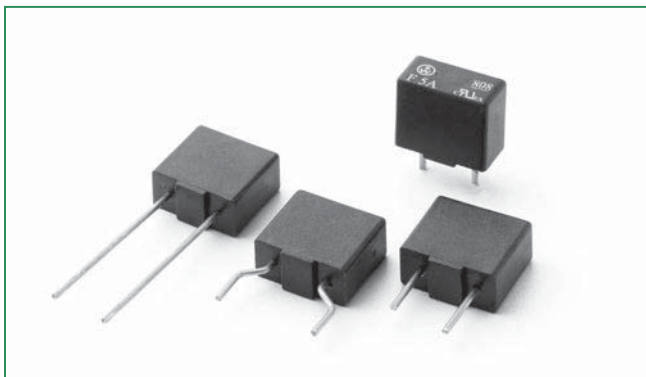


### RoHS HF 808 Series, TE5®, Fast-Acting Fuse



#### Agency Approvals

| Agency                                                                            | Agency File Number | Ampere Range                     |                         |
|-----------------------------------------------------------------------------------|--------------------|----------------------------------|-------------------------|
|  | E67006             | 1.00A<br>2.00A<br>3.15A<br>5.00A | 1.60A<br>2.50A<br>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 |

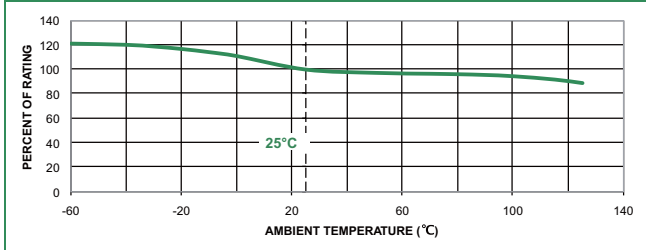
#### Electrical Characteristics

| 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                                                                                     |

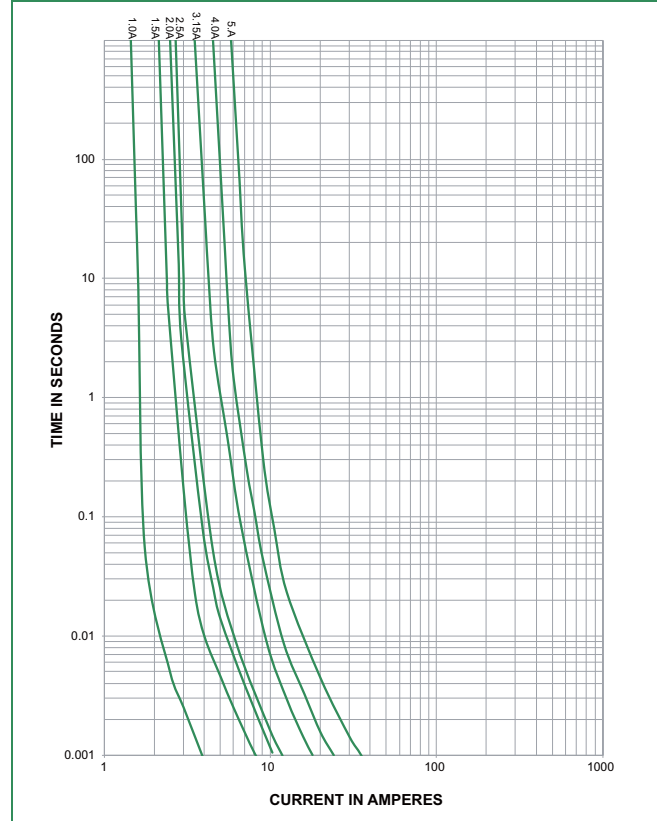
#### Notes:

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.

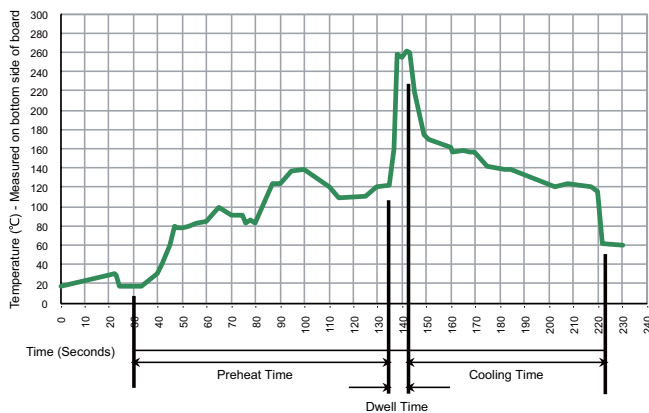
### Temperature Derating Curve



### Average Time Current Curves



### Soldering Parameters - Wave Soldering



### Recommended Process Parameters:

| Wave Parameter                                              | Lead-free Recommendation          |
|-------------------------------------------------------------|-----------------------------------|
| <b>Preheat:</b><br>(Depends on Flux Activation Temperature) | (Typical Industry Recommendation) |
| Temperature Minimum:                                        | 100° C                            |
| Temperature Maximum:                                        | 150° C                            |
| Preheat Time:                                               | 60-180 seconds                    |
| <b>Solder Pot Temperature:</b>                              | 260° C Maximum                    |
| <b>Solder Dwell Time:</b>                                   | 2-5 seconds                       |

### Recommended Hand-Solder Parameters:

Solder Iron Temperature: 350° C +/- 5°C  
Heating Time: 5 seconds max.

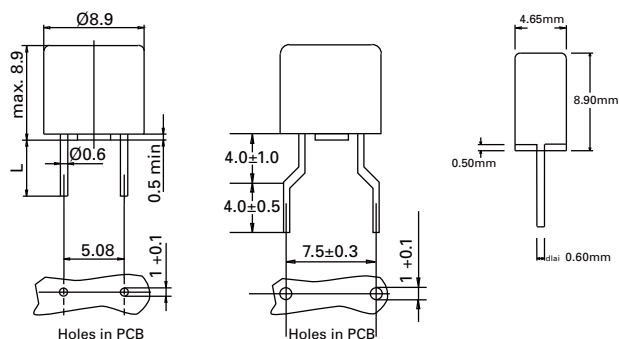
**Note: These devices are not recommended for IR or Convection Reflow process.**

## Product Characteristics

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

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

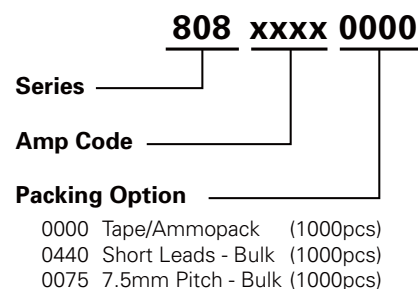
## Dimensions



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

7.5mm Pitch

## Part Numbering System



808 Series

## Packaging

| Packaging Option  | Packaging Specification | Quantity | Quantity & Packaging Code | Taping Width |
|-------------------|-------------------------|----------|---------------------------|--------------|
| <b>808 Series</b> |                         |          |                           |              |
| 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          |

