

# MEGA® High Breaking Capacity

## Rated 60 V-SF51



### Description

MEGA® High Breaking Capacity SF51 fuses were developed specifically to provide overcurrent and short circuit protection to circuits for 48 V batteries. The fuses can withstand large inrushes of current and short circuit currents up to 5 kA at 60 V dc. These capabilities make the fuses a perfect fit for many applications where ultra-high current protection is needed.

### Features & Benefits

- High breaking capacity (peak higher than 5 kA)
- Available with two, one, or no mounting holes
- High-contrast color coding on housing aids identification
- Refer to ISO 20934 – Type SF51
- Date codes are optimized for OCR reading by digital camera

### Additional Information



Resources

### Applications

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

See Disclaimer Notice

### Specifications

<b>Voltage Rating:</b>	60 V DC
<b>Interrupting Rating:</b>	5000 A @ 60 V DC
<b>Recommended Environmental Temperature:</b>	-40 °C to +85 °C
<b>Terminals Material:</b>	Tin-plated copper alloy
<b>Housing Material:</b>	PPA-GF33 (UL 94 Flammability rating of HB)
<b>Typical Weight per Fuse:</b>	13.0 g
<b>Mounting Torque M6:</b>	9 Nm ± 1 Nm (ISO prescription)
<b>Mounting Torque M8:</b>	20 Nm ± 1 Nm (ISO prescription)
<b>Refer to:</b>	ISO 20934 - Type SF51

# MEGA<sup>®</sup> High Breaking Capacity

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### Ordering Information

Part Number	Rating	Package Qty	Bolt Size	Bolt Hole Qty
0878450.UX-NH	450A	400	N/A	0
0878450.UX-2M8	450A	400	M8	2
0878450.UX-1M8	450A	400	M8	1
0878450.UX-2M6	450A	400	M6	2
0878450.UX-1M6	450A	400	M6	1

### Ratings

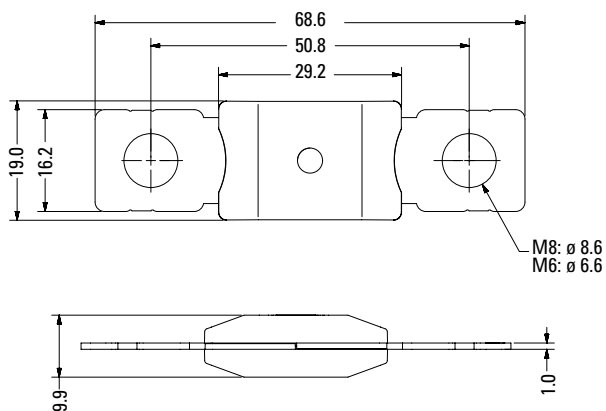
Part Number	Current Rating (A)	Wire Size (mm <sup>2</sup> )	Typ. Voltage Drop at 75% I <sub>r</sub> (mV)	Typ. Cold Resistance (mΩ)	Typ. Melting I <sup>2</sup> t (A <sup>2</sup> s)
0878450.UX-XXX	450	35	60	0.105	810 492

**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.

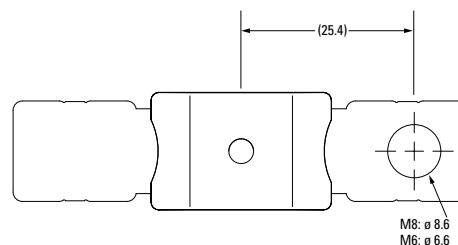
### Dimensions

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

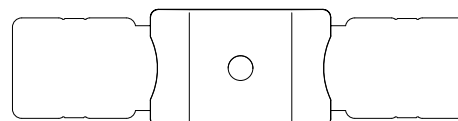
#### 2-Holes version (M8/ M6)



#### 1-Hole version (M8/M6)



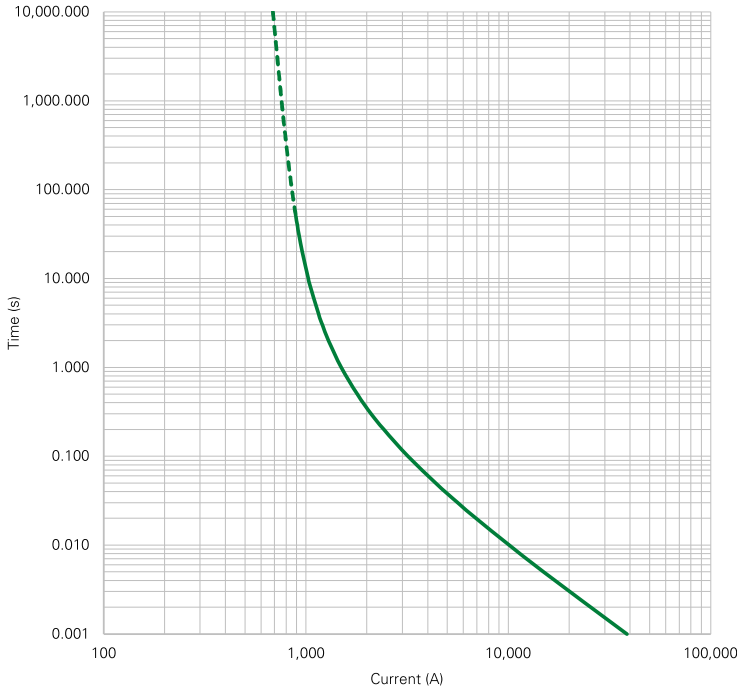
#### No-Holes version



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### Time-Current Characteristic



IR (%)	Opening Time (s)	
	Typical	Max.
200	28.5	35
211	13.8	18
222	7.85	9.5
333	0.99	1.2
444	0.51	0.65
778	0.07	0.09
1111 <sup>1</sup>	0.04	0.045

<sup>1</sup> Average current during short circuit tests.  
Peak current above 5000 A.

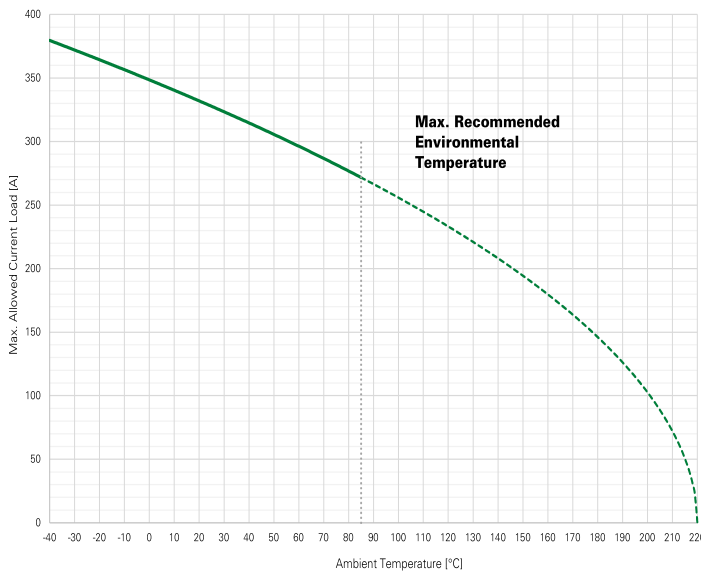
— 450 A

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

### Typical Derating Curves

Temperature security margin is 20%.

Please contact Littelfuse<sup>®</sup> for Details Regarding Derating Test Set Up



	Max. allowed current load (A) according to typical derating					
	-40 °C	-20 °C	0 °C	20 °C	65 °C	85 °C
450 A	380	360	350	330	290	270

— 450 A

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