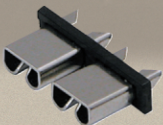
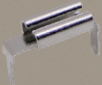
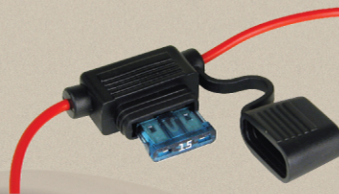




**MPD**  
MEMORY PROTECTION DEVICES

## 12V Parts



*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.*



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.

# 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.



Covered Socket



High Amperage Plugs



Fuse Blades,  
Clips and Holders



Device Adapters

## 12V Power Cord Sets



### 12V Power Cord Sets

|            |  |
|------------|--|
| AE-602-15  | Battery clip w. 30 mm socket                           |
| BK-6048    | APP-001 w/3 amp fuse, 13' cord, 2.5 x 5.5 mm angle cut |
| ZA5035     | ZA1030 Auto power cord set, 2.1 x 5.5 mm DC plug       |
| ZA5036     | ZA1030 w/400 mm cord, 1.3 x 3.5 mm R/A plug            |
| ZA5054     | ZA1060 w/10' cord, 2.5 x 5.5 mm DC plug                |
| ZA5073     | APP-001 w/5 amp fuse, 6' cord, 2.1 x 5.5 mm DC plug    |
| ZA5073-2.5 | APP-001 w/5 amp fuse, 6' cord, 2.5 x 5.5 mm DC plug    |
| ZA5073-B   | APP-001 w/5 amp fuse, 6' cord with tinned ends         |
| ZA5075     | APP-001 w/3 amp fuse, 5' cord + 2 pin connector        |
| ZA5077     | APP-001 w/3 amp fuse, 6' cord, 2.1 x 5.5 mm DC plug    |



## 12V Coiled Cord Sets



ZA5070



ZA5074



ZA5074-2.5



ZA5074-B

### 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



ZA5070



ZA5071

### 12V Extension 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



ZA5072



ZA5018

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



Terminals, Spades  
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



ZA2010

Auto Cigarette Socket

Specialized Auto Cigarette Plugs



AP-133



USB Adapter



AS234A-A



## Auto Cigarette Plugs



APP-001



APP-002



APP-003



APP-004



BK-6142



ZA1010



ZA1030



ZA1060



ZA1080



ZA1093



AP-120



AP-121



AP-124



AP-125



AP-129



AP-130



AP-131



AP-132



AP-133



AP113

Individual drawings of our products are available online at [www.12V-parts.com](http://www.12V-parts.com)



## Vibration-Resistant Assembly

Weather resistant



### Auto Cigarette Plugs

|               |   |
|---------------|---|
| 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-GRN



APP-001-15 amp



APP-001-20 amp



## Covered Cigarette Sockets



AS213



AS215



AS214



AS-203B



## Marine Plugs

### Panel Mounting Sockets



AS212



AS212B



AS212C



### Top Mounting Sockets



AS212-L



AS212D



AS212E-A



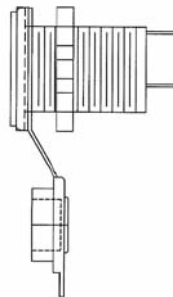
AS-210



AS212-G



AS216



AS234A-A

Individual drawings of our products are available online at [www.fuseholders.com](http://www.fuseholders.com)

## Auto Cigarette Sockets

Weather Resistant Socket



AS212

(available with and without markings)



AS212-L



ZA2010



ZA2050



ZA2060



ZA2070

### 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.



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.



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                   |



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.



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.



Automotive Blade Fuse Clips and Holders

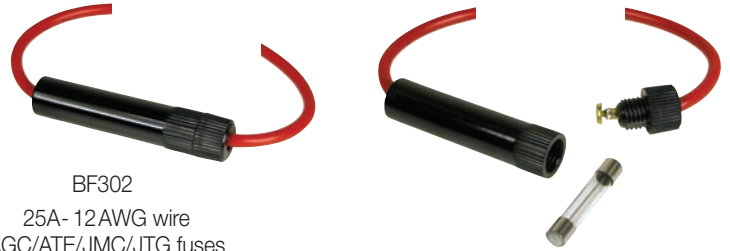
|         |  |
|---------|--|
| BK-6006 | Auto fuse clip for .205" x .025" standard blade fuses          |
| BK-6008 | Auto fuse clip for .110" x .032" mini blade fuses              |
| BK-6010 | Auto fuse holder for .205" x .025" standard blade fuses        |
| BK-6011 | Auto fuse vertical holder for .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](http://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 30mm 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 20mm 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     |



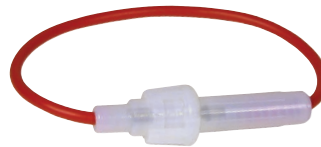
BF303  
5mm x 20mm  
15A GMA/GTE fuses  
16AWG



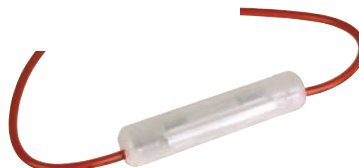
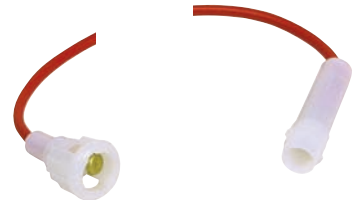
BF308  
16A- 18AWG wire  
AGC/JMC fuses



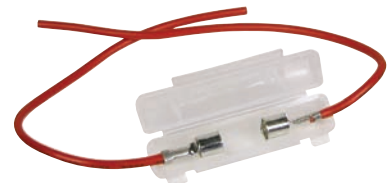
BF308-C  
16A- 18AWG wire  
AGC/JMC fuses  
water resistance  
for wire only



BF309  
20A- 16AWG wire  
AGC/JMC fuses



BF310  
10A- 18AWG wire  
AGC/JMC fuses

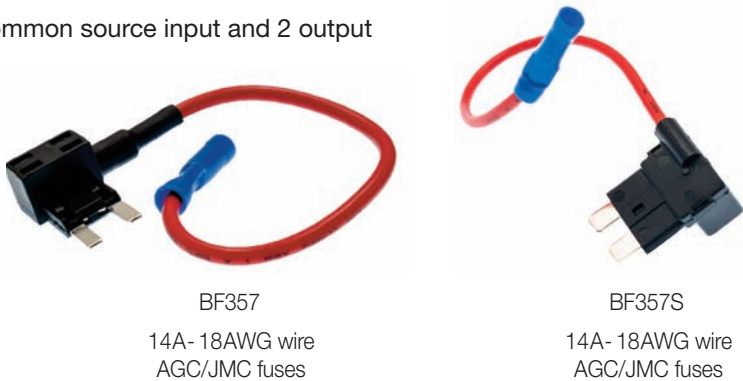


Individual drawings of our products are available online at [www.fuseholders.com](http://www.fuseholders.com)



**In-line Fuse Holders** .....

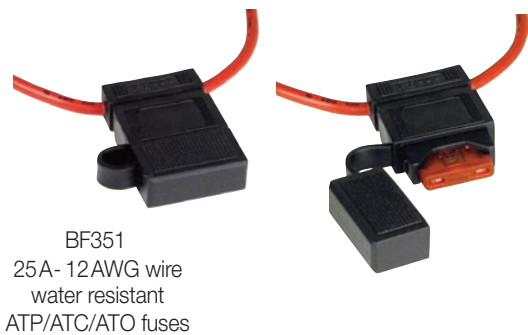
2 fuse holder with 1 common source input and 2 output



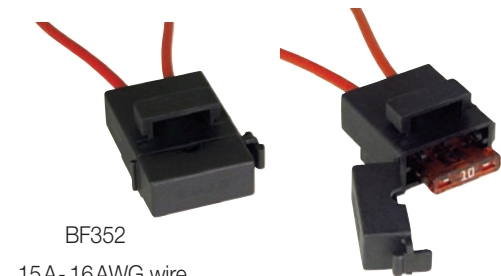
**In-line Blade Fuse Holders** .....

**Automotive and Marine Fuse Holders**

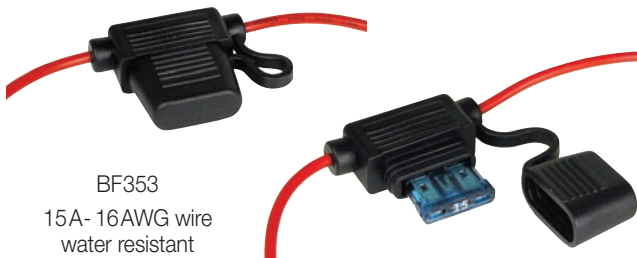
Blade fuse holders are a reliable and cost-effective solution to protect equipment and electrical applications from damage caused by blown circuits. Fuses are an ideal alternative to circuit breakers because of their small size and ability to protect multiple circuits within a small space. MPD has a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



BF351  
25A- 12AWG wire  
water resistant  
ATP/ATC/ATO fuses



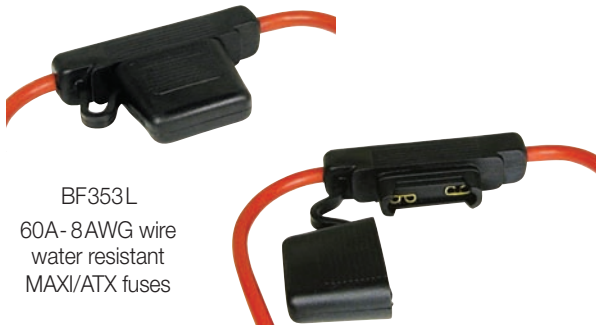
BF352  
15A- 16AWG wire  
ATP/ATC/ATO fuses



BF353  
15A- 16AWG wire  
water resistant  
ATP/ATC/ATO fuses

**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 | 60A- 8AWG 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                      |

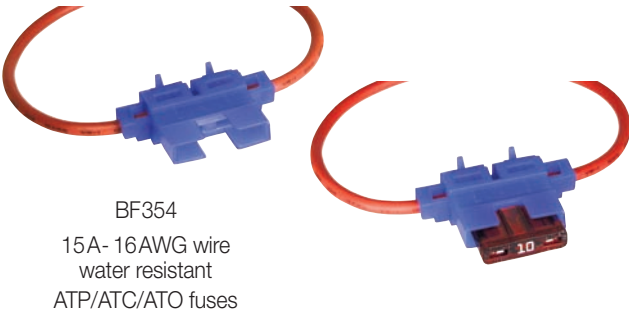


BF353L  
60A- 8AWG wire  
water resistant  
MAXI/ATX fuses

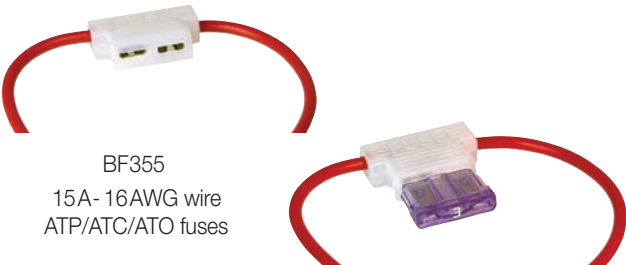
**In-line Blade Fuse Holders** .....



BF353S  
15A- 16AWG wire  
water resistant  
ATM/ASP fuses



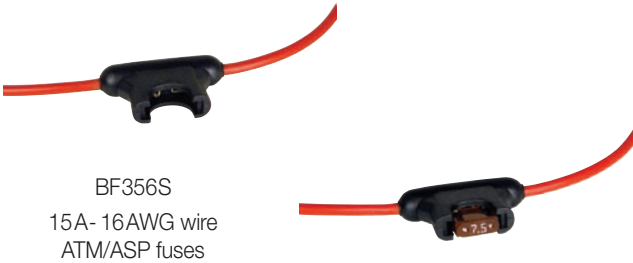
BF354  
15A- 16AWG wire  
water resistant  
ATP/ATC/ATO fuses



BF355  
15A- 16AWG wire  
ATP/ATC/ATO fuses



BF356  
15A- 16AWG wire  
ATP/ATC/ATO fuses








BF356S  
15A- 16AWG wire  
ATM/ASP fuses



**Recent Additions to Our Fuseholders Product Line**

SALES@FUSEHOLDERS.COM



BF101      BF102      BF103B      BF104      BF110

Panel Mount Fuse Holders



# Distributors



## Asian Distributors

|                                      |                               |                  |  |
|--------------------------------------|-------------------------------|------------------|--|
| Digi-Key                             | Worldwide                     | (800) 344-4539   | <a href="http://www.digikey.com/us/en/International/global.html">www.digikey.com/us/en/International/global.html</a> |
| Online Components                    | Online                        | (888) 906-8217   | <a href="http://www.onlinecomponents.com">www.onlinecomponents.com</a>   |
| AddCom                               | China (Shanghai)              | (86) 2154357506  | <a href="http://www.addcom.com.sg">www.addcom.com.sg</a>   |
| AddCom                               | China (Shenzhen)              | (86) 75583864328 | <a href="http://www.addcom.com.sg">www.addcom.com.sg</a>   |
| AddCom                               | China (Hong Kong)             | (852) 29470728   | <a href="http://www.addcom.com.sg">www.addcom.com.sg</a>   |
| Gagner                               | China (Shanghai)              | (86) 2154315716  | <a href="http://www.gagnerproducts.com">www.gagnerproducts.com</a>   |
| Gagner                               | China (Shen Zhen City)        | (86) 75583662671 | <a href="http://www.gagnerproducts.com">www.gagnerproducts.com</a>   |
| QuadRep                              | China (Beijing)               | (86) 1062123833  | <a href="http://www.quadrep.com.cn">www.quadrep.com.cn</a>   |
| QuadRep                              | China (Shanghai)              | (86) 2163175445  | <a href="http://www.quadrep.com.cn">www.quadrep.com.cn</a>   |
| QuadRep                              | China (Beijing)               | (86) 2425621468  | <a href="http://www.quadrep.com.cn">www.quadrep.com.cn</a>   |
| Gagner                               | Hong Kong (Hong Kong)         | (852) 28927311   | <a href="http://www.gagnerproducts.com">www.gagnerproducts.com</a>   |
| Master Electronics                   | HongKong (Tsuen Wan)          | (852) 35911701   | <a href="http://www.masterelectronics.com">www.masterelectronics.com</a>   |
| AddCom                               | Indonesia (Singapore)         | (65) 68442788    | <a href="http://www.addcom.com.sg">www.addcom.com.sg</a>   |
| AddCom                               | India (Faridabad)             | (91) 01294000408 | <a href="http://addcom.com.sg">addcom.com.sg</a>   |
| Tamuz Electronics Ltd.               | Israel (Kfar-Saba)            | (972) 97633000   | <a href="http://www.tamuz-ele.com">www.tamuz-ele.com</a>   |
| AddCom                               | Japan                         | (65) 68442788    | <a href="http://www.addcom.com.sg">www.addcom.com.sg</a>   |
| Kaztech                              | Japan (Tokyo)                 | (81) 0333877611  | <a href="http://www.kaztech.co.jp">www.kaztech.co.jp</a>   |
| AddCom                               | South Korea (Seoul)           | (65) 68442788    | <a href="http://www.addcom.com.sg">www.addcom.com.sg</a>   |
| AddCom                               | Malaysia (Bayan Lepas Penang) | (60) 46469223    | <a href="http://www.addcom.com.sg">www.addcom.com.sg</a>   |
| Gagner                               | Malaysia (Puchong, Selangor)  | (60) 45075088    | <a href="http://www.gagnerproducts.com">www.gagnerproducts.com</a>   |
| Master Electronics                   | Malaysia (Penang)             | (604) 530-1128   | <a href="http://www.masterelectronics.com">www.masterelectronics.com</a>   |
| QuadRep                              | Malaysia (Penang)             | (60) 46581771    | <a href="http://www.quadrep.com.sg">www.quadrep.com.sg</a>   |
| AddCom                               | Philippines (Singapore)       | (65) 68442788    | <a href="http://www.addcom.com.sg">www.addcom.com.sg</a>   |
| QuadRep                              | Philippines (Las Piñas City)  | (63) 28052879    | <a href="http://www.quadrep.com.sg">www.quadrep.com.sg</a>   |
| AddCom                               | Singapore (Singapore)         | (65) 68442788    | <a href="http://www.addcom.com.sg">www.addcom.com.sg</a>   |
| Gagner                               | Singapore (TechPark)          | (65) 68489430    | <a href="http://www.gagnerproducts.com">www.gagnerproducts.com</a>   |
| QuadRep                              | Singapore (Singapore)         | (65) 63461933    | <a href="http://www.quadrep.com.cn">www.quadrep.com.cn</a>   |
| AddCom                               | Thailand (Laksi Bangkok)      | (66) 25761988    | <a href="http://www.addcom.com.sg">www.addcom.com.sg</a>   |
| Gagner                               | Thailand (Bangkok)            | (66) 267548146   | <a href="http://www.gagnerproducts.com">www.gagnerproducts.com</a>   |
| AddCom                               | Taiwan (New Taipei City)      | (886) 921128259  | <a href="http://www.addcom.com.sg">www.addcom.com.sg</a>   |
| QuadRep                              | Taiwan (Bangkok)              | (886) 226989933  | <a href="http://www.quadrep.com.cn">www.quadrep.com.cn</a>   |
| QuadRep Electronics (Hsinchu office) | Taiwan (Taipei)               | (886) 35737853   | <a href="http://www.quadrep.com.tw">www.quadrep.com.tw</a>   |
| AddCom                               | Vietnam (Ho Chi Minh City)    | (08) 38107677    | <a href="http://www.addcom.com.sg">www.addcom.com.sg</a>   |
| Quadrep Vietnam (Ho Chi Minh)        | Vietnam (Ho Chi Minh City)    | (84) 87262981    | <a href="http://www.quadrep.com.sg">www.quadrep.com.sg</a>   |
| Quadrep Vietnam Office Hanoi         | Vietnam (Hanoi)               | (84) 0936484282  | <a href="http://www.quadrep.com.sg">www.quadrep.com.sg</a>   |

## Australian/Oceanic Distributors

|                    |                        |                |  |
|--------------------|------------------------|----------------|--|
| Digi-Key           | Worldwide              | (800) 344-4539 | <a href="http://www.digikey.com/us/en/International/global.html">www.digikey.com/us/en/International/global.html</a> |
| Online Components  | Online                 | (888) 906-8217 | <a href="http://www.onlinecomponents.com">www.onlinecomponents.com</a>   |
| Master Instruments | Australia (Sydney)     | (61) 295191200 | <a href="http://www.master-instruments.com.au">www.master-instruments.com.au</a>                                     |
| Active Components  | New Zealand (Auckland) | (64) 94439500  | <a href="http://www.activecomponents.com">www.activecomponents.com</a>   |

## Africa

|            |                          |                   |  |
|------------|--------------------------|-------------------|--|
| Brabek PTY | South Africa (Cape Town) | (27) 021 706-3162 | <a href="http://www.brabek.co.za">www.brabek.co.za</a> |
|------------|--------------------------|-------------------|--|

**Our list of distributors continues on the following page.**

# Distributors (continued from previous page)

## Global Catalog Distributors

|                   |           |                |  |
|-------------------|-----------|----------------|--|
| Digi-Key          | Worldwide | (800) 344-4539 | <a href="http://www.digikey.com/us/en/International/global.html">www.digikey.com/us/en/International/global.html</a> |
| Online Components | Online    | (888) 906-8217 | <a href="http://www.onlinecomponents.com">www.onlinecomponents.com</a>   |

## North American Distributors

|                           |                           |                 |  |
|---------------------------|---------------------------|-----------------|--|
| ElectroSonic              | Canada (Montreal QC)      | 514-748-7942    | <a href="http://www.e-sonic.com">www.e-sonic.com</a>                     |
| ElectroSonic              | Canada (Markham, ON)      | 905-946-0500    | <a href="http://www.e-sonic.com">www.e-sonic.com</a>                     |
| ElectroSonic              | Canada (Vancouver, BC)    | 604-273-2911    | <a href="http://www.e-sonic.com">www.e-sonic.com</a>                     |
| Inventus Power            | Mexico (Tijuana)          | (52) 6642314832 | <a href="http://www.inventuspower.com">www.inventuspower.com</a>         |
| Master Electronics        | Mexico (Zapopan)          | (33) 21534181   | <a href="http://www.masterelectronics.com">www.masterelectronics.com</a> |
| Custom Power LLC          | USA (Fountain Valley, CA) | 1-800-432-3385  | <a href="http://www.custompower.com">www.custompower.com</a>             |
| Excel Components & Supply | USA (Holtville, NY)       | 1-631-475-1100  | <a href="http://www.excelcomp.com">www.excelcomp.com</a>                 |
| Inventus Power            | USA (Woodridge IL)        | 1-630-410-7900  | <a href="http://www.inventuspower.com">www.inventuspower.com</a>         |
| Master Electronics        | USA (Phoenix AZ)          | 1-602-267-1111  | <a href="http://www.masterelectronics.com">www.masterelectronics.com</a> |
| Master Electronics        | USA (Eden Prairie, MN)    | 1-952-944-2151  | <a href="http://www.masterelectronics.com">www.masterelectronics.com</a> |
| Master Electronics        | USA (Tampa, FL)           | 1-813-814-2900  | <a href="http://www.masterelectronics.com">www.masterelectronics.com</a> |
| Master Electronics        | USA (Santa Clara, CA)     | 1-408-970-8090  | <a href="http://www.masterelectronics.com">www.masterelectronics.com</a> |
| Master Electronics        | USA (Bohemia, NY)         | 1-631-434-9394  | <a href="http://www.masterelectronics.com">www.masterelectronics.com</a> |
| Master Electronics        | USA (Redmond, WA)         | 1-425-821-5454  | <a href="http://www.masterelectronics.com">www.masterelectronics.com</a> |
| Master Electronics        | USA (Santa Monica, CA)    | 1-310-452-1229  | <a href="http://www.masterelectronics.com">www.masterelectronics.com</a> |
| Master Electronics        | USA (Miami, FL)           | 1-305-638-2000  | <a href="http://www.masterelectronics.com">www.masterelectronics.com</a> |
| Source Research           | USA (Schaumburg, IL)      | 1-800-356-0259  | <a href="http://www.sourcereasearch.com">www.sourcereasearch.com</a>     |
| Taylor/Master Electronics | USA (Germantown, WI)      | 1-414-365-6335  | <a href="http://www.taylorwisconsin.com">www.taylorwisconsin.com</a>     |

## European Distributors

|                               |                              |                   |  |
|-------------------------------|------------------------------|-------------------|--|
| Digi-Key                      | Worldwide                    | (800) 344-4539    | <a href="http://www.digikey.com/us/en/International/global.html">www.digikey.com/us/en/International/global.html</a>                                       |
| Online Components             | Online                       | (888) 906-8217    | <a href="http://www.onlinecomponents.com">www.onlinecomponents.com</a>   |
| Ineltro                       | Austria (Wien)               | (43) 0161062136   | <a href="http://www.ineltro.eu">www.ineltro.eu</a>   |
| Ineltro                       | Switzerland (Regensdorf)     | (41) 433437300    | <a href="http://www.ineltro.ch">www.ineltro.ch</a>   |
| Rossmann Electronic           | Germany (Dießen am Ammersee) | (49) 8807949940   | <a href="http://www.rossmannweb.de/index.php?lang=de">www.rossmannweb.de/index.php?lang=de</a>   |
| RC Microelectronica           | Spain (Barcelona)            | (34) 932602166    | <a href="http://www.rcmicro.es">www.rcmicro.es</a>   |
| Sorelec Electronics           | France (Cesson-Sevigne)      | (33) 299837854    | <a href="http://www.sorelec.com/l-actu/87-sorelec-distribue-les-solutions-mpd.html">www.sorelec.com/l-actu/87-sorelec-distribue-les-solutions-mpd.html</a> |
| Dissios SA Batteries          | Greece (Paiania)             | (30) 2106647333   | <a href="http://www.batteries.gr/en/rechargeable/accessories/holders.html">www.batteries.gr/en/rechargeable/accessories/holders.html</a>                   |
| HT Componenti Elettronici srl | Italy (Firenze)              | (39) 055430310    | <a href="http://it.kompass.com/c/ht-componenti-elettronici-srl/it0179298/">it.kompass.com/c/ht-componenti-elettronici-srl/it0179298/</a>                   |
| Nedelko                       | Netherlands (Barendrecht)    | (31) 180645400    | <a href="http://www.nedelko.nl">www.nedelko.nl</a>   |
| OEM Electronics AB            | Denmark (Allerød)            | (46) 087328560    | <a href="http://www.oemelectronics.se/leverantorer/mpd">www.oemelectronics.se/leverantorer/mpd</a>   |
| OEM Electronics AB            | Norway (Drammen)             | (46) 087328560    | <a href="http://www.oemelectronics.se/leverantorer/mpd">www.oemelectronics.se/leverantorer/mpd</a>   |
| OEM Electronics Poland        | Poland (Warszawa)            | (48) 22-86 32 722 | <a href="http://www.oemelectronics.pl/">www.oemelectronics.pl/</a>   |
| OEM Electronics AB            | Sweden (TRANÅS)              | (46) 087328560    | <a href="http://www.oemelectronics.se/leverantorer/mpd">www.oemelectronics.se/leverantorer/mpd</a>   |

## South American Distributors

|                                |                    |                   |  |
|--------------------------------|--------------------|-------------------|--|
| Inventus Power                 | Brazil (Manus)     | (55) 92 2126 6400 | <a href="http://www.inventuspower.com">www.inventuspower.com</a>     |
| Power Circuit Eletrônica Ltda. | Brazil (São Paulo) | (55) 11-3981-3965 | <a href="http://www.powercircuit.com.br">www.powercircuit.com.br</a> |



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