

606 Series

High-Current Fuse



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 & Benefits

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

Web Resources



Download ECAD models, order samples, and find technical resources at www.littelfuse.com

Agency Approvals

Agency	Agency File Number	Ampere Range
cULUS	E71611	40A to 63A
	J 50446306	40A to 63A

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.

Electrical Specifications by Item

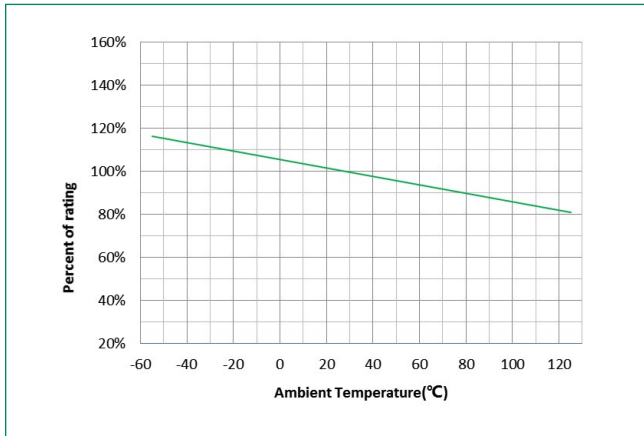
Ampere Rating (A)	Amp Code	Max Voltage Rating (V)	Interrupting Rating*	Nominal Cold Resistance (mOhms)	Nominal Melting I ² t (A ² sec)	Watts Loss at 70% Rated Current (W)	Watts Loss at 100% Rated Current (W)	Agency Approvals	
40	040.	500Vac	2,000A @ 500VAC	1.70	2500	1.90	4.63	cULUS	
50	050.		25,000 @ 305VAC	1.31	4800	2.34	5.65	X	X
63	063.		10,000 @ 250VAC	1.06	7000	2.96	7.30	X	X

Note: * Interrupting Rating may differ based on Agency Approval. See Agency Approval certificate for more details.

606 Series

High-Current Fuse

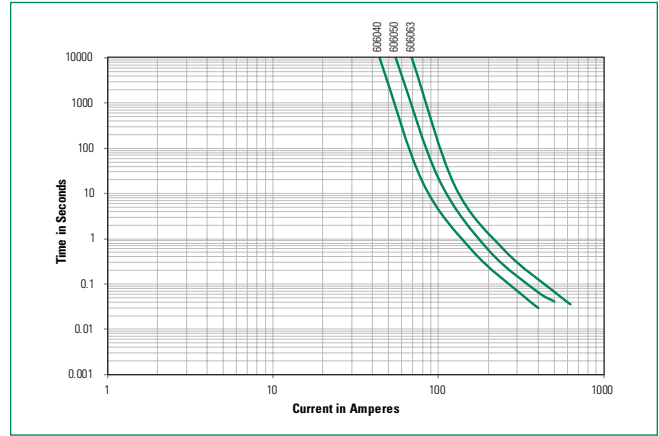
Temperature Re-rating Curve



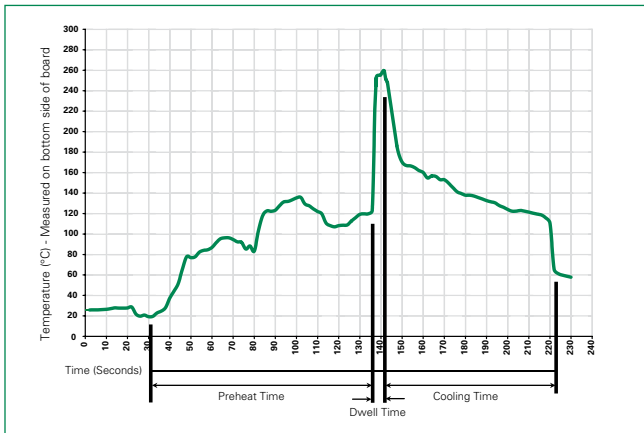
Note:

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 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.

606 Series

High-Current Fuse

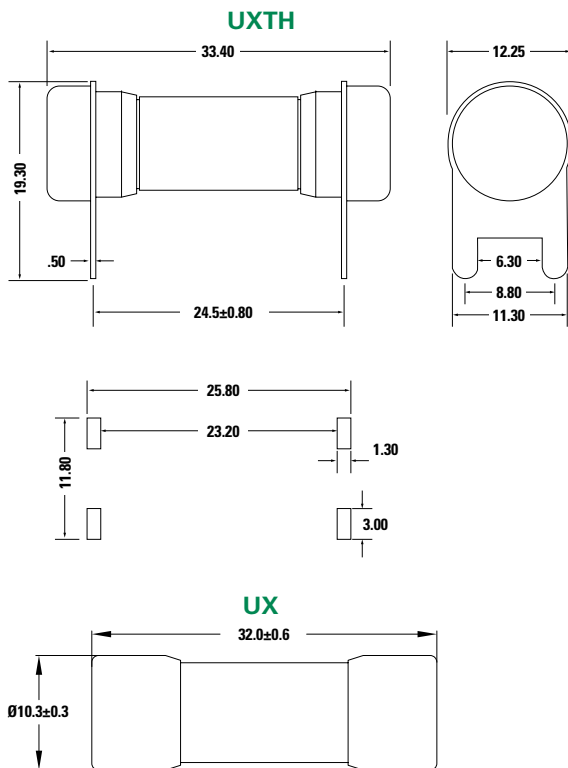
Product Characteristics

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

Unit in mm



Part Numbering System

0606 XXX. U X TH P

SERIES	0606
AMP Code*	XXX
Refer to Amp Code column of Electrical Characteristics Table	
QUANTITY Code	U
U = 500 Pieces	
PACKAGING Code	X
X = Filler	
OPTION Code	TH
TH = Through Hole Mounting Blank = Cartridge Type Fuse	
P: LEAD-FREE	P

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
Tray	N/A	500	UX	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: www.littelfuse.com/disclaimer-electronics.