

RoHS **HF 808 Series, TE5®, Fast-Acting Fuse**



Agency Approvals

Agency	Agency File Number	Ampere Range	
	E67006	1.00A 2.00A 3.15A 5.00A	1.60A 2.50A 4.00A

Description

The 450 V TE5® Fast-Acting Fuse is designed to enable compliance with the RoHS Directive. This product is fully compatible with lead-free solder alloy. The device is UL Recognized for protecting components or internal circuits against overcurrent condition at high DC applications.

Features

- Lead-free
- Reduce PCB space requirements
- Direct solderable or plug-in versions
- Internationally approved
- Low internal resistance
- RoHS compliant
- Shocksafe casing
- Vibration resistant
- Halogen-free
- Antimony-free
- Ideal for high voltage DC applications

Applications

- AC/DC power adaptors
- High voltage DC/DC converters
- Battery chargers
- Consumer electronics

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 I²t (10In - A²sec)	Max Voltage Drop (mV)	Agency Approvals
		AC	DC	AC	DC					
					Min	Max				
1.00	1100	250	450	100A @ 250V	300A	10kA	0.252	0.0066	510	x
1.60	1160	250	450		300A	10kA	0.129	0.0344	400	x
2.00	1200	250	450		300A	10kA	0.094	0.0610	342	x
2.50	1250	250	450		300A	10kA	0.069	0.0898	300	x
3.15	1315	250	350		300A	10kA	0.052	0.2191	270	x
4.00	1400	250	250		300A	10kA	0.035	0.5445	240	x
5.00	1500	250	250		300A	10kA	0.026	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. Agency Approval Table Key: X=Approved or Certified, P=Pending.

Temperature Derating Curve



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.

Product Characteristics

Materials	Overmolding: Black Thermoplastic Polyphenylene Sulfide, UL 94 V-0 Round Pins: Copper, Tin-plated
Product Marking	Body: Brand Logo, Current Rating, Characteristic "F"; Product Series No., Agency Approval
Solderability	260°C, ≤ 3s. (Wave) 350°C, ≤ 1s. (Soldering Iron)
Soldering Heat Resistance	260°C, ≤ 10s. (IEC 60068-2-20) 350°C, ≤ 3s. (Soldering Iron)

Operating Temperature	-40°C to +125°C with proper derating
Climatic Category	-40°C to +85°C/21 days (EN 60068-1,-2-1,-2-2,-2-78)
Stock Conditions	+10°C to +60°C RH 75% yearly average, without dew, maximum value of 30 days-95%
Vibration Resistance	24 cycles at 5min. each (EN60068-2-6) 10 - 60Hz at 0.75mm amplitude 60 - 2000Hz at 10g acceleration

Dimensions



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

7.5mm Pitch

Part Numbering System



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

