

828 Series

High Voltage Cartridge Fuses



Description

The 828 Series fuses are specifically designed and tested to the circuit protection needs of compact auto-electronics applications. This series is rated 1,000Vdc with remarkable interrupting rating.

Features and Benefits

- Available in Through-hole and Bolt Down version
- RoHS-compliant, lead-free and halogen-free.
- Recognized to UL/CSA/NMX 248-1 and UL/CSA/NMX 248-14 for the US and Canadian Markets
- Small size
- High voltage
- High breaking capacity
- AEC-Q200 Qualified

Additional Information



Resources



Accessories



Samples

Applications

- On-Board Charger
- Power Distribution Unit

Agency Approvals

Agency	Agency File Number	Ampere Range
c UL US	E10480	15 A - 30 A

Electrical Characteristics

% of Ampere Rating	Ampere Rating	Opening Time at 25°C
100%	15 A - 30 A	4hrs, Min.
135%	15 A - 30 A	3600 seconds, Max.

Electrical Specifications

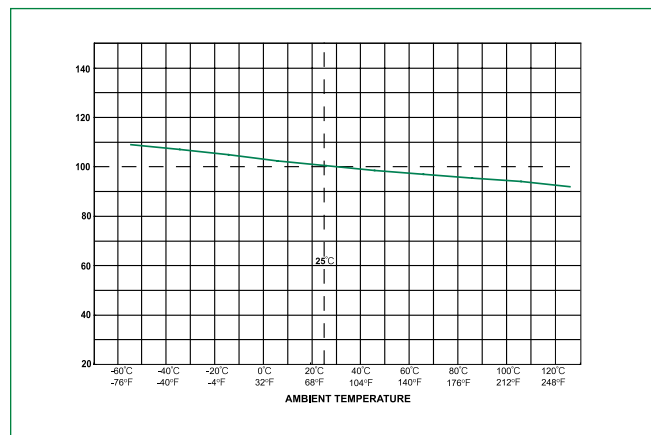
Ampere Rating (A)	Amp Code	Max Voltage Rating (V)	Interrupting Rating (AC/DC)	Nominal Cold Resistance (mOhm)	Nominal Melting I ² t (A ² sec)	Agency Approvals
15	015.	1000Vdc	10KA@1000Vdc	7.65	190	c UL US
20	020.			4.90	536	
25	025.			3.20	1190	
30	030.			2.90	1500	

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

828 Series

High Voltage Cartridge Fuses

Temperature Re-rating Curve

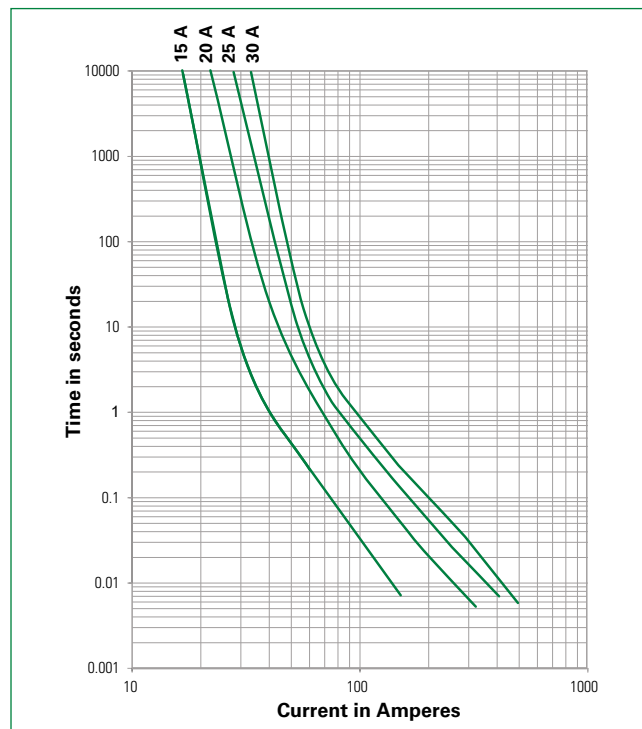


Note: Re-rating depicted in this curve is in addition to the standard derating of 25% for continuous operation.

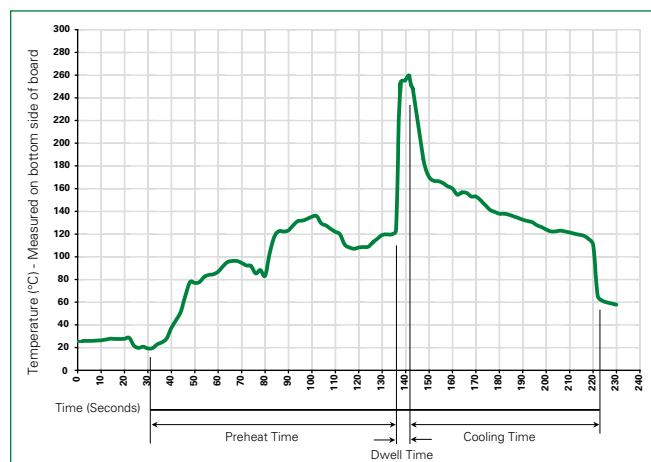
Product Characteristics

Materials	Body: Glass fiber Cap: Tin plated Copper alloy
Mechanical Shock	MIL-STD-202, Method 213, Test Condition I (100 G's peak for 6 milliseconds)
Solderability	Reference MIL-STD-202 method 208
Product Marking	Brand logo, current and voltage ratings
Resistance to Solder Heat	MIL-Std 202 Method 210 Test Condition B (10sec at 260 °C)
Operating Temperature	-55 °C to +125 °C
Vibration	MIL-STD-202G, Method 201A
Salt Spray	MIL-STD-202G, Method 101E, Test condition B

Average Time Current Curves



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.

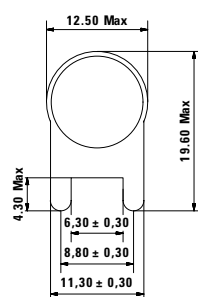
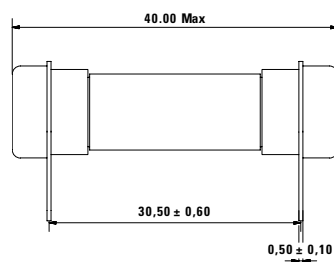
Note: These devices are not recommended for IR or Convection Reflow process.

828 Series

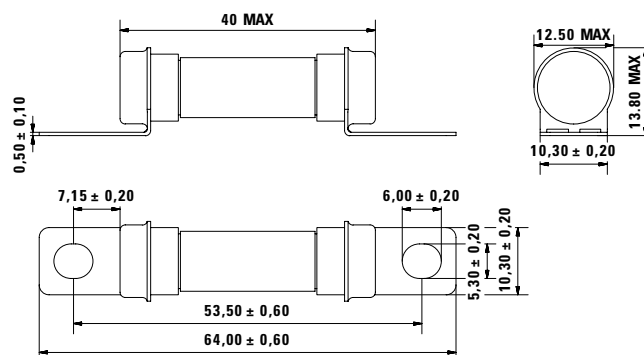
High Voltage Cartridge Fuses

Dimensions (mm)

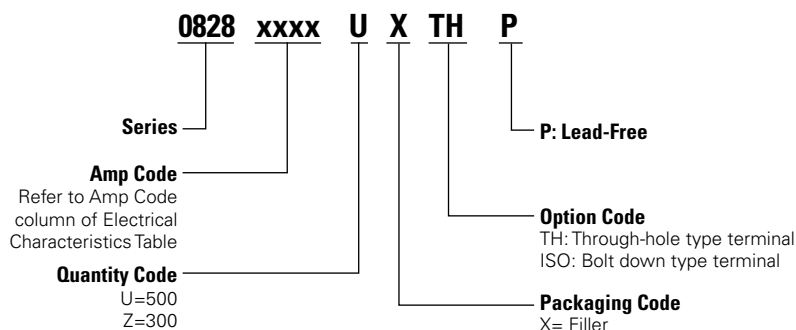
Through-hole



Bolt Down



Part Numbering System



Packaging

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

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 <http://www.littelfuse.com/disclaimer-electronics>.