

MIDI High Performance Series

Bolt-down Fuses – Rated 70V-SF36



Description

MIDI® High Performance 70V automotive fuses protect circuits that receive large inrushes of current, such as those for fans, heaters, batteries, and starters. Silicon inserts ensure these fuses offer more than 1 Mohm of resistance in their open state. Like all bolt-down MIDI fuses, these employ diffusion pill technology to offer predictable time-delayed performance.

Features & Benefits

- 1 Mohm open state resistance
- High-contrast color coding on housing aids identification
- High tightening torque resistance
- Available with two, one, or no mounting holes
- Recognized as UL 248-1 Special Purpose Fuses (at 70V DC File E71611) and Directive 2011/65/EU
- Refers to ISO 20934 – Type SF36

Applications

- Cars / SUVs
- Trucks
- Offroad vehicles
- Power Tools
- 2/3 wheelers
- Buses
- Watercraft as approved by Littelfuse®

Agency Approvals

| Agency | Agency File Number | Current Rating (A) |
|--------|----------------------------|--------------------|
| | ULUS-L71611-295-03219102-3 | 30 A - 200 A |

Additional Information



Resources



Samples

[See Disclaimer Notice](#)

Specifications

| | |
|---|---|
| Voltage Rating: | 70 V DC |
| Interrupting Rating: | 2500 A @ 70 V DC |
| Recommended Environmental Temperature: | -40 °C to +125 °C |
| Terminals Material: | Tin-plated copper alloy |
| Housing Material: | PA66-GF25 FR (UL 94 Flammability rating of V-0) |
| Open State Resistance (OSR): | > 1 Mohm (after fuse opening) |
| Mounting Torque M6: | 9 Nm +/- 1Nm |
| Typical Weight per Fuse: | 3.5 g |
| Refers To: | ISO 20934 – Type SF36. Fuse ratings 150 A, 175 A and 200 A deviate from ISO standard (current cycles and current steps not applicable). |
| Comply With: | Standard UL 248-1 as a Special Purpose Fuse in UL File E71611 and Directive 2011/65/EU. |












MIDI High Performance Series

Bolt-down Fuses – Rated 70V-SF36

Ordering Information

| Part Number | Current Rating (A) | Bolt Size | Bolt Qty. | Package Size |
|--------------|--------------------|-----------|-----------|--------------|
| 4998xxx.M-M6 | 30 – 200 | M6 | 2 | 500 |
| 4998xxx.M1M6 | 30 – 200 | M6 | 1 | 500 |
| 4998xxx.M-NH | 30 – 200 | - | 0 | 500 |

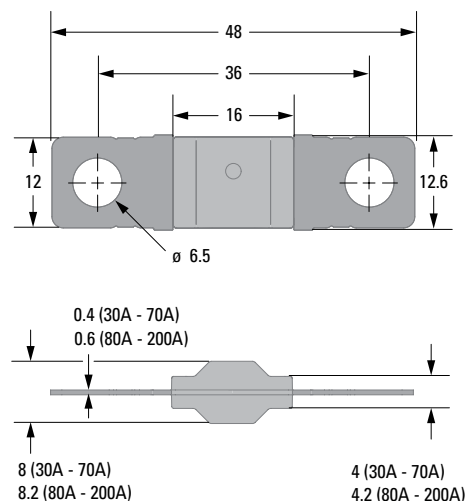
Ratings

| Part Number | Current Rating (A) | Housing Material Color | Test Cable Size (mm ²) | Typ. Voltage Drop (mV) | Typ. Cold Resistance (mΩ) | Typ. I ² t (A ² s) |
|-------------|--------------------|---|------------------------------------|------------------------|---------------------------|--|
| 4998030.M_ | 30 |  | 2.5 | 100 | 2.20 | 3200 |
| 4998040.M_ | 40 |  | 4 | 94 | 1.56 | 4700 |
| 4998050.M_ | 50 |  | 6 | 86 | 1.16 | 7500 |
| 4998060.M_ | 60 |  | 6 | 81 | 0.94 | 6800 |
| 4998070.M_ | 70 |  | 10 | 76 | 0.74 | 10 900 |
| 4998080.M_ | 80 |  | 10 | 64 | 0.57 | 10 500 |
| 4998100.M_ | 100 |  | 10 | 68 | 0.44 | 18 300 |
| 4998125.M_ | 125 |  | 16 | 66 | 0.35 | 51 300 |
| 4998150.M_ | 150 |  | 25 | 72 | 0.29 | 45 100 |
| 4998175.M_ | 175 |  | 25 | 70 | 0.24 | 88 000 |
| 4998200.M_ | 200 |  | 35 | 67 | 0.20 | 111 700 |

Note: The typical I²t is an average value calculated from the breaking capacity tests by using the melting time before the arcing occurs.

Dimensions

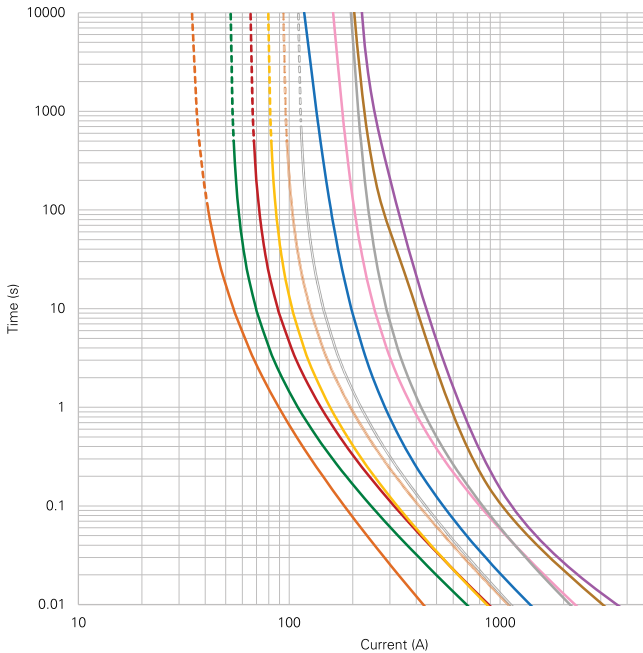
Dimensions in mm. Please refer to the outline drawing for dimensions and tolerances.



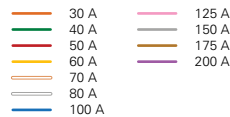
MIDI High Performance Series

Bolt-down Fuses – Rated 70V-SF36

Time-Current Characteristic



| % of Rating | Opening Time Min. / Max. (s) |
|-------------|------------------------------|
| 100 | 360 000 / - |
| 135 | 300 / 3 600 |
| 150 | 90 / 500 |
| 200 | 1 / 50 |
| 300 | 0.3 / 4 |
| 500 | 0.1 / 1 |
| 600 | 0.07 / 0.7 |



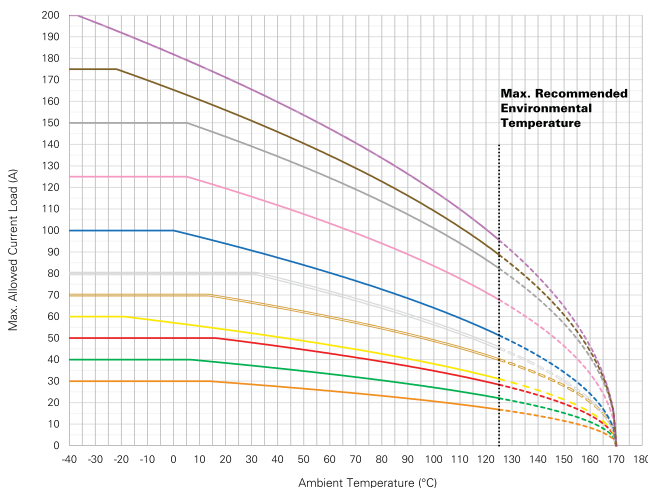
Note 1: Current recommendation may be impacted by the final condition of the application (terminals characteristics, wire size etc.). Please contact Littelfuse® for more information.

Note 2: Fuse ratings 150 A, 175 A and 200 A deviate from ISO standard (current cycles and current steps not applicable).

Typical Derating Curves

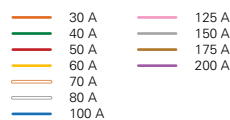
Temperature security margin is 20%

Please contact Littelfuse® for Details Regarding Derating Test Set Up.



Max. allowed current load (A) at ambient temperature based on typical derating

| | -40 °C | 0 °C | 20 °C | 65 °C | 85 °C | 110 °C | 125 °C |
|--------------|--------|------|-------|-------|-------|--------|--------|
| 30 A | 30 | 30 | 29 | 25 | 23 | 19 | 17 |
| 40 A | 40 | 40 | 38 | 33 | 30 | 25 | 22 |
| 50 A | 50 | 50 | 49 | 42 | 38 | 32 | 28 |
| 60 A | 57 | 57 | 54 | 46 | 42 | 35 | 31 |
| 70 A | 70 | 70 | 69 | 59 | 53 | 46 | 40 |
| 80 A | 80 | 80 | 80 | 70 | 63 | 52 | 45 |
| 100 A | 100 | 100 | 94 | 78 | 71 | 59 | 51 |
| 125 A | 125 | 125 | 120 | 101 | 91 | 78 | 68 |
| 150 A | 150 | 150 | 144 | 122 | 110 | 94 | 82 |
| 175 A | 175 | 165 | 156 | 132 | 119 | 101 | 89 |
| 200 A | 200 | 182 | 171 | 144 | 130 | 110 | 96 |



Note: Current recommendation may be impacted by the final condition of the application (terminals characteristics, wire size etc.). Please contact Littelfuse® for more information.

Disclaimer Notice - Information furnished is believed to be accurate and reliable. However, users should independently evaluate the suitability of and test each product selected for their own applications. Littelfuse products are not designed for, and may not be used in, all applications. Read complete Disclaimer Notice at <https://www.littelfuse.com/legal/disclaimers/product-disclaimer.aspx>