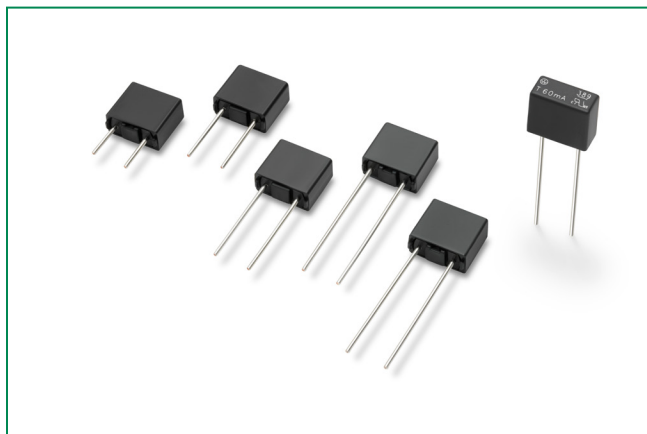


389 Series

TE5® Fuse, Time-Lag



Description

The 389 Series are TE5®, Time-Lag type, 250V rated fuses. They are specifically designed for short circuit protection of sensitive electronic components and assemblies

Features

- Reduced PCB space requirements
- Highly defined cut-off times
- Low internal resistance
- Flame resistant encapsulated casing
- RoHS compliant and Lead-free

Applications

- Telecom equipment
- Data processing equipment
- Input/output modules
- Household appliances
- Medical equipment

Additional Information



Resources



Accessories



Samples

Agency Approvals

| Agency | Agency File Number | Ampere Range |
|--------|--------------------|--------------|
| US | E67006 | 0.060A |

Electrical Characteristics

| % of Ampere Rating | Opening Time |
|--------------------|----------------------|
| 166 | 600 sec, Min. |
| 250 | 45 sec, Max. |

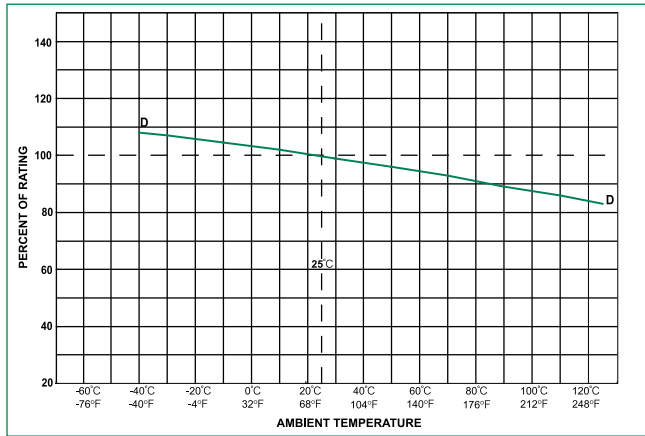
Electrical Characteristics

| Amp Code | Rated Current | Voltage Rating | Breaking Capacity | Cold Resistance 0.1In (mΩ) | Power Dissipation (mW) | Melting Integral 10In (A ² s) | US |
|----------|---------------|----------------|-------------------|----------------------------|------------------------|--|--------|
| 0060 | 60mA | 250 VAC | 10A@250VAC | 6080 | 100 | 0.033 | E67006 |

389 Series

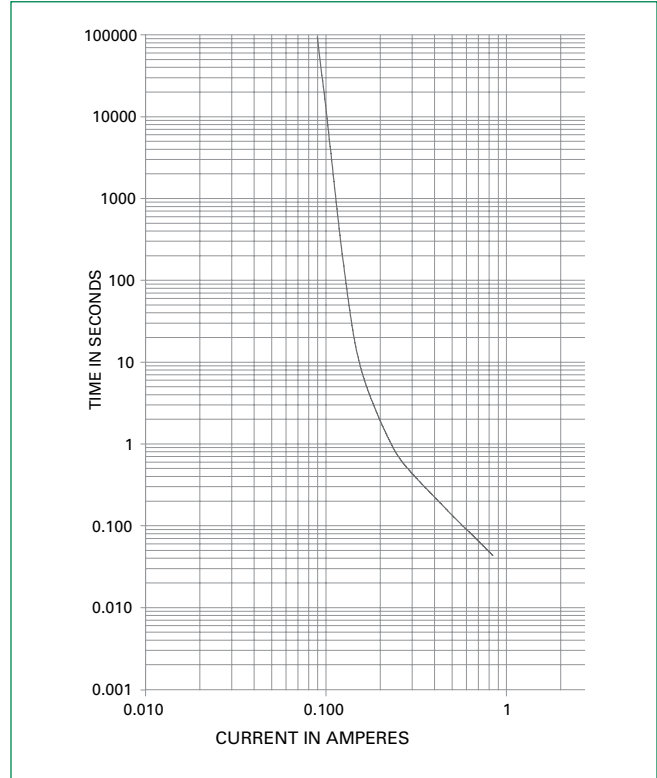
TE5® Fuse, Time-Lag

Temperature Re-rating Curve

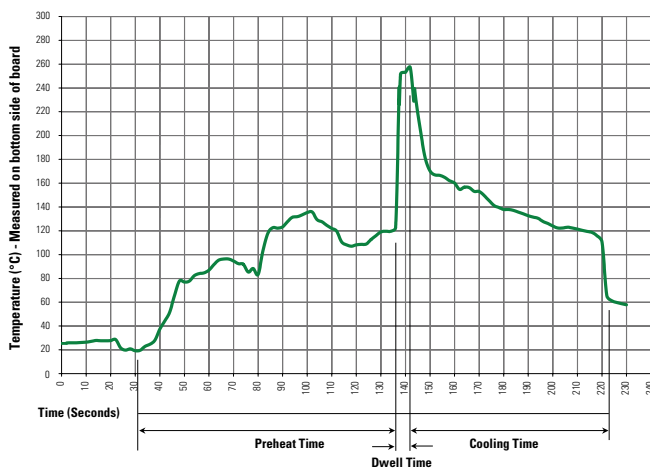


Note:
1. Derating depicted in this curve is in addition to the standard derating of 25% for continuous operation.

Average Time Current Curves



Soldering Parameters - Wave Soldering



Recommended Process Parameters:

| Wave Parameter | Lead-Free Recommendation |
|--|-----------------------------------|
| 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: | 280°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.

389 Series

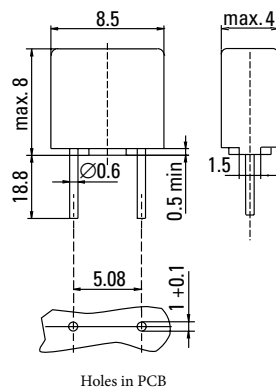
TE5® Fuse, Time-Lag

Product Characteristics

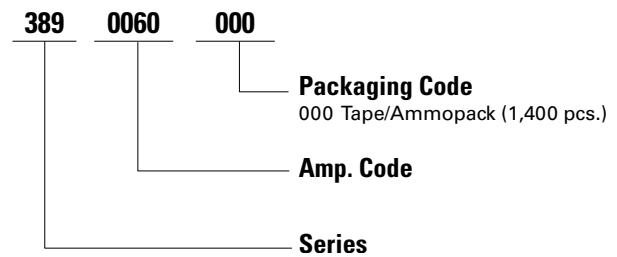
| | |
|----------------------------------|--|
| Materials | Base/Cap: Black Thermoplastic Polyamide PA 66, UL 94V-0 Round Pins: Copper, Tin-plated |
| Lead Pull Strength | 10N (IEC 60068-2-21) |
| Solderability | 260°C, ≤ 3 sec. (Wave) 350°C, ≤ 1 sec. (Hand) |
| Soldering Heat Resistance | 260°C, 10 sec. (IEC 60068-2-20) |

| | |
|------------------------------|--|
| Operating Temperature | -40°C to +125°C (consider re-rating) |
| Climatic Category | -25°C/+70°C/21 days (IEC 60068-1.3) |
| Stock Conditions | +10°C to +60°C RH, ≤ 75% yearly average, without dew, maximum value for 30 days-95% |
| Vibration Resistance | 24 cycles at 15 min. each (IEC 60068-6) 10 - 60Hz at 0.75mm amplitude 60 - 2000Hz at 10g acceleration |

Dimensions (mm)



Part Numbering System



Packaging

| Packaging Code | Packing Option | Quantity |
|----------------|----------------|----------|
| 000 | Tape/Ammopack | 1400 |

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