

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

See Disclaimer Notice

Specifications

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

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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

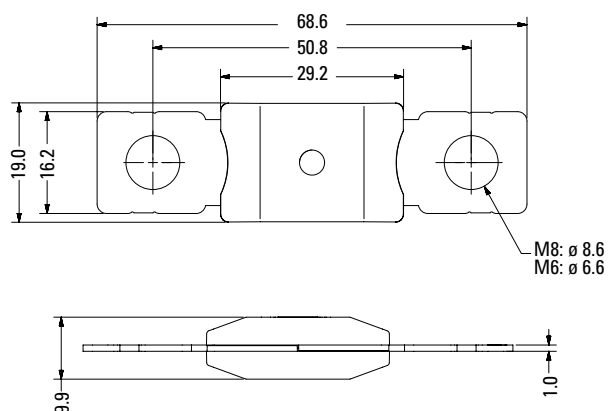
Part Number	Current Rating (A)	Wire Size (mm ²)	Typ. Voltage Drop at 75% I _r (mV)	Typ. Cold Resistance (mΩ)	Typ. Melting I ² t (A ² s)
0878450.UX-XXX	450	35	60	0.105	810 492

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

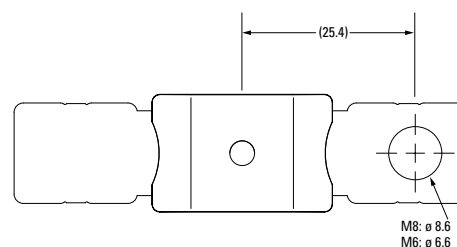
Dimensions

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

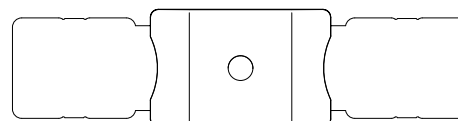
2-Holes version (M8/ M6)



1-Hole version (M8/M6)



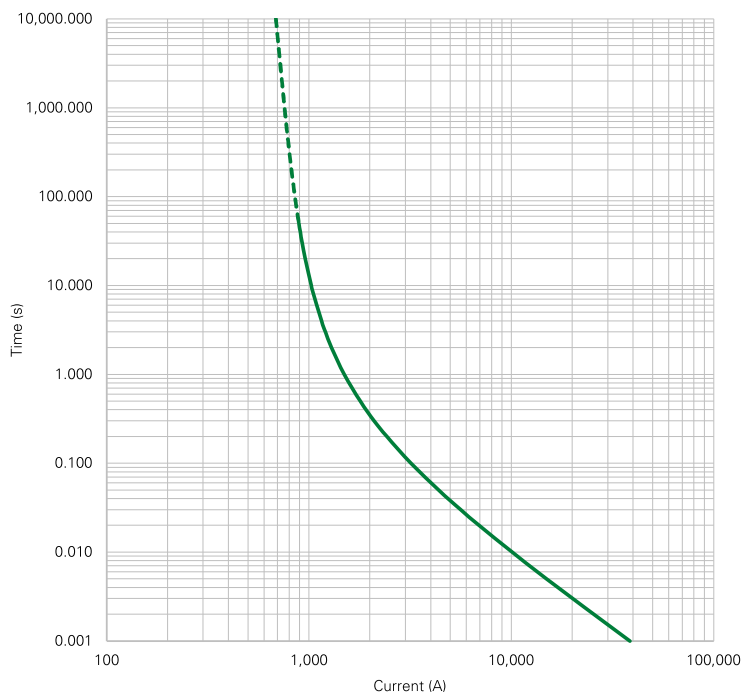
No-Holes version



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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 ¹	0.04	0.045

¹ Average current during short circuit tests.
Peak current above 5000 A.

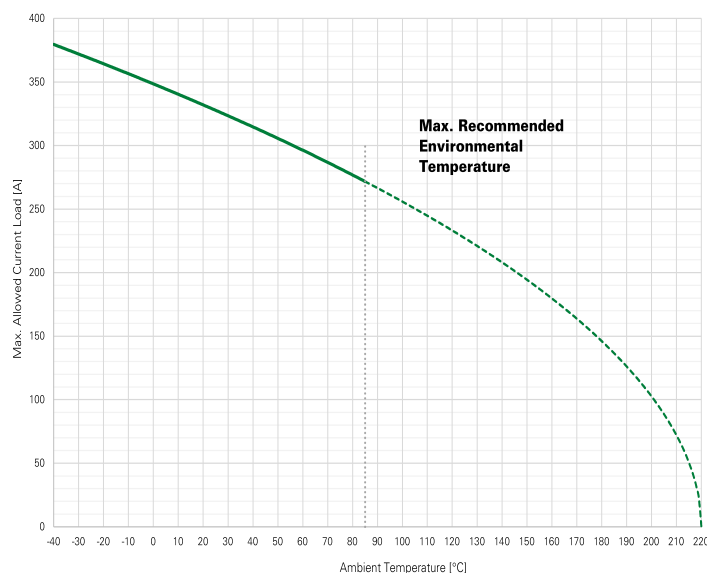
— 450 A

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

Typical Derating Curves

Temperature security margin is 20%.

Please contact Littelfuse® 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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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>