

# MEGA® High Performance Series

## Bolt-down Fuses – Rated 70V-SF51



### Description

MEGA® 70V High Performance SF51 automotive 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

- Available with ampere ratings of 60 A to 500 A
- Available with two, one, or no mounting holes
- 51 mm pitch prevents mistaken replacement with other types of high-current fuses
- High-contrast, color-coded ampere rating stamps on housings aid identification
- Refer to ISO 20934 - Type SF51

### Applications

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

### Agency Approvals

Agency	Agency File Number	Current Rating (A)
	UL-US-2210474-0	60 – 500

[See Disclaimer Notice](#)

### Additional Information



Resources



Samples

### Specifications

<b>Voltage Rating:</b>	70 V DC
<b>Interrupting Rating:</b>	2500 A @ 70 V DC
<b>Recommended Environmental Temperature:</b>	-40 °C to +125 °C
<b>Terminals Material:</b>	Tin-plated copper alloy
<b>Housing Material:</b>	PPA-GF33 (U.L. 94 Flammability rating - HB)
<b>Mounting Torque M6:</b>	9 Nm ± 1 Nm
<b>Mounting Torque M8:</b>	12 Nm ± 1 Nm
<b>Refer to:</b>	ISO 20934 - Type SF51
<b>Open State Resistance (after fuse opening):</b>	>1MΩ

### Ordering Information

Part Number	Current Rating (A)	Bolt Size	Bolt Hole Qty.	Package Size
0998xxx.UX-2M8	60 - 500	M8	2	500
0998xxx.UX-1M8	60 - 500	M8	1	500
0998xxx.UX-2M6	60 - 500	M6	2	500
0998xxx.UX-1M6	60 - 500	M6	1	500
0998xxx.UX-NH	60 - 500	-	-	500

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### Ratings

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

<sup>1</sup> Short Circuit Protector only

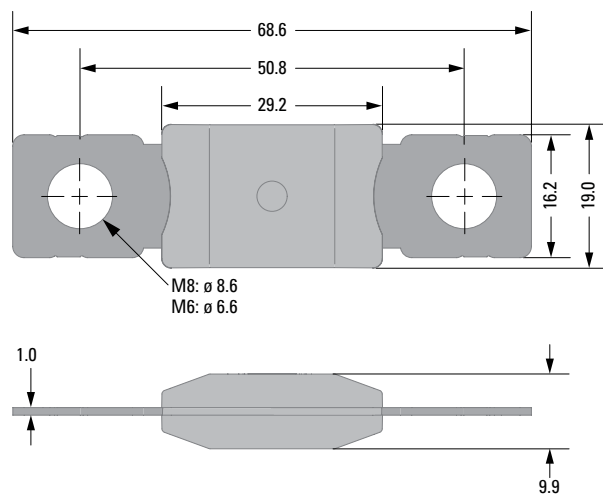
<sup>2</sup> Voltage Drop measurements for short circuit protectors taken at 75% of rated current.

**Note:** The typical I<sup>2</sup>t is an average value calculated from the breaking capacity tests by using the melting time before the arcing occurs.

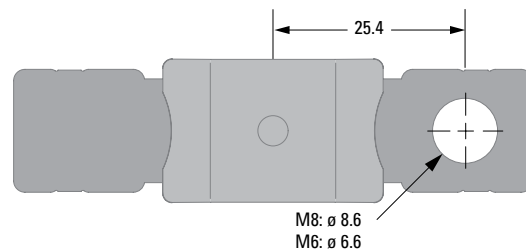
### Dimensions

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

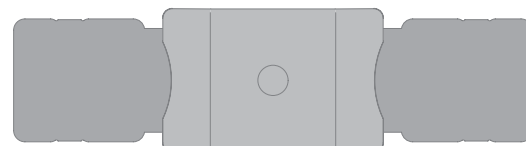
MEGA HP SF51 2 Holes M8/M6 versions



MEGA HP SF51 1 Hole M8/M6 versions



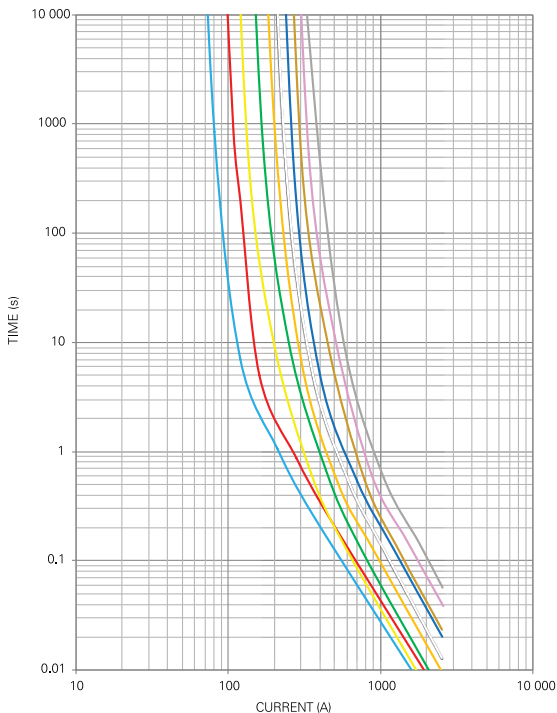
MEGA HP SF51 No-Holes version



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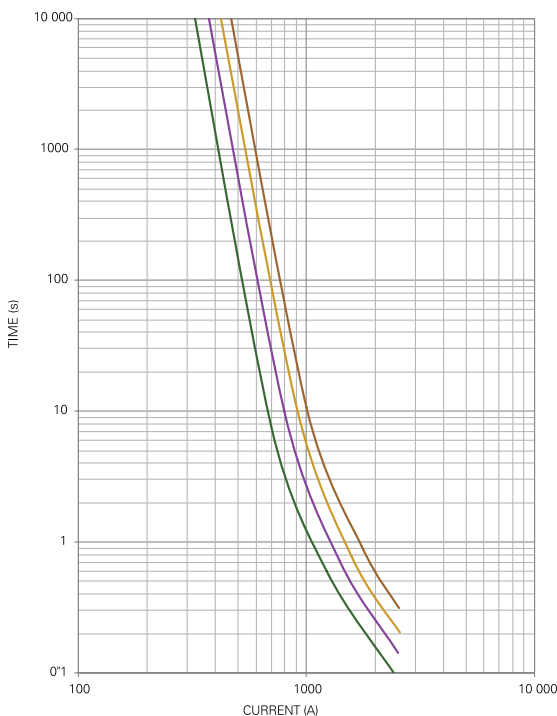
### Time-Current Characteristic



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

- 60 A
- 80 A
- 100 A
- 125 A
- 150 A
- 175 A
- 200 A
- 225 A
- 250 A
- 300 A

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



% of Rating	Opening Time Min. / Max. (s)
	350 - 500 A
75	14 400 / -
100	- / -
135	- / -
150	- / -
200	1 / 15
350	0.5 / 5
600	0.1 / 1

- 350 A
- 400 A
- 450 A
- 500 A

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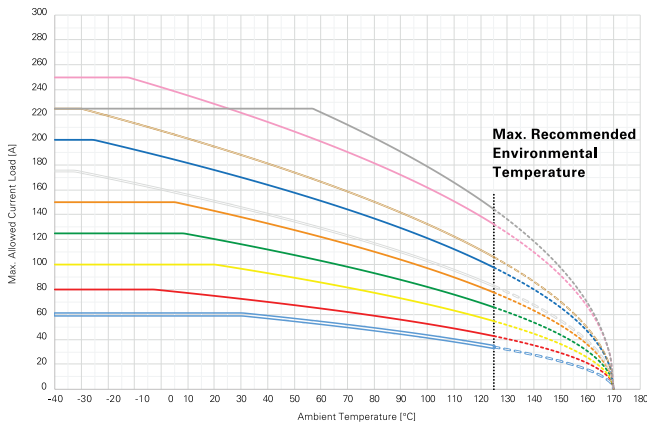
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## Bolt-down Fuses – Rated 70V-SF51

### Typical Derating Curves

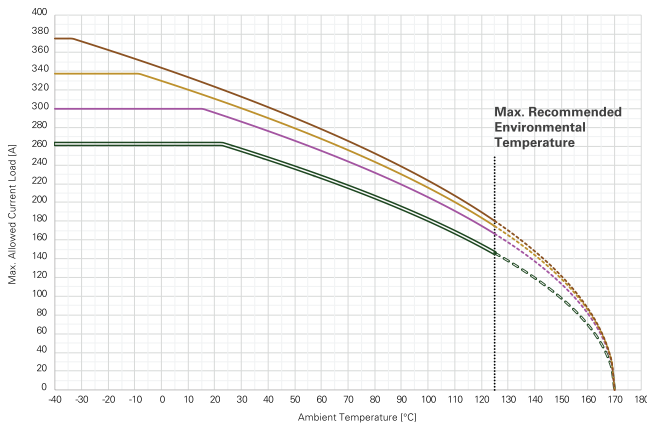
Temperature security margin is 20%.

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

- 60 A
- 80 A
- 100 A
- 125 A
- 150 A
- 175 A
- 200 A
- 225 A
- 250 A
- 300 A



- 350 A
- 400 A
- 450 A
- 500 A

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