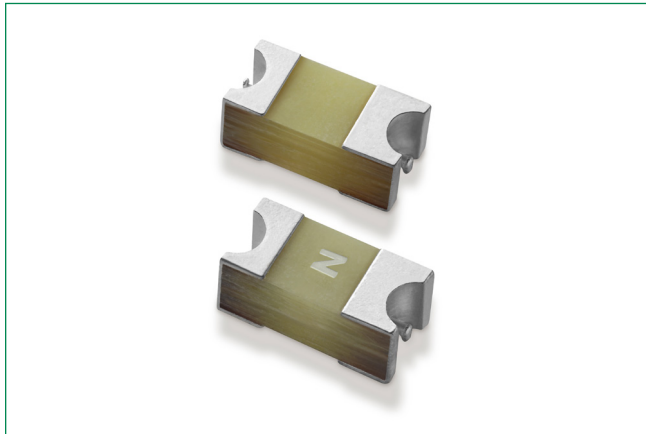


Surface Mount Fuses

Thin Film Fuse > Fast Acting > 483A Series



Description

Littelfuse 483A Series AEC-Q200 qualified fuses are to cater to secondary circuit protection needs of compact auto electronics applications. The general design ensures excellent temperature stability and performance reliability.

This high I²t fuse series is designed to have ultra high inrush current withstand capability to avoid nuisance fuse open.

Features

- Operating Temperature from -55 °C to 125 °C
- 100% Lead-free, Halogen-Free and RoHS compliant
- AEC-Q200 Qualified
- Very Small 1206 Footprint
- Ultra high I²t values
- Fast Acting
- Recognized to UL/CSA/NMX 248-1 and UL/CSA/NMX 248-14

Agency Approvals

Agency	Agency File Number	Ampere Range
	E10480	0.750–2 A

Electrical Characteristics

% of Ampere Rating	Opening Time
100%	4 Hours, Minimum
250%	5 Seconds, Maximum

Benefits

- Single fuse solution for high current application
- Suitable for a wide variety of voltage requirements and applications

Applications

- Li-Ion Battery
- LED Lighting
- Automotive Navigation System
- Battery Management System (BMS)
- Cluster

Additional Information



Resources



Accessories



Samples

Electrical Specifications

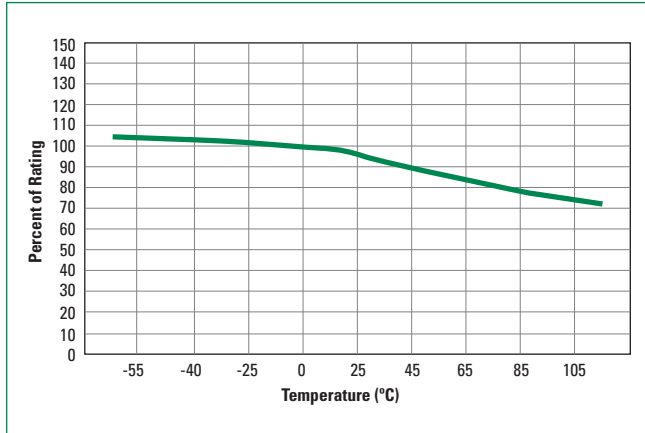
Ampere Rating (A)	Amp Code	Max Voltage Rating (V)	Interrupting Rating	Nominal Cold Resistance (Ohms)	Nominal Melting I ² t (A ² sec.)	Agency Approvals
0.750	0.750	75V	50A @ 75VDC/VAC	0.235	0.144	X
1.00	001.	75V		0.165	0.286	X
2.00	002.	75V		0.073	1.420	X

Note: I²t values stated for 1 msec opening time.

Surface Mount Fuses

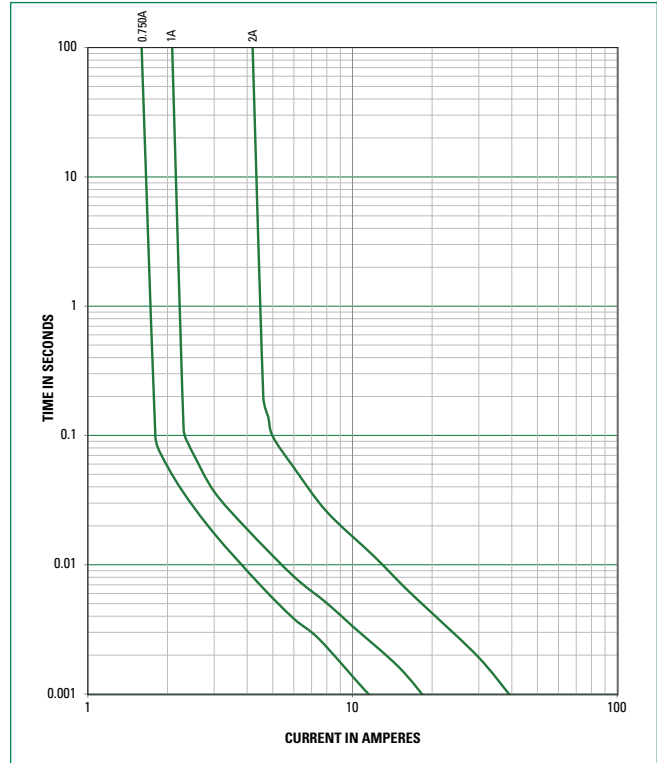
Thin Film Fuse > Fast Acting > 483A Series

Temperature Re-rating Curve



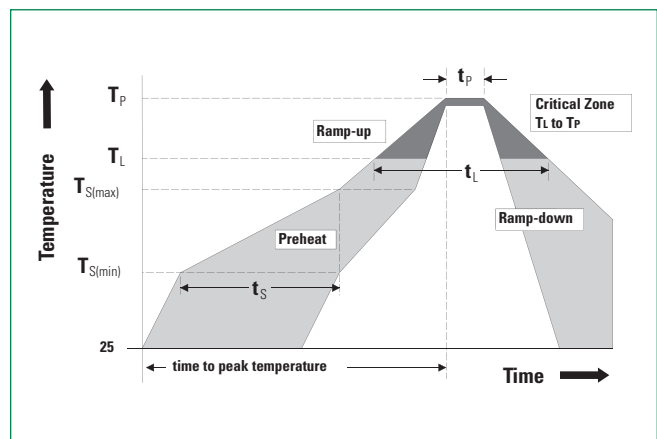
Note
Derating depicted in this curve is in addition to the standard derating of 25% for continuous operation.

Average Time Current Curves



Soldering Parameters

Reflow Condition		Pb – Free assembly
Pre Heat	- Temperature Min ($T_{s(min)}$)	150 °C
	- Temperature Max ($T_{s(max)}$)	200 °C
	- Time (Min to Max) (t_s)	60–180 secs
Average ramp up rate (Liquidus Temp (T_L) to peak)		5 °C/second max.
$T_{s(max)}$ to T_L - Ramp-up Rate		5 °C/second max.
Reflow	- Temperature (T_L) (Liquidus)	217 °C
	- Temperature (t_L)	60–150 secs
Peak Temperature (T_p)		260+0/-5 °C
Time within 5 °C of actual peak Temperature (t_p)		20–40 seconds
Ramp-down Rate		5 °C / second max.
Time 25 °C to peak Temperature (T_p)		8 minutes max.
Do not exceed		260 °C



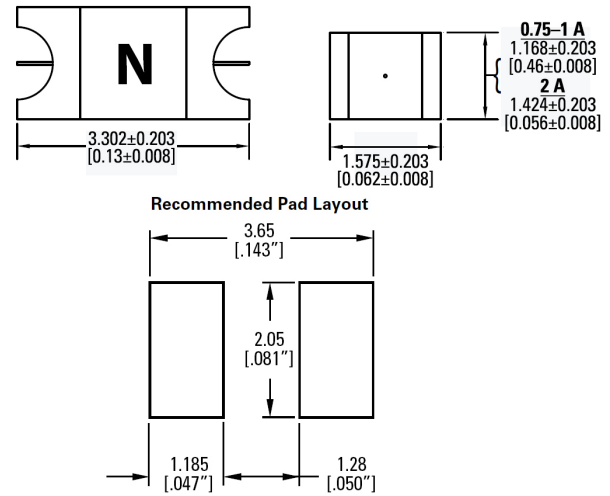
Surface Mount Fuses

Thin Film Fuse > Fast Acting > 483A Series

Product Characteristics

Materials	Body: Glass-Reinforced Epoxy Terminations: Cu/Ni/Sn (100% Pb-free)
Moisture Sensitivity Level	IPC/JEDEC J-STD-020, Level 1
Thermal Shock	JESD22-A104C
Biased Humidity	MIL-STD-202, Method 103, Test Condition D w/ exemptions
High Temperature Storage	MIL-STD-202, Method 108 Test Condition D w/ exemptions
High Temperature Operational Life	MIL-STD-202, Method 108, Test Condition D
Mechanical Shock	MIL-STD-202, Method 213
High Frequency Vibration	MIL-STD-202, Method 204
Resistance to Solvents	MIL-STD-202, Method 215
Resistance to Soldering Heat	MIL-STD-202, Method 210
Salt Fog	MIL-STD-202, Method 101
Moisture Resistance	MIL-STD-202, Method 106
Terminal Strength	AEC-Q200-006
Board Flex	AEC-Q200-005
Solderability	JESD22-B102E Method 1
Pulse Testing	Device Specification
Electrical Characterization	Conducted at minimum, ambient and maximum temperatures

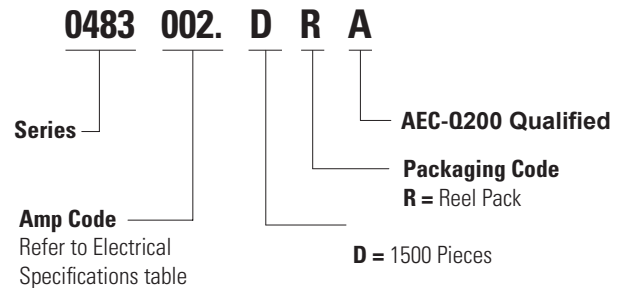
Dimensions mm [inch]



Part Marking System

Amp Code	Marking Code
.750	G
001.	H
002.	N

Part Numbering System



Packaging

Packaging Option	Packaging Specification	Quantity	Quantity & Packaging Code	Reel Size
8 mm Tape and Reel	EIA-481	1500	DR	N / A

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. Littelfuse products are not designed for, and may not be used in, all applications. Read complete Disclaimer Notice at <http://www.littelfuse.com/disclaimer-electronics>.