

# 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, highcurrent 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
- Refers to ISO 8820-8
- Industry-standard footprint

### Applications

- EVs
- Hybrid passenger vehicles

### Additional Information



Resources



Samples

[See Disclaimer Notice](#)

### Specifications

<b>Voltage Rating:</b>	450 V DC
<b>Interrupting Rating:</b>	10 kA @ 450 V DC
<b>Recommended Environmental Temperature:</b>	–40 °C to +125 °C
<b>Terminals Material:</b>	Copper Alloy
<b>Housing Material:</b>	Melamine (U.L. 94 Flammability rating – V0)
<b>End caps Material:</b>	Stainless Steel
<b>Recommended Mounting Torque M6:</b>	6 ±1 Nm (Max. allowed: 10 Nm)
<b>Net Weight per Fuse:</b>	30 g ±5 g
<b>Refers To:</b>	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 <sup>2</sup> t (A <sup>2</sup> 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

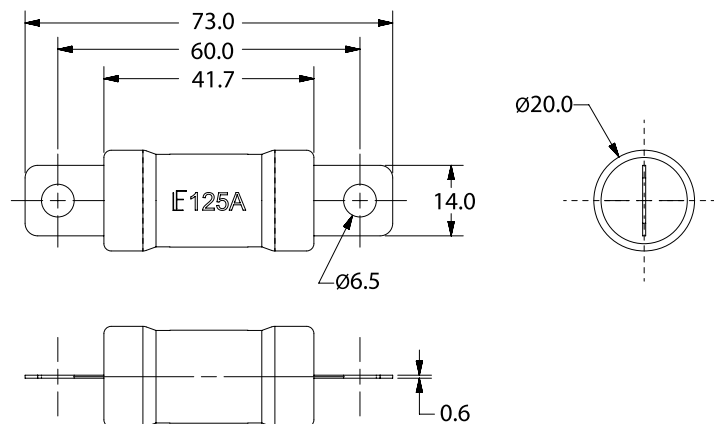
\* Products in development - please contact Littelfuse® for more details regarding availability timing.

**Note 1:** Final values for voltage drop, resistance, melting I<sup>2</sup>t and T/C curves will be generated from P/V tests data

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

### Dimensions

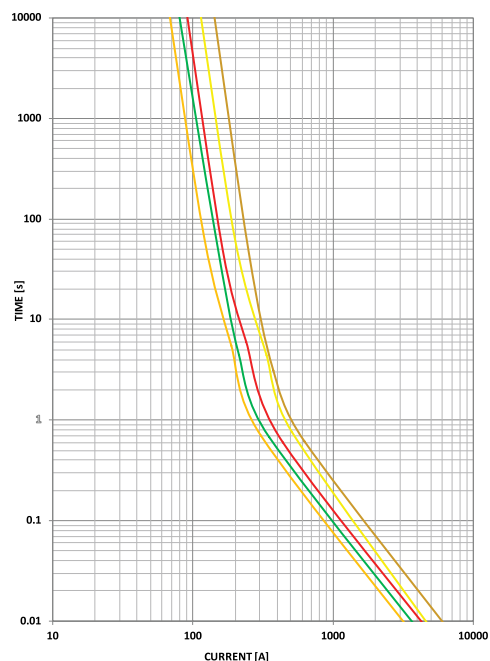
Dimensions in mm. Please refer to the outline drawing for dimensions and tolerances.



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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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