

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

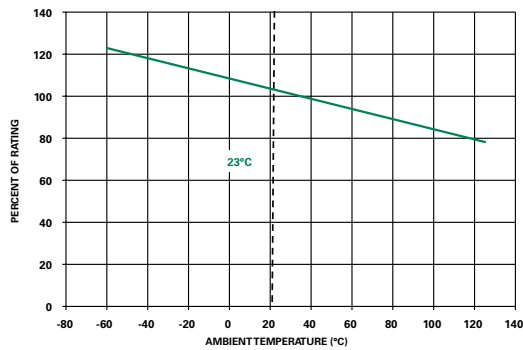
Notes:

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.

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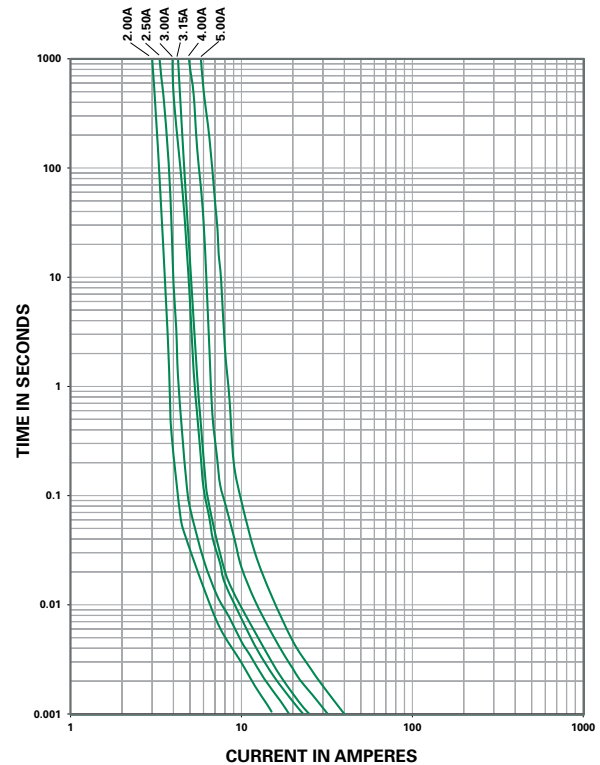
Temperature Re-rating Curve



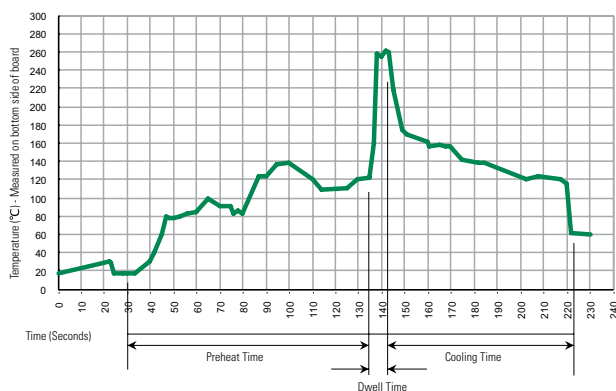
Note:

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.

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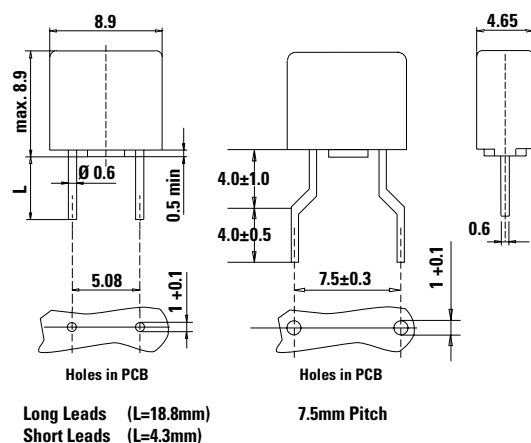
TE5® Fast-Acting Fuse

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

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