# **High Current & Voltage Cartridge Fuse**

High-Current > 606 Series

# 606 Series High-Current Fuse





#### **Agency Approvals**

	Agency	Agency File Number	Ampere Range		
	c <b>'711</b> °us	E71611	40A to 63A		
	$\triangle$	J 50446306	40A to 63A		

#### **Description**

The 606 series is a 10x32mm cartridge fuse rated at 500Vac with 40A to 63A current ratings and a 2,000A@500Vac interrupting rating. It is designed for over-current protection in high voltage applications. The 606 series fuse is RoHS compliant and 100% Lead (Pb) free.

#### **Features**

- Rated voltage @ 500VAC
- 40A to 63A rating available
- Through-hole mounting for circuit boards
- RoHS compliant, Halogen-free, and Leadfree
- Recognized to UL/CSA/ NMX 248-1
- Conforms to EN 60127-1 and EN 60127-7

#### **Electrical Characteristics for Series**

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

#### **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

### **Electrical Specifications by Item**

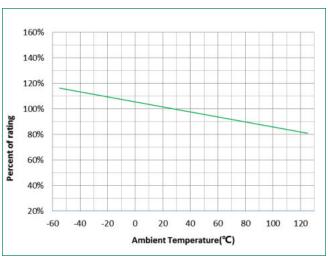
Ampere Rating (A)	Amp Code	Max Voltage Rating (V)	Interrupting Rating*	Nominal Cold Resistance (mOhms)	Nominal Melting I²t (A²sec)	Watts Loss at 70% Rated Current (W)	Watts Loss at 100% Rated Current (W)	Agency Approvals	
								c <b>FL</b> °us	<b>A</b>
40	040.	500Vac	2000A @	1.70	2500	1.90	4.63	Х	X
50	050.		500Vac	1.31	4800	2.34	5.65	X	Χ
63	063.		10KA @ 250Vac	1.06	7000	2.96	7.30	X	Χ

<sup>\* -</sup> Interrupting Rating may differ based on Agency Approval. See Agency Approval certificate for more details.

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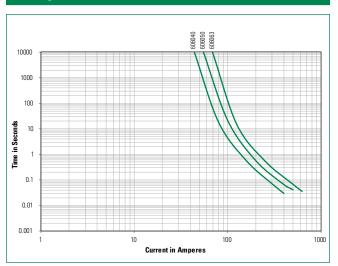
## **Temperature Re-rating Curve**



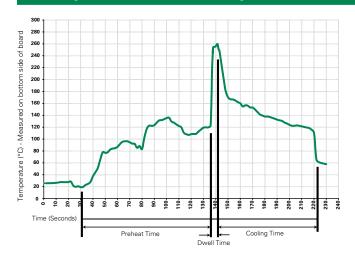
#### Note:

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**



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 PotTemperature:	260°C Maximum		
Solder DwellTime:	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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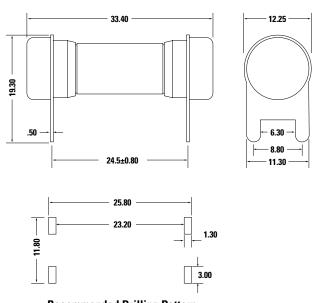
#### **Product Characteristics**

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

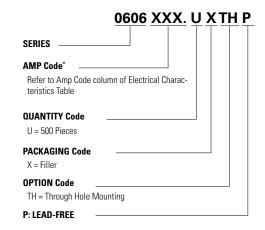
Operating Temperature	-55°C to +125°C		
Thermal Shock	MIL-STD-202, Method 107 Test condition B (5 cycles -65°C to 125°C)		
Vibration	MIL-STD-202, Method 201		
Moisture Resistance	MIL-STD-202, Method 103 Test condition A		
Salt Spray	MIL-STD-202, Method 101Test condition B		

#### **Part Numbering System**

#### Unit in mm



# **Part Numbering System**



#### **Recommended Drilling Pattern**

4oz (140 $\mu$ m) minimum Cu layer for 40A and 50A 6oz (210 $\mu$ m) 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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