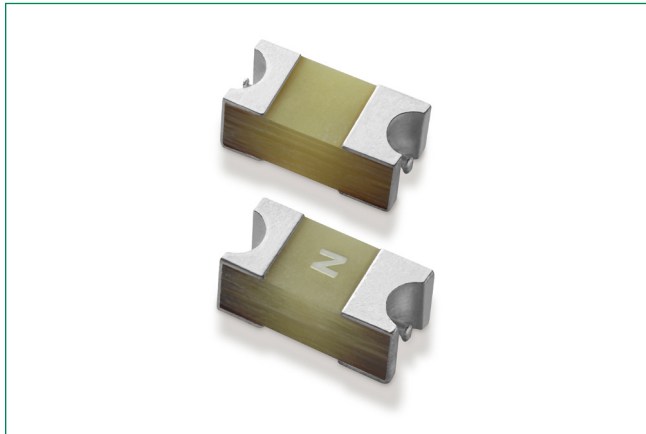


# Surface Mount Fuses

## 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 I<sup>2</sup>t 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 I<sup>2</sup>t 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

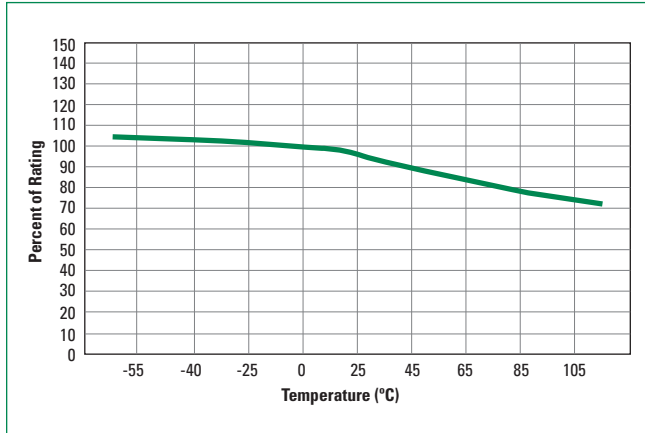
Ampere Rating (A)	Amp Code	Max Voltage Rating (V)	Interrupting Rating	Nominal Cold Resistance (Ohms)	Nominal Melting I <sup>2</sup> t (A <sup>2</sup> sec.)	Agency Approvals
0.750	0.750	75V	50A @ 75VDC/VAC	0.235	0.144	X
1.00	001.	75V		0.165	0.286	X
2.00	002.	75V		0.073	1.420	X

Note: I<sup>2</sup>t values stated for 1 msec opening time.

# Surface Mount Fuses

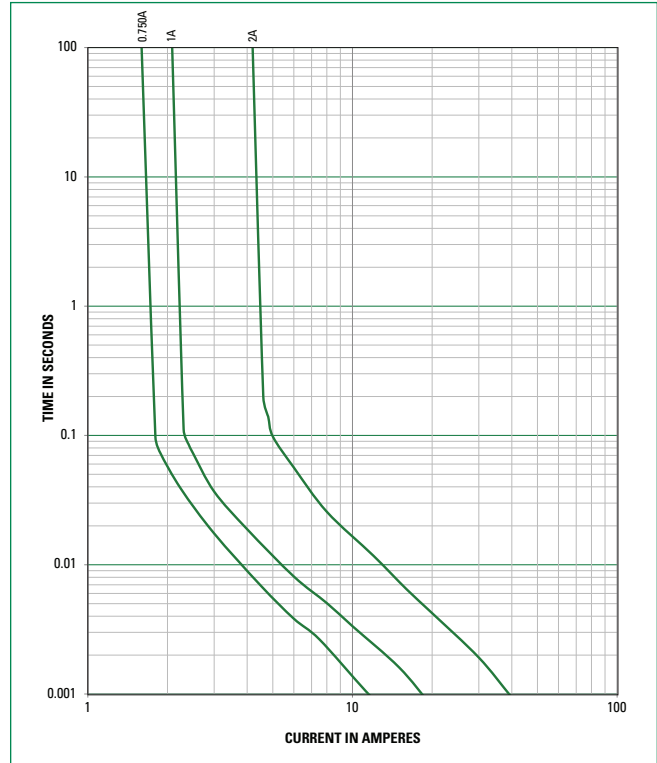
Thin Film Fuse > Fast Acting > 483A Series

## Temperature Re-rating Curve



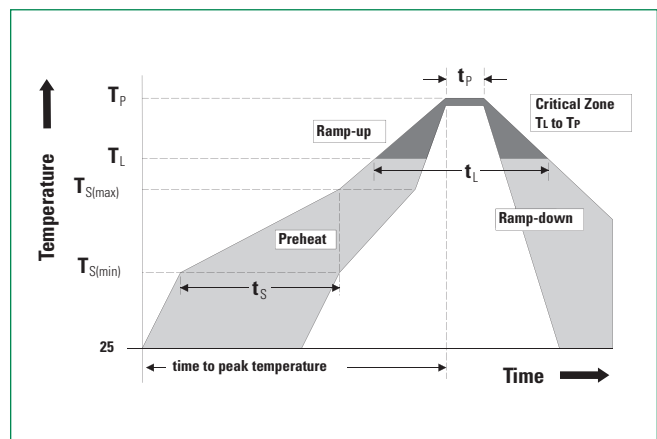
**Note**  
Derating depicted in this curve is in addition to the standard derating of 25% for continuous operation.

## Average Time Current Curves



## Soldering Parameters

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



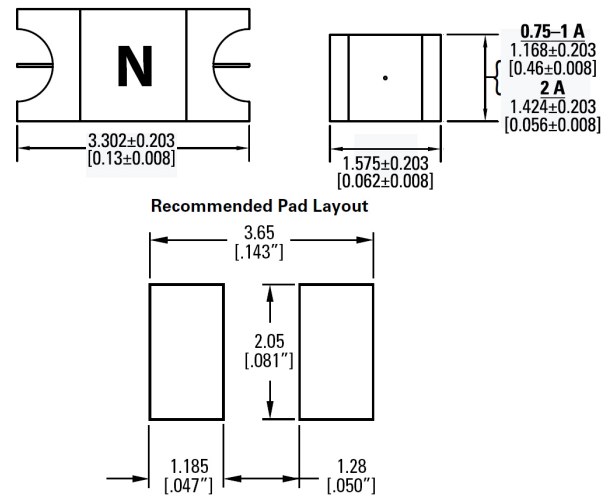
# Surface Mount Fuses

## Thin Film Fuse > Fast Acting > 483A Series

### Product Characteristics

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

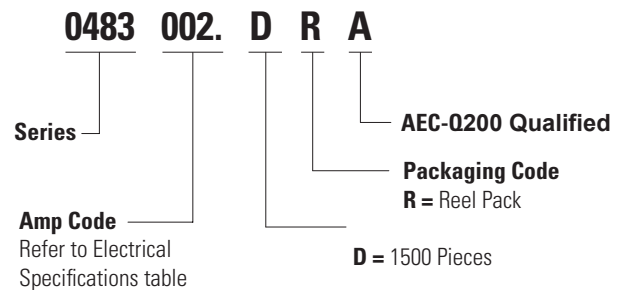
### Dimensions mm [inch]



### 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>.