

A comprehensive assortment of standard and custom 12 volt parts available up to 20 amp. Ideal for demanding applications, MPD parts provide exceptional reliability and are competitively priced. We offer standard and custom 12 volt parts including plugs, sockets, cable sets, and fuse holders. All of our products are available standard, in amperages from milliamps up to 20 amp. If your company needs parts with a higher amperage rating, we can custom manufacture those as well.

Our plugs are available in the color of your choice, with or without a red or green LED. Parts are manufactured to fit any make of automobile including those from Europe, America and Asia. They are made of the finest materials having undergone extreme durability testing including dragging and crushing. The thick and rugged plastic is engineered to withstand the worst abuse.

Equally as tough, our sockets are precisely sized to make an easy, yet snug, connection every time. Weather-resistant and marine versions are available for the harshest conditions. We also carry an assortment of safety cover accessories.

If your company needs a custom cord set, we offer a complete line of wire and connector options. Our coiled or straight cables can be made to a specified wire gauge and can include inline reset-able fuses and EMI shield coils. For cable assemblies we have twenty one plugs for every price point available and a complete line of connector options for the other end as well. If we don't stock the connector you need, we can manufacture it to your specifications. And, we can even do splits in the cable if needed!

We also carry blade and inline fuse holders, as well as, fuse clips. They are PC-mountable and have low-profiles, so they are ready to be integrated into your project. All of our parts are made to the same strict quality standards, so you can be assured that your customers' safety is guaranteed when using our fuse holders.

Because we produce parts in high volumes, we can pass on the best prices and great service. In addition, for custom parts we can suggest design or manufacturability improvements to aid reliability and reduce costs. We have ISO 9001 certification, a sign of the commitment we have made to demand high quality as much as our customers do.

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Automotive 12V Technology

In today's world, a wide array of automotive 12 volt plug-in cord sets, 12v-plugs and 12v-sockets are presented to designers of electronic systems and products. Some are hardly up to the challenges presented by the ever-increasing multitude of electronic devices like cell phones, iPods and portable navigation devices that have become as commonplace as tires on a vehicle.

Market Outlook: Automotive 12 volt cord sets are normally made with twin copper wires and in lengths typically from three to fifteen feet. Some use heavy gage copper wire in longer lengths and are greatly affected by changes in copper's pricing. Long lengths of heavy gage wires sometimes suffer twice because of higher freight costs with rising petroleum and labor costs.

Vibration. Heat. Shock. Humidity. Corrosion. Pressure. These real-world conditions cause device failures and higher support costs for suppliers. Without a reliable and continuous supply of current, an electronic device's operation will be interrupted and the system might be damaged. Repeated, forceful insertions and removals by consumers could cause stress fractures of plastic or metal components and wires.

Automotive plug-in cord set designs are traditionally full of trade-offs: size and weight constraints versus durability, ease of insertion and removal versus ability to retain the plug under rigorous conditions, and durability of materials versus component cost, to name a few. The increasing demand for ruggedness of portable devices has made the balancing act of 12v-plug design even trickier.

Retention: An automotive 12v-plug needs to be able to retain itself into the socket even under significant vibration, shock, and torque. Failure to properly hold the connection, even for a matter of microseconds, can result in an interruption of power and device malfunction. A well-designed 12v-plug will resist shock and vibration, while remaining easy to remove without tools.

Durability: Depending on the use, a device could have its 12v-plug inserted hundreds or even thousands of times throughout its lifespan. Because of the retention issues described above, an automotive plug must hold its connection securely. However, this results in extra wear upon the contacts as the same high grip which secured the 12v-plug causes increased wear under the stresses of removal and insertion. Thus, it is important to insure that 12v-plug materials be durable enough to withstand stresses that could cause dangerous fractures.

Corrosion Resistance: When components are exposed to humidity, airborne pollutants, extreme temperatures, and other environmental conditions, corrosion can result. Over time, this corrosive build-up can cause loss of electrical contact. The use of corrosion resistant contacts is particularly necessary for portable devices, where protection from the elements cannot be guaranteed.

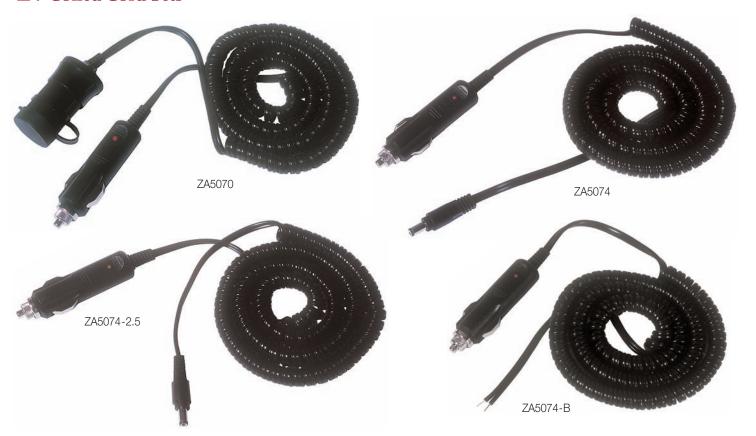
Contact Conductivity: The choice of metals in 12v-plug sets determine how easily electricity will flow from the automobile to the device. Some types of platings are subject to oxidation and thus the resulting increase in electrical resistance. More conductive metals that resist oxidation, such as gold, allow high conductivity, meaning lower resistance, which allows for slightly quicker charging during short trips.

Fuses: A safety item that every automotive cord set should have but frequently do not. Many assume that the current in automobiles is not subject to voltage changes. An automobiles electrical system can have very high voltage spikes, for instance when the starter stops a minus 200 volt spike can occur, and large positive spikes can also occur. The battery does a good job as a filter because it acts like a large capacitor to absorb these spikes, but a fuse is an inexpensive insurance, especially in a product having worldwide distribution and use.





12V Coiled Cord Sets



12V Coiled Cord Sets

ZA5070	APP-001 with 5 amp fuse, 12' coil cord, cigarette socket
ZA5074	APP-001 with 5 amp fuse, 12' coil cord, 2.1 x 5.5 mm
ZA5074-2.5	APP-001 with 5 amp fuse, 12' coil cord, 2.5 x 5.5 mm
ZA5074-B	APP-001 with 5 amp fuse, 12' coil cord, tinned leads

12V Extension Assemblies



12V Extenion Assemblies

ZA5070	APP-001 with 5 amp fuse, 12' coil cord, cigarette socket
ZA5071	APP-001 with 10 amp fuse, 12' cord, cigarette socket

12V Cigarette Plug Splitters





12V Cigarette Plug Splitters

ZA5018	One plug and two cigarette sockets, LED, 2 amp fuse
ZA5072	APP-001 with 10 amp fuse, 8' cord & twin cigarette socket

Auto Cable Assembly Options





Tinned/Stripped Wires and Cords

and Lugs

DC Plugs- Straight

DC Plugs- Right Angle

2-Pin Auto Connector

Contact our factory for details on how to place an order and to specify assembly options.





Lead Acid Clip

Auto Cigarette Socket

Specialized Auto Cigarette Plugs







AS234A-A

Auto Cigarette Plugs



Individual drawings of our products are available online at www.12V-parts.com









Auto Cigarette Plugs

AP-121

	, -
AP113	Cigarette plug for 21 or 22 mm 3 amp fuse
AP-120	Cigarette plug, adjustable head, on-off switch, green LED, 5 amp fuse
AP-121	Cigarette plug, weather-vibration resistant, twist & lock, green LED, 3 amp
AP-124	Cigarette plug, 5 amp fuse, high impact body
AP-125	12V auto plug, car battery analyzer
AP-129	12V auto plug, European style, CE listed
AP-130	12V auto plug, led, switch and fuse, CE listed
AP-131	12V auto plug, mini style with fuse, CE listed
AP-132	12V auto plug, adapter to aircraft plug
AP-133	12V auto plug, with USB outlet
APP-001	Black auto cigarette plug, red LED, 3 amp fuse
APP-001-10AMP	same as APP-001 but with 10 amp fuse
APP-001-GRN	same as APP-001 but with Green LED and 10 amp fuse
APP-001-15AMP	same as APP-001 but with 15 amp fuse
APP-001-20AMP	same as APP-001 but with 20 amp fuse
APP-002	Gray auto cigarette plug, red LED, 3 amp fuse
APP-003	Black auto cigarette plug, no LED, 3 amp fuse
APP-004	Gray auto cigarette plug, no LED, 3 amp fuse
BK-6139	Cigarette plug for 21 or 22.2 mm diameter socket, 10 amp
BK-6142	Cigarette plug, 10 amp fuse
BK-6153	Cigarette plug, with 6' wire with 2.1 x 5.5 x 11.40mm DC plug and auto plug
ZA1010	Cigarette plug, bakelite with 3 amp fuse
ZA1030	Cigarette plug, bakelite
ZA1060	Cigarette plug, plastic
ZA1080	Cigarette plug, plastic with thumb grips
ZA1093	Cigarette plug, Bakelite with 3 amp fuse and dual contacts

High Amperage Auto Cigarette Plugs • •







APP-001-15 amp APP-001-20 amp

AS214



Marine Plugs



AS-203B



Individual drawings of our products are available online at www.fuseholders.com



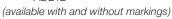
Auto Cigarette Sockets







AS 212











Auto Cigarette Sockets

AS203B	12V auto socket with safety cap
AS210	Dust-proof spring-loaded cover, 15 amps, quick connect terminals
AS212	Weather & vibration resistant, 15 amps
AS212B	Weather & vibration resistant, 15 amps, with quick-mount ring
AS212C	12V socket, weather & vibration resistant
AS212D	Weather & vibration resistant, 15 amps, mounting bracket, quick-mount ring
AS212E-A	Weather & vibration resistant, 20 amps
AS212-L	Weather & vibration resistant, 15 amps, with mounting bracket
AS213	DIN, 12mm standard socket with cap, panel type with flat terminals
AS214	DIN, 12mm standard socket with protective cap, cable type
AS215	12V auto socket with cover
AS234-A-A	Smart phone compatible double port USB charger with power indicator
ZA2010	Cigarette socket, 12V plastic inline socket, unscrews for easy wiring
ZA2050	Cigarette socket, bakelite insulator, insert lock, panel mounting
ZA2060	Cigarette socket, bakelite insulator, screwlock, panel mounting
ZA2070	Cigarette socket, porcelain insulator, insert lock, panel mounting

PCB Fuse Clips and Holders

MPD consistently delivers superior quality fuse clips and holders carefully engineered to meet the strictest electronic application requirements. Our safety components are known for their reliability and are designed to meet the ever increasing needs of a wide range of industrial and consumer product applications where circuit protection is essential to the delivery of uninterrupted power.

As a recognized industry leader in the manufacture of circuit protection, MPD carries an elaborate line of 2A and 5mm fuse clips, 3AG fuse clips and fuse holders, PC blade fuse clips, 15 Amp PC automotive blade fuse holders, and inline fuse holders. We also offer a variety of mounting configurations.

Our clips are manufactured from brass and tin plated to assure low contact resistance, and superior shelf life. They are engineered to mount easily and retain a stable position during wave soldering. Our low profile space saving clips also feature orientation tabs and end stops to insure safety and design integrity.

Special finishes can be requested as a custom order. Call MPD's engineering services to special order fuse clips and holders that are not standard sizes. Our engineers can design parts to meet your exact specifications.

Fuse Clips and Fuse Holders

2AG and 5mm Fuse Clips

Low-profile, snap-in design, PC retention for wave soldering, available with legs for critical alignment during PC installation, available with or without stops. Rated 6.3 to 30 Amps.







BK-6005



BK-6009

3AG (.250") Fuse Clips and PC Fuse Holders

Low-profile, snap-in design, PC retention for wave soldering, available with legs for critical alignment during PC installation, available with or without stops. Rated 6.3 to 30 Amps.



BK-6001



BK-6003



BK-6007

Fuse Clips and Fuse Holders

BK-6001 Snap-in 3AG, PC clip for 1/4" diameter fuse BK-6002 Snap-in 2AG, PC clip for 5mm diameter fuse BK-6003 Traditional 3AG, PC clip for 1/4" diameter fuse BK-6004 3AG, PC fuse holder BK-6005 Traditional 2AG, PC clip for 5mm diameter fuse BK-6007 Traditional 3AG, PC clip for 1/4" diameter fuse BK-6009 PC clip for 5mm diameter fuse		
BK-6003 Traditional 3AG, PC clip for 1/4" diameter fuse BK-6004 3AG, PC fuse holder BK-6005 Traditional 2AG, PC clip for 5 mm diameter fuse BK-6007 Traditional 3AG, PC clip for 1/4" diameter fuse	BK-6001	Snap-in 3AG, PC clip for 1/4" diameter fuse
BK-6004 3AG, PC fuse holder BK-6005 Traditional 2AG, PC clip for 5 mm diameter fuse BK-6007 Traditional 3AG, PC clip for 1/4" diameter fuse	BK-6002	Snap-in 2AG, PC clip for 5mm diameter fuse
BK-6005 Traditional 2AG, PC clip for 5mm diameter fuse BK-6007 Traditional 3AG, PC clip for 1/4" diameter fuse	BK-6003	Traditional 3AG, PC clip for 1/4" diameter fuse
BK-6007 Traditional 3AG, PC clip for 1/4" diameter fuse	BK-6004	3AG, PC fuse holder
	BK-6005	Traditional 2AG, PC clip for 5mm diameter fuse
BK-6009 PC clip for 5 mm diameter fuse	BK-6007	Traditional 3AG, PC clip for 1/4" diameter fuse
	BK-6009	PC clip for 5mm diameter fuse



Automotive Blade Fuse Clips and Holders

PC Automotive Blade Fuse Clips

Low-profile, snap-in design, PC retention for wave soldering, available with legs for critical alignment during PC installation, available with or without stops. Rated 6.3 to 30 Amps.







BK-6008



BK-6011



BK-6012

15 Amp PC Automotive Blade Fuse Holders

Thru-hole PC mountable, maintains position during wave soldering. Holder design prevents solder wicking. Shock and vibration resistant. Durable grip, even after multiple uses.



BK-6010



BK-6013

Automotive Blade Fuse Clips and Holders

BK-6006	Auto fuse clip for .205" x .025" standard blade fuses
BK-6008	Auto fuse clip for .110" x 032" mini blade fuses
BK-6010	Auto fuse holder for .205" x .025" standard blade fuses
BK-6011	Auto fuse vertical holder for .10" x .032" mini vertical blade
BK-6012	Auto fuse clip for .205" x .025" standard blade fuses
BK-6013	Auto fuse holder for .110" x" 032" mini blade fuses

Individual drawings of our products are available online at www.fuseholders.com



In-line Fuse Holders



BF301 10A-16AWG wire 6.3mm x 32mm



BF302 25A-12AWG wire AGC/ATE/JMC/JTG fuses



In-line Fuse Holders

BF301	In-line fuse holder, 10A-16AWG wire, add your own 6.35 x 30 mm fuses
BF302	In-line fuse holder, 25A-12AWG wire, AGC/ATE/JMC/JTG
BF303	In-line fuse holder, 15A-16AWG wire, add your own 5 x 20 mm fuses
BF308	In-line fuse holder, 16A-18AWG wire, AGC/JMC fuses
BF308-C	In-line fuse holder, 16A-18AWG wire, AGC/JMC fuses
BF309	In-line fuse holder, 20A-16AWG wire, AGC/JMC fuses
BF310	In-line fuse holder, 10A-18AWG wire, AGC/JMC fuses
BF357	In-line fuse holder, 14A-18AWG wire, AGC/JMC fuses, dbl. output
BF357S	In-line fuse holder, 14A-18AWG wire, AGC/JMC fuses, dbl. output



5mm x 20mm 15A GMA/GTE fuses 16AWG







16A-18AWG wire AGC/JMC fuses



BF308-C













Individual drawings of our products are available online at www.fuseholders.com



2 fuse holder with 1 common source input and 2 output



BF357 14A-18AWG wire AGC/JMC fuses



BF357S 14A-18AWG wire AGC/JMC fuses

In-line Blade Fuse Holders

Automotive and Marine Fuse Holders

Blade fuse holders are a reliable and cost-effective solution to protect equipment and electrical applications from damage caused by blown circuits. Fuses are an ideal alternative to circuit breakers because of their small size and ability to protect multiple circuits within a small space. MPD has a wide variety of automotive and marine fuse holders that you can choose from.



In-line Blade Fuse Holders

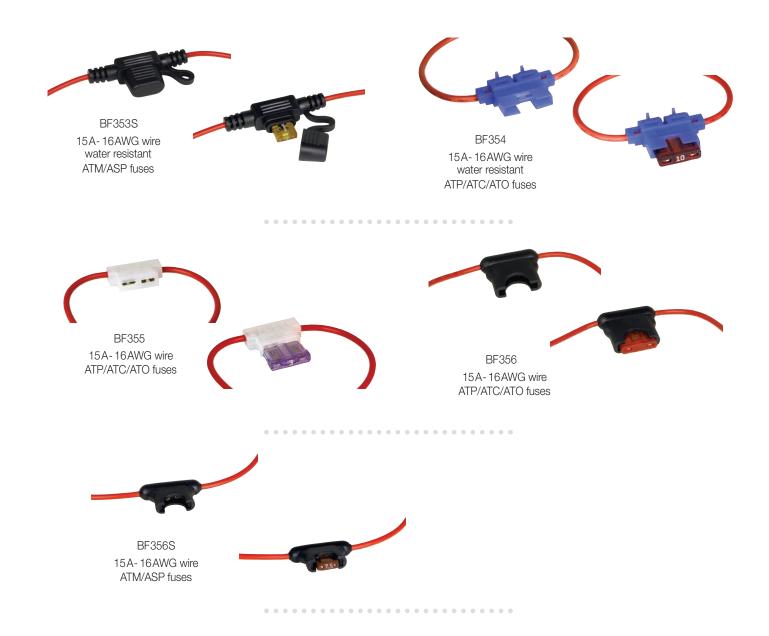
BF351	25A-12AWG wire- water resistant- ATP/ATC/ATO fuses
BF352	15A-16AWG wire- ATP/ATC/ATO fuses
BF353	15A-16AWG wire- water resistant- ATP/ATC/ATO fuses
BF353L	60 A - 8 AWG wire - water resistant - MAXI/ATX fuses
BF353S	15A-16AWG wire- water resistant- ATM/ASP fuses
BF354	15A-16AWG wire- water resistant- ATP/ATC/ATO fuses
BF355	15A-16AWG wire- ATP/ATC/ATO fuses
BF356	15A-16AWG wire- ATP/ATC/ATO fuses
BF356S	15A-16AWG wire- ATM/ASP fuses



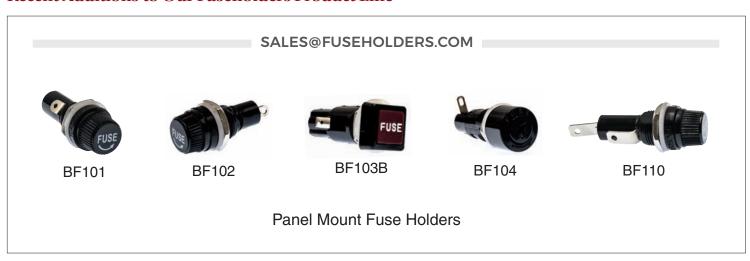




In-line Blade Fuse Holders



Recent Additions to Our Fuseholders Product Line



Distributors



Asian Distributors

Asian Distributors			
Digi-Key	Worldwide	(800) 344-4539	www.digikey.com/us/en/International/global.html
Online Components	Online	(888) 906-8217	www.onlinecomponents.com
AddCom	China (Shanghai)	(86) 2154357506	www.addcom.com.sg
AddCom	China (Shenzhen)	(86) 75583864328	www.addcom.com.sg
AddCom	China (Hong Kong)	(852) 29470728	www.addcom.com.sg
Gagner	China (Shanghai)	(86) 2154315716	www.gagnerproducts.com
Gagner	China (Shen Zhen City)	(86) 75583662671	www.gagnerproducts.com
QuadRep	China (Bejing)	(86) 1062123833	www.quadrep.com.cn
QuadRep	China (Shanghai)	(86) 2163175445	www.quadrep.com.cn
QuadRep	China (Bejing)	(86) 2425621468	www.quadrep.com.cn
Gagner	Hong Kong (Hong Kong)	(852) 28927311	www.gagnerproducts.com
Master Electronics	HongKong (Tsuen Wan)	(852) 35911701	www.masterelectronics.com
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AddCom	India (Faridabad)	(91) 01294000408	addcom.com.sg
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AddCom	Japan	(65) 68442788	www.addcom.com.sg
Kaztech	Japan (Tokyo)	(81) 0333877611	www.kaztech.co.jp
AddCom	South Korea (Seoul)	(65) 68442788	www.addcom.com.sg
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QuadRep	Philippines (Las Piñas City)	(63) 28052879	www.quadrep.com.sg
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Gagner	Singapore (TechPark)	(65) 68489430	www.gagnerproducts.com
QuadRep	Singapore (Singapore)	(65) 63461933	www.quadrep.com.cn
AddCom	Thailand (Laksi Bangkok)	(66) 25761988	www.addcom.com.sg
Gagner	Thailand (Bangkok)	(66) 267548146	www.gagnerproducts.com
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QuadRep Electronics (Hsinchu office)	Taiwan (Taipei)	(886) 35737853	www.quadrep.com.tw
AddCom	Vietnam (Ho Chi Minh City)	(08) 38107677	www.addcom.com.sg
Quadrep Vietnam (Ho Chi Minh)	Vietnam (Ho Chi Minh City)	(84) 87262981	www.quadrep.com.sg
Quadrep Vietnam Office Hanoi	Vietnam (Hanoi)	(84) 0936484282	www.quadrep.com.sg
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Digi-Key	Worldwide	(800) 344-4539	www.digikey.com/us/en/International/global.html
Online Components	Online	(888) 906-8217	www.onlinecomponents.com
Master Instruments	Australia (Sydney)	(61) 295191200	www.master-instruments.com.au
Active Components	New Zealand (Auckland)	(64) 94439500	www.activecomponents.com
Africa			
Brabek PTY	South Africa (Cape Town)	(27) 021 706-3162	www.brabek.co.za

Our list of distributors continues on the following page.

France (Cesson-Sevigne)

Netherlands (Barendrecht)

Greece (Paiania)

Denmark (Allerod)

Norway (Drammen)

Italy (Firenze)

Global Catalog Distribute	are

Digi-Key	Worldwide	(800) 344-4539	www.digikey.com/us/en/International/global.html
Online Components	Online	(888) 906-8217	www.onlinecomponents.com
North American Distributor	S		
ElectroSonic	Canada (Montreal QC)	514-748-7942	www.e-sonic.com
ElectroSonic	Canada (Markham, ON)	905-946-0500	www.e-sonic.com
ElectroSonic	Canada (Vancouver, BC)	604-273-2911	www.e-sonic.com
Inventus Power	Mexico (Tijuana)	(52) 6642314832	www.inventuspower.com
Master Electronics	Mexico (Zapopan)	(33) 21534181	www.masterelectronics.com
Custom Power LLC	USA (Fountain Valley, CA)	1-800-432-3385	www.custompower.com
Excel Components & Supply	USA (Holtsville, NY)	1-631-475-1100	www.excelcomp.com
Inventus Power	USA (Woodridge IL)	1-630-410-7900	www.inventuspower.com
Master Electronics	USA (Phoenix AZ)	1-602-267-1111	www.masterelectronics.com
Master Electronics	USA (Eden Prairie ,MN)	1-952-944-2151	www.masterelectronics.com
Master Electronics	USA (Tampa, FL)	1-813-814-2900	www.masterelectronics.com
Master Electronics	USA (Santa Clara, CA)	1-408-970-8090	www.masterelectronics.com
Master Electronics	USA (Bohemia, NY)	1-631-434-9394	www.masterelectronics.com
Master Electronics	USA (Redmond, WA)	1-425-821-5454	www.masterelectronics.com
Master Electronics	USA (Santa Monica, CA)	1-310-452-1229	www.masterelectronics.com
Master Electronics	USA (Miami, FL)	1-305-638-2000	www.masterelectronics.com
Source Research	USA (Schaumburg, IL)	1-800-356-0259	www.sourceresearch.com
Taylor/Master Electronics	USA (Germantown, WI)	1-414-365-6335	www.taylorwisconsin.com
European Distributors			
Digi-Key	Worldwide	(800) 344-4539	www.digikey.com/us/en/International/global.html
Online Components	Online	(888) 906-8217	www.onlinecomponents.com
Ineltro	Austria (Wien)	(43) 0161062136	www.ineltro.eu
Ineltro	Switzerland (Regensdorf)	(41) 433437300	www.ineltro.ch
Rossmann Electronic	Germany (Dießen am Ammersee)	(49) 8807949940	www.rossmannweb.de/index.php?lang=de
RC Microelectronica	Spain (Barcelona)	(34) 932602166	www.rcmicro.es

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O =	LICOTION / LD

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HT Componenti Elettronici srl

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South American Distributors						
Inventus Power	Brazil (Manus)	(55) 92 2126 6400	www.inventuspower.com			
Power Circuit EletrônicaLtda.	Brazil (São Paulo)	(55) 11-3981-3965	www.powercircuit.com.br			

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www.sorelec.com/l-actu/87-sorelec-distribue-les-solutions-mpd.html

www.batteries.gr/en/rechargeable/accessories/holders.html

it.kompass.com/c/ht-componenti-elettronici-srl/it0179298/

www.oemelectronics.se/leverantorer/mpd

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