

SHEV Series

High Voltage Fuses – Rated 450 V DC



Description

SHEV fuses employ diffusion pill technology. This enables them to provide predictable timedelayed circuit protection in high-voltage, high-current systems. These bolt down HC automotive fuses can be installed in most EVs and hybrid passenger vehicles.

Features & Benefits

- Ampere stamps on terminals aid identification
- Industry-standard footprint
- Refers to ISO 8820-8

Applications

- EVs
- Hybrid passenger vehicles

Additional Information



Resources



Samples

[See Disclaimer Notice](#)

Specifications

Voltage Rating:	450 V DC
Interrupting Rating:	10 kA @ 450 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:	Stainless Steel
Recommended Mounting Torque M6:	6 ± 1 Nm (Max. allowed: 10 Nm)
Net Weight per Fuse:	30 g ± 5 g
Refers To:	ISO 8820-8 1st ed. 2012-08-01 (Type J2), JASO D622

Ordering Information

Part Number	Current Rating (A)	Termination	Package Size
SHEVxxx.ZXBD	60 A - 125 A *	M6 Bolt Down	320

*The following ratings: 70 A and 125 A are under development. Please contact Littelfuse® for more details regarding availability timing.

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Ratings

Part Number	Current Rating (A)	Typ. Voltage Drop (mV)	Typ. Voltage Drop at 100% IR (mV)	Typ. Cold Resistance (mΩ)	Typ. I ² t (A ² s)
SHEV060.ZXBD	60	110	200	1.4	7 750
SHEV070.ZXBD	70 *	115	200	1.2	Coming up
SHEV080.ZXBD	80	90	200	0.8	16 000
SHEV100.ZXBD	100	95	200	0.62	27 100
SHEV125.ZXBD	125 *	95	200	0.48	Coming up

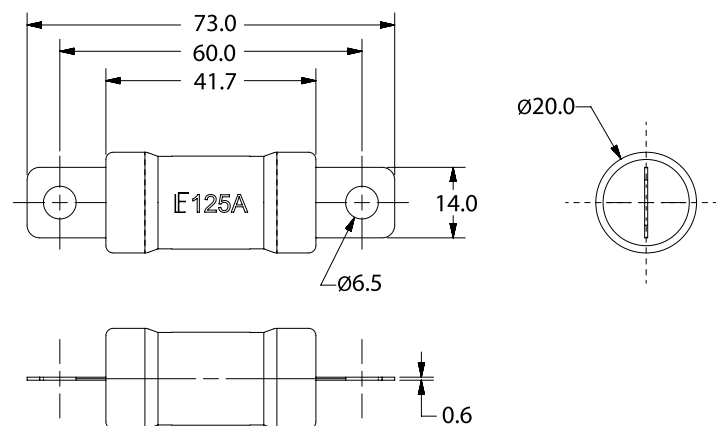
* Products in development - please contact Littelfuse® for more details regarding availability timing.

Note 1: Final values for voltage drop, resistance, melting I²t and T/C curves will be generated from PV tests data

Note 2: The typical I²t is an average value calculated from the breaking capacity tests by using the melting time before the arcing occurs.

Dimensions

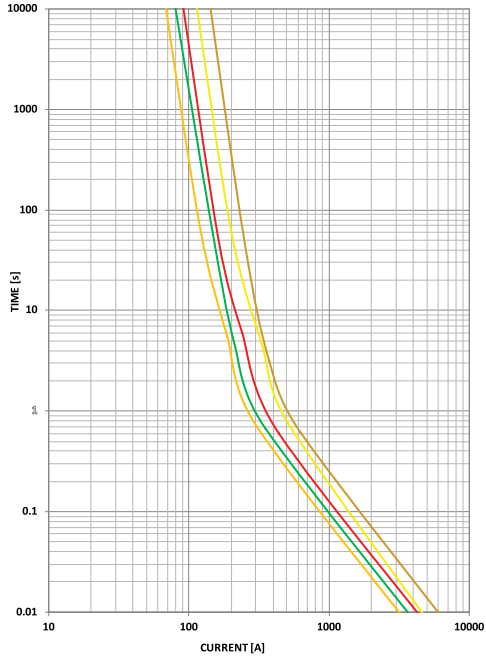
Dimensions in mm. Please refer to the outline drawing for dimensions and tolerances.



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Time-Current Characteristic



% of Rating	Opening Time Min. / Max. (s)
110	14 400 / -
200	1 / 300
300	0.2 / 30
500	0.05 / 1

- 60 A
- 70 A
- 80 A
- 100 A
- 125 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.

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