25EV1K Series

High Voltage Fuses – Rated 1000 V DC





Description

The 25EV1K fuse is designed for protection of high-voltage circuits in electric and hybrid electric vehicles.

Features & Benefits

- Interrupting Rating of 30 kA @ 1000 V DC
- Voltage Rating of 1000 V DC
- Typical weight of 100 g
- Operates from -40 °C to +125 °C
- Refers to ISO 8820-8

- Melamine body with UL 94 flammability ratings of V-0
- End caps in zinc alloy
- Terminal in copper alloy
- Mounting Torque of 12 ±1 Nm (ISO prescription)

Additional Information





Resources

Samples

Applications

Use 25EV1K fuses to protect circuits in EV and Hybrid passenger vehicles

See Disclaimer Notice

Specifications

Voltage Rating:	1000 V DC
Interrupting Rating:	30 kA @ 1000 V DC
Recommended Environmental Temperature:	-40 °C to +125 °C
Terminals Material:	Copper Alloy
Housing Material:	Melamine (U.L. 94 Flammability rating – V0)
End caps Material:	Zinc Alloy
Recommended Mounting Torque:	12 ±1 Nm (ISO prescription)
Typical Weight per Fuse:	100 g
Refers To:	ISO 8820-8

Ordering Information

Part Number	Current Rating (A)	Termination	Package Size	
25EV1Kxxx.ZXBDM	70 A - 100 A	M8 Bolt Down	60	



25EV1K Series

High Voltage Fuses – Rated 1000 V DC

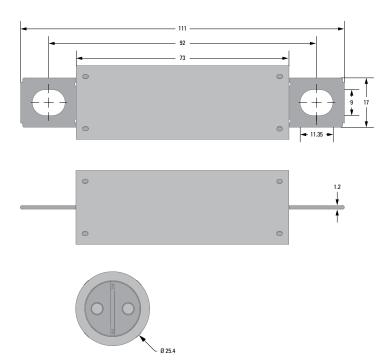
Ratings

Part Number	Current Rating (A)	Test Cable Size (mm²)	Typ. Voltage Drop at 100% Ir (mV)	Typ. Cold Resistance (mΩ)	Typical Melting I ² t (A ² s)
25EV1K070.ZXBDM	70	10	240	2.41	12 200
25EV1K080.ZXBDM	80	10	210	1.76	11 100
25EV1K090.ZXBDM	90	20	170	1.22	19 250
25EV1K100.ZXBDM	100	20	210	1.16	23 100
25EV1K125.ZXBDM ²	125	20	210	1.16	47 200

Note 1: The typical I²t is an average value calculated from the breaking capacity tests by using the melting time before the arcing occurs. **Note 2:** part number 125A is rated 900V.

Dimensions

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

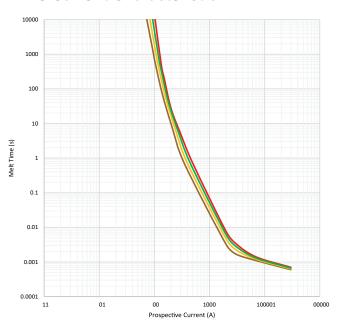




25EV1K Series

High Voltage Fuses – Rated 1000 V DC

Time-Current Characteristic



% of Rating	Opening Time Min. / Max. (s)
135	150 / 3600
150	20 / 1500
200	1 / 300
300	0.2 / 30
500	0.05 / 1

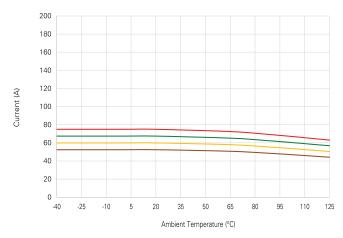
70 A 80 A 90 A

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 Rerating Curves

Temperature security margin is 20%.

Please contact Littelfuse® for Details Regarding Rerating 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
70 A	53	53	53	51	49	46	44
80 A	60	60	60	58	56	53	51
90 A	68	68	68	65	63	59	57
100 A	75	75	75	73	70	66	63

70 A 80 A 90 A 100

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

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. Littleffuse products are not designed for, and may not be used in, all applications. Read complete Disclaimer Notice at https://www.littleffuse.com/legal/disclaimer/product-disclaimer.aspx

