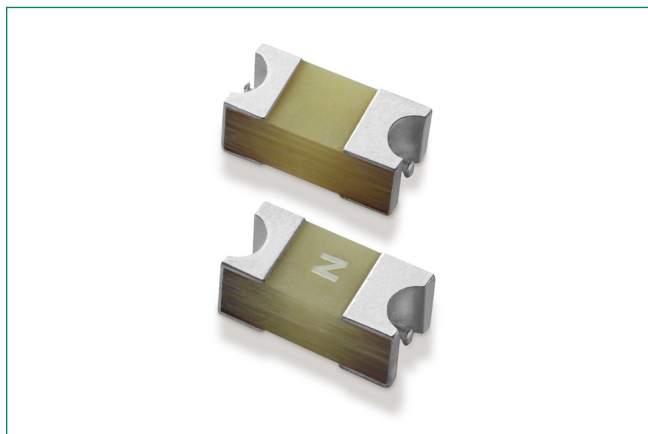


Surface Mount Fuses

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
c UL US	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

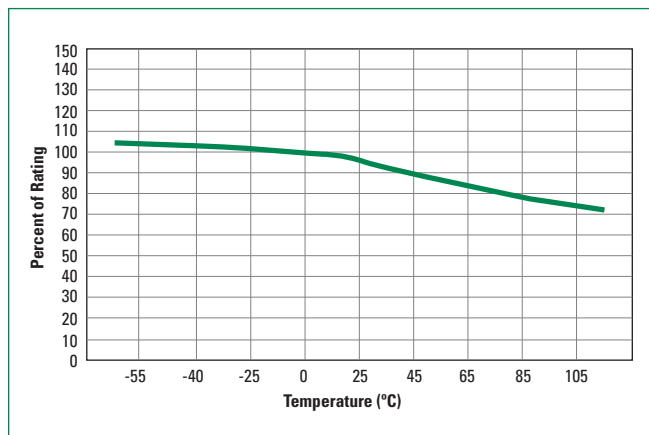
Ampere Rating (A)	Amp Code	Max Voltage Rating (V)	Interrupting Rating	Nominal Cold Resistance (Ohms)	Nominal Melting I ² t (A ² sec.)	Agency Approvals
0.750	0.750	75V	50A @ 75VDC/VAC	0.235	0.144	c UL US X
1.00	001.	75V		0.165	0.286	X
2.00	002.	75V		0.073	1.420	X

Note: I²t values stated for 1 msec opening time.

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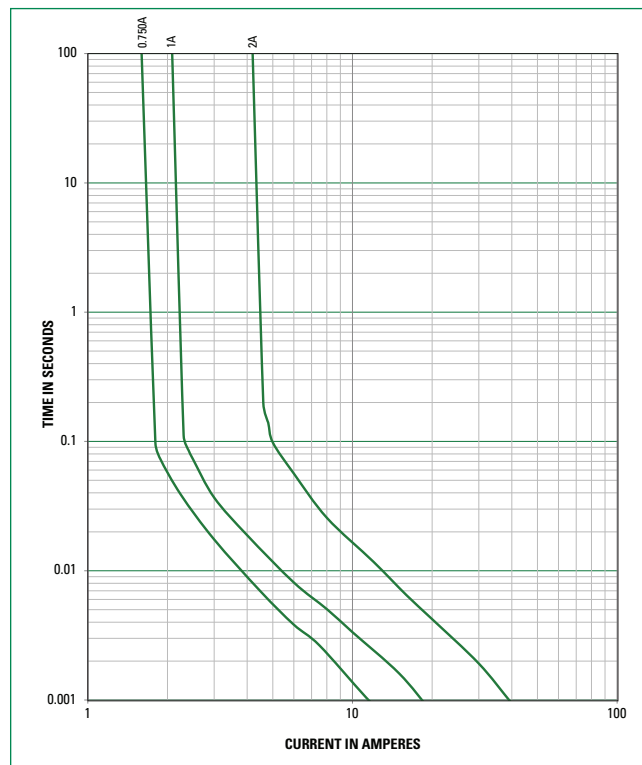
Temperature Re-rating Curve



Note

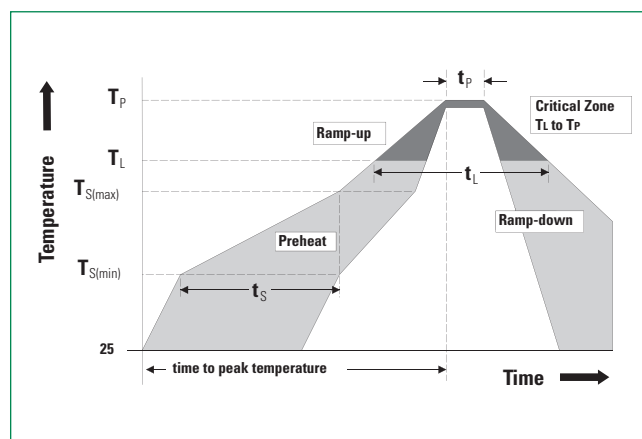
Derating depicted in this curve is in addition to the standard derating of 25% for continuous operation.

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



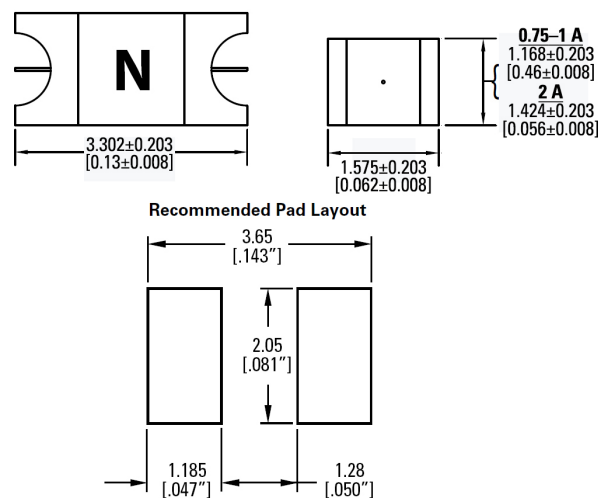
Surface Mount Fuses

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

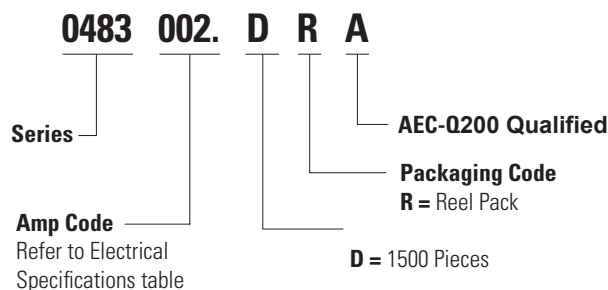
Dimensions mm [inch]



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

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