

# 607 Series

## Lead-free > 10x32mm Fuse



### Description

The 607 series fuses are specifically designed and tested to cater to the circuit protection needs of compact applications, which is 500Vdc/Vac rated with remarkable interrupting rating.

### Features & Benefits

- RoHS compliant and Lead-free
- High Interrupt Rating
- Rated voltage 500 Vdc/Vac
- Small size
- High current
- High voltage
- High breaking capacity

### Applications

- Data Center Power Supplies
- Uninterruptible Power Supply (UPS)
- Power conversion equipment like inverters and rectifiers

### Web Resources



Download ECAD models, order samples, and find technical resources at [www.littelfuse.com](http://www.littelfuse.com)

### Electrical Characteristics

% of Ampere Rating	Ampere Rating	Opening Time at 25°C
100%	40 A to 63 A	4hrs, Min.
200%	40 A to 63 A	120 seconds, Max.

### Agency Approvals

Agency	Agency File Number	Ampere Range
	E71611	40 A to 63 A
	J 50514752	40 A to 63 A

### Electrical Specifications

Ampere Rating (A)	Amp Code	Max Voltage Rating (V)	Interrupting Rating (AC/DC)	Nominal Code Resistance (Ohms)	Nominal Melting I <sup>2</sup> t (A <sup>2</sup> sec)	Agency Approvals		
40	040.	500VDC 500VAC 305VAC	10KA@500VDC 10KA@500VAC 47KA@305VAC	0.00187	2570	x	x	x
50	050.			0.00145	4230	x	x	x
63	063.	500VDC 500VAC 305VAC	10KA@500VDC 5KA@500VAC 47KA@305VAC	0.00102	7060	x	x	x

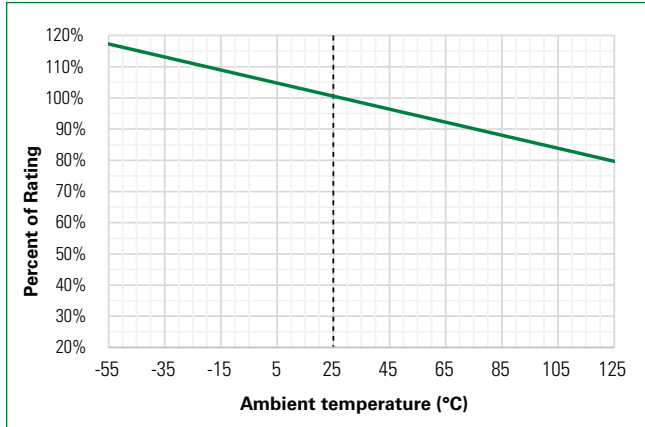
**Note**

Unless otherwise stated, all specifications are referenced at room ambient temperature.  
Interrupting Rating may differ based on Agency Approval. See Agency Approval certificate for more details.

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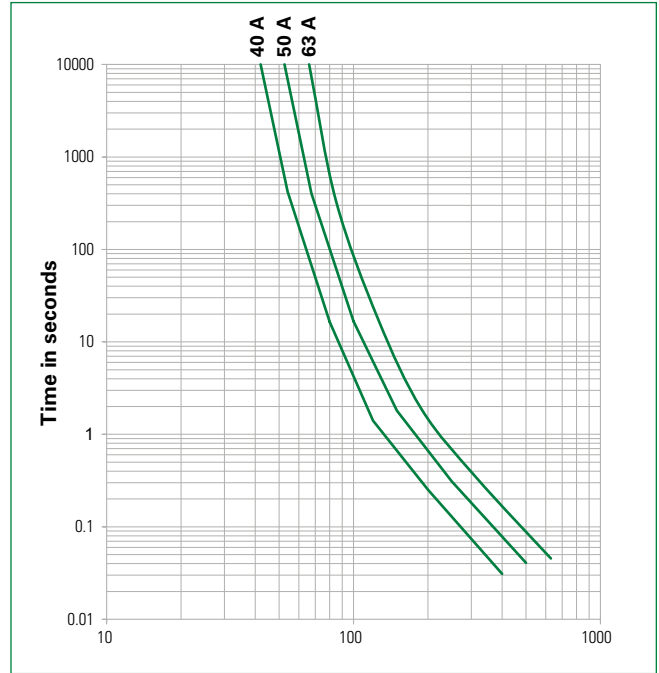
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**Temperature Re-rating Curve**



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

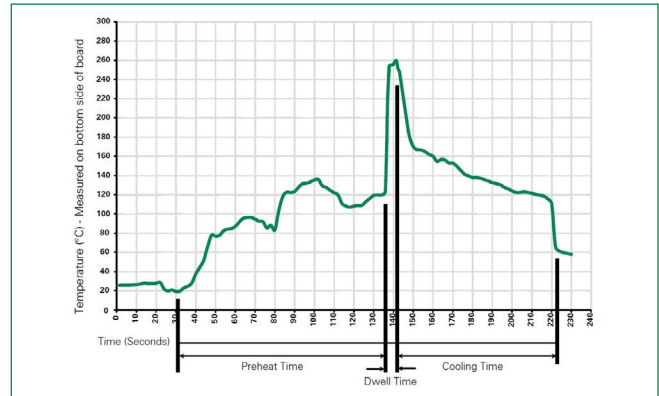
**Average Time Current Curves**



**Product Characteristics**

<b>Materials</b>	<b>Body:</b> Glass fiber <b>Cap:</b> Ni plated copper alloy <b>Terminal:</b> Tin plated copper alloy
<b>Mechanical Shock</b>	MIL-STD-202, Method 213, Test Condition I (100 G's peak for 6 milliseconds)
<b>Solderability</b>	Reference MIL-STD-202 method 208
<b>Product Marking</b>	Cap 1: Brand logo, current and voltage ratings Cap 2: Agency approval marks
<b>Resistance to Solder Heat</b>	MIL-Std 202 Method 210 Test Condition B (10sec at 260 °C)
<b>Operating Temperature</b>	-55 °C to +125 °C
<b>Thermal Shock</b>	MIL-STD-202G, Method 107G, Test condition B
<b>Vibration</b>	MIL-STD-202G, Method 201A
<b>Moisture Resistance</b>	MIL-STD-202G, Method 103B, Test condition A
<b>Salt Spray</b>	MIL-STD-202G, Method 101E, Test condition B

**Soldering Parameters–Wave Soldering**



Wave Parameter	Lead-Free Recommendation
<b>Preheat:</b> (Depends on Flex Activation Temperature)	(Typical Industry Recommendation)
Temperature Minimum	100 °C
Temperature Maximum	150 °C
Preheat Time	60–180 seconds
<b>Solder Pot Temperature</b>	260 °C Maximum
<b>Solder Dwell Time</b>	2–5 seconds

**Recommended Hand-Solder Parameters:**

Solder Iron Temperature: 350 °C +/- 5 °C

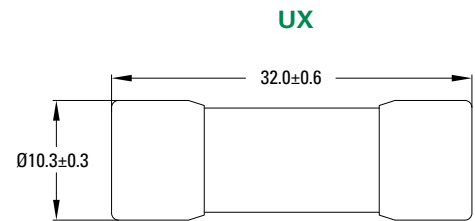
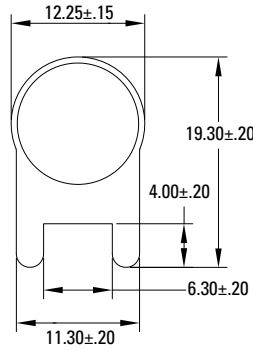
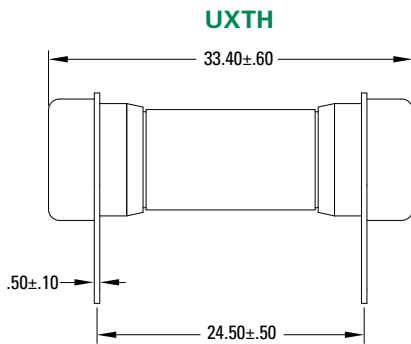
Heating Time: 5 seconds max.

**Note:** These devices are not recommended for IR or Convection Reflow process.

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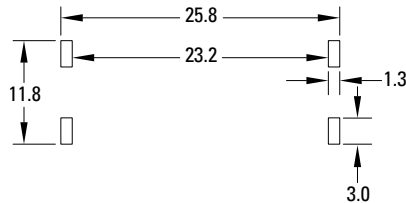
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## Dimensions

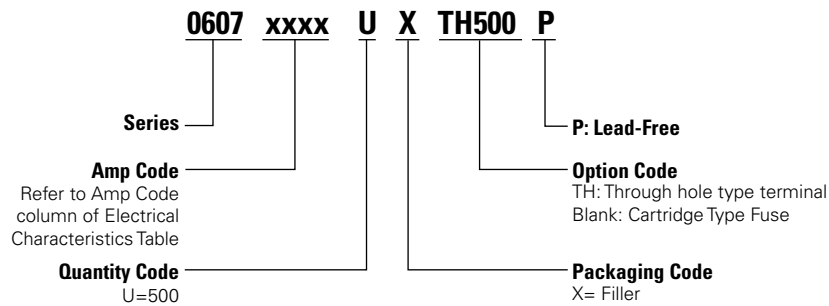


All dimensions in mm

## Recommended PCB Layout



## Part Numbering System



## Packaging

Packaging Option	Packaging Specification	Quantity	Quantity & Packaging Code	Reel Size
<b>607 Series</b>				
Tray	NA	500	NA	NA

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