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808 Series TE5® Fast-Acting 450V Fuse



Agency Approvals				
Agency Agency File Number Ampere Range				
PSE	NBK240118-E67006 2.00A - 5.00A			
c FN ° us	E67006	2.00A - 5.00A		

Description

The 450VTE5® 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

RoHS 🗭 HF C RUSUS (PS)

- 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						

Datasheet





Electrical Characteristics				
% of Ampere Rating	OpeningTime			
100%	4 Hours, Minimum			
200%	10 Seconds, Maximum			

Electrical Characteristics

Rating Code	Max Voltag	e Rating (V)			Nominal	Max Voltage	Agency Approval		
	Amp Code			Interrupting Rating ¹	Nominal Cold Resistance ²	Melting l²t 10xl _N	Drop 1.0xl _M	c FN us	PS E
(A)		AC	DC	(Ohms)	(A ² sec)	(mV)	C TAL US	E	
2.00	1200	250	450	200A@250VAC	0.069	0.0610	342	х	x
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	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.



Temperature Re-rating Curve



Note:

1. 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 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.



Radial Lead Fuses

TE5[®] > Fast Acting 450V Fuse > 808 Series

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, \leq 3s. (Wave) 350°C, \leq 1s. (Soldering Iron)	
Thermal Shock	50 cycles, 15 minutes at –65°C/15 minutes at 125°C (MILSTD-202, Method 107)	

Operating Temperature	-65°C to +125°C (Consider re-rating)	
Moisture Resistance10 cycles, 65°C at 90-98% R.H. o 150 minutes, 180 minutes holding Reduce temperature to 23 – 35°C 		
Vibration Resistance	24 cycles at 5 min. each (IEC60068-2-6) 10-60Hz at 0.75mm amplitude 60-2000Hz at 10G's acceleration	

Part Numbering System



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

8.9

8.9

Dimensions



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

7.5mm Pitch

4.65

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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