

### 606 Series High-Current SMD Fuse



#### Agency Approvals

AGENCY	AGENCY FILE NUMBER	AMPERE RANGE
	E71611	40A~63A

#### Electrical Characteristics for Series

% of Ampere Rating	Ampere Rating	Opening Time
100%	40A~63A	1 Hour, Min.
200%	40A~63A	120 Seconds, Max.

#### Electrical Specifications by Item

Ampere Rating (A)	Amp Code	Max Voltage Rating (V)	Interrupting Rating	Nominal Cold Resistance (mOhms)	Nominal Melting I <sup>2</sup> t (A <sup>2</sup> sec)	Agency Approvals
40	040.	500Vac	2000A @ 500Vac 10KA @ 250Vac	1.70	2500	X
50	050.			1.31	4800	X
63	063.			1.06	7000	X

#### Description

The 606 series is the smallest cartridge fuse rated at 500VAC with 40A to 63A current ratings and a 2,000A@500Vac interrupting rating. It is designed for supplemental branch circuit (AC input) over-current protection or other stages of power conversion where high voltage is present. This series fuse is RoHS compliant and 100% Pb free.

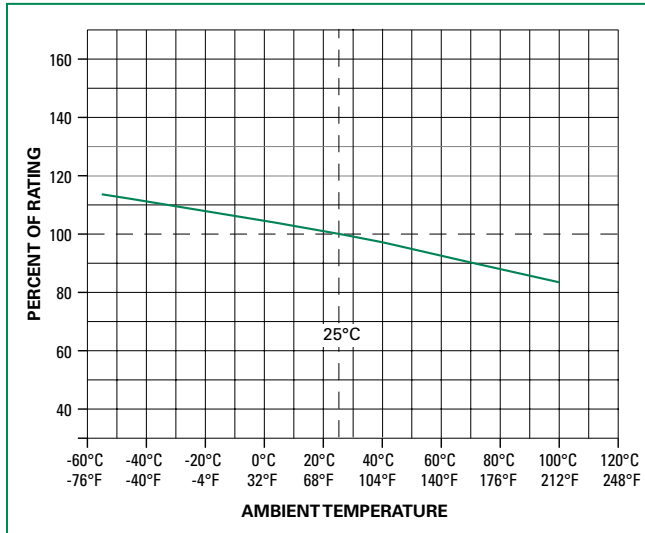
#### Features

- Rated voltage @ 500VAC
- 40A~63A rating available
- Available in through hole version
- RoHS compliant and Lead-free

#### Applications

- Uninterruptible Power Supply (UPS)
- Three-phase AC input for charging pile/ Electric Vehicle Supply Equipment (EVSE)
- Power conversion equipment such as inverters, rectifiers, etc.
- Motor protection in elevator systems

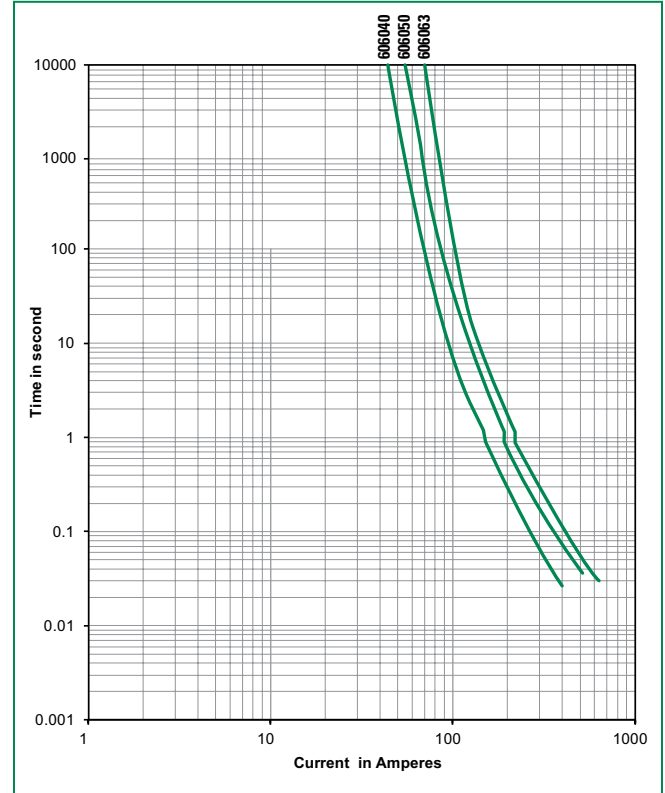
### Temperature Re-rating Curve



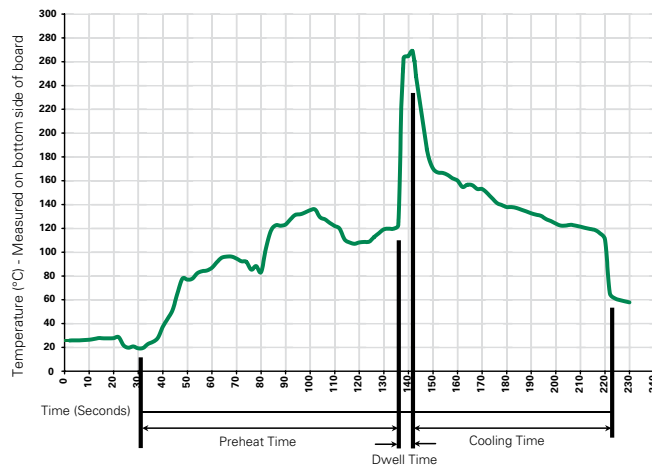
Note:

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

### Average Time Current Curves



### Soldering Parameters - Wave Soldering



### Recommended Process Parameters:

Wave Parameter	Lead-Free Recommendation
<b>Preheat:</b> (Depends on Flux 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.

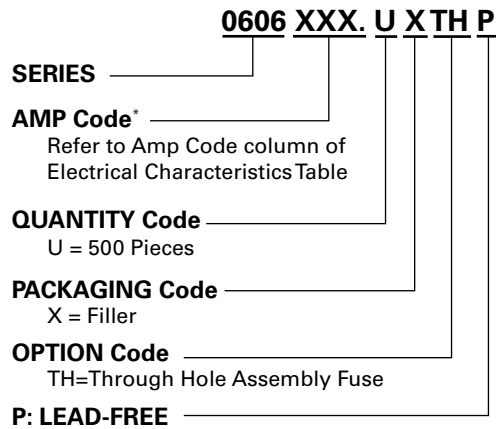
**Note: These devices are not recommended for IR or Convection Reflow process.**

### Product Characteristics

<b>Materials</b>	Body: Melamine Caps: Copper alloy Leads: Tin-plated copper alloy
<b>Terminal Strength</b>	MIL-STD-202, Method 211 Test condition A
<b>Solderability</b>	Reference MIL-STD-202 method 208
<b>Product Marking</b>	Cap1: Brand logo, Current and Voltage ratings Cap2: Series and agency approval Marks

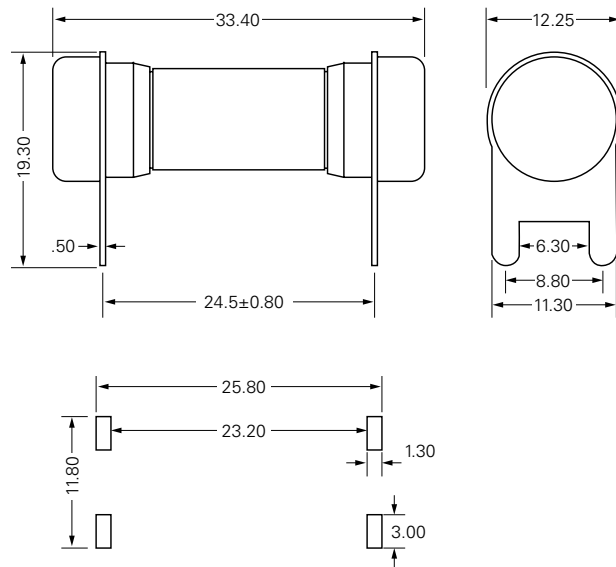
<b>Operating Temperature</b>	-55°C to +125°C
<b>Thermal Shock</b>	MIL-STD-202, Method 107 Test condition B (5 cycles -65°C to 125°C)
<b>Vibration</b>	MIL-STD-202, Method 201
<b>Moisture Resistance</b>	MIL-STD-202, Method 103 Test condition A
<b>Salt Spray</b>	MIL-STD-202, Method 101 Test condition B

### Part Numbering System



### Part Numbering System

Unit in mm



### Recommended Drilling Pattern

4oz (140µm) minimum Cu layer for 40A and 50A  
6oz (210µm) minimum Cu layer for 63A

### Packaging

Packaging Option	Packaging Specification	Quantity	Quantity & Packaging Code	Reel Size
Tray	N/A	500	UXTH	N/A

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