

827 Series

High Voltage Cartridge Fuses



Description

The 827 Series fuses are specifically designed for circuit protection needs of compact auto-electronics applications. This series is rated 800Vdc with remarkable interrupting rating.

Features and Benefits

- Available in Through Hole and Bolt Down version
- RoHS compliant and lead-free
- AEC-Q200 Qualified

Applications

- On Board Charger
- Power Distribution Unit

Web Resources



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

Agency Approvals

Agency	Agency File Number	Ampere Range
US	E10480	40A - 50A

Electrical Characteristics

% of Ampere Rating	Opening Time at 25°C
100%	4hrs, Min.
135%	3600 seconds, Max.

Electrical Specifications

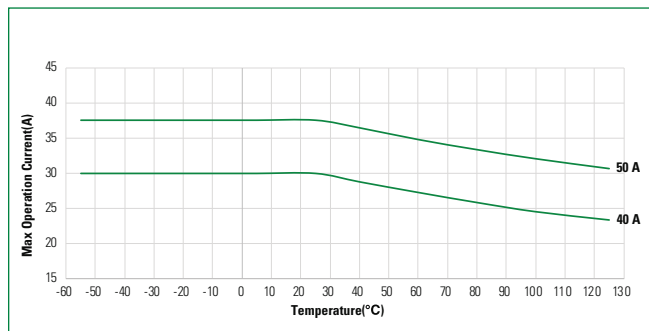
Amp Code	Ampere Rating (A)	Voltage Rating	Interrupting Rating	Nominal Cold Resistance (mOhm)	I ² t (A ² sec)	Agency Approvals
040.	40 A	800Vdc	10KA@ 800Vdc	2.04	4970	US x
050.	50 A			1.57	7056	x

Note: Unless otherwise stated, all specifications are referenced at room ambient temperature.

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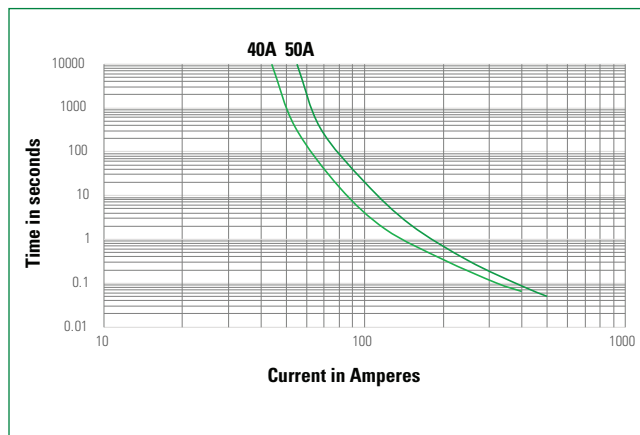
High Voltage Cartridge Fuses

Max Operation Current Curve



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

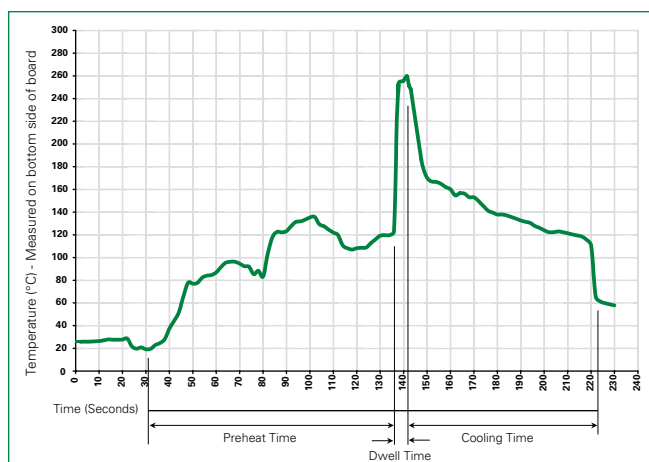
Average Time Current Curves



Product Characteristics

Materials	Body: Glass fiber Cap: Tin plated copper alloy/Ni plated copper alloy
Mechanical Shock	MIL-STD-202 Method 213
Vibration	MIL-STD-202 Method 204
Thermal Shock	JESD22-A104
Solderability	JESD22-B102E Method 1
Resistance to Solder Heat	MIL-STD-202 Method 210
Operating Temperature	-55°C to +125°C
Product Marking	Brand logo, current and voltage ratings

Soldering Parameters–Wave Soldering



Wave Parameter	Lead-Free Recommendation
Preheat: (Depends on Flex 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.

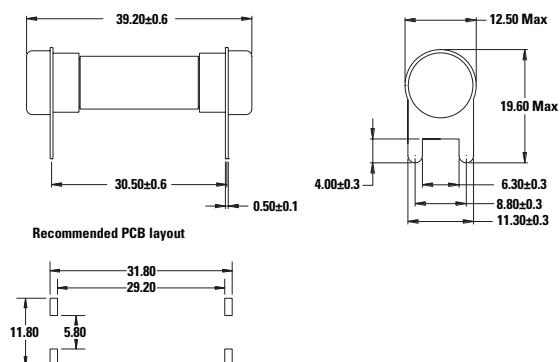
Note: These devices are not recommended for IR or Convection Reflow process.

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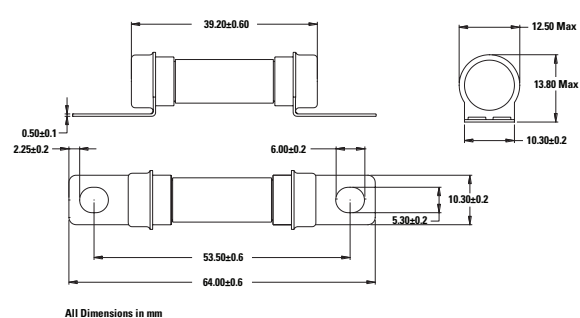
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Dimensions (mm)

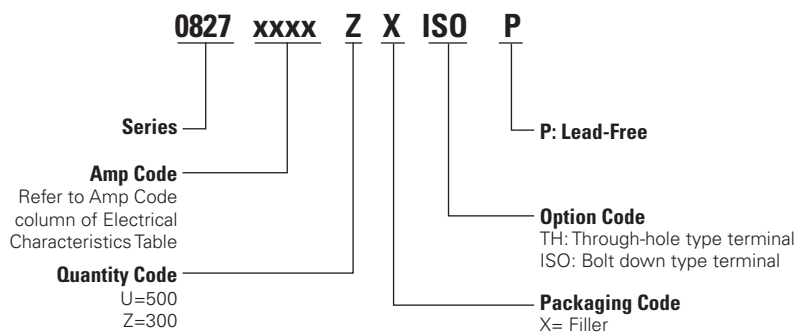
Through-hole



Bolt Down



Part Numbering System



Packaging

Packaging Option	Packaging Specification	Quantity	Quantity & Packaging Code	Reel Size
827 Though Hole Version				
Tray	NA	500	UXTH	NA
827 Bolt Down Version				
Tray	NA	300	ZXISO	NA

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