x 47.0 x 102.0)	1.98 (900)	P168-ND	9.34	83.00	184.26/24	LC-RB064P	EP: CFV64; YU: NP4-6; PS: PS-640
6 6.5	5.95 x 1.34 x 3.70 (151.0 x 34.0 x 94.0)	2.56 (1160)	P169-ND	13.50	—	133.20/12	LC-RB066R5P	EP: CFM6V6.5; YU: NP6-6; PS: PS-660
6 7.2	5.95 x 1.34 x 3.70 (151.0 x 34.0 x 94.0)	2.78 (1260)	P074-ND	14.06	—	138.75/12	LC-R067R2P	YU: NP7-6
6 10.0	5.95 x 1.97 x 3.70 (151.0 x 50.0 x 94.0)	3.93 (1780)	P170-ND	15.98	—	157.62/12	LC-RB0610P	EP: CFM6V8.0; YU: NP10-6; PS: PS-6100
6 10.0	5.95 x 1.97 x 3.70 (151.0 x 50.0 x 94.0)	3.93 (1780)	P269-NDT	15.98	—	157.62/12	LC-RB0610P1	—
6 12.0	5.95 x 1.97 x 3.70 (151.0 x 50.0 x 94.0)	4.30 (1950)	P075-ND	16.88	—	166.50/12	LC-R0612P	—
12 1.3	3.82 x 1.87 x 1.97 (97.0 x 47.5 x 50.0)	1.30 (590)	P264-ND	18.23	162.00	299.70/20	LC-R121R3PU	PS: PS-1212
12 2.2	6.97 x 1.34 x 2.36 (177.0 x 34.0 x 60.0)	1.76 (800)	P171-ND	21.38	190.00	421.80/24	LC-R122R2PU	EP: CF12V1.5; YU: NP1-9-12; PS: PS-1219
12 3.4	5.28 x 2.64 x 2.36 (134.0 x 67.0 x 60.0)	2.65 (1200)	P172-ND	26.78	—	264.18/12	LC-R123R4PU	EP: CF12V2.651; YU: NP2-6-12; PS: PS-1230
12 4.0	3.54 x 2.76 x 4.02 (90.0 x 70.0 x 102.0)	3.84 (1740)	P076-ND	18.45	—	182.04/12	LC-RB124P	PS: PS-1242
12 5.0	3.54 x 2.76 x 4.02 (90.0 x 70.0 x 102.0)	4.25 (1930)	P077-ND	19.35	—	190.92/12	LC-R125P	—
12 6.5	5.95 x 2.54 x 3.70 (151.0 x 64.5 x 94.0)	5.00 (2270)	P173-ND	22.39	—	199.00/10	LC-RB126R5P	EP: CFM12V6; YU: NP6-12; PS: PS-1265
12 7.2	5.95 x 2.54 x 3.70 (151.0 x 64.5 x 94.0)	5.45 (2470)	P078-ND	22.95	—	188.70/10	LC-R127R2P	YU: NP7-12
12 17	7.13 x 3.00 x 6.58 (181.0 x 76.0 x 167.0)	14.3 (65kg)	P174-ND	53.55	—	528.36/12	LC-RC1217P	EP: CFM12V18; YU: NP15-12; PS: PS-12150
12 28	6.50 x 4.92 x 7.07 (165.0 x 125.0 x 179.5)	24.30 (11kg)	P049-ND	71.78	638.00	—	LC-X1228P	—
12 33	7.70 x 5.12 x 7.09 (195.6 x 130.0 x 180.0)	26.5 (12kg)	P259-ND	77.06	685.00	—	LC-LA1233P	PS: PS-12330
12 42	7.76 x 6.50 x 7.09 (197.0 x 165.0 x 180.0)	35.3 (16kg)	P153-ND	110.25	980.00	—	LC-X1242P	—
VCR/Camcorder Batteries								
12 2.0	7.90 x 0.98 x 2.43 (201.0 x 25.0 x 62.0)	1.54 (700)	P178-ND#	26.53	—	306.99/12	LC-S122BU	PA: LCS-2012P; LCS-2012VBNC
12 2.3	7.17 x 0.94 x 2.43 (182.0 x 24.0 x 62.0)	1.40 (635)	P179-ND#	31.30	—	308.80/12	LC-SA122R3EU	PA: LCS-2012AP; LCS-2012AVBNC; PV-BP80; LCS-2312NC; LCS-2312AVBNC
12 2.0	5.65 x .93 x 2.55 (143.5 x 24.0 x 65.0)	1.30 (590)	P263-ND#	28.69	—	283.05/12	LC-SD122EU	PA: AG-BP20P; LCS-2012DVBNC
Trickle Charge Series (for communications, micro UPS, emergency lights, etc.)								
12 1.8	5.65 x 0.94 x 2.56 (143.5 x 24.0 x 65.0)	1.30 (590)	P050-ND#	26.46	—	282.24/12	LC-T121R8PU	P260
12 2.0	7.17 x 0.94 x 2.43 (182.0 x 24.0 x 62.0)	1.40 (635)	P052-ND#	22.28	—	396.00/20	LC-TA122PU	P261
12 2.0	6.97 x 0.94 x 2.60 (177.0 x 24.0 x 66.0)	1.40 (635)	P053-ND	22.28	—	396.00/20	LC-T122PU	
Terminal Clip for P178, P179, P263, P050, and P052			P260-ND	4.73	42.00	1396.50/500	VJA01R0	
Mating Connector for Clip (P260)			P261-ND	4.86	43.20	2721.60/1M	LCRCRCP-1	

* See "How To Order" for note on shipping charges on prepaid orders. # Pressure contact terminals. † Has 250" (7.1mm) Faston terminals.

PATCO Battery Charger/Maintainer

INTELTENDER MODELS 150 & 300



The IntelliTender brings the battery to full optimum charge. Then, under the control of its computer, monitors the battery's voltage, supplying only what is needed to maintain the ideal charge. Model 300 charges 2 batteries.

Volt	Amp	Model	Digi-Key Part No.	Price Each
Battery Chargers				
6	.75	150	PATC-02-ND	69.93
6	1.5	150	PATC-01-ND1	69.93
12	.75	150	PATC-04-ND	69.93
12	1.5	150	PATC-03-ND1	69.93
12 x 2	1.5 x 2	300	PATC-08-ND1	124.88
Cable (Must Order Separately)				
Battery Hook-up, Spring Clamp.....				
			PATC-07-ND	7.49
Motorcycle Hook-up, Ring Lugs.....				
			PATC-06-ND	5.00
Marine Hook-up, Ring Lugs.....				
			PATC-05-ND	5.00

* Recommended for 2.0 to 3.4 Ah batteries. † Recommended for 4.0 Ah & above batteries.

1-800-344-4539

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Panasonic **NEW!** Nickel-Metal Hydride Batteries and Tabbed Versions

Features: • **Superior Energy Density:** Nickel-metal hydride batteries originally double the capacity compared with Panasonic's standard Ni-Cad batteries • **High Cycle Life:** Like Ni-Cad batteries, nickel-metal hydride batteries can be repeatedly charged and discharged up to approx. 500 cycles (under ideal conditions). **Because a specially designed charger will be necessary,** please consult the Panasonic Technical Handbook (P001-ND) regarding the charge system • **Flat trickle charge cannot be used.** • **Excellent Discharge Characteristics:** Since the internal resistance of nickel-metal hydride batteries is low, continuous high-rate discharge up to 3C is possible in the same way as for Ni-Cad batteries • **Excellent Reliability:** Self-discharge performance is the same or better than that of nickel-cadmium

batteries. In addition, charging batteries after extended storage restores original battery capacity. Battery safety has also been improved and verified through testing under a wide range of conditions of use.

Applications: • Communication • Office Automation • Audio Visual Equipment • Other High-Tech Products.

Caution for Safety: Improper usage may cause battery liquid leakage, heat generation or explosion, resulting in equipment failure or injury • Do not disassemble or rework the battery • Do not solder the battery directly • Do not use new batteries together with old batteries, or different type batteries mixed together • Follow the specified charge conditions.

NOTE: Nickel-metal hydride batteries are not a drop-in replacement for Ni-Cad batteries. It is the responsibility of each user to ensure that each battery application system is adequately designed safe and compatible with all conditions encountered during use, and in conformance with existing standards and requirements. **Not designed for power tool applications.**



P001-ND NiMH Technical Handbook..... \$2.95

Size	Capacity C/5 (mAh)	Dimensions Inch (mm) Dia. x Height	Weight* Oz. (gram)	Std. Chg @ 15hrs (mA)	(Control Required) Quick Charge (mA) (hrs.)	(Regular Version)			(Solder Tabbed Version)			Panasonic Part No.				
						Digi-Key Part No.	1	10	Carton	Digi-Key Part No.	1		10	Carton		
AAA	1.2	550	.41 x 1.75 (10.5 x 44.5)	0.42 (12)	55	550	1.2	P011-ND†	2.75	24.75	2633.40/1800	P011T-ND	3.05	27.45	2920.68/1800	HHR-55AAA
L-AAA	1.2	650	.41 x 1.97 (10.5 x 50.0)	0.49 (14)	65	650	1.2	P012-ND†	3.58	32.18	2670.27/1404	P012T-ND	3.88	34.88	2894.35/1404	HHR-65TA
4/5 AA	1.2	1150	.57 x 1.69 (14.5 x 43.0)	0.81 (23)	115	1150	1.2	P013-ND†	2.83	25.43	1356.00/800	P013T-ND	3.13	28.13	1500.00/800	HHR-120AA
AA	1.2	1300	.57 x 1.97 (14.5 x 50.0)	0.92 (26)	130	1300	1.2	P014-ND†	3.23	29.03	1548.00/800	P014T-ND	3.53	31.73	1692.00/800	HHR-130AA
AA	1.2	1500	.57 x 1.97 (14.5 x 50.0)	0.92 (26)	150	1500	1.2	P015-ND†	3.25	29.25	1491.75/765	P015T-ND	3.55	31.95	1629.45/765	HHR-150AAB05
4/5 A	1.2	1700	.67 x 1.71 (17.0 x 43.0)	1.09 (31)	170	1700	1.2	P016-ND†	4.63	41.63	1998.00/720	P016T-ND	4.93	44.33	2127.60/720	HHR-170A
A	1.2	2100	.67 x 1.97 (17.0 x 50.0)	1.34 (38)	210	2100	1.2	P017-ND†	5.35	48.15	2311.20/720	P017T-ND	5.65	50.85	2440.80/720	HHR-210A
4/3 A	1.2	3700	.67 x 2.64 (17.0 x 67.0)	1.87 (53)	370	2000	2.2	P018-ND†	7.38	66.38	2369.50/540	P018T-ND	7.68	69.08	2486.70/540	HHR-380A

† Non-extending positive terminals. * See "How To Order" for note on shipping charges on prepaid orders.

Panasonic Nickel Cadmium Batteries



The Panasonic nickel-cadmium battery is a rechargeable sealed nickel-cadmium alkaline cell.

FEATURES: • Long Life • Excellent Discharge Characteristics • Long Shelf Life • High-Rate Charging • Wide Temperature Range • Reliable, Self-Sealing Vent • Sealed, Strong, Leakproof Construction.

APPLICATIONS: For Cyclic Use: • Consumer Applications • Office Equipment • Tools • Photography • Toys & Hobby. For Trickle or Float Charge Use: • Emergency Devices • Memory Back-up.

SPECIAL PURPOSE BATTERIES: Rapid-Charge "R" Type: The "R" type cell has a specially improved negative plate with increased gas absorption characteristics. It can be subjected to uncontrolled charging at the 1C rate & rapid-charge in 1 to 1.5 hours is possible. High-temperature "H" Type: By using a polypropylene separator, the "H" type cell can withstand a temp. of 65°C (149°F) during use. When charging is conducted at a low charging current of C/20 to C/30 in a high-temp. ambient, the "H" type cell has a sharply improved capacity compared to a standard cell, due to special electrolyte. High-capacity "E" Type: The extra capacity cells combine a high-

capacity density positive plate with a high-density paste negative plate. These cells have 20-30% more capacity than equivalent standard cells. Super High Capacity & Rapid Charge "S" Type: Super high capacity & rapid charge "S" type batteries are ideal for today's high capacity needs. They feature increased capacity & rapid charging within approx. 1 hr. The high-density positive base material of foam nickel is combined with the pasted negative plate to produce a capacity approximately 40% greater than that of the rapid-charge "R" type battery of the same size. High Rate Discharge & Rapid Charge "RP" Type: This rapid charge, high rate discharge type has been developed through the integration of all Panasonic battery technology. It employs unique plates featuring unsurpassed gas absorption characteristics & a current-collecting system to provide charging in just 1 to 1.5 hours. The internal resistance is also greatly reduced for improved voltage characteristics during high rate discharge at approximately 10CmA.

Digi-Key is not approved by any state or federal agency as an authorized supplier of product for medical, life support or life sustaining devices or systems.

CROSS REFERENCE ABBREVIATIONS: SF = SAFT USA (France); VA = VARTA Germany; ER = Ever-Ready; SA = SANYO Japan; TO = Toshiba; DY = Dynacharge

Panasonic 6-Hour Nickel Cadmium Battery Charger

FEATURES:

- True full charge in just 6 hours (9V in 15 hours)
- Quickly recharges up to 4 rechargeable nickel-cadmium batteries to 100% power!
- UL approved. With anti-reversal polarity protection system
- Simultaneous charging of any pair of nickel-cadmium batteries: D, C, AA, AAA, or single 9V. No special adaptor needed for AAA!
- Not for use with flat top batteries indicated by /FT.

P292-ND (4 unit)..... \$18.75
P293-ND Same charger as above except this one handles 8 batteries!.... \$33.75

Size	Capacity C/5 (mAh)	Dimensions Inch (mm) Dia. x Height	Weight* Oz. (gram)	Std. Chg @ 15hrs (mA)	Quick Charge (mA) (hrs.)	Digi-Key Part No.	1	10	Pkg.	Carton	Panasonic Part No.	Panasonic Replacement Battery Cross Reference (see above for manufacture abbreviations)
<i>Standard Type</i>												
N	1.2	150	0.45 x 1.16 (11.5 x 29.5)	0.28 (8.0)	15	38	6.0	P110-ND	2.39	21.47	381.60/200	1522.58/1200
AA	1.2	220	0.41 x 1.75 (10.5 x 44.5)	0.35 (10)	22	66	5.0	P100-ND	2.49	22.39	398.00/200	2382.03/1800
AAA	1.2	250	0.41 x 1.75 (10.5 x 44.5)	0.35 (10)	25	75	5.0	P254-ND	2.49	22.39	398.00/200	2382.03/1800
AA	1.2	500	0.57 x 1.97 (14.5 x 50.0)	0.74 (21)	50	150	5.0	P116-ND	2.16	19.40	68.96/40	1034.40/800
AA	1.2	500	0.57 x 1.90 (14.5 x 48.3)	0.74 (21)	50	150	5.0	P227-ND†	2.38	21.42	76.16/40	1142.40/800
2/3SC	1.2	600	0.89 x 1.02 (22.5 x 26.0)	1.02 (29)	60	180	6.0	P118-ND†	5.17	46.49	619.80/150	1859.40/600
2/C	1.2	1000	1.02 x 1.22 (25.8 x 31.0)	1.59 (45)	100	333	4.5	P238-ND†	6.21	55.91	248.50/50	1118.25/300
C	1.2	2200	1.00 x 1.94 (25.3 x 49.3)	2.65 (75)	220	730	4.5	P163-ND	6.34	57.08	101.48/20	913.32/240
C	1.2	4000	1.02 x 1.97 (25.8 x 50.0)	2.65 (75)	240	1500	2.4	P108-ND†	7.47	67.21	119.48/20	1075.32/240
D	1.2	4000	1.30 x 2.36 (33.0 x 60.0)	4.90 (139)	400	—	—	P124-ND	11.31	90.46	90.46/10	678.45/100
9 Volt	8.4	120	1.043 x 1.949 x 0.689 (26.5x49.5x17.5)	1.54 (43.7)	12	—	—	P148-ND	10.63	—	114.75/12	114.75/12
<i>High Temperature "H" Type</i>												
1/3AA	1.2	110	0.57 x 0.69 (14.5 x 17.5)	0.23 (6.5)	11	—	—	P109-ND†	1.96	17.64	188.16/20	2502.53/2400
AA	1.2	500	0.57 x 1.90 (14.5 x 48.3)	0.74 (21)	50	—	—	P161-ND	2.28	20.52	72.96/40	1094.40/800
SC	1.2	1200	0.89 x 1.67 (22.5 x 42.5)	1.69 (48)	120	—	—	P091-ND†	3.76	33.86	301.00/100	903.00/400
C	1.2	1800	1.02 x 1.97 (25.8 x 50.0)	2.55 (73)	180	—	—	P122-ND†	6.84	61.58	109.48/20	985.32/240
C	1.2	2300	1.02 x 1.97 (25.8 x 50.0)	2.75 (78)	230	—	—	P090-ND†	7.12	64.06	113.88/20	1024.92/240
D	1.2	4000	1.30 x 2.42 (33.0 x 61.5)	4.90 (139)	400	—	—	P258-ND	10.78	86.26	86.26/10	646.95/100
<i>High Capacity "E" Type</i>												
SC	1.2	1500	0.89 x 1.67 (22.5 x 42.5)	1.69 (48)	150	500	4.5	P156-ND†	4.19	37.69	402.00/120	1265.00/480
D	1.2	4400	1.27 x 2.36 (32.3 x 59.9)	4.93 (140)	440	—	—	P158-ND	10.91	87.26	87.26/10	654.45/100
<i>High Rate Discharge and Rapid Charge "R/P" Type</i>												
4/5SC	1.2	1200	0.91 x 1.30 (23.0 x 33.0)	1.38 (38)	120	1000	1.6	P232-ND†	3.64	32.74	291.00/100	1309.50/600
CSC	1.2	1300	0.91 x 1.65 (23.0 x 42.0)	1.66 (47)	130	1300	1.5	P098-ND†	2.56	23.06	205.00/100	615.00/400
SC	1.2	1200	0.91 x 1.69 (23.0 x 43.0)	1.66 (47)	120	1200	1.5	P240-ND†	3.64	32.74	291.00/100	873.00/400
SC	1.2	1300	0.91 x 1.69 (23.0 x 43.0)	1.66 (47)	130	1300	1.5	P159-ND†	2.56	23.06	205.00/100	615.00/400
SC	1.2	1400	0.91 x 1.69 (23.0 x 43.0)	1.69 (48)	140	1400	1.5	P233-ND†	2.81	25.31	225.00/100	810.00/480
<i>Rapid Charge "R" Type</i>												
2/3AA	1.2	300	0.57 x 1.11 (14.5 x 28.2)	0.42 (12)	30	300	1.5	P234-ND†	2.19	19.71	350.40/200	2330.16/2000
AA	1.2	600	0.57 x 1.97 (14.5 x 50.0)	0.78 (22)	60	600	1.5	P272-ND	2.48	22.32	79.36/40	1190.40/800
AA	1.2	600	0.57 x 1.97 (14.5 x 50.0)	0.74 (21)	60	600	1.5	P229-ND†	1.87	16.83	59.84/40	897.60/800
AA	1.2	700	0.57 x 1.90 (14.5 x 48.3)	0.78 (22)	70	700	1.5	P253-ND†	1.91	17.15	60.96/40	914.40/800
2/3AF	1.2	450	0.65 x 1.10 (16.5 x 28.0)	0.63 (18)	45	450	1.5	P150-ND†	4.08	36.68	163.00/50	1956.00/800
4/5AF	1.2	700	0.65 x 1.67 (16.5 x 42.5)	0.95 (27)	70	700	1.5	P152-ND†	4.64	41.72	185.40/50	1390.50/500
2/3SC	1.2	600	0.89 x 1.02 (22.5 x 26.0)	0.95 (27)	60	600	1.5	P181-ND†	4.54	40.86	435.84/120	1634.40/600
SC	1.2	1800	0.91 x 1.69 (23.0 x 43.0)	1.73 (49)	180	1800	1.5	P088-ND†	4.69	42.19	450.00/120	1350.00/480
C	1.2	2800	1.02 x 1.97 (26.0 x 50.0)	2.79 (79)	280	2800	1.5	P190-ND†	7.84	70.58	125.48/20	1129.32/240
D	1.2	5000	1.30 x 2.42 (33.0 x 61.5)	5.10 (145)	500	5000	1.5	P257-ND	12.93	—	103.46/10	1775.95/100
<i>Super High Capacity and Rapid Charge "S" Type</i>												
AA	1.2	800	0.57 x 1.90 (14.5 x 48.3)	0.71 (20)	80	800	1.5	P097-ND†	2.21	19.85	70.56/40	1058.40/800
AA	1.2	1000	0.57 x 1.97 (14.5 x 50.0)	0.81 (23)	100	1000	1.5	P092-ND†	3.16	28.40	100.96/40	1514.40/800
5/4AA	1.2	1100	0.57 x 2.56 (14.5 x 65.0)	1.02 (29)	110	1100	1.5	P160-ND†	4.04	36.36	161.60/50	1212.00/500
5/4AA	1.2	1200	0.57 x 2.56 (14.5 x 65.0)	1.09 (31)	120	1200	1.5	P093-ND†	4.42	39.74	176.60/50	1589.40/600
2/3AF	1.2	600	0.67 x 1.12 (17.0 x 28.5)	0.63 (18)	60	600	1.5	P235-ND†	2.78	25.02	400.32/180	1200.96/720
4/5AF	1.2	1100	0.67 x 1.69 (17.0 x 43.0)	0.88 (25)	110	1100	1.5	P239-ND†	3.66	32.94	527.04/180	1581.12/720
4/5AF	1.2	1200	0.67 x 1.69 (17.0 x 43.0)	0.92 (26)	120	1200	1.5	P094-ND†	3.54	31.82	509.04/180	1527.12/720
4/5AF	1.2	1500	0.67 x 1.69 (17.0 x 43.0)	0.95 (27)	140	1400	1.5	P255-ND†	4.16	37.44	599.04/180	1797.12/720
AF	1.2	1400	0.67 x 1.97 (17.0 x 50.0)	1.16 (33)	140	1400	1.5	P095-ND†	3.67	33.01	528.12/180	1584.36/720
AF	1.2	1600	0.67 x 1.97 (17.0 x 50.0)	1.16 (33)	160	1600	1.5	P256-ND†	4.22	37.96	607.32/180	1821.96/720
SC	1.2	1800	0.89 x 1.67 (22.5 x 42.5)	1.65 (47)	180	1500	1.6	P237-ND†	5.52	50.06	445.00/100	1335.00/400
5/4SC	1.2	2300	0.91 x 1.97 (23.0 x 50.0)	2.24 (57)	230	2000	1.6	P096-ND†	7.93	71.37	761.28/120	1712.88/360

† Non-extending positive terminals. * See "How To Order" for note on shipping charges on prepaid orders.

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Panasonic Nickel Cadmium Batteries Solder Tabbed Version

Size	(V)	Capacity C/5 (mAh)	Dimensions Inch (mm) Dia. x Height	Weight* Oz. (gram)	Std. Chg @ 15hrs (mA)	Quick Charge (hrs.)	Digi-Key Part No.	1	10	Pricing	Pkg.	Carton
<i>Standard Type (Solder Tabbed)</i>												
N	1.2	150	0.45 x 1.16 (11.5 x 29.5)	0.28 (8.0)	15	38	6.0	P110T-ND	2.69	24.17	429.60/200	1714.10/1200
AAA	1.2	220	0.41 x 1.75 (10.5 x 44.5)	0.35 (10)	22	66	5.0	P100T-ND	2.79	25.09	446.00/200	2669.31/1800
AA	1.2	250	0.41 x 1.75 (10.5 x 44.5)	0.35 (10)	25	75	5.0	P254T-ND	2.79	25.09	446.00/200	2669.31/1800
AA	1.2	500	0.57 x 1.90 (14.5 x 48.3)	0.74 (21)	50	150	5.0	P227T-ND	2.68	24.12	85.76/40	1286.40/800
2/3SC	1.2	600	0.89 x 1.02 (22.5 x 26.0)	1.02 (29)	60	150	6.0	P118T-ND	5.47	49.19	655.80/150	1967.40/600
2/3C	1.2	1000	1.02 x 1.22 (25.8 x 31.0)	1.59 (45)	100	333	4.5	P238T-ND	6.51	58.61	260.50/50	1172.25/300
C	1.2	2200	1.00 x 1.94 (25.3 x 49.3)	2.65 (75)	220	730	4.5	P163T-ND	6.64	59.78	106.28/20	956.52/240
C	1.2	2400	1.02 x 1.97 (25.8 x 50.0)	2.65 (75)	240	1500	2.4	P108T-ND	7.77	69.91	124.28/20	1118.52/240
D	1.2	4000	1.30 x 2.36 (33.0 x 60.0)	4.90 (139)	400	—	—	P124T-ND	11.61	92.86	92.86/10	696.45/100
<i>High Temperature "H" Type (Solder Tabbed)</i>												
1/3AA	1.2	110	0.57 x 0.69 (14.5 x 17.5)	0.23 (6.5)	11	—	—	P109T-ND	2.26	20.34	216.96/120	2885.57/2400
AA	1.2	500	0.57 x 1.90 (14.5 x 48.3)	0.74 (21)	50	—	—	P161T-ND	2.58	23.22	82.56/40	1238.40/800
SC	1.2	1200	0.89 x 1.67 (22.5 x 42.5)	1.69 (48)	120	—	—	P091T-ND	4.06	36.56	325.00/100	975.00/400
C	1.2	1800	1.02 x 1.97 (25.8 x 50.0)	2.65 (73)	180	—	—	P122T-ND	7.14	64.28	114.28/20	1028.52/240
C	1.2	2300	1.02 x 1.97 (25.8 x 50.0)	2.75 (78)	230	—	—	P090T-ND	7.42	66.76	118.68/20	1068.12/240
D	1.2	4000	1.30 x 2.42 (33.0 x 61.5)	4.90 (139)	400	—	—	P258T-ND	11.08	88.66	88.66/10	664.95/100
<i>High Capacity "E" Type (Solder Tabbed)</i>												
SC	1.2	1500	0.89 x 1.67 (22.5 x 42.5)	1.69 (48)	150	500	4.5	P156T-ND	4.49	40.39	430.80/120	1292.40/480
D	1.2	4400	1.27 x 2.36 (32.3 x 59.9)	4.93 (140)	440	—	—	P158T-ND	11.21	89.66	89.66/10	672.45/100
<i>High Rate Discharge and Rapid Charge "RIP" Type (Solder Tabbed)</i>												
4/5SC	1.2	1200	0.91 x 1.30 (23.0 x 33.0)	1.38 (38)	120	1000	1.6	P232T-ND	3.94	35.44	315.00/100	1417.50/600
CSC	1.2	1300	0.91 x 1.65 (23.0 x 42.0)	1.66 (47)	130	1300	1.5	P088T-ND	2.86	25.76	229.00/100	687.00/400
SC	1.2	1200	0.91 x 1.69 (23.0 x 43.0)	1.66 (47)	120	1200	1.5	P240T-ND	3.94	35.44	315.00/100	945.00/400
SC	1.2	1300	0.91 x 1.69 (23.0 x 43.0)	1.66 (47)	130	1300	1.5	P159T-ND	2.86	25.76	229.00/100	687.00/400
SC	1.2	1400	0.91 x 1.69 (23.0 x 43.0)	1.69 (48)	140	1400	1.5	P233T-ND	3.11	28.01	249.00/100	896.40/480
<i>Rapid Charge "R" Type (Solder Tabbed)</i>												
2/3AA	1.2	300	0.57 x 1.11 (14.5 x 28.2)	0.42 (12)	30	300	1.5	P234T-ND	2.49	22.41	398.40/200	2649.36/2000
AA	1.2	600	0.57 x 1.97 (14.5 x 50.0)	0.74 (21)	60	600	1.5	P229T-ND	2.17	19.53	69.44/40	1041.60/800
AA	1.2	700	0.57 x 1.90 (14.5 x 48.3)	0.78 (22)	70	700	1.5	P253T-ND	2.21	19.85	70.56/40	1058.40/800
2/3Af	1.2	450	0.65 x 1.10 (16.5 x 28.0)	0.63 (18)	45	450	1.5	P150T-ND	4.38	39.38	175.00/50	2100.00/800
4/5Af	1.2	700	0.65 x 1.67 (16.5 x 42.5)	0.95 (27)	70	700	1.5	P152T-ND	4.94	44.42	197.40/50	1480.50/500
2/3SC	1.2	600	0.89 x 1.02 (22.5 x 26.0)	0.95 (27)	60	600	1.5	P181T-ND	4.84	43.56	464.64/120	1742.40/600
SC	1.2	1800	0.91 x 1.69 (23.0 x 43.0)	1.73 (49)	180	1800	1.5	P089T-ND	4.99	44.89	478.80/120	1436.40/480
C	1.2	2800	1.02 x 1.97 (26.0 x 50.0)	2.79 (79)	280	2800	1.5	P190T-ND	8.14	73.28	130.28/20	1172.52/240
D	1.2	5000	1.30 x 2.42 (33.0 x 61.5)	5.10 (145)	500	5000	1.5	P257T-ND	13.23	—	105.86/10	793.95/100
<i>Super High Capacity and Rapid Charge "S" Type (Solder Tabbed)</i>												
AA	1.2	700	0.55 x 1.88 (14.0 x 47.8)	0.74 (21)	70	700	1.5	P236T-ND	3.28	29.52	104.96/40	1574.40/800
AA	1.2	800	0.57 x 1.90 (14.5 x 48.3)	0.71 (20)	80	800	1.5	P097T-ND	2.51	22.55	80.16/40	1202.40/800
AA	1.2	1000	0.57 x 1.97 (14.5 x 50.0)	0.81 (23)	100	1000	1.5	P092T-ND	3.46	31.10	110.56/40	1658.40/800
5/4AA	1.2	1100	0.57 x 2.56 (14.5 x 65.0)	1.02 (29)	110	1100	1.5	P160T-ND	4.34	39.06	173.60/50	1302.00/600
5/4AA	1.2	1200	0.57 x 2.56 (14.5 x 65.0)	1.09 (31)	120	1200	1.5	P093T-ND	4.72	42.44	188.60/50	1697.40/600
2/3Af	1.2	600	0.67 x 1.12 (17.0 x 28.5)	0.63 (18)	60	600	1.5	P235T-ND	3.08	27.72	443.52/180	1330.56/720
4/5Af	1.2	1100	0.67 x 1.69 (17.0 x 43.0)	0.88 (25)	110	1100	1.5	P239T-ND	3.96	35.64	570.24/180	1710.72/720
4/5Af	1.2	1200	0.67 x 1.69 (17.0 x 43.0)	0.92 (26)	120	1200	1.5	P094T-ND	3.84	34.52	552.24/180	1656.72/720
4/5Af	1.2	1500	0.67 x 1.69 (17.0 x 43.0)	0.95 (27)	140	1400	1.5	P255T-ND	4.46	40.14	642.24/180	1926.72/720
Af	1.2	1400	0.67 x 1.97 (17.0 x 50.0)	1.16 (32)	140	1400	1.5	P095T-ND	3.97	35.71	571.32/180	1713.96/720
Af	1.2	1600	0.67 x 1.97 (17.0 x 50.0)	1.16 (33)	160	1600	1.5	P256T-ND	4.52	40.66	650.52/180	1951.56/720
SC	1.2	1800	0.89 x 1.67 (22.5 x 42.5)	1.65 (47)	180	1500	1.6	P237T-ND	5.86	52.76	469.00/100	1407.00/400
5/4SC	1.2	2300	0.91 x 1.97 (23.0 x 50.0)	2.24 (57)	230	2000	1.6	P096T-ND	8.23	74.07	790.08/120	1777.68/360

* See "How To Order" for note on shipping charges on prepaid orders.

Battery Packs with Panasonic Batteries

For Memory Backup, Power Tools, Radio Controlled and Other Endless Applications

All battery packs are made using our high quality Panasonic cells. Shown are standard configurations. If you have a special need or a configuration that you do not see, give us a call for further information. Packs are available in nearly all sizes of Nickel-Cadmium, NiMH, Lithium, and Alkaline cylinder batteries.

Digi-Key is not approved by any state or federal agency as an authorized supplier of product for medical, life support or life sustaining devices or systems.

Style	Volts	Cells	Configurations	Diagram
F021	2.4	2		
F031	3.6	3		
F041	4.8	4		
F051	6.0	5		
F061	7.2	6		
F071	8.4	7		
F081	9.6	8		
F091	10.8	9		
F101	12.0	10		
F022	4.8	4		
F023	7.2	6		
F024	9.6	8		
F025	12.0	10		

Style	Volts	Cells	Configurations	Diagram
L021*	2.4	2		
L031*	3.6	3		
L041*	4.8	4		
L051*	6.0	5		* Styles L021, L031, L041 and L051 are not available in nickel-metal hydride batteries.
L022	4.8	4		
L032	7.2	6		
L042	9.6	8		
L052	12.0	10		
L023	7.2	6		
L024	9.6	8		
L025	12.0	10		

HOW TO ORDER:

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Panasonic Lithium Batteries



The main features of lithium batteries are as follows:

High Voltage: Nominal voltage is 3V, which is nearly double that of other batteries which use the aqueous electrolyte system, such as manganese dry batteries, and silver-oxide batteries.

High energy density: Overwhelmingly high energy density, as compared with conventional batteries and other lithium batteries. The energy density is 5 to 10 times higher than that of manganese dry batteries.

Long Service and Shelf Life: Since Panasonic lithium batteries are composed of chemically and thermally stable material, self-discharge is extremely small. Deterioration when stored at room temperatures is ca. 0.5% annually – worry about deterioration is unnecessary.

Stable Flat Discharge Voltage: Since conductive carbon is continuously formed during discharge, internal impedance does not increase until the end of discharge, thus stabilizing discharge voltage.

Excellent Temperature Characteristics: Organic solvent ensures a low electrolytic freezing point so that the batteries can be used in a wide temperature range. -40°C to 85°C is standard (-40°C to 150°C for the High Temperature Coin Type; -40°C to 125°C for Model BR2477A and -40°C to 70°C for Camera Type).

BR Types versus CR Types: BR, or (CF) n/Li, batteries provide a more stable voltage particularly during the last half of discharge, while CR, or MnO₂/Li, batteries provide a higher voltage during the first half. CR batteries also can provide a higher current capability than BR batteries. In storage, BR batteries perform better at high temperatures. These characteristics must be taken into consideration when selecting a battery for a particular application.

UL Approval: Panasonic Lithium batteries are UL recognized. UL File No. MH12210.

DOT Exemption: Panasonic lithium cells and multiple cell batteries are authorized for transportation, in commerce, by U.S. shipping exemption DOT-E7052.

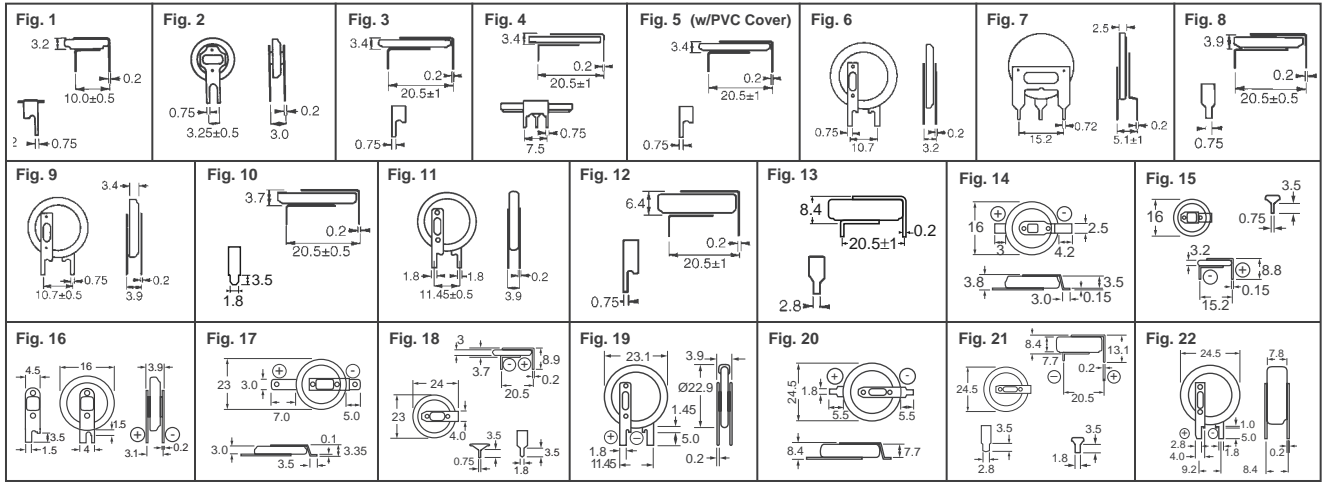
Disposal Information: Panasonic lithium cells are not an EPA listed hazardous waste, but may be considered a "characteristic" hazardous waste. Lithium metal, the anode component of the cells, is considered by the U.S. EPA to be hazardous when disposed because it is reactive with water. However, a cell which contains a small quantity of lithium metal is not necessarily a hazardous waste. Disposal regulations and policies are different in each State and are subject to frequent changes. Contact your local jurisdiction for specific advice on disposal.

Digi-Key is not approved by any state or federal agency as an authorized supplier of product for medical, life support or life sustaining devices or systems.

Fig.	Type	Cap. (mAh)	Dim. (mm) Dia. x Height	Wt.* (g)	Max. Drain (mA)	Std. (mA)	Digi-Key Part No	1	10	Pricing Pkg.	Carton	Panasonic Part No.
Computer Type												
-	Replacement Pack w/Leads	6 1200	19.5 x 33.9 x 36.0	41.0	250	2.5	P204-ND	12.63	113.63	1515.00/150	3408.75/450	BR-P2
-		6 1200	22.0 x 39.0 x 41.0	35.0	250	2.5	P203-ND	15.48	139.28	619.00/50	928.50/100	BR-E3C3BCA
Camera Type												
-	Replacement Pack	6 1300	19.5 x 35.0 x 36.0	37.0	-	20	P205-ND	11.00	-	118.80/12	2534.40/288	CR-P2PA/1B
-	Replacement Cyl.	3 750	15.6 x 27.0	11.0	-	20	P155-ND NEW!	7.38	66.38	70.80/12	4708.20/1200	CR-2PA/1B
-	Replacement Cyl.	3 1300	17.0 x 34.5	17.0	-	20	P154-ND	6.88	61.88	66.00/12	4708.00/1200	CR-123PA/1B
-	Replacement Pack	6 1300	17.0 x 34.0 x 45.0	38.0	-	20	P073-ND	11.00	99.00	105.60/12	1900.80/288	2CR-5MPA/1B
Standard Type												
-	C	3 5000	26.0 x 50.0	42.0	300	150	P167-ND	13.70	123.30	1096.00/100	1644.00/200	BR-CSSP
-	C w/ Tabs	3 5000	26.0 x 50.0	42.0	300	150	P144-ND†	14.88	133.88	1190.00/100	1785.00/200	BR-CT2SP
-	A	3 1800	17.0 x 45.5	18.0	250	2.5	P267-ND	9.38	84.38	774.00/100	4987.50/1000	BR-A
-	A w/ Tabs	3 1800	17.0 x 45.5	18.0	250	2.5	P267T-ND†	9.68	87.08	750.00/100	5147.10/1000	BR-A-T
-	2/3 A	3 1200	17.0 x 33.5	13.5	250	2.5	P133-ND	4.40	39.60	70.40/20	2112.00/800	BR-2/3A
-	2/3 A w/ Tabs	3 1200	17.0 x 33.5	13.5	250	2.5	P201-ND†	5.25	47.25	420.00/100	2793.00/1000	BR-2/3AT-2SP
-	2/3 A w/2 PCB Pins	3 1200	17.0 x 33.5	13.5	250	2.5	P226-ND†	5.25	47.25	420.00/100	2793.00/1000	BR-2/3AESPP
-	2/3 A w/3 PCB Pins	3 1200	17.0 x 33.5	13.5	250	2.5	P270-ND†	5.25	47.25	420.00/100	2793.00/1000	BR-2/3AE2SP
-	1/2 A 2/ Tabs	3 650	17.0 x 23.0	9.5	70	5.0	P134T-ND†	4.80	43.20	76.80/20	2553.60/1000	BR-1/2A-T
Bobbin Technology Type												
-	Cylinder	3 1750	17.0 x 33.5	17.0	8	1.0	P149-ND	8.48	76.28	678.00/100	4508.70/1000	CR17335SPE
Standard Coin Type												
-	Coin	3 25	12.5 x 1.6	0.6	5	0.1	P182-ND	1.43	12.83	456.00/400	2907.00/4000	BR1216
-	Coin	3 48	12.5 x 2.5	0.8	8	0.1	P183-ND	1.43	12.83	456.00/400	2907.00/4000	BR1225
-	Coin	3 48	16.0 x 1.6	1.0	8	0.1	P184-ND	1.43	12.83	228.00/200	1516.20/2000	BR1616
-	Coin	3 75	20.0 x 1.6	1.5	10	0.1	P137-ND	1.53	13.73	244.00/200	1622.60/2000	BR2016
-	Coin	3 100	20.0 x 2.0	2.0	10	0.2	P185-ND	1.43	12.83	228.00/200	1516.20/2000	BR2020
-	Coin	3 110	23.0 x 2.0	2.5	10	0.2	P136-ND	1.50	13.50	240.00/200	1596.00/2000	BR2320
-	Coin	3 165	23.0 x 2.5	3.2	10	0.2	P135-ND	1.50	13.20	240.00/200	1596.00/2000	BR2325
-	Coin	3 190	20.0 x 3.2	2.5	10	0.2	P186-ND	1.63	14.63	260.00/200	1729.00/2000	BR2032
-	Coin	3 255	23.0 x 3.0	3.2	10	0.3	P187-ND	2.03	18.23	324.00/200	2154.60/2000	BR2330
-	Coin	3 30	10.0 x 2.5	0.7	5	0.1	P031-ND	1.25	11.25	400.00/400	2550.00/4000	CR1025
-	Coin	3 25	12.5 x 1.6	0.7	5	0.1	P032-ND	1.13	10.13	360.00/400	2295.00/4000	CR1216
-	Coin	3 35	12.5 x 2.0	1.2	5	0.1	P033-ND	1.08	9.68	340.00/400	2193.00/4000	CR1220
-	Coin	3 55	16.0 x 1.6	1.2	8	0.1	P034-ND	.85	7.65	136.00/200	904.40/2000	CR1616
-	Coin	3 75	16.0 x 2.0	1.3	8	0.1	P035-ND	1.03	9.23	328.00/400	2091.00/4000	CR1620
-	Coin	3 125	16.0 x 3.2	1.8	8	0.1	P036-ND	1.13	10.13	360.00/400	2295.00/4000	CR1632
-	Coin	3 165	20.0 x 1.2	1.4	10	0.1	P037-ND	.63	5.63	200.00/400	1275.00/4000	CR2012
-	Coin	3 95	20.0 x 1.6	1.7	10	0.1	P138-ND	.55	4.95	88.00/200	351.12/1200	CR2016
-	Coin	3 150	20.0 x 2.5	2.5	15	0.2	P188-ND	.68	6.08	108.00/200	718.20/2000	CR2025
-	Coin	3 210	20.0 x 3.2	3.1	15	0.2	P189-ND	.55	4.95	88.00/200	585.20/2000	CR2032
-	Coin	3 130	23.0 x 2.0	3.0	15	0.2	P038-ND	1.35	12.15	216.00/200	1436.40/2000	CR2320
-	Coin	3 265	23.0 x 3.0	4.0	15	0.2	P111-ND	1.60	14.40	256.00/200	1702.40/2000	CR2330
-	Coin	3 560	23.0 x 5.4	5.9	15	0.2	P117-ND	2.03	18.23	362.00/100	1077.30/1000	CR2354
-	Coin	3 1000	24.5 x 7.7	10.5	10	0.2	P120-ND	4.00	36.00	320.00/100	2128.00/1000	CR2477
-	Coin	3 500	30.0 x 3.2	7.1	15	0.2	P121-ND	2.58	23.18	412.00/200	2739.80/2000	CR3032
PCB Terminal - Coin Type												
1	Coin	3 48	12.5 x 2.5	0.8	8	0.1	P191-ND	1.93	17.33	184.80/120	1228.92/1200	BR1225-1HC
2	Coin	3 48	12.5 x 2.5	0.8	8	0.1	P192-ND	1.93	17.33	308.00/200	693.00/600	BR1225-1VC
3	Coin	3 165	23.0 x 2.5	3.2	10	0.2	P142-ND	2.00	18.00	96.00/60	720.00/600	BR2325-1HB
4	Coin	3 165	23.0 x 2.5	3.2	10	0.2	P193-ND	2.00	18.00	96.00/60	720.00/600	BR2325-1HG
5	Coin	3 165	23.0 x 2.5	3.2	10	0.2	P028-ND	2.00	18.00	96.00/60	720.00/600	BR2325-1HC
6	Coin	3 165	23.0 x 2.5	3.2	10	0.2	P194-ND	2.00	18.00	160.00/100	600.00/500	BR2325-1VC
7	Coin	3 165	23.0 x 2.5	3.2	10	0.2	P195-ND	2.00	18.00	96.00/60	720.00/600	BR2325-1VG
8	Coin	3 190	20.0 x 3.2	2.5	10	0.2	P196-ND	2.00	18.00	160.00/100	480.00/400	BR2032-1HE
9	Coin	3 190	20.0 x 3.2	2.5	10	0.2	P197-ND	2.00	18.00	192.00/120	720.00/600	BR2032-1VB
10	Coin	3 255	23.0 x 3.0	3.2	10	0.3	P198-ND	2.30	20.70	110.40/60	828.00/600	BR2330-1HE
11	Coin	3 255	23.0 x 3.0	3.2	10	0.3	P199-ND	2.30	20.70	110.40/60	828.00/600	BR2330-1VC
12	Coin	3 165	23.0 x 2.5	6.4	10	0.2	P143-ND	4.20	37.80	134.40/40	1008.00/400	BR2325-2HC
13	Coin	3 1000	24.5 x 7.7	10.5	10	0.2	P126-ND	4.68	42.08	374.00/100	2487.10/1000	CR2477-1HF
PCB Terminal - High Temperature Coin Type (BR1632 & BR2330 Series: -40°C to 150°C; BR2477 Series: -40°C to 125°C)												
14	Coin	3 120	16.0 x 3.20	1.5	-	0.03	P022-ND NEW!	2.08	18.68	664.00/400	4233.00/4000	BR1632A/FA
15	Coin	3 120	16.0 x 3.20	1.5	-	0.03	P023-ND NEW!	2.08	18.68	664.00/400	4233.00/4000	BR1632A/HA
16	Coin	3 120	16.0 x 3.20	1.5	-	0.03	P024-ND NEW!	2.08	18.68	664.00/400	4233.00/4000	BR1632A/VA
17	Coin	3 255	23.0 x 3.00	3.2	-	0.03	P025-ND NEW!	2.35	21.15	376.00/200	2500.40/2000	BR2330A/FA
18	Coin	3 255	23.0 x 3.00	3.2	-	0.03	P026-ND NEW!	2.35	21.15	376.00/200	2500.40/2000	BR2330A/HA
19	Coin	3 255	23.0 x 3.00	3.2	-	0.03	P027-ND NEW!	2.35	21.15	376.00/200	2500.40/2000	BR2330A/VA
20	Coin	3 1000	24.5 x 7.00	8.0	-	0.03	P028-ND NEW!	3.83	34.43	306.00/100	2034.90/1000	BR2447A/FB
21	Coin	3 1000	24.5 x 7.00	8.0	-	0.03	P029-ND NEW!	3.83	34.43	306.00/100	2034.90/1000	BR2447A/FA
22	Coin	3 1000	24.5 x 7.00	8.0	-	0.03	P030-ND NEW!	3.83	34.43	306.00/100	2034.90/1000	BR2447A/VA
Pin Type												
-	Pin	3 25	4.2 x 25.9	0.55	4	0.5	P140-ND	3.75	33.75	900.00/300	5737.50/3000	BR425
-	Pin	3 50	4.2 x 35.9	0.85	6	1.0	P139-ND	3.75	33.75	900.00/300	5737.50/3000	BR435

PCB Terminal Type

* See "How To Order" for note on shipping charges on prepaid orders. † Tabbed version.



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Panasonic Vanadium Pentoxide Lithium Rechargeable Batteries

Features: • One high-voltage battery to serve your back up needs. This single, compactly designed, cost-effective 3V battery does the work of three 1.2V Ni-Cd or two capacitors. • Months of continuous

use as a backup The VL3032 has a nominal electrical capacity of 100mAh which translates into 10,000 hours with a microprocessor load of 10 µA.

Applications: • **Memory Backup:** Facsimiles, ECRs, telephones, typewriters, sequencers, VTRs, video cameras, personal computers, memory cards, tuners.

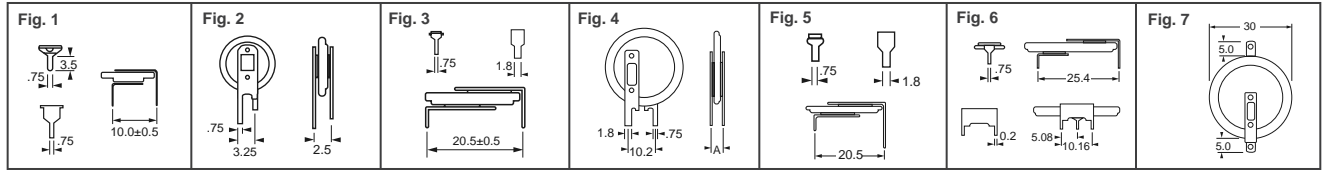
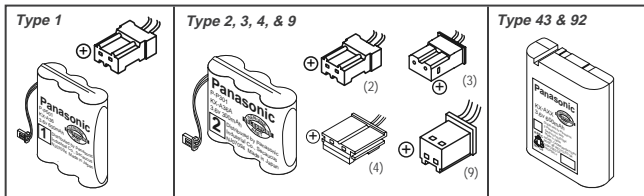


Fig.	Type	(V)	Capacity (mAh)	Dimensions (mm)			Weight (g)	Drain Max. (µA)	Charge Current*	Digi-Key Part No	Pricing			Panasonic Part No.	
				Dia.	Height	A					1	10	Pkg.	Carton	
1	Coin	3	7	12.5	2.0	—	0.8	< 20	< 0.5 mA	P079-ND	4.45	40.05	213.60/60	2840.88/1200	VL1220-1HF
2	Coin	3	7	12.5	2.0	—	0.8	< 20	< 0.5 mA	P080-ND	4.45	40.05	178.00/50	2840.88/1200	VL1220-1VC
3	Coin	3	20	20.0	2.0	—	2.2	< 70	< 1.5 mA	P081-ND	4.75	42.75	456.00/120	1710.00/600	VL2020-1HF
4	Coin	3	20	20.0	2.0	2.7	2.2	< 70	< 1.5 mA	P082-ND	4.75	42.75	456.00/120	1710.00/600	VL2020-1VC
5	Coin	3	30	23.0	2.0	—	2.8	< 100	< 2.0 mA	P083-ND	5.85	52.65	280.80/60	2106.00/600	VL2320-1HF
4	Coin	3	30	23.0	2.0	2.7	2.8	< 100	< 2.0 mA	P084-ND	5.85	52.65	280.80/60	2106.00/600	VL2320-1VC
5	Coin	3	50	23.0	3.0	—	3.7	< 100	< 2.0 mA	P085-ND	7.38	66.38	354.00/60	2655.00/600	VL2330-1HF
4	Coin	3	50	23.0	3.0	3.7	3.7	< 100	< 2.0 mA	P086-ND	7.38	66.38	354.00/60	2655.00/600	VL2330-1VC
6	Coin	3	100	30.0	3.2	—	6.3	< 200	< 4.0 mA	P087-ND	9.28	83.48	445.20/60	3339.00/600	VL3032-1GUF
7	Coin	3	100	30.0	3.2	—	6.3	< 200	< 4.0 mA	P088-ND	9.28	83.48	742.00/100	4934.30/1000	VL3032-1F2

* Charge Voltage = 3.4 ± 0.15V

Panasonic Replacement Telephone Packs



Pan. Type	(V)	Cap. C/5 (mAh)	Dimensions — H x L x T Inch (mm)	Weight Oz. (g)	Digi-Key Part No.	Price Each	Panasonic Part No.
1	3.6	600	1.88 x 1.65 x 0.55 (47.8 x 41.9 x 14.0)	2.37 (67.2)	P072-ND	7.99	P-P501
2	3.6	300	1.09 x 1.65 x 0.55 (27.7 x 41.9 x 14.0)	1.47 (41.7)	P071-ND	7.99	P-P301
3	3.6	300	1.09 x 1.65 x 0.55 (27.7 x 41.9 x 14.0)	1.47 (41.7)	P070-ND	7.99	P-P302
4	3.6	300	1.09 x 1.65 x 0.55 (27.7 x 41.9 x 14.0)	1.47 (41.7)	P069-ND	7.99	P-P303
9	3.6	300	1.09 x 1.65 x 0.55 (27.7 x 41.9 x 14.0)	1.47 (41.7)	P066-ND	7.99	P-P304
43	3.6	600	2.16 x 1.77 x 0.66 (54.9 x 45.0 x 16.8)	2.69 (72.6)	P065-ND	22.39	P-P543
92	3.6	600	2.08 x 1.68 x 0.58 (52.8 x 42.7 x 14.7)	2.52 (71.4)	P064-ND	20.14	P-P592

TELEPHONE MODEL CROSS REFERENCE CHART

Phone Model #	Pan. Type #	Phone Model #	Pan. Type #	Phone Model #	Pan. Type #	Phone Model #	Pan. Type #	Phone Model #	Pan. Type #
AT&T		AT&T, Cont.		Bell South		Cobra, Cont.		Code-A-Phone, Cont.	
HT 3400	#4	4500	#4	Southwind - Models	#9	CP-464 S	#3	7015	#3
HT 4100	#4	4600	#4	HAC-Models	#9	CP-469 S	#3	7050	#3
HT 4200	#4	4605	#4	YCL 7701	#4	CP-470 S	#3	7110	#3
HT 4210	#4	4615	#4	YCL 7702	#4	CP-471 S	#3	7210	#3
HT 4400	#4	4690	#4	YCL 7703	#4	CP-472 S	#3	General Electric	
HT 4410	#4	4695	#4	CP-473 S	#3	CP-473 S	#3	EA1X681	#3
HT 5200	#4	4725	#4	CP-474 S	#3	CP-474 S	#3	Ex. 3100	#3
HT 5300	#4	5200	#4	AN-8525	#3	CP-475 S	#3	Ex. 32011	#1
HT 5310	#4	5210	#4	AN-8526	#3	CP-483 S	#4	255	#1
HT 5320	#4	5300	#4	AN-8630 (LS)	#3	CP-484 S	#4	3210C	#3
HT 5500	#4	5310	#4	CP-110	#1	CP-100 SA	#1	PAC Tel	
MLC5	#4	5320	#4	CP-310	#1	CP-110 SA	#1	CS8000	#4
450	#4	5352	#4	CP-320	#1	CP-115 SA	#1	CS8100	#4
500	#4	5400	#4	CP-355	#1	CP-120 SA	#1	CS8400	#4
600	#4	5405	#4	CP-481	#3	CP-130 SA	#1	Pacific Bell	
700	#4	5450	#4	CP-482	#3	CP-140 SA	#1	800	#4
3000	#4	5455	#4	CP-483	#3	CP-320 S(A)	#1	810	#4
3400	#4	5460	#4	CP-484	#3	CP-2500	#3	820	#4
4000(A)	#4	5470	#4	CP-487	#3	CP-2505	#3	Panasonic	
4100	#4	5471	#4	CP-488	#3	CP-2507	#3	KX-T3610	#2
4110	#4	5480	#4	CP-489	#3	CP-2510	#3	KX-T3620	#2
4200	#4	5481	#4	CP-492	#3	CSPA	#1	KX-T3640	#2
4210	#4	5484	#4	CP-701	#3	100 SA	#1	KX-T3702	#2
4300	#4	5490	#4	CP-702	#3	110 S	#1	KX-T3705	#2
4305	#4	5500	#4	CP-705	#3	115 A	#1	KX-T3710 (B)	#2
4310	#4	5510	#4	CP-711	#3	120 SA	#1	KX-T3712	#2
4315	#4	5552	#4	CP-712	#3	130 SA	#1	KX-T3720 (B)	#2
4320	#4	5600	#4	CP-714	#3	140 SA	#1	KX-T3725 (B)	#2
4330	#4	5635	#4	CP-720	#3	205 SA	#1	KX-T3730	#2
4335	#4	5650	#4	CP-250 S	#1	Code-A-Phone	#1	KX-T3732	#2
4400	#4	5700	#4	CP-260 S	#1	3150	#3	KX-T3800	#2
4410	#4	5710	#4	CP-310 S	#1	3260	#3		
				CP-355 S	#1	7010	#3		

Phone Model #	Pan. Type #	Phone Model #	Pan. Type #	Phone Model #	Pan. Type #	Phone Model #	Pan. Type #	Phone Model #	Pan. Type #
G. E., Cont.		Panasonic, Cont.		Panasonic, Cont.		Sharp, Cont.		S. Western Bell, Cont.	
2-9735	#4	KX-T3805	#2	KX-TC100	#2	CL-260	#4	FF-1150	#1
2-9740	#4	KX-T3807	#2	KX-TC109	#2	CL-265ID	#4	FF-1175	#1
2-9745	#4	KX-T3815	#1	KX-TC150	#2	CL-300	#1	FF-1700	#1
2-9750	#4	KX-T3822	#2	KX-TC155	#2	CL-350	#4	FF-1750	#1
2-9751	#4	KX-T3823	#2	KX-TC157	#2	CL-355	#4	FF-1755	#1
2-9752	#4	KX-T3824	#2	KX-TC180	#2	CL-400	#1	Toshiba	
2-9753	#4	KX-T3825	#1	KX-TC190	#2	CL-405	#1	FT-6002	#2
2-9755	#4	KX-T3832	#2	KX-TC280	#2	CL-410	#1	FT-6003/BK	#2
2-9770	#4	KX-T3835	#1	KX-TC289	#2	CL-500	#4	FT-6203	#2
2-9775	#4	KX-T3842	#1	KX-TC900B	#2	CL-505	#4	FT-6202 (P)	#2
2-9782	#4	KX-T3845	#1	KX-TC900W	#2	CL-510	#4	FT-6203	#2
2-9783	#4	KX-T3848 (B)	#2	KX-TC905	#43	CL-540	#4	FT-6302 (P)	#2
2-9785	#4	KX-T3850 (B)	#2	KX-TC909	#2	CL-550	#4	FT-6303	#2
2-9795	#4	KX-T3855 (B)	#2	KX-TC910B	#2	CL-555	#4	FT-6400W	#2
2-9821	#3	KX-T3860 (W)	#2	KX-TC919B	#2	FT-4150	#4	FT-6503	#2
5-2126	#3	KX-T3870	#2	KX-TC930	#43	FT-4155	#4	FT-6603	#2
5-2132	#3	KX-T3875	#2	KX-TC940B	#2	FT-4160	#4	Uniden	
5-2189	#3	KX-T3880	#1	KX-TC940W	#2	FT-4250	#4	AM468V	#2
5-2198	#3	KX-T3900	#1	KX-TCM938	#2	FT-4255	#4	B-3810	#1
5-2303	#3	KX-T3908	#2	KX-TC970W	#2	FT-4350	#4	B-4101	#1
5-2309	#3	KX-T3910 (B)	#2	Radio Shack		FT-4355	#4	CT301	#2
5-2304	#3	KX-T3912	#2	CS-228	#2	FT-4400	#1	EX-255	#1
5-2310	#3	KX-T3920 (B)	#2	Sanyo		FT-5410	#1	EX-2100	#1
5-2311	#3	KX-T3925	#2	CAS-100	#3	FT-5505	#4	EX-3101	#1
5-3304	#3	KX-T3930	#2	CAS-125	#3	FT-5510	#4	EX-3102	#1
		KX-T3932	#2	CAS-130	#3	FT-5555	#4	EX-3800	#1
		KX-T3935 (W)	#2	CAS-160	#3	Sony		EX-4100	#1
200CT	#4	KX-T3940 (W)	#2	CAS-170	#3	SPP-20	#2	EX-4102	#1
20X	#4	KX-T3945	#2	CAS-837	#3	SPP-55	#2	EX-4800	#1
Circa 2000	#4	KX-T3950 (B)	#2	CAS-887	#3	SPP-57	#2	XC265	#2
		KX-T3960 (B)	#2	CAS-1200	#3	SPP-65	#2	XC202	#2
3150	#3	KX-T3962	#2	CAS-1500	#3	SPP-71	#2	XC305	#2
		KX-T3965	#2	CLT-156	#3	SPP-72 (C)	#2	XC310	#2
		KX-T3967	#2	CLT-177	#3	SPP-73	#2	XC312	#2
Excursion	#1	KX-T3968	#2	CLT-177	#3	SPP-A20	#2	XC314	#2
Ex. 3100	#3	KX-T3980 (B)	#2	CLT-300	#3	SPP-A40	#2	XC315	#2
Ex. 32011	#1	KX-T4108	#2	CLT-556	#3	SPP-A60	#2	XC320	#2
255	#1	KX-T4109	#2	CLT-576	#3	SPP-A110	#2	XC330	#2
3210C	#3	KX-T4168	#2	CLT-577	#3	SPP-A250	#2	XC332	#2
		KX-T4169	#2	CLT-656	#3	SPP-A450	#2	XC340	#2
CS8000	#4	KX-T4200	#2	CLT-657	#3	SPP-A900	#1	XC345	#2
CS8100	#4	KX-T4310	#2	CLT-667	#3	SPP-D15	#1	XC365	#2
CS8400	#4	KX-T4340	#2	CLT-670	#3	SSP-AQ120	#2	XC610	#2
		KX-T4342	#2	CLT-677	#3	SSP-AQ150	#2	XC611	#2
800	#4	KX-T4300 (B)	#2	CLT-760	#3	SSP-AQ500	#2	XC615	#2
810	#4	KX-T4330 (B)	#2	CLT3300A	#3	SSP-AQ600	#2	XC714	#2
820	#4	KX-T4350	#2	CLT3600A	#3	SSP-Q110	#2	XC716	#2
		KX-T4360	#2	CLT4300	#3	SSP-Q120	#2	XC717	#2
		KX-T4365	#2	CLT4600	#3	SSP-Q150	#2	XC718	#2
KX-T3610	#2	KX-T4370 (B)	#2	Sears		SSP-D900	#1	XC3510 (G)	#2
KX-T3620	#2	KX-T4400 (B)	#2	34953	#4	SSP-ER1	#1	XC3514	#2
KX-T3640	#2	KX-T4500	#2	34955	#4	SSP-ER101	#1	XC3515	#2
KX-T3702	#2	KX-T4550	#2	Sharp					

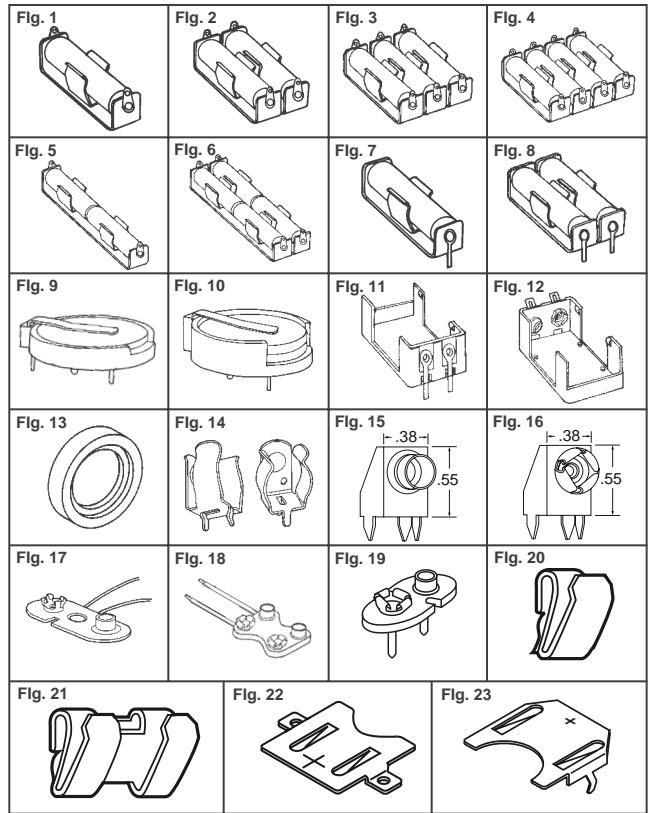
KEYSTONE Electronics Corp. Battery Holders

Fig.	No. of Cells	Digi-Key Part No.	1	10	100
AA "PC" Battery Clip					
14	1	92K-ND	.472	1.75	11.70
AAA Snap-In Battery Clips					
14	—	82K-ND	.352	1.46	11.70
9 Volt "PC" Battery Clips (on board battery mount)					
15	Male	593K-ND	.26	1.92	18.30
16	Female	594K-ND	.31	2.31	22.20
9 Volt Battery Straps					
17	Single	72K-ND	.76	6.77	50.85
18	Dual	227K-ND	1.96	14.70	120.20
24mm Coin Cell Lithium "PC" Holders					
9	1	105K-ND	1.04	7.83	69.30
10	2	1025K-ND	.92	8.04	76.20
20mm Coin Cell Lithium "PC" Holders					
9	1	106K-ND	1.04	7.83	69.30
10	2	1026K-ND	.92	8.04	76.20
23mm Coin Cell Lithium "PC" Holders					
9	1	107K-ND	1.04	7.83	69.30
10	2	1027K-ND	.92	8.04	76.20
12mm Coin Cell Lithium "PC" Holders					
9	1	500K-ND	1.61	13.05	112.35
16mm Coin Cell Lithium "PC" Holders					
9	1	502KE-ND	1.61	13.05	112.35
9 Volt Holders					
11	1	1294K-ND	1.19	8.94	74.25
12	1	1295K-ND	1.15	8.62	70.90
Insulated Polarizing Washers - 59 (Red), 60 (Black)					
13	—	59K-ND	—	.66	5.80
13	—	60K-ND	—	.66	5.80
N Cell Holders*					
1	1	154K-ND	1.34	10.01	81.85
2	2	155K-ND	2.75	20.66	168.80
3	3	156K-ND	5.73	42.98	336.00
AAA Cell Holders*					
1	1	137K-ND	1.63	12.21	99.70
2	2	138K-ND	2.86	21.43	166.00
3	3	169K-ND	4.22	31.64	248.00
4	4	170K-ND	5.76	43.20	340.00
AA Cell Holders*					
1	1	139K-ND	1.05	7.91	64.65
2	2	140K-ND	2.13	15.95	130.35
3	3	171K-ND	3.38	25.37	198.00
4	4	182K-ND	4.80	36.00	295.00

Fig.	No. of Cells	Digi-Key Part No.	1	10	100
5	2	189K-ND	1.69	12.65	103.40
6	4	192K-ND	3.26	24.41	189.00
7	1	2222K-ND	1.32	9.93	86.20
8	2	2223K-ND	2.26	16.97	145.30
C Cell Holders*†					
1	1	173K-ND	1.29	9.71	79.40
2	2	174K-ND*	2.25	16.91	138.05
3	3	187K-ND	4.67	35.06	274.00
5	2	185K-ND	1.98	14.87	121.50
6	4	196K-ND	3.67	27.55	217.00
7	1	2224K-ND	1.35	10.16	83.00
8	2	2225K-ND*	2.42	18.16	148.35
D Cell Holders*†					
1	1	175K-ND	1.50	11.24	89.50
2	2	176K-ND*	2.63	19.72	161.10
3	3	190K-ND	5.79	43.43	341.00
5	2	186K-ND	2.25	16.91	138.05
6	4	200K-ND	4.11	30.83	240.00
7	1	2226K-ND	1.87	14.05	113.20
8	2	2227K-ND*	2.96	22.22	181.50
Vertical "9V" PC Connector					
19	—	968K-ND	.78	7.12	52.25
Single "AA" cell clip					
20	—	209K-ND	.372	1.49	12.45
Dual "AA" cell clip					
21	—	210K-ND	.612	2.49	21.50
AAA Snap-On Contacts					
20	—	204K-ND	.372	1.49	12.45
21	—	202K-ND	.612	2.49	21.50

Fig.	Size	Digi-Key Part No.	1	10	100
Surface Mount Coin Cell Retainer Contacts					
22	12mm	3000K-ND	.32	2.36	20.90
22	20mm	3002K-ND	.32	2.42	21.40
22	23mm	3004K-ND	.33	2.48	21.95
22	24mm	3006K-ND	.34	2.54	22.45
Thru Hole Mount Coin Cell Retainer Contacts					
23	12mm	3001K-ND	.32	2.36	20.90
23	20mm	3003K-ND	.32	2.42	21.40
23	23mm	3005K-ND	.33	2.48	21.95
23	24mm	3007K-ND	.34	2.54	22.45

* Cell Holders are Aluminum. † "C" and "D" cell holders are dual clips only. • Figs. 14, 20, 21, 22 & 23 sold by the pair.



“Budget Balancers” Battery Holders

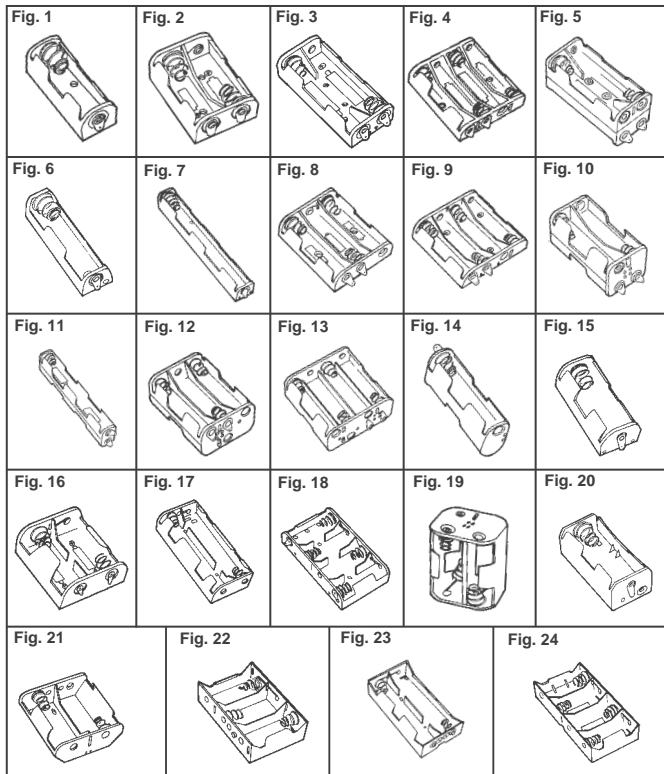


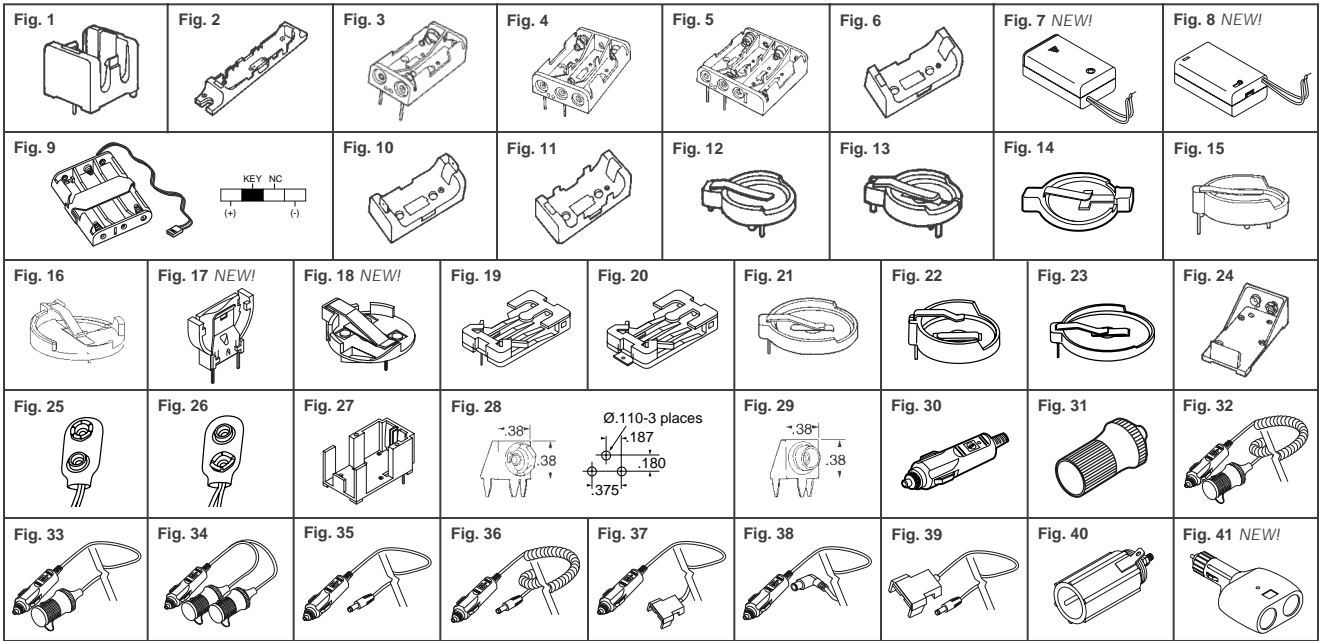
Fig.	No. of Cells	Description	Digi-Key Part No.	1	10	100
N Cell Holders						
1	1	Solder Tabs	BHNL-ND	.58	5.18	48.00
2	2	Solder Tabs	BH2NL-ND	.62	5.55	51.01
AAA Cell Holders						
3	2	Solder Tabs	BC2AAAL-ND	.62	5.55	51.01
4	4	Solder Tabs	BC4AAAL-ND	1.46	13.11	121.09
5	4	Solder Tabs	BH2AAAAL-ND	.99	8.89	82.00
3	2	6" Wire Leads, Stripped-Tinned 3/16" (4.78mm)	BC2AAAW-ND	.69	6.22	57.85
4	4	6" Wire Leads, Stripped-Tinned 3/16" (4.78mm)	BC4AAAW-ND	1.49	13.42	124.00
5	4	6" Wire Leads, Stripped-Tinned 3/16" (4.78mm)	BH2AAAAW-ND	1.00	9.04	84.00
AA Cell Holders						
6	1	Solder Tabs	BCAAL-ND	.54	4.83	45.03
7	2	Solder Tabs	BC12AAL-ND	.60	5.37	50.00
14	2	Solder Tabs	BC22AAL-ND	.58	5.18	48.00
8	3	Solder Tabs	BC3AAL-ND	.93	8.36	77.07
9	4	Solder Tabs	BC4AAL-ND	.96	8.67	80.00
10	4	Solder Tabs	BH2AAL-ND	.85	7.63	70.91
11	4	Solder Tabs	BH14AAL-ND	.71	6.41	59.04
12	6	Solder Tabs	BH26AAL-ND	1.20	10.80	100.00
13	8	Solder Tabs	BH48AAL-ND	1.46	13.11	121.09
14	2	6" Wire Leads, Stripped-Tinned 3/16" (4.78mm)	BC22AAW-ND	.59	5.33	49.05
8	3	6" Wire Leads, Stripped-Tinned 3/16" (4.78mm)	BC3AAW-ND	.96	8.67	80.00
9	4	6" Wire Leads, Stripped-Tinned 3/16" (4.78mm)	BC4AAW-ND	1.00	9.04	84.00
10	4	6" Wire Leads, Stripped-Tinned 3/16" (4.78mm)	BH24AAW-ND	.93	8.36	77.06
11	4	6" Wire Leads, Stripped-Tinned 3/16" (4.78mm)	BH14AAW-ND	.77	6.95	64.00
12	6	6" Wire Leads, Stripped-Tinned 3/16" (4.78mm)	BH26AAW-ND	1.26	11.35	105.05
13	8	6" Wire Leads, Stripped-Tinned 3/16" (4.78mm)	BH48AAW-ND	1.49	13.42	124.00
C Cell Holders						
15	1	Solder Tabs	BHCL-ND	.65	5.86	54.00
16	2	Solder Tabs	BH2CL-ND	1.24	11.15	102.87
17	4	Solder Tabs	BH24CL-ND	1.37	12.37	114.86
18	4	Solder Tabs	BH4CL-ND	1.63	14.65	136.00
19	4	Solder Tabs	BH22CL-ND	1.75	15.74	146.00
D Cell Holders						
20	1	Solder Tabs	BHDL-ND	.71	6.41	59.04
21	2	Solder Tabs	BH2DL-ND	1.37	12.37	114.86
22	3	Solder Tabs	BH3DL-ND	1.71	15.37	142.00
23	4	Solder Tabs	BH24DL-ND	1.71	15.37	142.00
24	4	Solder Tabs	BH4DL-ND	2.12	19.07	176.88

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Memory Protection Devices



Battery Holders

No. of Fig.	Cells	Description	Digi-Key Part No.	Pricing		
				1	10	100
<i>*1/3N" Cell Holders</i>						
1	1	PC Mount, Solder Legs	BH1/3N-ND	.86	7.75	65.10
<i>*N" Cell Holders</i>						
2	2	PC Mount, Solder Legs	BH2N-ND	1.94	17.49	159.98
<i>*AAA" Cell Holders</i>						
3	2	PC Mount, Solder Legs	BH2AAA-PC-ND	1.35	12.11	100.94
4	3	PC Mount, Solder Legs	BH3AAA-PC-ND	2.24	20.14	167.71
3	2	6" (152.40mm) Wire Leads, Stripped-Tinned 3/16" (4.76mm)	BH2AAA-W-ND	1.35	12.11	100.94
4	3	6" (152.40mm) Wire Leads, Stripped-Tinned 3/16" (4.76mm)	BH3AAA-W-ND	2.24	20.14	167.71
5	4	6" (152.40mm) Wire Leads, Stripped-Tinned 3/16" (4.76mm)	BH4AAA-W-ND	2.49	22.45	187.56
<i>*AA" Cell Holders</i>						
6	1	PC Mount, Solder Legs	BH4AA-ND	1.84	16.59	138.67
3	2	PC Mount, Solder Legs	BH2AA-PC-ND	1.42	12.75	106.27
4	3	PC Mount, Solder Legs	BH3AA-PC-ND	2.39	21.55	179.94
5	4	PC Mount, Solder Legs	BH4AA-PC-ND	2.59	23.35	194.99
7	2	Battery Case for 2 AA Cells with 6" Wire Leads	SBH-321A-ND NEW!	.65	5.83	54.00
8	2	Battery Case for 2 AA Cells with 6" Wire Leads and Switch	SBH-321AS-ND NEW!	.72	6.48	60.00
7	3	Battery Case for 3 AA Cells with 6" Wire Leads	SBH-331A-ND NEW!	.96	8.64	80.00
8	3	Battery Case for 3 AA Cells with 6" Wire Leads and Switch	SBH-331AS-ND NEW!	1.03	9.29	86.00
7	4	Battery Case for 4 AA Cells with 6" Wire Leads	SBH-341A-ND NEW!	1.01	9.07	84.00
8	4	Battery Case for 4 AA Cells with 6" Wire Leads and Switch	SBH-341AS-ND NEW!	1.08	9.72	90.00
3	2	6" (152.40mm) Wire Leads, Stripped-Tinned 3/16" (4.76mm)	BH2AA-W-ND	1.42	12.75	106.27
4	3	6" (152.40mm) Wire Leads, Stripped-Tinned 3/16" (4.76mm)	BH3AA-W-ND	2.39	21.55	179.94
5	4	6" (152.40mm) Wire Leads, Stripped-Tinned 3/16" (4.76mm)	BH4AA-W-ND	2.59	23.35	194.99
<i>Computer Clock Battery Replacement / "AA" Cell Holder</i>						
9	3	9" Wire Leads w/ conn, velcro pads included	BH3AA-211-ND	3.19	28.74	283.34
<i>*1/2AA" Cell Holders</i>						
6	1	PC Mount, Solder Legs	BH1/2AA-ND	1.48	13.34	111.67
<i>*2/3A" Cell Holders</i>						
6	1	PC Mount, Solder Legs	BH2/3A-ND	1.65	15.62	149.10
—	1	Cover for PC Mount Holder	BH2/3AC-ND	.44	3.97	33.53
10	1	Fast-On Tabs	BH2/3A-T-ND	1.66	14.92	142.06
<i>*C" Cell Holders</i>						
11	1	PC Mount, Solder Legs	BHC-ND	2.02	18.19	175.55
<i>Coin Cell Holders — 12mm Cell Diameter</i>						
12	1	PC Mount, Solder Legs, 2-2.5mm Cell Height	BH500-ND	.97	8.71	73.02
<i>Coin Cell Holders — 16mm Cell Diameter</i>						
13	1	PC Mount, Solder Legs, 1.6-3.2mm Cell Height	BH600-ND	.92	8.29	69.44
14	1	SMT, Temp. range -40°C to +245°C	BH600SM-ND	1.13	10.13	84.60
<i>Coin Cell Holders — 20mm Cell Diameter</i>						
15	2	PC Mount, Solder Legs, 2.5-3.2mm Cell Height	BH800S-ND	.60	5.41	53.33
14	1	SMT -60° to 282°C 1.6mm Cell Height	BH2016SM-ND	.70	6.26	61.67
16	1	PC Mount, Solder Legs	BH32T-C-ND	1.14	8.63	72.73
17	1	Vertical, for CR2032 Battery	BS-5-ND NEW!	.95	8.54	71.36

No. of Fig.	Cells	Description	Digi-Key Part No.	Pricing		
				1	10	100
18	1	Horizontal, for CR2032 Battery	BS-3-ND NEW!	.77	6.94	57.98
19	1	PC Mount, Press-to-Eject Feature	BA2032-ND	.72	5.83	53.67
20	1	SMT, Press-to-Eject Feature	BA2032SM-ND	.72	5.83	53.67
<i>Coin Cell Holders — 23mm Cell Diameter</i>						
15	2	PC Mount, Solder Legs, 2.5mm Cell Height	BH906S-ND	1.01	9.11	76.09
16	1	PC Mount, Solder Legs, 2-3.2mm Cell Height	BH908T-C-ND	1.14	8.63	72.73
14	1	SMT, Temp. range -60°C to +282°C	BH2303SM-ND	1.16	10.45	89.10
<i>Coin Cell Holders — 24-25mm Cell Diameter</i>						
21	1	PC Mount, Solder Legs, 2-3mm Cell Height	BH1000-ND	.98	8.84	73.85
22	1	PC Mount, Solder Legs, 7.7mm Cell Height	BH1000-G-ND	1.22	11.25	94.50
<i>Coin Cell Holders — 30mm Cell Diameter</i>						
23	1	PC Mount, Solder Legs, 3.2mm Cell Height	BH3000-ND	1.22	11.25	94.50
<i>9-Volt Cell Holders</i>						
24	1	PC Mount, Solder Legs	BH9V-PC-ND	1.17	10.57	89.02
24	1	6" (152.40mm) Lead Wires	BH9V-W-ND	.88	7.95	78.33
25	1	6" (152.40mm) Battery Snap Cable	BS61-ND	.30	2.70	24.99
25	1	12" (304.8mm) Battery Snap Cable	BS12I-ND	.31	2.79	26.00
26	1	6" (152.40mm) Heavy Duty Battery Snap Cable	BS61-HD-ND	.33	3.06	28.00
26	1	12" (304.8mm) Heavy Duty Battery Snap Cable	BS12I-HD-ND	.35	3.15	30.00
27	1	PC Mount, Printed Circuit Board Type w/Contacts	BC9VPC-ND	1.41	11.25	101.34
<i>Printed Circuit Snap-Ons (off board battery mount)</i>						
28	—	9-Volt Female Snap-on	BSPCF-ND	.22	1.99	13.24
29	—	9-Volt Male Snap-on	BSPCM-ND	.19	1.73	11.38

Cigarette Lighter Sockets

- 21 mm (Inside Diameter) • Auto Plugs: (Fuse 3AG Style)
- The length of cord shown in each item is measured from the welding point.

No. of Fig.	Description	Digi-Key Part No.	Pricing		
			1	10	100
<i>Auto Power Plug</i>					
30	ABS fused auto plug with LED, Black	APP-001-ND	2.25	20.29	200.00
30	ABS fused auto plug with LED, Gray	APP-002-ND	2.25	20.29	200.00
30	ABS fused auto plug w/ no LED, Black	APP-003-ND	2.07	18.60	183.34
<i>Cigarette Assemblies</i>					
31	Cigarette Inline Socket, Plastic	ZA2010-ND	1.13	10.14	100.00
—	Red Rubber Cap for Sockets	ZA2081-ND	.56	5.07	50.00
32	12' (3.66 meters) Coil Cord Assembly with 5A Fused Plug	ZA5070-ND	5.26	47.34	466.68
33	12' (3.66 meters) 18AWG Cord Assembly, w/10A Fused Plug	ZA5071-ND	6.48	58.33	575.01
34	8' (203.2mm) 18AWG Cord Assembly, w/10A Fused Plug	ZA5072-ND	6.20	55.80	550.01
35	6' (1.83 meters) 18AWG Cord, 2.1mm x 5.5mm DC Plug with 5A Fused Plug	ZA5073-ND	3.85	34.66	341.74
36	12' (3.66 meters) Cord, 2.1mm x 5.5mm DC Plug, w/5A Fused Plug	ZA5074-ND	6.11	54.95	541.68
37	1', (0.30 meters) UL2468 Cord, Lead Acid Clip, with 2A Fused Plug	ZA5076-ND	4.32	38.89	383.34
38	6' (1.83 meters) Cord, 2.1mm x 5.5mm Rt. Angle DC Plug with 3A Fused Plug	ZA5077-ND	3.85	34.66	341.67
39	8' (203.2mm) UL2468 Cord, Lead Acid Clip, 2.1mm x 5.5mm DC Plug	ZA5350-ND	2.91	26.21	258.34
39	8' (203.2mm) UL2468 Cord, Lead Acid Clip, No Connector	ZA5350-B-ND	2.54	22.83	225.00
40	Panel Mount, Power Socket, Insert Lock	ZA2070-ND	3.36	29.92	270.40
40	Panel Mount, Power Socket, Screw Lock	ZA2060-ND	2.60	23.19	209.56
41	Power Plug Splitter, One Male Plug-Two Receptacle Sockets	ZA5018-ND NEW!	6.08	54.93	539.50

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TASKMASTER™ Flashlights

These Heavy-Duty Lights are durable enough for even the most demanding jobs. **Features:** • Performance tested by independent testing laboratory • Durable scratch-resistant high-tech plastic withstands drop tests from 7 feet onto concrete pavement • Powerful Krypton Bulb for brighter and whiter light • Heavy-Duty Switch tested to operate over 10,000 cycles • Lifetime warranty on flashlight and switch (On manufacture defects only).

Specifications: **FF-307PA/K** • Weight: 2.8 oz. (79.38 grams) • Batteries: 2 Heavy-Duty "AA" size • **Brightness:** Light output of over 50 candles at 5 ft. (1.52 meters) **FF-107PA/K** • Weight: 11.3 oz. (320.34 grams) • Batteries: 2 Heavy-Duty "D" size • **Brightness:** Light output of over 100 candles at 5 ft. (1.52 meters) **FF-3PA/K** • Weight: 1.8 lbs. (82 kilograms) • Batteries: 4

Heavy-Duty "D" size • **Brightness:** Over 200 candles at 5 ft. (1.52 meters).

TASKMASTER™ Head Light

Features: • Powerful hands-free operation • Designed for comfort with wide, adjustable elastic headband and padded headrest • Heavy-duty rugged, impact resistant plastic housing and durable switch • Pivoting lamp has high intensity bulb with hands-free operation for any job — indoors or out • Lightweight 5.7 oz. (161.59 grams) • Operates on two "AA" batteries (P107-ND sold separately) • Spare bulb included

TASKMASTER™ Light Scopes

Features: • Built-in blue filter optimizes focal clarity • Sturdy rack and pinion focusing mechanism built into the barrel • Comes with removable base stand/mount



clip for viewing slides, printed pieces, etc. (FF-393PA does not include slide base)

Specifications: • **Magnification:** 30x or 100x • **Power Source:** Two "AA" batteries (P107-ND sold separately) • **Body Material:** ABS plastic (black) • **Dimensions:** 5.5" x 2.0" x 0.9" (139.7mm x 50.8mm x 22.86mm) • **Weight:** Approx. 2.4 oz. (68.04 grams)

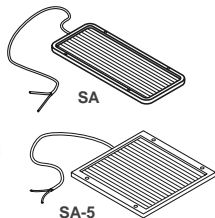
Applications: Research labs, environmental field work, circuit board exam, hobbyists, collectors, students, manufacturing, and more.

Fig.	Description	Digi-Key Part No.	Price Each	Panasonic Part No.
1	Flashlight	P056-ND	6.99	FF-307PA/K
2	Flashlight	P057-ND	8.49	FF-107PA/K
3	Lantern	P058-ND	11.99	FF-3PA/K
4	Head Light	P059-ND	12.99	BF-178PA/1B
5	30X Light Scope	P054-ND	39.98	FF-393PA
	100X Light Scope	P055-ND	59.99	FF-394PA

SOLAREX Solar Cell Modules

SA Series Amorphous Silicon Module

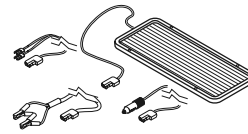
The SA-Series solar-electric modules use the most advanced of the photovoltaic technologies — thin films of semiconductive and conductive materials deposited on glass — to transform light energy to electricity. Its proven encapsulation system and durable Lexan™ frame ensure long outdoor life, high reliability, and quick, easy installation. Typical commercial applications of these modules include operation of remote telemetry units, security sensors, and signals. It is also well-suited to various small electrical jobs around the home, farm, boat or RV, such as charging marine or vehicle batteries, powering radios and portable communications equipment, and operating other low voltage devices. Power output is via a stress-relieved two-conductor cable which extends from the edge of the module. The cable's two #18 AWG leads are insulated with PVC, and the cable jacket is PVC.



BatteryMate I & II

The BatteryMate I™ is designed for automotive-type batteries. This compact, light-weight solar panel fits easily onto a vehicle's dash and plugs into its cigarette lighter. Two to four hours a day of sun offsets normal battery stand losses and parasitic drain from accessories. BatteryMate I™ is a complete package with charging LED: just plug it in and let the sun shine in on your vehicle's battery!

BatteryMate II™ — This slightly larger module is designed for RV and marine-type batteries. It can be hooked up directly to the battery or plugged into a cigarette lighter. BatteryMate II™ is a complete package ready for installation on dash, boat cover, or ready for permanent installation on vehicle. BatteryMate I™ comes with male cigarette lighter plug. BatteryMate II™ includes cables for 3 hook-up possibilities.



Series	Min. Peak Power (Watt)	Typical Electrical Characteristics (1)		Minimum Characteristics at STC (2)				Dimensions - In. (mm)		Weight lbs. (kgs)	Digi-Key Part No.	Price Each	Solarex Part No.
		Current at Design Operating Point (Iop)	Voltage at Design Operating Point (Vop)	Voltage at Max. Power (Vmp)	Current at Max. Power (Imp)	Open-Circuit Voltage (Voc)	Short-Circuit Current (Isc)	L x W x D					
SA	1	100mA	15V	17.5V	80mA	23V	110mA	4.9 x 13 x 0.4 (124.46 x 330.2 x 10.16)	0.9 (41)	10232-ND	42.95	SA-1	
	2	300mA	7.5V	8.8V	290mA	11.5V	360mA	6.8 x 13.8 x 0.5 (172.72 x 350.52 x 12.70)	1.3 (59)	10233-ND	49.95	SA-2/6V	
	2	150mA	15V	17.5V	145mA	23V	160mA	6.8 x 13.8 x 0.5 (172.72 x 350.52 x 12.70)	1.3 (59)	10234-ND	69.95	SA-2/12V	
SA5	5	330mA	15V	17.5V	290mA	23V	380mA	13.6 x 13.6 x 0.8 (345.44 x 345.44 x 20.32)	3.2 (145)	10235-ND	79.95	SA-5	
BATT. MATE	1	100mA	15V	17.5V	80mA	23V	110mA	4.9 x 13 x 0.4 (124.46 x 330.2 x 10.16)	1.8 (82)	10238-ND	49.95	BATTERYMATE I	
	2	150mA	15V	17.5V	145mA	23V	160mA	6.8 x 13.8 x 0.5 (172.72 x 350.52 x 12.70)	2.2 (1.00)	10239-ND	69.95	BATTERYMATE II	

Notes: 1. These are the characteristics in full sun at ambient temperature of 20°C.
2. Minimum initial characteristics are based on measurements made at Standard Test Conditions (STC), which are: • Illumination of 1kW/m² (1 sun) at spectral distribution of AM 1.5 • Cell temperature of 25°C

Panasonic Magnetic Card Readers

Manual Swipe Card Readers: • Compact and light-weight designs • New high performance head mechanism • **Applications:** • Credit Authorization Terminals • Credit Card Telephones • POS Terminals • Time and Attendance Terminals • Banking Terminals (ATM/CD) • **Power Supply Voltage:** +5 VDC • **Operating Temperature/Humidity:** -20°C to 60°C/10 to 90%RH • **Head Life:** PCR 100 - 300K Passes, PCR102 - 500K Passes.

NEW! Manual Swipe Card Reader w/ Built-In RS-232 Interface & Decoder: • Fully enclosed self (port) powered card reader featuring two track capability with long life heads. Shipped with attached 9 Pin D-Sub Cable, Demo-Software & Documentation • **Power Supply Voltage:** +5 VDC • **Operating Temperature/Humidity:** -10°C to 50°C/10 to 90%RH (Non condensation allowed) • **Weight:** 90g approximately.

Manual Insertion Card Readers: • High precision, high reliability • **Applications:** • Credit Card Telephones • Cost Control for Facsimiles and Copiers • Security Control Systems • Time & Attendance Terminals. • **Power Supply Voltage:** +5 VDC • **Operating Temperature/Humidity:** -20 to 60°C/10 to 90%RH • **Head Life:** PCR105 - 300K Passes, PCR106 & PCR107 - 500K Passes.

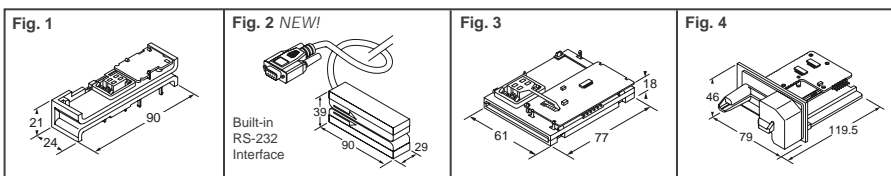
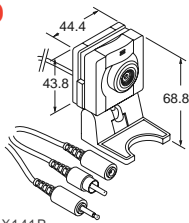


Fig.	Card Standard	Current	Card Feed Speed	Card Reading Direction	Digi-Key Part No.	Pricing			Panasonic Part No.
						1	10	100	
1	ISO2	3mA	8 - 150 cm/sec.	Swipe	PCR100-ND	25.10	237.99	1930.00	ZU-M1121S1
1	ISO1/ISO2	6mA	10 - 150 cm/sec.	Swipe	PCR102-ND	64.04	569.43	4721.10	ZU-M1242S1
2	ISO1/ISO2	14mA	10 - 150 cm/sec.	RS-232 Swipe	PCR108-ND NEW!	128.83	1082.13	8760.10	ZU-M1242L40K
3	ISO2	10mA	10 - 120 cm/sec.	Insertion	PCR105-ND	34.50	335.00	3239.99	ZU-M2121S11
4	ISO2	15mA	10 - 120 cm/sec.	Ejection	PCR106-ND	63.75	553.50	4700.00	ZU-1852MAL
4	ISO1/ISO2	15mA	10 - 100 cm/sec.	Ejection	PCR107-ND	104.50	940.50	8360.42	ZU-1870MA5T5
Cable for Single Track Swipe Reader 200mm (Use w/ PCR100)						PCR101-ND	1.94	—	ZUHM106A200
Cable for Double Track Swipe Reader 200mm (Use w/ PCR102)						PCR103-ND	2.81	—	ZUHM109A200
Cover for Single/Double Manual Swipe Reader (Use w/ PCR100, PCR102)						PCR104-ND	2.81	—	U1101M041

Matsushita Communication Industrial Co., Ltd. Color CCD Camera

Model GP-KR501P

- Enclosed color CCD camera with microphone.
- Designed for video conferencing or video telephone use.
- Features the GP-CX141P camera board with audio.
- Innovative mounting bracket allows mounting in virtually any position.
- 360° Pan, 90° Tilt (manual).
- Includes AC adapter and non-detachable cables.
- RCA Plug for video out, standard microphone plug for audio out.



Panasonic Color Board Camera

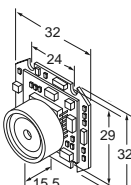
Model GP-CX141/45P, NTSC Version

A self-contained board type color camera with a 45° viewing angle for indoor applications. It features a small size and a low power consumption with the built-in one-chip DSP for digital signal processing and the latest bare-chip manufacturing technology.

FEATURES: • Small size and lightweight (32mm x 32mm) • Low power consumption (160 mA) • 1/4-inch CCD, 330-Line horizontal resolution.

SPECIFICATIONS: • **Image Device:** 1/4" Interline transfer CCD • **Effective Pixels:** Approx. 250,000 pixels 512(H) x 492(V) • **Horizontal Resolution:** More than 330 lines • **Min. Illumination:** 40 lx (F2.8) • **Signal-to-Noise Ratio:** More than 40 dB (AGC OFF) • **Video Output:** VBS 1Vp-p/75 Ω • **Synchronization:** Internal only • **White Balance:** ATW fixed • **ELC:** ON fixed (1/60 - 1/10,000 sec.) • **AGC:** ON fixed (approx. +12dB) • **Lens:** Horizontal viewing angle, 45°, F2.8, f=4.6mm • **Focus:** Manual adjustment with a tool, ∞ - 10 cm • **Power Supply:** DC5.0V to 6.0V • **Power Consumption:** 160 mA • **Operating Temperature:** 0°C to +40°C • **Dimensions:** 32mm x 32mm x 21.5mm • **Weight:** Approx. 11 gms. • **Connector:** MOLEX connector, No. 53398-0490.

Requires Mating Connector, Molex No. 51021-0400 (Digi-Key No. WM1722-ND) and Molex Contacts, No. 50058-0000 (Digi-Key No. WM1775-ND). Must be ordered separately.



- 1 - DC In
 - 2 - Power Ground
 - 3 - Video Out
 - 4 - Video Ground
- * Cable not included with camera

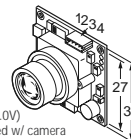
CONNECTOR

Panasonic B/W CCD Camera

Model BS7258

The BS7258 is B/W CCD video camera module using 1/3 type CCD solid image sensor. Provided with the following features and functions, it can be optimally incorporated into various equipment. • Ultra compact and lightweight, 32 x 32 x 24 mm • 380 TV lines horizontal resolution • Electronic iris function • Provided with small standard lens. (L-type) • Sensitive to Infrared.

General Ratings: • **TV System:** EIA • **Image Sensor:** Interline transfer system 1/3 type CCD image sensor • **No. of Pixels:** 512(H) x 492(V) • **Scanning System:** 2:1 Interlace • **Sync. System:** Internal sync. • **Sync. Frequency:** Horizontal: 15.734kHz, Vertical: 59.9Hz • **Resolution:** Horizontal: 380 TV lines typ., Vertical: 315 TV lines typ. • **S/N Ratio:** 46dB typ. (Dark, AGC OFF) • **Standard Illumination:** 50 lux • **Minimum Illumination:** 0.3 lux • **r Compensation:** 0.45 typ. • **Video Signal Output:** Composite video signal: 1.0Vp-p/75 Ω • **AGC:** ≥12dB • **ALC:** Electronic Iris (Linear control: 1/60 - 1/15000 sec.) • **Supply Voltage:** DC 9.0 ± 0.1V • **Current Consumption:** 120mA typ. • **Operating Temperature:** -10 - 70°C (Board environmental temp.) • **Storage Temperature:** -20 - 80°C • **Operating Humidity Range:** ≤80% • **Lens:** f = 3.8mm/f = 2.0mm standard lens • **Viewing Angle:** 89.6° • **Dimension:** 32mm x 32mm



Description	Digi-Key Part No.	Price Each	Matsushita Part No.
Camera Module w/Mic	P9503-ND	139.00	GP-KR511P

Description	Digi-Key Part No.	Price Each	Panasonic Part No.
Color Camera Module	P9502-ND	109.00	GP-CX151/45P

Description	Digi-Key Part No.	Price Each	Panasonic Part No.
Camera Module	P9500-ND	149.00	BS7259L

1-800-344-4539

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