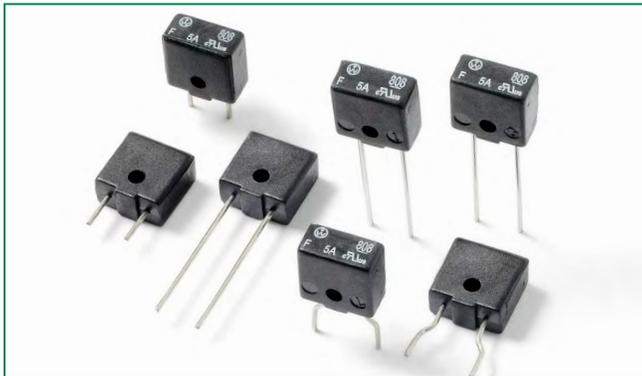


## 808 Series TE5® Fast-Acting 450V Fuse



### 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

- Reduced PCB space requirements
- Direct solderable or plug-in versions
- Low internal resistance
- Halogen free, Lead-free, and RoHS compliant
- Shock safe casing
- Vibration resistant
- Antimony-free
- Ideal for high voltage DC applications
- Very high breaking capacity of 10kA at rated DC voltage

### Agency Approvals

Agency	Agency File Number	Ampere Range
	NBK060111-JP1021A	2.00A - 5.00A
	E67006	2.00A - 5.00A

### Applications

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

### Additional Information



Datashheet



Resources



Samples

### Electrical Characteristics

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

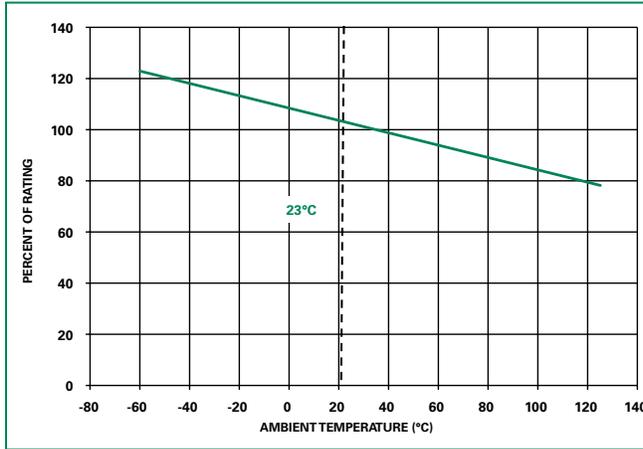
### Electrical Characteristics

Ampere Rating (A)	Amp Code	Max Voltage Rating (V)		Interrupting Rating	Nominal Cold Resistance (Ohms)	Nominal Melting I <sup>2</sup> t (10In - A <sup>2</sup> sec)	Max Voltage Drop (Mv)	Agency Approval 
		AC	DC					
2.00	1200	250	450	200A@250VAC 10KA@450VDC	0.069	0.0610	342	x
2.50	1250	250	450		0.054	0.0898	300	x
3.00	1300	250	350	200A@250VAC 10KA@350VDC	0.042	0.2007	276	x
3.15	1315	250	350		0.038	0.2191	270	x
4.00	1400	250	250	200A@250VAC 10KA@250VDC	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.

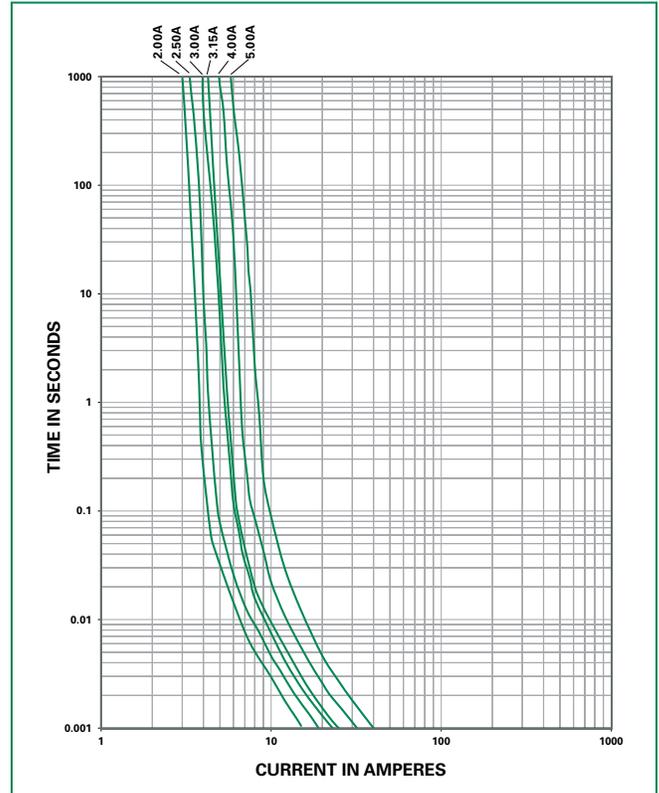
## Temperature Re-rating Curve



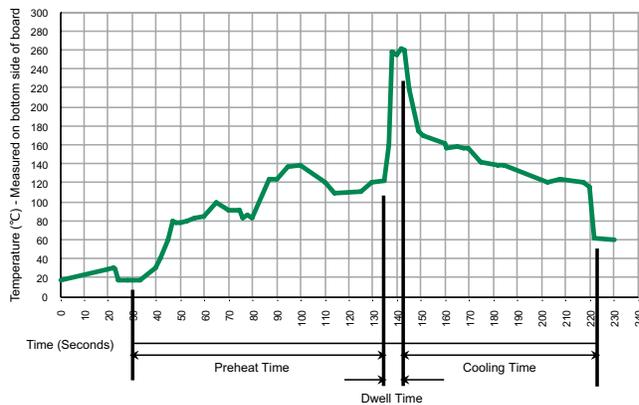
Note:

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



## Recommended Process Parameters:

Wave Parameter	Lead-Free Recommendation
<b>Preheat:</b> (Depends on Flux Activation Temperature)	(Typical Industry Recommendation)
Temperature Minimum:	100°C
Temperature Maximum:	150°C
Preheat Time:	60-180 seconds
<b>Solder Pot Temperature:</b>	260°C Maximum
<b>Solder Dwell Time:</b>	2-5 seconds

## Recommended Hand-Solder Parameters:

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

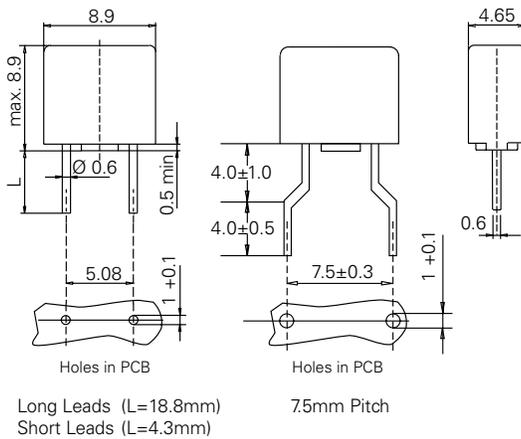
**Note: These devices are not recommended for IR or Convection Reflow process.**

### Product Characteristics

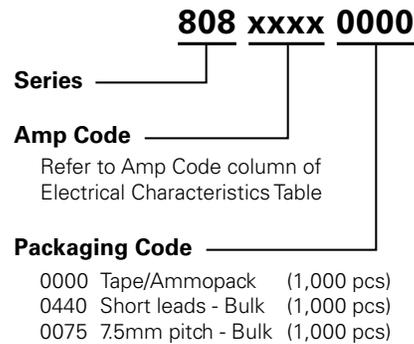
<b>Materials</b>	Base/Cap: Black Thermoplastic Polyphenylene Sulfide, UL 94 V-0 Round Pins: Copper, Sn-plated
<b>Product Marking</b>	Body: Brand Logo, Current Rating Rated Voltage, Characteristic "F"
<b>Solderability</b>	260°C, ≤ 3s. (Wave) 350°C, ≤ 1s. (Soldering Iron)
<b>Thermal Shock</b>	50 cycles,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

<b>Operating Temperature</b>	-65°C to +125°C (Consider re-rating)
<b>Moisture Resistance</b>	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
<b>Vibration Resistance</b>	24 cycles at 5 min. each (IEC60068-2-6) 10-60Hz at 0.75mm amplitude 60-2000Hz at 10G's acceleration

### Dimensions



### Part Numbering System



### Packaging

Packaging Option	Packaging Specification	Quantity	Quantity & Packaging Code	Taping Width
<b>808 Series</b>				
Tape & Ampopack	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