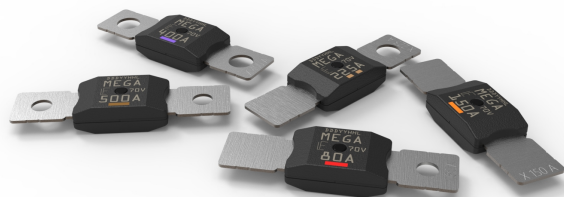


MEGA® High Performance Fuse

Rated 70V-SF51

RoHS



Specifications

| | |
|---|---|
| Voltage Rating: | 70 V DC |
| Interrupting Rating: | 2500A @ 70 V DC |
| Recommended Environmental Temperature: | -40 °C to +125 °C |
| Terminals Material: | Tin Plated Copper |
| Housing Material: | PPA-GF33 (U.L. 94 Flammability rating - HB) |
| Mounting Torque M6: | 9 Nm +/- 1 Nm |
| Mounting Torque M8: | 20 Nm +/- 1 Nm |
| Complies with: | ISO 20934 - Type SF51 |
| Open State Resistance (after fuse opening) | >1MΩ |

Description

The MEGA® 70V-SF51 High Performance (HP) Fuses employ diffusion pill technology to provide predictable time-delayed circuit protection. These MEGA fuses are ideal for protecting batteries, alternators, and heavy gauge wire harnesses that experience large inrushes of current. Use fuses with ampere ratings between 350 A and 500 A only for short circuit protection.

Features & Benefits

- High-contrast ampere rating stamp on housing aids identification
- Available with two, one, or no mounting holes
- More than 1 Mohm open state resistance

Applications

- Cars
- Trucks
- SUVs
- Offroad vehicles
- Buses
- Watercraft as approved by Littelfuse®

Ordering Information

| Part Number | Rating | Package Size | Bolt Size | Bolt Hole Qty |
|----------------|--------|--------------|-----------|---------------|
| 0998xxx.UX-2M8 | 60-500 | 500 | M8 | 2 |
| 0998xxx.UX-1M8 | 60-500 | 500 | M8 | 1 |
| 0998xxx.UX-2M6 | 60-500 | 500 | M8 | 2 |
| 0998xxx.UX-1M6 | 60-500 | 500 | M8 | 1 |
| 0998xxx.UX-NH | 60-500 | 500 | M8 | 0 |

MEGA® High Performance Fuse

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Ratings

| Part Number | Current Rating (A) | Font Color | Test Cable Size (mm ²) | Typ. Voltage Drop (mV) | Typ. Cold Resistance (mΩ) | Typ. I ² t (A ² s) |
|-------------|--------------------|--------------|------------------------------------|------------------------|---------------------------|--|
| 0998060_ | 60 | Blue | 6 | 75.5 | 0.90 | 22 800 |
| 0998080_ | 80 | Red | 10 | 88.0 | 0.75 | 34 900 |
| 0998100_ | 100 | Yellow | 10 | 66.7 | 0.46 | 24 000 |
| 0998125_ | 125 | Green | 16 | 70.4 | 0.37 | 38 000 |
| 0998150_ | 150 | Orange | 25 | 70.6 | 0.32 | 58 100 |
| 0998175_ | 175 | White | 25 | 79.2 | 0.28 | 79 300 |
| 0998200_ | 200 | Light Blue | 35 | 76.9 | 0.24 | 123 600 |
| 0998225_ | 225 | Light Orange | 35 | 76.6 | 0.21 | 142 500 |
| 0998250_ | 250 | Pink | 50 | 66.0 | 0.17 | 220 000 |
| 0998300_ | 300 | Grey | 50 | 46.9 ² | 0.15 | 340 000 |
| 0998350_ | 350 ¹ | Dark Green | 50 | 50.7 ² | 0.14 | 495 000 |
| 0998400_ | 400 ¹ | Purple | 70 | 50.1 ² | 0.12 | 872 000 |
| 0998450_ | 450 ¹ | Gold | 70 | 52.9 ² | 0.10 | 1 224 000 |
| 0998500_ | 500 ¹ | Brown | 70 | 56.3 ² | 0.09 | 1 800 000 |

¹ Short Circuit Protector only

² Voltage Drop measurements for short circuit protectors taken at 75% of rated current.

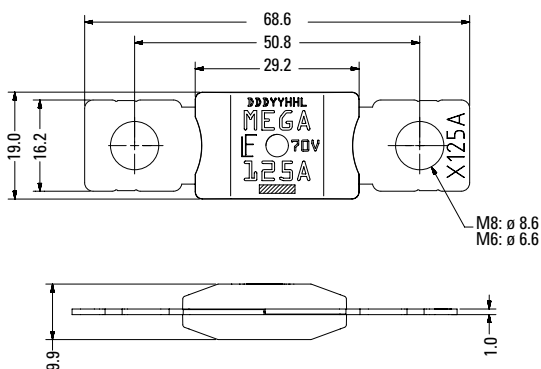
The I²t value is calculated from the breaking capacity tests by using the current time profile before the arcing occurs.

Dimensions

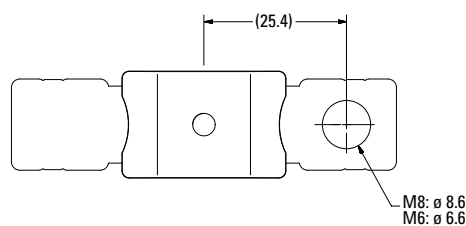
Dimensions in mm for reference only.

See outline drawing for dimensions and tolerances.

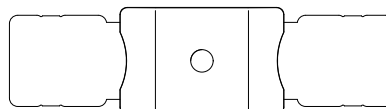
MEGA HP SF51 2 Holes M8/M6 versions



MEGA HP SF51 1 Hole M8/M6 versions



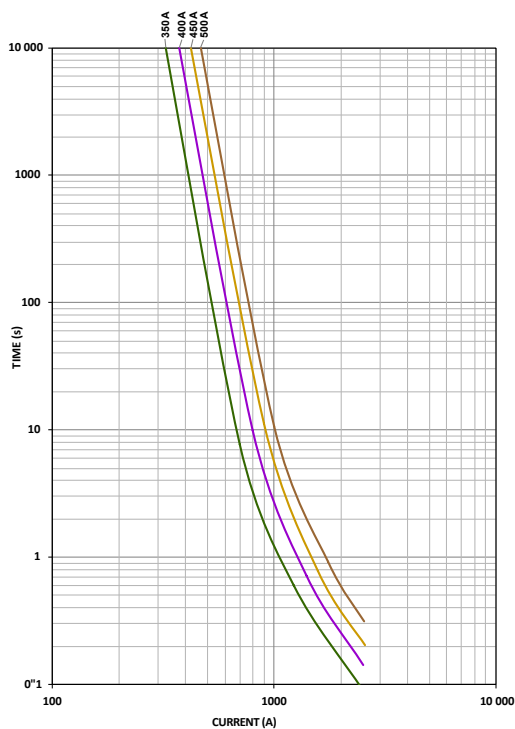
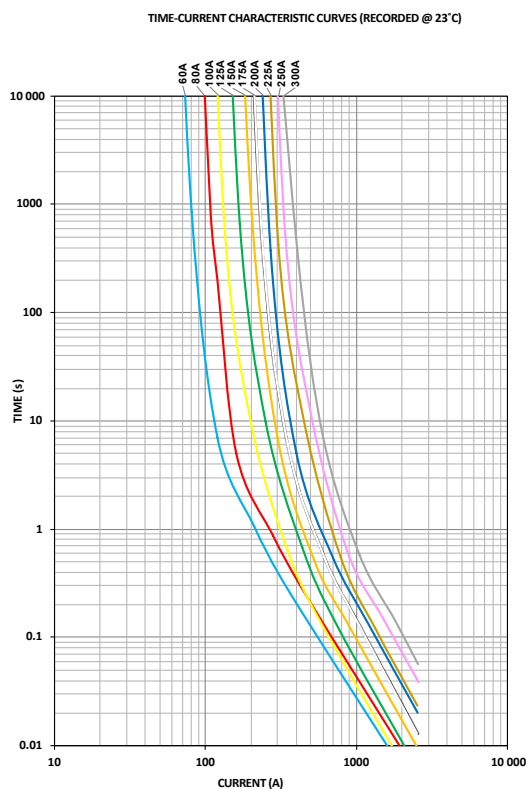
MEGA HP SF51 No-Holes version



MEGA[®] High Performance Fuse

Rated 70V-SF51

Time-Current Characteristic Curves



Time-Current Characteristics

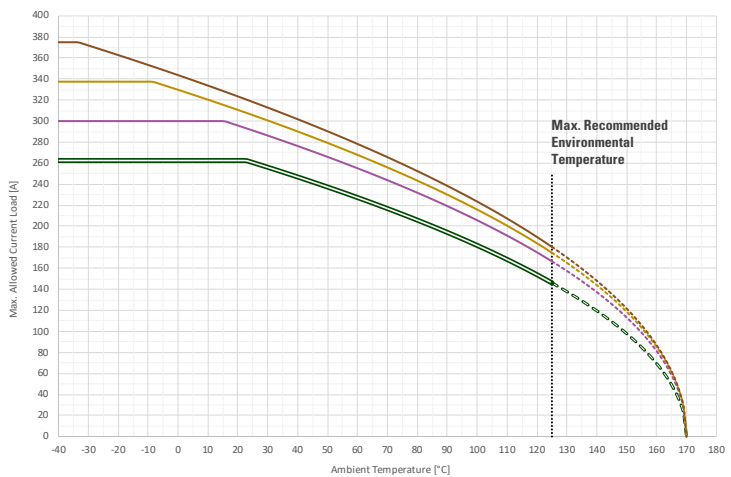
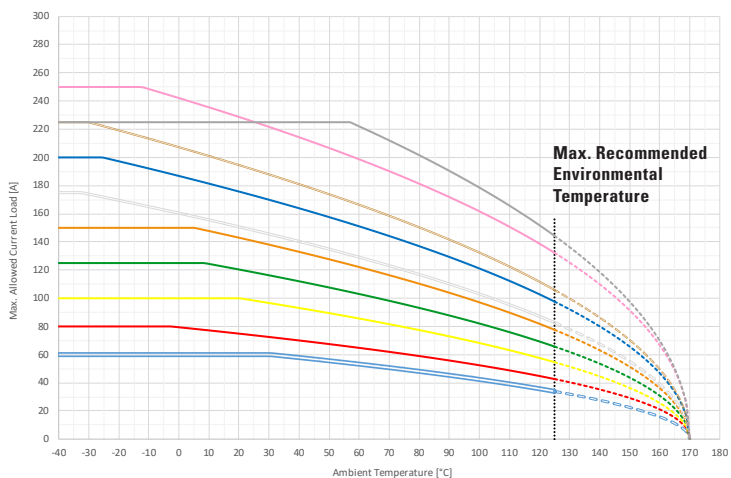
| % of Rating | Opening Time Min / Max (s) | | |
|-------------|----------------------------|------------|------------|
| | 60-250 | 300 | 350-500 |
| 75 | - / - | 14 400 / ∞ | 14 400 / ∞ |
| 100 | 14 400 / ∞ | - / - | - / - |
| 135 | 120 / 1800 | 120 / 1800 | - / - |
| 150 | 20 / 450 | 20 / 450 | - / - |
| 200 | 1 / 15 | 1 / 15 | 1 / 15 |
| 350 | 0.3 / 5 | 0.3 / 5 | 0.5 / 5 |
| 600 | 0.1 / 1 | 0.1 / 1 | 0.1 / 1 |

MEGA® High Performance Fuse

Rated 70V-SF51

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 |
| 60A | 60 | 60 | 60 | 52 | 47 | 39 | 34 |
| 80A | 80 | 79 | 75 | 63 | 57 | 49 | 43 |
| 100A | 100 | 100 | 100 | 84 | 75 | 63 | 55 |
| 125A | 125 | 125 | 120 | 101 | 90 | 76 | 66 |
| 150A | 150 | 150 | 143 | 119 | 107 | 90 | 78 |
| 175A | 175 | 160 | 151 | 126 | 114 | 95 | 83 |
| 200A | 200 | 187 | 176 | 148 | 133 | 112 | 98 |
| 225A | 225 | 207 | 195 | 163 | 146 | 123 | 106 |
| 250A | 250 | 242 | 229 | 194 | 177 | 151 | 132 |
| 300A | 225 | 225 | 225 | 217 | 196 | 166 | 144 |
| 350A | 263 | 263 | 263 | 222 | 200 | 168 | 146 |
| 400A | 300 | 300 | 296 | 250 | 226 | 191 | 167 |
| 450A | 338 | 330 | 311 | 262 | 237 | 201 | 175 |
| 500A | 375 | 344 | 323 | 272 | 246 | 207 | 180 |