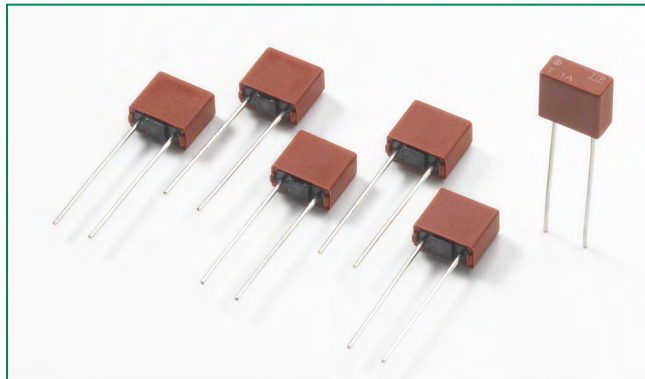


## 385 Series, TE5® Telecom Interface Protector Fuse



## Agency Approvals

| Agency                                                                            | Agency File Number | Ampere Range  |
|-----------------------------------------------------------------------------------|--------------------|---------------|
|  | E67006             | 0.350A - 1.5A |

## Additional Information



Datasheet



Resources



Samples

## Description

The 385 Series TE5R Telecom Interface Protector Fuses are 125V rated, Time-Lag type and designed in accordance to UL 248-14.

## Features

- Surge proof for telecom applications
- Reduced PCB space requirements
- Highly defined cut-off times
- Low internal resistance
- Irreversible physical separation
- Flame resistant encapsulated casing
- Available from 0.350A to 1.5A

## Applications

- Battery chargers
- Consumer Electronics
- Telecom
- Power supplies
- Industrial controllers

## Electrical Characteristics

| % of Ampere Rating | Opening Time                |
|--------------------|-----------------------------|
| 100%               | 2 Hours,                    |
| 300%               | 300 ms., Min.; 5 sec., Max. |

## Electrical Characteristics

| Amp Code | Rated Current | Voltage Rating | Breaking Capacity | Nominal Cold Resistance (Ohms) | Voltage Drop 1.0xI <sub>N</sub> max. (mV) | Power Dissipation 1.0xI <sub>N</sub> max. (mW) | Melting Integral 10xI <sub>N</sub> max. (A <sup>2</sup> s) | Surge Amplitude (A) <sup>1</sup> |          |     | Agency Approvals |
|----------|---------------|----------------|-------------------|--------------------------------|-------------------------------------------|------------------------------------------------|------------------------------------------------------------|----------------------------------|----------|-----|------------------|
|          |               |                |                   |                                |                                           |                                                |                                                            | FCC                              | Bellcore | ITU |                  |
| 0350     | 350mA         | 125V           | 50A @125VAC       | 0.4320                         | 250                                       | 90                                             | 0.78                                                       | 32                               | 19       | 36  | x                |
| 0500     | 500mA         | 125V           |                   | 0.2570                         | 220                                       | 110                                            | 1.81                                                       | 48                               | 26       | 61  | x                |
| 0800     | 800mA         | 125V           |                   | 0.1290                         | 170                                       | 130                                            | 4.35                                                       | 80                               | 42       | 67  | x                |
| 1100     | 1.00A         | 125V           |                   | 0.0830                         | 140                                       | 130                                            | 6.75                                                       | 100                              | 52       | 67  | x                |
| 1125     | 1.25A         | 125V           |                   | 0.0610                         | 125                                       | 140                                            | 9.84                                                       | 128                              | 65       | 67  | x                |
| 1150     | 1.50A         | 125V           |                   | 0.0495                         | 120                                       | 170                                            | 11.52                                                      | 155                              | 78       | 67  | x                |

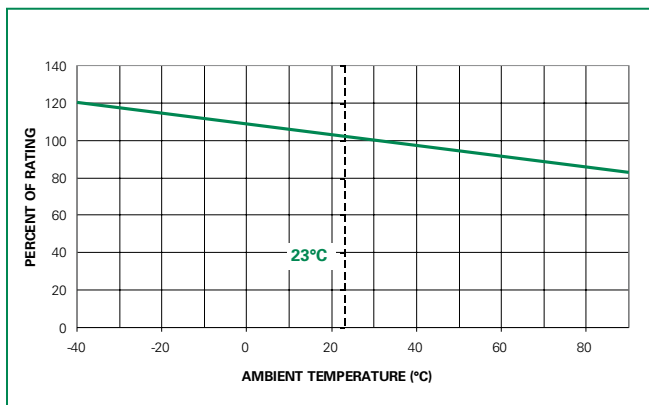
<sup>1</sup> FCC 47 Part 68: Minimum pulse load quantity is 2 pulses at a test generator output of 800V and 10x560μs waveform.

ITU-T K.20: Minimum pulse load quantity is 30 pulses at a test generator output of 1000V, 67A and 10x700μs waveform.

Bellcore GR-1089: Minimum pulse load quantity is 50 pulses at a test generator output of 1000V and 10x1000μs.

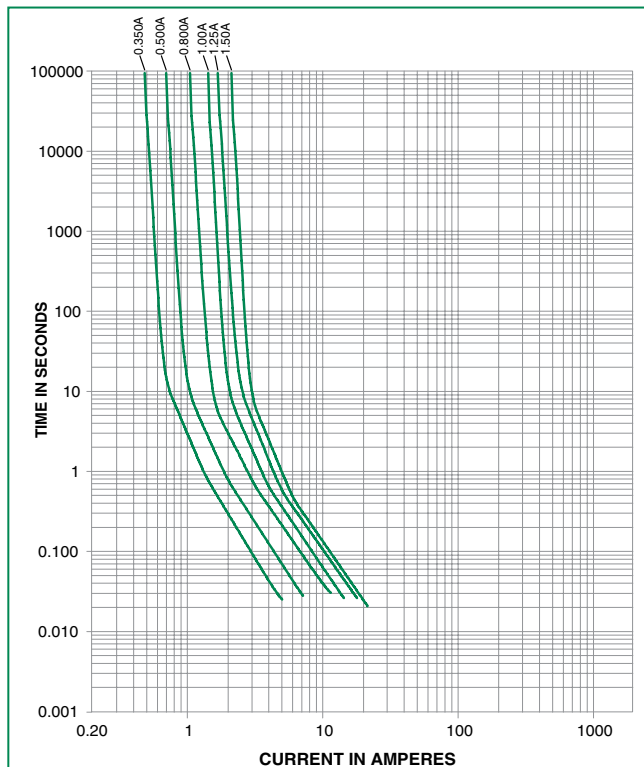
Note: 1.00 means the number one with two decimal places. 1,000 means the number one thousand.

## Temperature Re-rating Curve

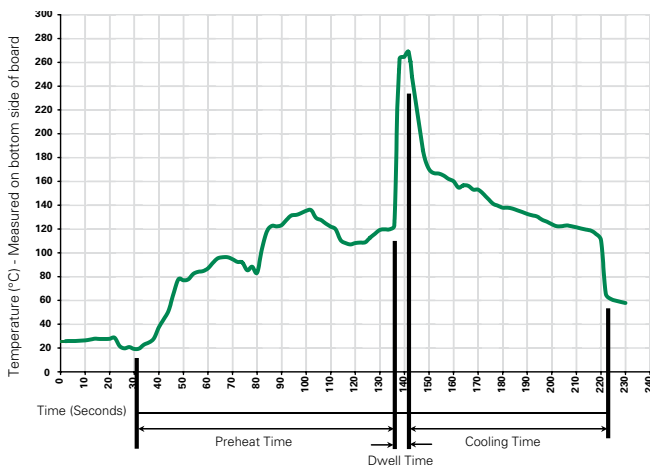


Note:  
1. Derating depicted in this curve is in addition to the standard derating of 25% for continuous operation.

## 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                       |

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

# Radial Lead Fuses

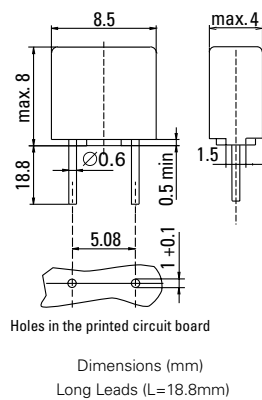
TE5® > Transient Tolerant Fuse > 385 Series

## Product Characteristics

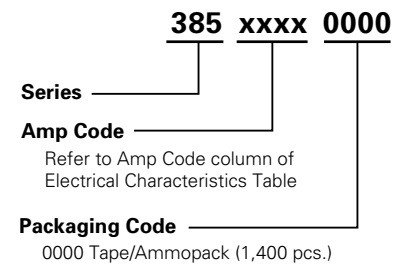
|                                  |                                                                                            |
|----------------------------------|--------------------------------------------------------------------------------------------|
| <b>Materials</b>                 | Base/Cap: Brown Thermoplastic Polyamide PA 6.6, UL 94V-0<br>Round Pins: Copper, Tin-plated |
| <b>Lead Pull Strength</b>        | 10N (IEC 60068-2-21)                                                                       |
| <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 +85°C (consider re-rating)                                                                              |
| <b>Climatic Category</b>     | -40°C to +85°C/21 days<br>(IEC 60068-1,-2-1,-2-2,-2-78)                                                          |
| <b>Stock Conditions</b>      | +10°C to +60°C RH,<br>≤ 75% yearly average, without dew,<br>maximum value for 30 days-95%                        |
| <b>Vibration Resistance</b>  | 24 cycles at 15 min. each<br>(IEC 60068-2-6)<br>10 - 60Hz at 0.75mm amplitude<br>60 - 2000Hz at 10g acceleration |

## Dimensions



## Part Numbering System



## Packaging

| Packaging Option  | Packaging Specification | Quantity | Quantity & Packaging Code | Taping Width |
|-------------------|-------------------------|----------|---------------------------|--------------|
| <b>385 Series</b> |                         |          |                           |              |
| Tape & Amp-pack   | N/A                     | 1,400    | 0000                      | N/A          |