### **Radial Lead Fuses**

TE5® > Fast Acting 450V Fuse > 808 Series

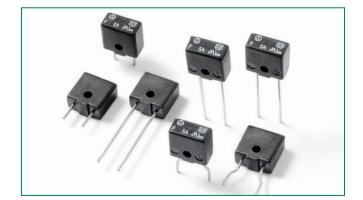
## 808 Series TE5® Fast-Acting 450V Fuse











# **Agency Approvals**

Agency	Agency File Number	Ampere Range
PS	NBK240118-E67006	2.00A - 5.00A
c <b>71</b> 2°us	E67006	2.00A - 5.00A

### **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 and is UL Recognized for protecting components or internal circuits against overcurrent conditions at high DC voltages.

### **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

### **Applications**

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

### **Additional Information**







Samples

### **Electrical Characteristics**

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

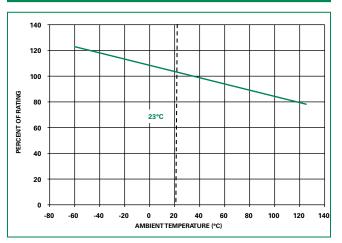
### **Electrical Characteristics**

	Max Voltage Rating (V)				Nominal	Max Voltage	Agency Approval		
Ampere Rating	Amp	IVIAX VOITAY	- Hatting (V)	Interrupting Rating <sup>1</sup> Resistan	Nominal Cold Resistance <sup>2</sup>	Melting l <sup>2</sup> t	Drop		
(A)	Code	AC	DC		(Ohms)	10xI <sub>N</sub> (A²sec)	1.0xl <sub>N</sub> (mV)	c <b>71</b> °us	PS
2.00	1200	250	450	200A@250VAC	0.069	0.0610	342	Х	Х
2.50	1250	250	450	300A to 10kA@450VDC	0.054	0.0898	300	Х	X
3.00	1300	250	350	200A@250VAC	0.042	0.2007	276	Х	x
3.15	1315	250	350	300A to 10kA@350VDC	0.038	0.2191	270	Х	X
4.00	1400	250	250	200A@250VAC	0.027	0.5445	240	Х	x
5.00	1500	250	250	300A to 10kA@250VDC	0.022	1.1584	215	Х	Х

- 1. This fuse is not recommended for use in DC circuits where the available prospective short-circuit current is less than 300A at rated voltage.
- 2. Cold resistance measured at less than 10% of rated current at 23°C.
- 3. An operating current of 80% or less of rated current is recommended, with further derating required at elevated ambient temperature.
- 4. Have special electrical characteristic needs? Contact Littelfuse to learn more about application specific options.



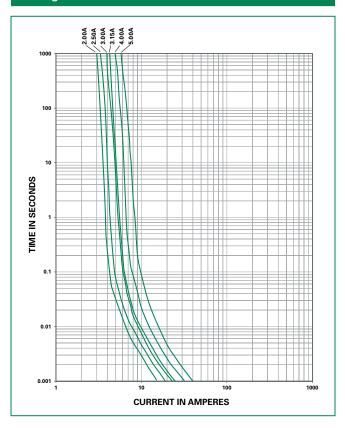
### **Temperature Re-rating Curve**



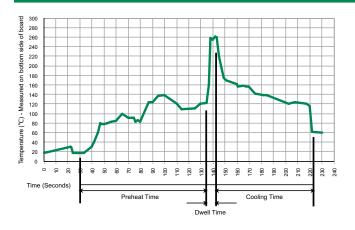
#### Note:

 Rerating depicted in this curve is in addition to the standard derating of 20% for continuous operation.

### **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 DwellTime:	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.

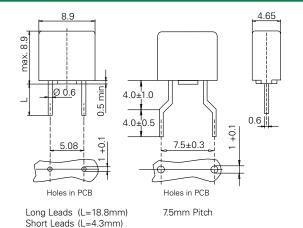
### **Radial Lead Fuses**

### **Product Characteristics**

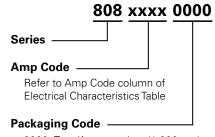
Materials	Base/Cap: Black Thermoplastic Polyphenylene Sulfide, UL 94 V-0 Round Pins: Copper, Sn-plated	
Product Marking	Body: Brand Logo, Current Rating Rated Voltage, Characteristic "F"	
Solderability	260°C, ≤ 3s. (Wave) 350°C, ≤ 1s. (Soldering Iron)	
Thermal Shock	50 cycles, 15 minutes at -65°C/15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

Operating Temperature	-65°C to +125°C (Consider re-rating)	
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 (IEC60068-2-6) 10-60Hz at 0.75mm amplitude 60-2000Hz at 10G's acceleration	

### **Dimensions**



### **Part Numbering System**



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

### **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	

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