LC SMD

SMD Autofuses

RoHS

Description

The SMD Autofuse is a new surface-mountable fuse that's designed to perform similarly to traditional automotive blade fuses where ease of replacement is not desired or required. The implementation of the SMD autofuse offers space savings and systems savings without performance sacrifices.

See Disclaimer Notice

Specifications

Voltage Rating:	18 V DC
Interrupting Rating:	1000 A @ 18 V DC
Recommended Environmental Temperature:	–40 ˚C to +105 ˚C
Terminals Material:	Tin plated zinc alloy
Housing Material:	LCP (U.L. 94 Flammability Rating - HB)
Net Weight per Fuse:	0.27±15% gr
Comply With:	SAE 2741 and ISO 8820-12 in reference to electrical and environmental performance requirements

Additional Information

Resources **Samples**

Ordering Information

Part Number	Current Rating (A)	Package Size
0317000.M	5 – 25	1000

Revised: 09/24/2024

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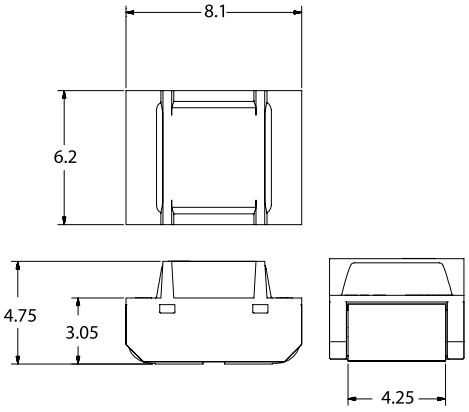
Ratings

Part Number	Current Rating (A)	Typ. Voltage Drop (mV)	Typ. Cold Resistance (mΩ)	Typ. I^2t (A^2s)
0317005.M	5	121	16.24	26
031707.5M	7.5	104	9.81	36
0317010.M	10	90	6.73	71
0317015.M	15	109	4.61	320
0317020.M	20	84	3.21	728
0317025.M	25	87	2.43	652

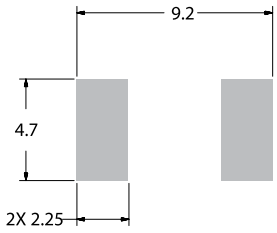
Note: The typical I^2t is an average value calculated from the breaking capacity tests by using the melting time before the arcing occurs.

Dimensions

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



Recommended Pad Printing



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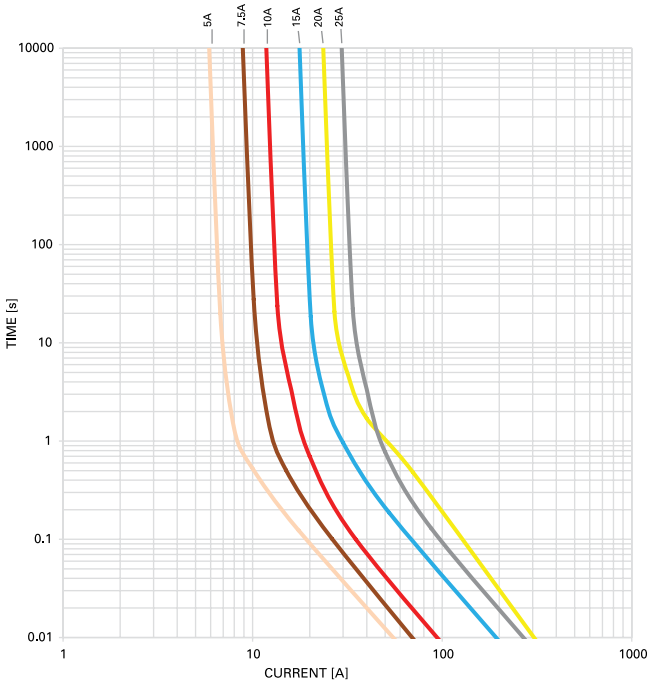
Time-Current Characteristic



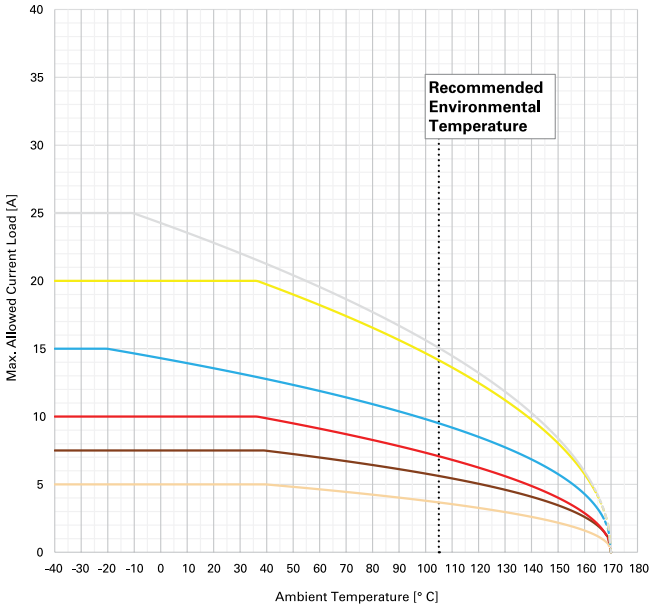
% of Rating	Opening Time Min. / Max. (s)
110	360 000 / -
135	0.75 / 120
160	0.3 / 50
200	0.15 / 5
350	0.04 / 0.5
600	0.02 / 0.1

5 A
7.5 A
10 A
15 A
20 A
25 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%.
Trace Cross-Section Based On IPC Standard (70% In and 30K rise)
Please contact Littelfuse® for Details Regarding Derating 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
5 A	5	5	5	5	4	4	3
7.5 A	7.5	8	8	7	6	5	5
10 A	10	10	10	9	8	7	6
15 A	15	14	14	12	11	9	8
20 A	20	20	20	18	16	14	12
25 A	25	24	23	19	17	14	13

5 A
7.5 A
10 A
15 A
20 A
25 A

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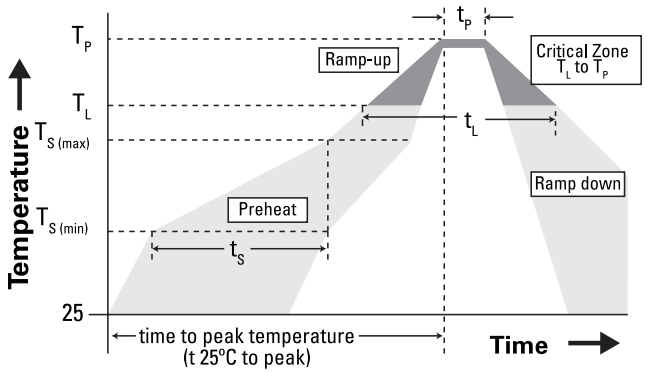
Soldering Parameters

Pre Heat	**Temperature Min (Ts min)**	150 °C
	Temperature Max (Ts max)	200 °C
	Time (min to max) (ts)	40 - 80 secs
Reflow	**Temperature (TL) (Liquidus)**	220 °C
	Time (tL)	45 - 90 secs
Peak Temperature (Tp)		235 - 250 °C
Ramp-down Rate		< 2.5 °C / Sec
Do not exceed		260 °C



Packaging

Packaging Option	Package Specification	Quantity	Quantity & Packaging Code
16mm Tape and Reel	EIA-481	1000 pcs per reel	MR