High Voltage 20EV fuse

Rated 500 V DC





Description

Bolt down 20EV automotive fuses can be installed in most EVs and hybrid passenger vehicles for circuit protection.

Features & Benefits

- Interrupting Rating of 20 kA @ 500 Vdc
- Voltage Rating of 500 Vdc
- Operates from -40 °C to +125 °C
- Typical weight of 35 g
- Mounting Torque M6 of 6 ±1 Nm (ISO prescription) 10 Nm (Max. allowed)
- Melamine body with UL 94 flammability ratings of V-0
- End caps in zinc alloy
- Terminal in copper alloy
- Refers to ISO 8820-8

Applications

Use the 20EV high voltage fuses to protect circuits in EV and Hybrid passenger vehicles.

Ratings

Part Number	Current Rating (A)	Typ. Voltage Drop (mV)	Max. Voltage Drop Spec at 100% IR (mV)	Test Cable Size (mm²)	Typical Cold Resistance (mΩ)	Typical Melting l²t (A²s)
20EV060.ZXBDMC*	60	137	250	5	1.78	7600
20EV070.ZXBDMC*	70	142	250	10	1.5	11 100
20EV080.ZXBDMC*	80	145	250	10	1.35	23 150
20EV100.ZXBDMC*	100	132	250	20	0.90	24 400
20EV125.ZXBDMC*	125	160	200	20	0.73	34 000

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

(*) Products in development - Final values for voltage drop, resistance, melting I²t and T/C curves will be generated from PV tests data. Please contact Littelfuse® for more details regarding availability timing.

Ordering Information

Part Number	Termination	Package Size
20EVxxx.ZXBDMC	M6 Bolt Down	320

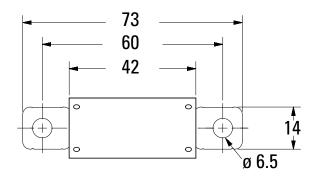


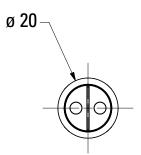
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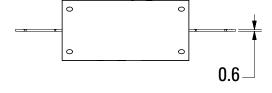
Rated 500 V DC

Dimensions

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



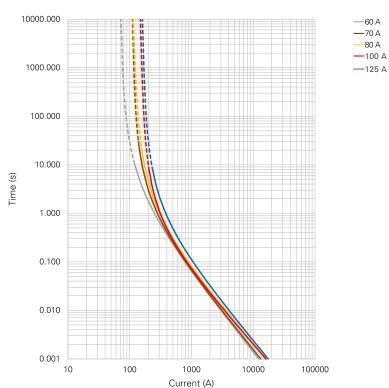




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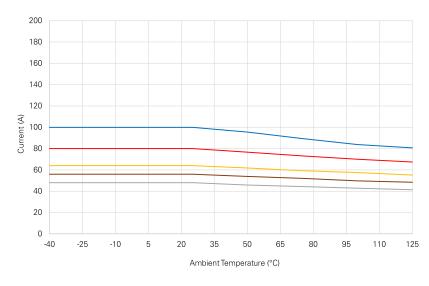
Time-Current Characteristic



% of Rating	Opening Time Min. / Max. (s)		
110	14 400 / -		
200	1.0 / 300		
300	0.2 / 30		
500	0.05 / 1.0		

Typical Rerating Curves

Please contact Littelfuse® for Details Regarding Rerating Test Set Up



	Max. Allowed Current Load (A) at Ambient Temperature (Typical Rerating)						
	-40°C	0°C	20°C	65°C	85°C	110°C	125°C
60A	48	48	48	45	44	42	41
70A	56	56	56	53	51	49	48
80A	64	64	64	61	58	57	56
100A	80	80	80	75	72	69	67
125A	100	100	100	94	90	86	84

Current recommendation may be impacted by the final condition of the application (terminals characteristics, wire size

etc..).
Please contact Littelfuse® for more information.

—60 A
—70 A
—80 A
—100 A
— 125 A

