



MIDI® 70V HP Fuse

## MIDI® High Performance Fuse Rated 70V

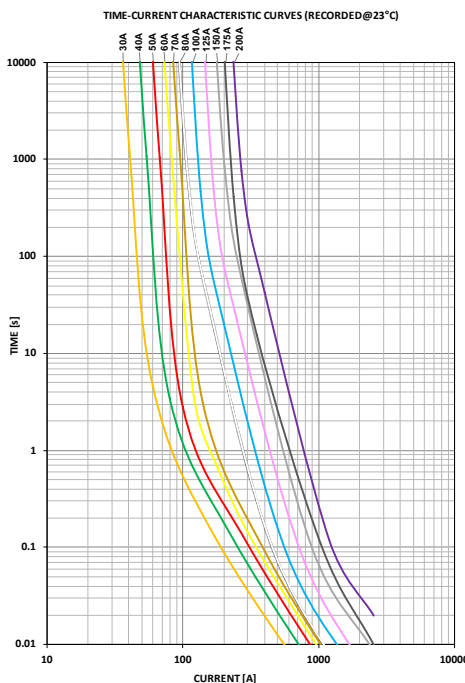
The MIDI® 70V High Performance (HP) Fuse is designed for high current circuit protection up to 200A with "Diffusion Pill Technology." The MIDI® 70V HP features 1MOhm Open State Resistance after fuse opening to guarantee safe interruption at any voltage up to 70V. The MIDI® 70V HP Fuse is an ideal solution for any high current application like fans, heaters and high inrush peak loads. The new added 135% overload gate provides much better wire protection.

### Specifications

|                                            |                                                                                                                    |
|--------------------------------------------|--------------------------------------------------------------------------------------------------------------------|
| Voltage Rating:                            | 70 VDC                                                                                                             |
| Interrupting Rating:                       | 2500A @ 70 VDC                                                                                                     |
| Recommended Environmental Temperature:     | -40°C to + 125°C                                                                                                   |
| Terminals Material:                        | Tin Plated Copper                                                                                                  |
| Housing Material:                          | PA66 GF25 FR (U.L. 94 Flammability rating – V0)                                                                    |
| Mounting Torque M6:                        | 9Nm+/-1Nm                                                                                                          |
| Open State Resistance (after fuse opening) | >1MOhm                                                                                                             |
| Refers To:                                 | ISO 20934 - Type SF36                                                                                              |
| Complies With:                             | Standard UL 248-1 as a Special Purpose Fuse in<br>UL File E71611 (from 60A to 100A only) and Directive 2011/65/EU. |



### Time-Current Characteristic Curves



### Ordering Information

| Part Number   | Rating   | Package Size | Bolt Hole Qty |
|---------------|----------|--------------|---------------|
| 4998xxx.M-M6  | 30 - 200 | 500          | 2             |
| 4998xxx.M-1M6 | 30 - 200 | 500          | 1             |
| 4998xxx.M-NH  | 30 - 200 | 500          | 0             |

### Time-Current Characteristics

| % 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                 |

### Ratings

| Part Number | Current Rating (A) | Color Code | Test Cable Size (mm²) | Voltage Drop (mV) max. | Typ. I²t (A²s) |
|-------------|--------------------|------------|-----------------------|------------------------|----------------|
| 4998030.M_  | 30 <sup>1</sup>    | Orange     | 2.5                   | 120                    | 2,100          |
| 4998040.M_  | 40 <sup>1</sup>    | Green      | 4                     |                        | 3,600          |
| 4998050.M_  | 50 <sup>1</sup>    | Red        | 6                     |                        | 5,600          |
| 4998060.M_  | 60 <sup>1,2</sup>  | Yellow     | 6                     | 110                    | 7,100          |
| 4998070.M_  | 70 <sup>1,2</sup>  | Brown      | 10                    |                        | 8,300          |
| 4998080.M_  | 80 <sup>2</sup>    | White      | 10                    |                        | 10,400         |
| 4998100.M_  | 100 <sup>2</sup>   | Blue       | 10                    | 100                    | 17,500         |
| 4998125.M_  | 125                | Pink       | 16                    |                        | 24,900         |
| 4998150.M_  | 150 <sup>1</sup>   | Grey       | 25                    |                        | 50,200         |
| 4998175.M_  | 175 <sup>1</sup>   | Brown      | 25                    |                        | 57,700         |
| 4998200.M_  | 200 <sup>1</sup>   | Purple     | 35                    |                        | 119,100        |

<sup>1</sup> Note 1: In development - please contact Littelfuse® for more details regarding availability timing.

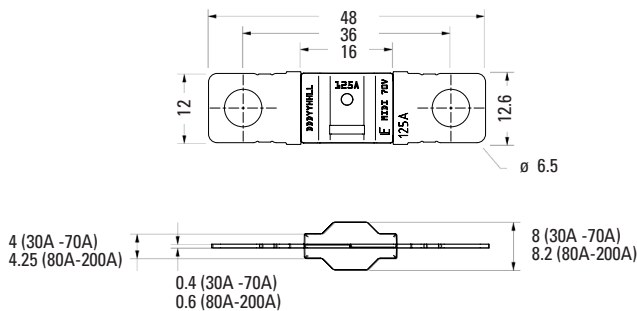
<sup>2</sup> Note 2: UL Recognized.

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

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### Dimensions

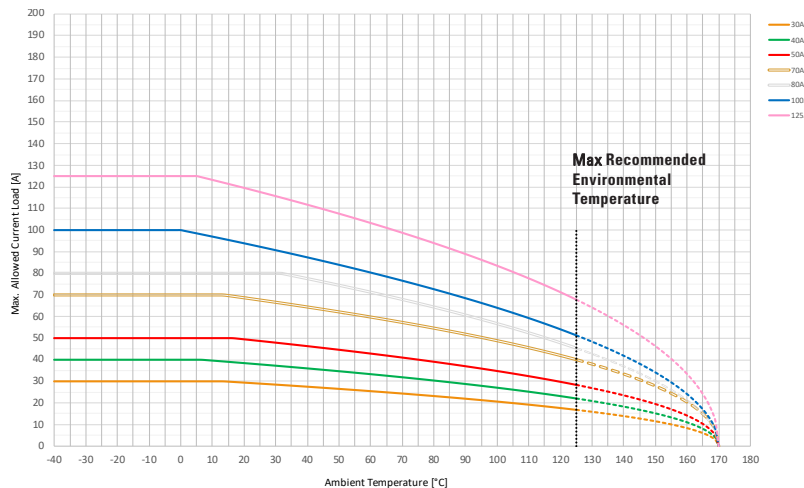
Dimensions in mm for reference only. See outline drawing for dimensions and tolerances.



### Typical Derating of Fuse Melting Element

Temperature Security Margin is 20%

Please Contact Littelfuse® for Details Regarding Derating Test Set-Up



Derating curves may change depending on the final condition of the application (terminals characteristics, wire size etc.). Please ask Littelfuse for more information.

### Temperature Table

|      | max. allowed current load [A] at ambient temperature (typical derating) |     |      |      |      |       |       |
|------|-------------------------------------------------------------------------|-----|------|------|------|-------|-------|
|      | -40°C                                                                   | 0°C | 20°C | 65°C | 85°C | 110°C | 125°C |
| 30A  | 30                                                                      | 30  | 29   | 25   | 23   | 19    | 17    |
| 40A  | 40                                                                      | 40  | 38   | 33   | 30   | 25    | 22    |
| 50A  | 50                                                                      | 50  | 49   | 42   | 38   | 32    | 28    |
| 60A  | Coming Up                                                               |     |      |      |      |       |       |
| 70A  | 70                                                                      | 70  | 69   | 59   | 53   | 46    | 40    |
| 80A  | 80                                                                      | 80  | 80   | 70   | 63   | 52    | 45    |
| 100A | 100                                                                     | 100 | 94   | 78   | 71   | 59    | 51    |
| 125A | 125                                                                     | 125 | 120  | 101  | 91   | 78    | 68    |
| 150A | Coming Up                                                               |     |      |      |      |       |       |
| 175A | Coming Up                                                               |     |      |      |      |       |       |
| 200A | Coming Up                                                               |     |      |      |      |       |       |