

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 ² t (A ² 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.

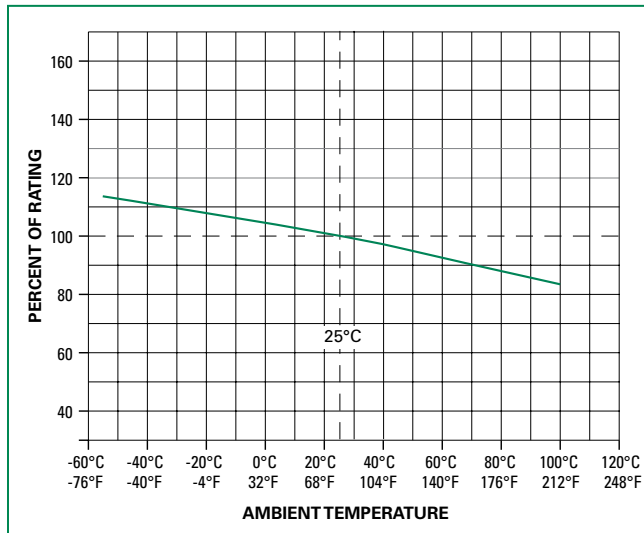
Features

- 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

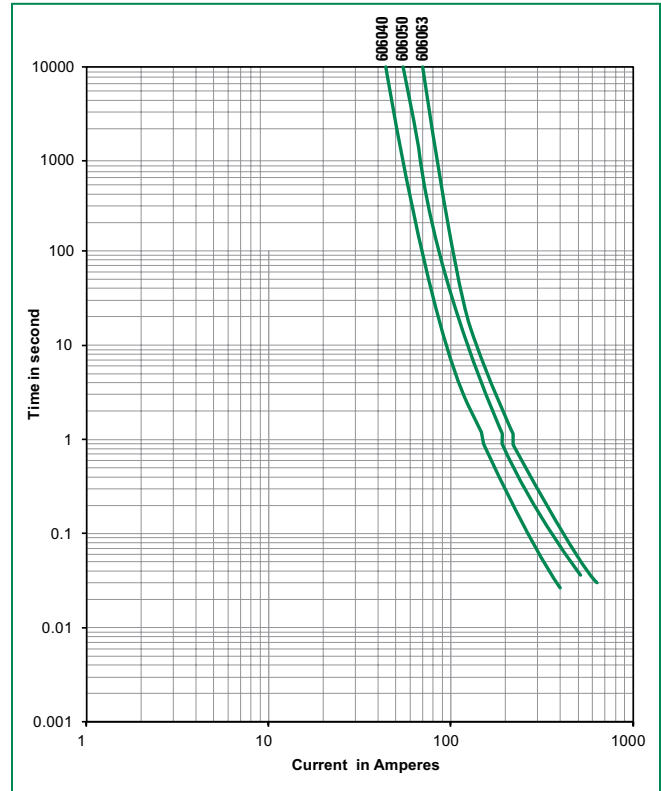
Temperature Re-rating Curve



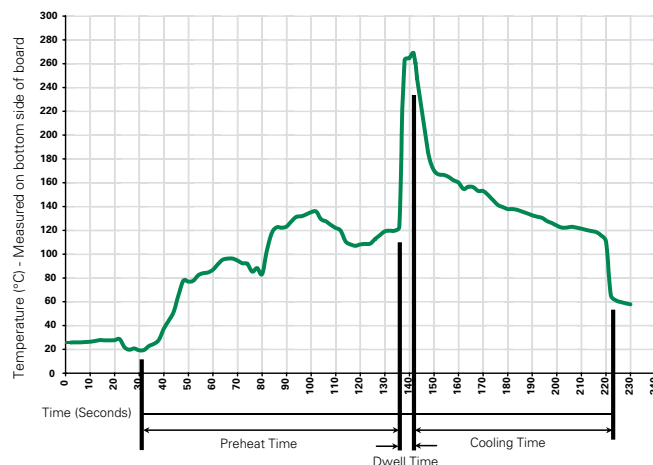
Note:

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
Preheat: (Depends on Flux Activation Temperature)	(Typical Industry Recommendation)
Temperature Minimum:	100°C
Temperature Maximum:	150°C
Preheat Time:	60-180 seconds
Solder Pot Temperature:	260°C Maximum
Solder Dwell Time:	2-5 seconds

Recommended Hand-Solder Parameters:

Solder Iron Temperature: 350°C +/- 5°C
Heating Time: 5 seconds max.

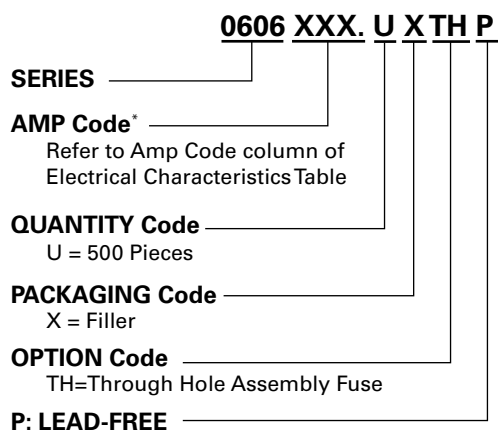
Note: These devices are not recommended for IR or Convection Reflow process.

Product Characteristics

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

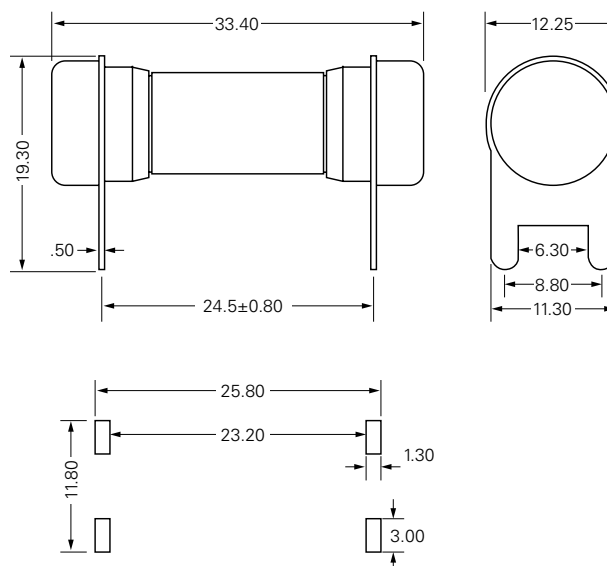
Operating Temperature	-55°C to +125°C
Thermal Shock	MIL-STD-202, Method 107 Test condition B (5 cycles -65°C to 125°C)
Vibration	MIL-STD-202, Method 201
Moisture Resistance	MIL-STD-202, Method 103 Test condition A
Salt Spray	MIL-STD-202, Method 101 Test condition B

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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