



New Bourns® Multifuse® PPTC Resettable Fuses Provide Overcurrent Protection in a 0402 Footprint

Three low-hold-current models combine ratings of up to 9 VDC with ENIG terminals and a 0.6 mm maximum profile

RIVERSIDE, Calif., October 7, 2026 - Bourns today announced the [MF-ASMF Series Multifuse® polymer positive temperature coefficient \(PPTC\) resettable fuses](#) for overcurrent protection in portable electronics with limited PCB area. The three models provide hold-current ratings of 0.05 A, 0.08 A, and 0.10 A in a 0402 footprint, with maximum voltage ratings of 6 VDC or 9 VDC.

Battery-powered and portable electronic designs often require protection for low-current battery, charging, sensing, signal-line, and interface circuits while maintaining compact board dimensions. The MF-ASMF Series addresses this layout constraint with a symmetrical package measuring up to 1.15 mm by 0.65 mm and a maximum profile of 0.6 mm. The devices combine swift time-to-trip characteristics with electroless nickel under immersion gold terminals, cUL recognition, and TÜV certification.

“Designers of compact, battery-powered electronics need low-hold-current protection that does not increase the required board area. The MF-ASMF Series provides three hold-current options in a 0402 footprint, with a symmetrical 0.6 mm maximum profile and ENIG terminals for surface-mount assembly.”

— **Shawn Yu, Product Line Manager, Bourns**

Design Features and Key Capabilities

- **Compact 0402 footprint** — Conserves PCB area in space-constrained portable electronics.
- **Swift time to trip** — Responds to overcurrent events within the limits specified for each model.
- **ENIG terminals** — Electroless nickel under immersion gold terminal material provides excellent solderability.
- **Symmetrical, low-profile design** — Supports placement flexibility with a maximum component profile of 0.6 mm.
- **Agency recognition** — cUL recognized under file E174545 and TÜV certified under R50256634.
- **TÜV-certified standards** — Certifications cover IEC 62319-1, IEC 60738-1, and IEC 60730-1:2013, including Clause 15, Clause 17, and Annex J.
- **Environmental compliance** — RoHS compliant* and halogen free**.

Electrical Specifications

Model	V _{max}	I _{max}	I _{hold} at 23 °C	I _{trip} at 23 °C	R _{min} at 23 °C	R _{1max} ¹ at 23 °C	Max. time to trip at 23 °C	Tripped Power (Typ.)
MF-ASMF005X	9 V	50 A	0.05 A	0.15 A	2.8 Ω	25.0 Ω	1.0 s at 0.25 A	0.3 W
MF-ASMF008X	6 V	50 A	0.08 A	0.24 A	2.0 Ω	12.0 Ω	1.0 s at 0.4 A	0.3 W
MF-ASMF010X	6 V	50 A	0.10 A	0.30 A	1.4 Ω	8.0 Ω	1.0 s at 0.5 A	0.3 W

¹ R_{1max} is measured one hour after reflow.

Target Applications

- Overcurrent protection for small Li-ion and polymer battery circuits in wearable devices
- I/O and signal line protection in PC motherboards
- Protection for low power battery and charging circuits in mobile devices
- Sensing circuit protection
- Interface protection for handheld and portable gaming devices
- Protection for electronic reading devices, digital cameras and other portable electronics

Availability

The [MF-ASMF Series Multifuse® PPTC Resettable Fuses](#) are available through Bourns' authorized distribution network. Specifications and inventory information are available at bourns.com/products/circuit-protection/resettable-fuses-multifuse-pptc#smdlos. Samples may be requested from [Bourns Customer Service](#).

About Bourns

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