MEGA® High Breaking Capacity Series

Bolt-down Fuses – Rated 60V-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)
- High-contrast color coding on housing aids identification
- Refer to ISO 20934 – Type SF51
- Date codes are optimized for OCR reading by digital camera
- Available with two, one, or no mounting holes

Applications

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

See Disclaimer Notice

Additional Information

Resources

Samples

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 (U.L. 94 Flammability rating - 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

Ordering Information

Part Number	Current Rating (A)	Bolt Size	Bolt Hole Qty.	Package Size
0878450.UX-NH	450 A	-	-	400
0878450.UX-2M8	450 A	M8	2	400
0878450.UX-1M8	450 A	M8	2	400
0878450.UX-2M6	450 A	M6	2	400
0878450.UX-1M6	450 A	M6	2	400

Revised: 06/28/2024

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Ratings

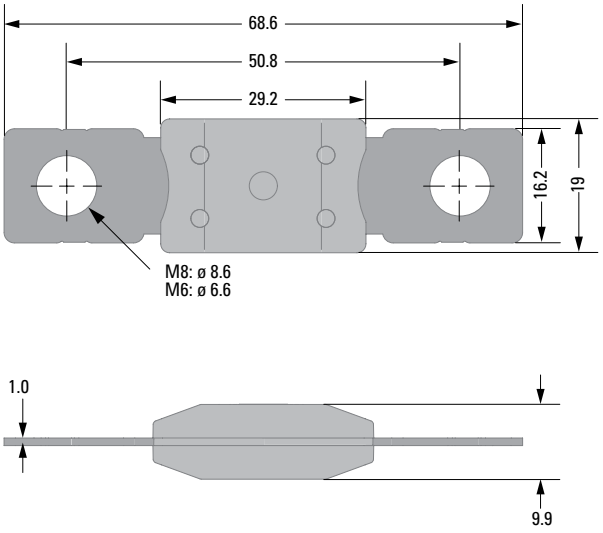
Part Number	Current Rating (A)	Wire Size (mm2)	Typ. Voltage Drop at 755 Ir (mV)	Typ. Cold Resistance (mΩ)	Typ. Melting I^2t (A^2s)
0878450.UX-XXX	450	35	60	0.105	810 492

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

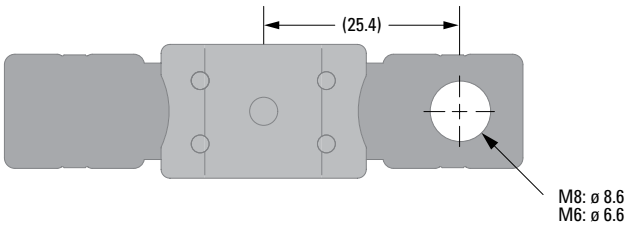
Dimensions

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

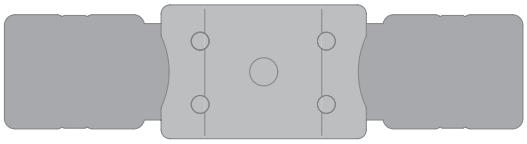
2-Holes version (M8/ M6)



1-Hole version (M8/M6)



No-Holes version



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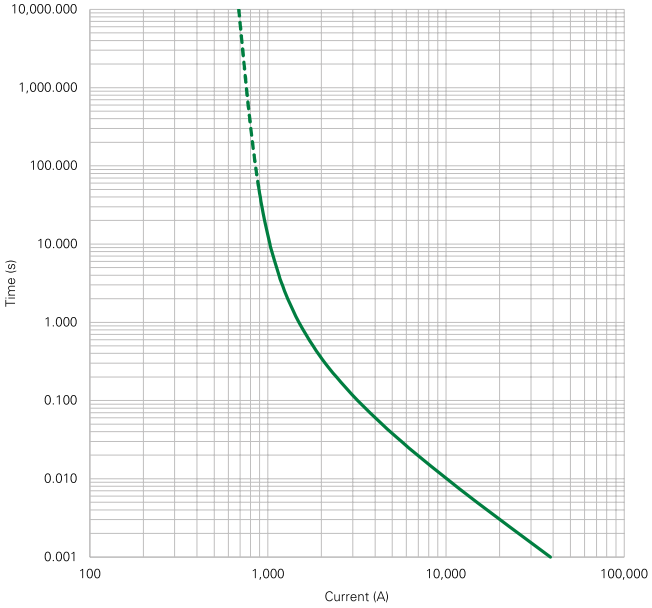
Time-Current Characteristic



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

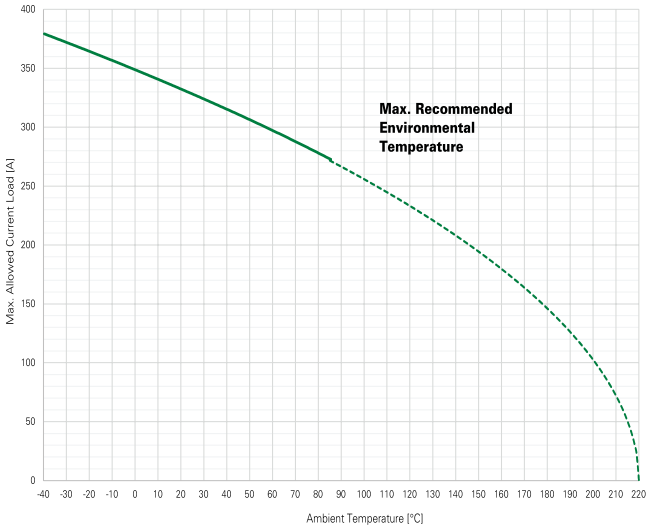
450 A

1: Average current during short circuit tests.
Peak current above 5000 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) at ambient temperature based on typical derating					
	-40 °C	-20 °C	0 °C	20 °C	65 °C	85 °C
450 A	380	360	350	330	290	270

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.