

808 Series

TE5® Fast-Acting Fuse



Additional Information



Resources



Accessories



Samples

Description

The 808 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 & Benefits

- 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
- Recognized to UL/CSA/NMX 248-1 and UL/CSA/NMX 248-14
- Conforms to DENAN's Appendix 3

Applications

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

Agency Approvals

Agency	Agency File Number	Ampere Range
	NBK240118-E67006	2.00A - 5.00A
	E67006	2.00A - 5.00A
	NA	2.00A - 5.00A
	NA	2.00A - 5.00A

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 ¹	Nominal Cold Resistance ² (Ohms)	Nominal Melting I ² t 10xI _N (A ² sec)	Max Voltage Drop 1.0xI _N (mV)	Agency Approval			
		AC	DC					CE	UK CA	cULus	PS E
2.00	1200	250	450	200A to 10kA @ 250VAC	0.069	0.0610	342	x	x	x	x
2.50	1250	250	450	300A to 10kA@450VDC	0.054	0.0898	300	x	x	x	x
3.00	1300	250	350	200A@250VAC	0.042	0.2007	276	x	x	x	x
3.15	1315	250	350	300A to 10kA@350VDC	0.038	0.2191	270	x	x	x	x
4.00	1400	250	250	200A@250VAC	0.027	0.5445	240	x	x	x	x
5.00	1500	250	250	300A to 10kA@250VDC	0.022	1.1584	215	x	x	x	x

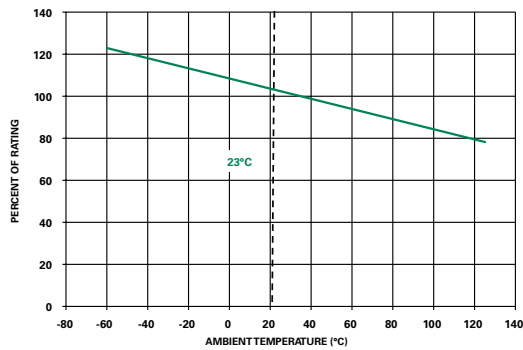
Notes:

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.

808 Series

TE5® Fast-Acting Fuse

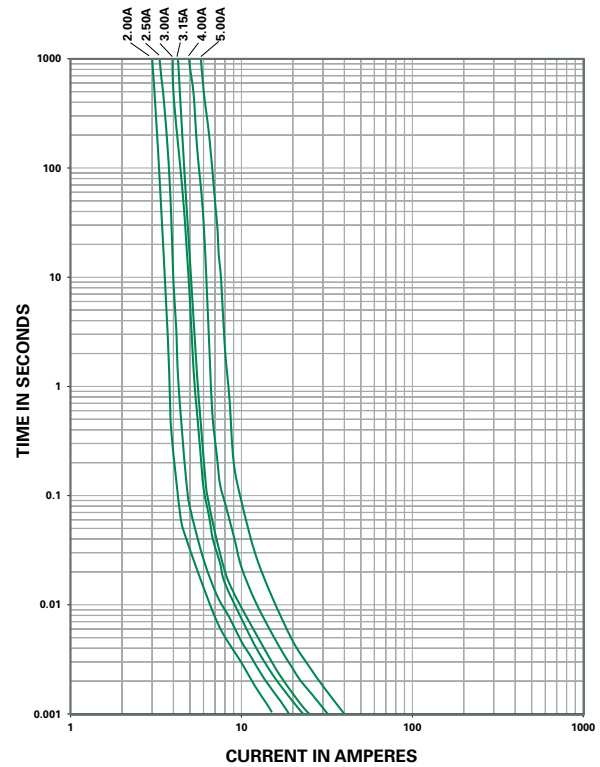
Temperature Re-rating Curve



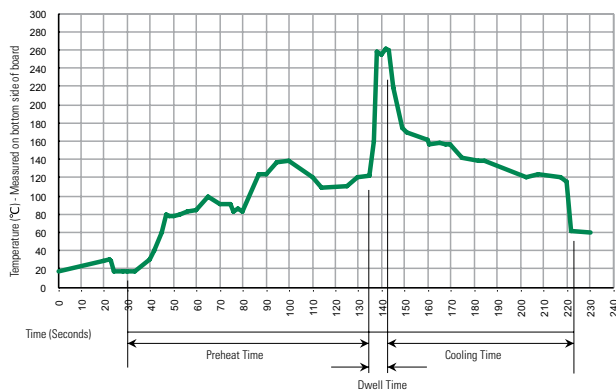
Note:

1. Derating 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 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.

808 Series

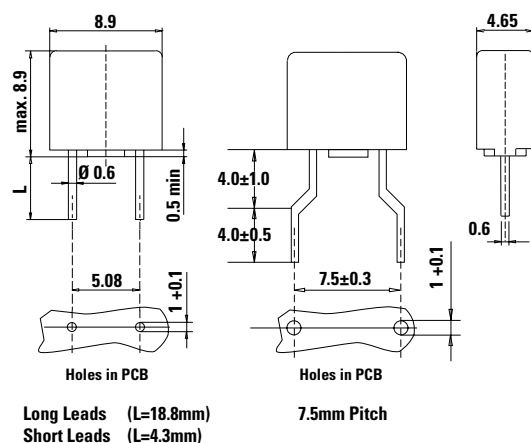
TE5® Fast-Acting Fuse

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 (mm)



Part Numbering System

Series	808	xxxx	0000
Amp Code	Refer to Amp Code column of Electrical Characteristics Table		
Packaging Code			
0000	Tape/Ampopack	(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 & 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

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: www.littelfuse.com/disclaimer-electronics.