808 Series TE5® Fast Acting 450V Fuse

RoHS Pb HF cULus

Description

The 450V TE5 Fast-acting Fuse is designed to enable compliance with the RoHS Directive. This product is fully compatible with lead-free solder alloy. This device is UL Recognized for protecting components or internal circuits against overcurrent condition at high DC application.

Features

- Lead-free
- Reduced PCB space requirements
- Direct solderable or plug-in versions
- Internationally approved
- Low internal resistance
- RoHS compliant
- Shock safe casing
- Vibration resistant
- Halogen-free
- Antimony-free
- Ideal for high voltage DC applications

Agency Approvals

Agency	Agency File Number	Ampere Range
cULus	E67006	2.00A - 5.00A

Applications

- DC/DC Converter
- Transformer-less AC/DC Circuit
- Data Centers
- Telecom/Datacom Central Offices

Electrical Characteristics

| % of Ampere Rating	Opening Time
100%	4 Hours, Minimum
200%	10 Seconds, Maximum

Electrical Characteristics

| Ampere Rating (A)	Amp Code	Max Voltage Rating (V)		Interrupting Rating			Nominal Cold Resistance (Ohms)	Nominal Melting I2t (10In - A²sec)	Max Voltage Drop (Mv)	Agency Approval cULus
		AC	DC	AC	DC Min	DC Max				
2.00	1200	250	450				0.069	0.0610	342	x
2.50	1250	250	450				0.054	0.0898	300	x
3.00	1300	250	350	200A	300A	10kA	0.042	0.2007	276	x
3.15	1315	250	350				0.038	0.2191	270	x
4.00	1400	250	250				0.027	0.5445	240	x
5.00	1500	250	250				0.022	1.1584	215	x

Notes:

1. Cold resistance measured at less than 10% of rated current at 23°C.

2. An operating current of 80% or less of rated current is recommended, with further derating required at elevated ambient temperature.

3. Have special electrical characteristic needs? Contact Littelfuse to learn more about application specific options.
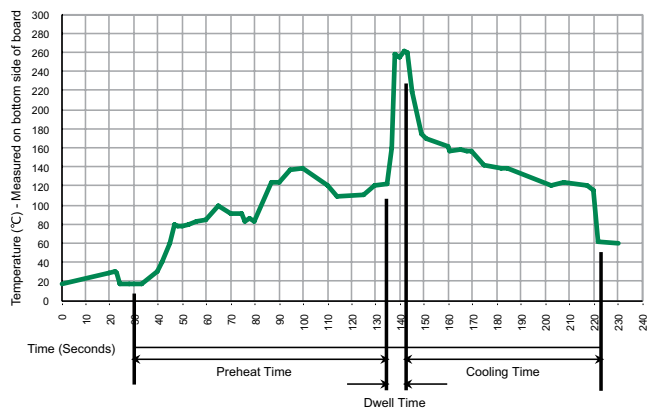
808 Series

Temperature Rerating Curve
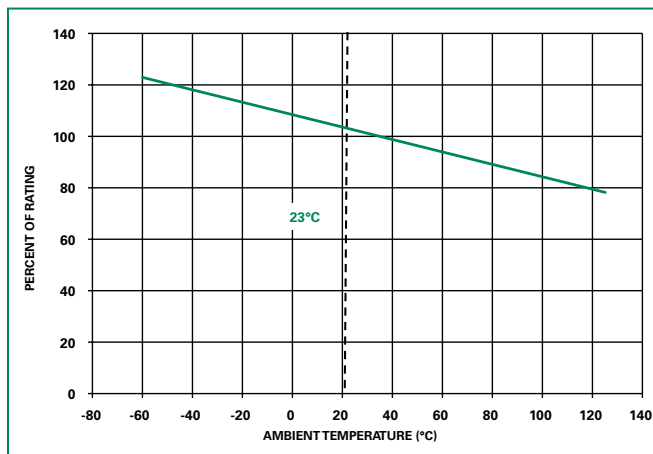
Average Time Current Curves
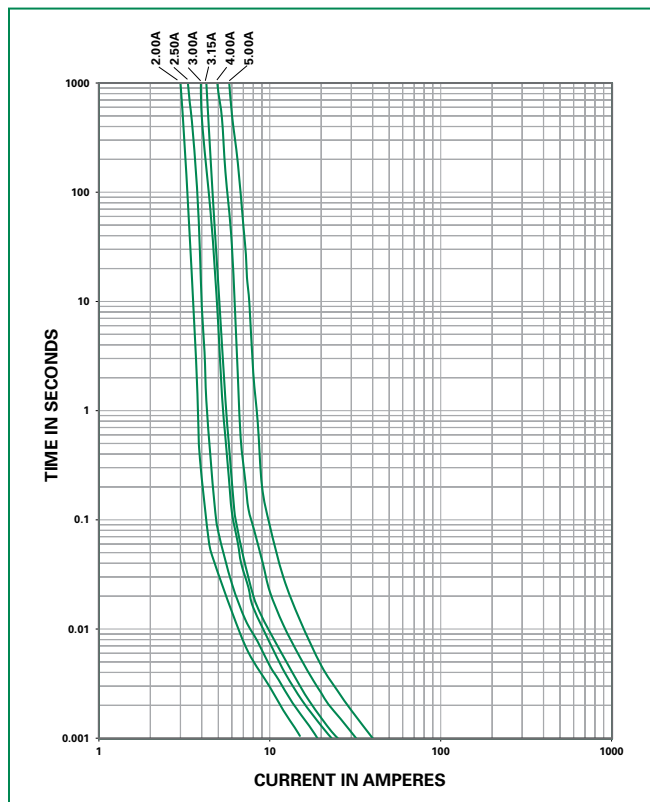
Soldering Parameters - Wave Soldering

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:

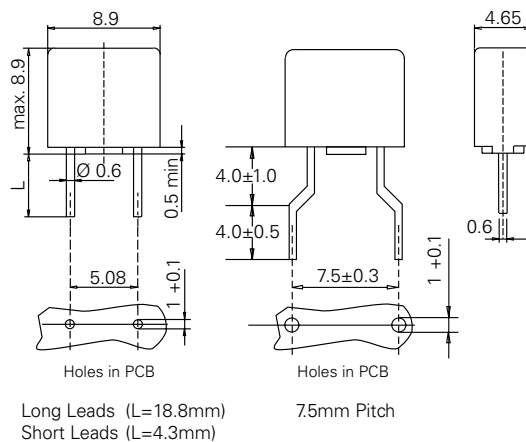Solder Iron Temperature: 350° C +/- 5°C
Heating Time: 5 seconds max.

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

Product Characteristics

Materials	Base/Cap: Black Thermoplastic Polyphenylene Sulfide, UL 94 V-0 Round Pins: Copper, Sn-plated
Product Marking	Body: Brand Logo, Current Rating Rated Voltage, Characteristic "F"
Solderability	260°C, ≤ 3s. (Wave) 350°C, ≤ 1s. (Soldering Iron)
Thermal Shock	50 cycles, 15 minutes at –65°C / 15 minutes at 125°C (MIL-STD-202, Method 107)

Operating Temperature	-65°C to +125°C with proper derating
Moisture Resistance	10 cycles, 65°C at 90-98% R.H. over 150 minutes, 180 minutes holding time, Reduce temperature to 23 – 35°C over 150 minutes, 8 hours holding time
Vibration Resistance	24 cycles at 5 min. each (EN60068-2-6) 10-60Hz at 0.75mm amplitude 60-2000Hz at 10G's acceleration

Dimensions

Long Leads (L=18.8mm)
Short Leads (L=4.3mm)

7.5mm Pitch

Part Numbering System

808 xxxx 0000

Series

Amp Code
Refer to Amp Code column of Electrical Characteristics Table

Packaging Code
0000 Tape/Ammopack (1,000 pcs)
0440 Short leads - Bulk (1,000 pcs)
0075 7.5mm pitch - Bulk (1,000 pcs)

808 Series

Packaging

Packaging Option	Packaging Specification	Quantity	Quantity & Packaging Code	Taping Width
808 Series				
Tape & Ammopack	N/A	1,000	0000	N/A
Short Leads	N/A	1,000	0440	N/A
7.5 mm Pitch	N/A	1,000	0075	N/A