

How to Select a Fuse Holder

A practical guide to matching an MPD holder or clip to the fuse, circuit, installation and service environment.

Start with the protective device

Specify the fuse before choosing its holder: cartridge or blade style, exact body and terminal dimensions, rated current, voltage, time current behavior and breaking capacity for the available fault current. The fuse provides the overcurrent protection. Its holder must accept that fuse and be rated for the circuit and environment.

Make five decisions in order

- 1 Identify the fuse. Confirm 5 × 20 mm cartridge, 2AG, 6.3 × 32 mm (3AG), standard blade, mini blade, MAXI blade or another exact format; do not rely on a similar appearance.
- 2 Check electrical ratings. Verify the holder's current and voltage ratings for AC or DC use, expected temperature rise, contact resistance and applicable approvals on the specific datasheet.
- 3 Choose placement. Use PCB clips or holders inside a board assembly, panel mount for user access, in-line for a wire harness, or a block for multiple circuits.
- 4 Match installation details. Check footprint or panel cutout, wire gauge and length, termination, enclosure clearance, service access and safe isolation.
- 5 Validate the assembly. Fit the actual fuse and test continuity, heating, retention, vibration, replacement and environmental exposure in the final product.

Examples from MPD product photography



5 mm PCB clip



Panel mount



In-line cartridge



In-line blade

Product photos: MPD part pages at fuseholders.com. Illustrations show form factors; check the current drawing for each exact part.

Choose the fuse holder family

Begin with the fuse style and mounting location. These MPD examples show the range of choices; confirm ratings and compatibility on the current part drawing.

Fuse format	MPD example	Selection cue
5 mm cartridge / 2AG family	BK-6002 PCB clip; BF303 in-line holder for 5 × 20 mm	Match the actual fuse length and diameter. Choose board access or a wire harness and confirm ratings.
6.3 × 32 mm cartridge / 3AG	BK-6004 PCB holder; BF302 in-line holder	Compare board footprint, wire gauge, required protection against accidental contact and fuse access.
Panel accessible cartridge	BF101 panel mount holder	Check the panel cutout, cap clearance, terminals, fuse fit and the exact part’s rating.
Standard automotive blade	BK-6010 PCB holder; BF353 in-line holder	Check the blade terminal size, housing, wire gauge and exposure to moisture.
Mini automotive blade	BK-6013 PCB holder; BF353S in-line holder	Confirm mini blade geometry and service clearance. Do not substitute a standard blade fuse.
MAXI / ATX blade	BF353L in-line holder	Check the heavier wire and higher-current application against the part datasheet.

Match placement to service needs

Mounting	Typical use	What to verify
PCB clips / holder	Compact electronics or assembly line installation	Land pattern, retention, wave solder process, clearance, exposed live parts
Panel mount	Fuse replacement from outside an enclosure	Panel thickness and cutout, cap access, wiring, touch safety
In-line	Automotive, marine and equipment harnesses	Wire size, splice and strain relief, moisture exposure, service location
Multiple circuits	Distribution panel or harness branch	Fuse spacing, wiring, labeling and availability of a current MPD block

Check lifecycle status for every part number. Some older fuse block models appear in MPD’s end-of-life notices; ask MPD for a current recommendation before specifying a block.

Worked selection examples

Small control board

A replaceable 5 × 20 mm cartridge fuse. Start with BK-6002 5 mm clips at the correct spacing if the PCB and enclosure provide suitable protection and access. Compare BF303 when the 5 × 20 mm fuse must sit in a harness. Confirm fuse dimensions, clip spacing, current and voltage rating, and touch protection.

Equipment front panel

A service technician needs to change a cartridge fuse without opening the enclosure. Start with the BF101 panel mount family. Verify the intended fuse, panel cutout and thickness, cap travel, rear termination and electrical rating from the current drawing.

Automotive accessory harness

A standard ATP/ATC/ATO blade fuse near the power takeoff. Start with BF353, described by MPD as a water resistant in-line option. Match wire gauge, circuit current and installation location. Water resistant does not by itself establish an IP rating or immersion suitability.

Compact harness with a mini blade

An ATM/ASP fuse in a limited enclosure. Start with BF353S, MPD's water resistant mini blade option. Test the actual fuse profile, cap and wire exit in the installed orientation.

MPD compared with another supplier

Compare exact parts under the same conditions. MPD offers documented choices across mounting and fuse formats, plus custom design support; no one holder outperforms every competitor in every circuit.

Comparison point	MPD option to assess	Check on any alternative
Format and placement	PCB clips and holders, panel mount, in-line blade and cartridge options	Does the exact fuse seat correctly in the required mounting location?
Application fit	Wire gauge and water resistant options for selected in-line products	Are ratings, seals and wire terminations documented for your conditions?
Design resources	Part drawings, CAD files, samples and engineering collaboration	Are current drawings, traceable ratings and sample units available?
Custom requirements	MPD can modify an existing design or manufacture a new component	Can the supplier support a fit, terminal or harness change and qualify it?

Qualify the holder and the fuse together

- Confirm the selected fuse's current, voltage and breaking capacity for the circuit's normal load and maximum available fault current. The holder rating is a separate requirement.
- Measure heating at the highest continuous operating current and worst expected ambient temperature; account for enclosure airflow, wire size and PCB copper.
- Test insertion and removal with the actual fuse. Check contact pressure, terminal plating, vibration, shock and access for replacement.
- Check that users cannot touch energized parts while replacing the fuse, and follow the equipment's applicable safety requirements and approvals.
- For outdoor or marine uses, confirm the specific environmental protection claimed by the selected part and test the assembled harness.

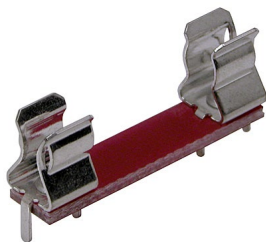
When a standard part does not fit

MPD is a custom manufacturer. Share the fuse format, electrical rating, circuit environment, mounting drawing, wire specification, desired length and connector, annual volume and any approval requirements. MPD can discuss modified terminals, mounting, wire harness details or a purpose built solution. Samples and drawings allow the proposed design to be checked before production.

Request samples and engineering help

Samples are available on request. Email sales@memoryprotectiondevices.com or call MPD at (631) 249-0001. Include the fuse type, circuit voltage and current, mounting style and intended environment so MPD can recommend relevant parts.

More MPD product examples



3AG PCB holder



Mini blade PCB



Mini blade in-line



MAXI blade in-line

MPD sources

Fuse holder catalog <https://www.memoryprotectiondevices.com/documents/catalogs/MPD-Fuse-Holders.pdf>

Fuseholders product pages and images <https://www.fuseholders.com/>

MPD quality and custom capability <https://www.fuseholders.com/about.php>

End-of-life notices <https://www.fuseholders.com/documents.php?type=EOL+Information>

Illustrative selections only. Confirm current product specifications, availability and circuit suitability with MPD before design release.