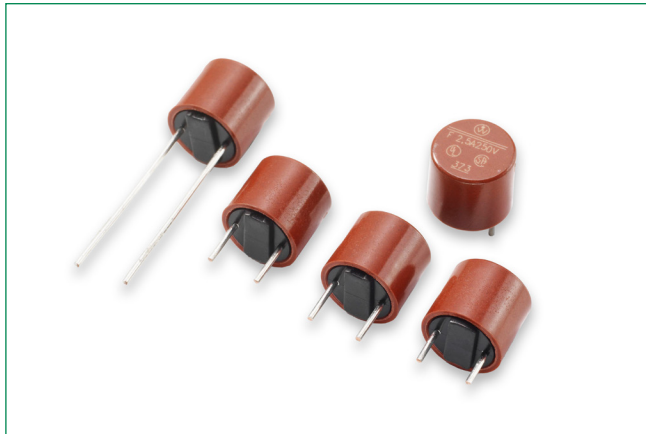


373 Series

TR5® Fuse, Fast Acting



Description

The TR5® 373 Series fuses are fast-acting 250V rated and designed in accordance to UL 248 -14.

Features & Benefits

- Reduced PCB space requirements
- Direct solderable or plug-in versions
- Internationally approved
- Low internal resistance
- Shock safe casing
- Vibration resistant
- Lead-free, Halogen free and RoHS compliant
- Available from 0.050A to 10A

Additional Information



Resources



Accessories



Samples

Electrical Characteristics

| % of Ampere Rating | Ampere Rating | Opening Time |
|--------------------|---------------|-------------------------|
| 200% | 50mA - 6.3A | 5 Seconds, Max. |
| | 8A - 10A | 60 Seconds, Max. |

Applications

- Battery Chargers
- Consumer Electronics
- Power supplies
- Industrial Controllers

Agency Approvals

| Agency | Agency File Number | Ampere Range |
|--------|--------------------|---------------|
| | 51378 | 0.050A - 6.3A |
| | E67006 | 0.050A - 10A |
| | NA | 50mA - 10A |

Electrical Characteristics

| Amp Code | Rated Current | Voltage Rating | Breaking Capacity | Nominal Cold Resistance (Ohms) | Voltage Drop 1.0xI _N max. (mV) | Power Dissipation 1.0xI _N max. (mW) | Melting Integral 10xI _N max. (A ² s) | Agency Approvals | | |
|----------|---------------------|----------------|-------------------|--------------------------------|---|--|--|------------------|---|---|
| | | | | | | | | | | |
| 0050 | 50mA | 250V | 50A@250VAC | 7.6250 | 1400 | 70 | 0.0001 | X | X | X |
| 0063 | 63mA | 250V | | 4.6900 | 1300 | 85 | 0.0002 | X | X | X |
| 0080 | 80mA | 250V | | 3.6500 | 1200 | 100 | 0.0004 | X | X | X |
| 0100 | 100mA | 250V | | 8.9000 | 1100 | 110 | 0.0013 | X | X | X |
| 0125 | 125mA | 250V | | 6.0550 | 1000 | 125 | 0.0019 | X | X | X |
| 0160 | 160mA | 250V | | 4.1310 | 950 | 155 | 0.0040 | X | X | X |
| 0200 | 200mA | 250V | | 3.2260 | 850 | 170 | 0.0065 | X | X | X |
| 0250 | 250mA | 250V | | 2.2240 | 750 | 190 | 0.0140 | X | X | X |
| 0315 | 315mA | 250V | | 1.5150 | 650 | 205 | 0.0320 | X | X | X |
| 0400 | 400mA | 250V | | 0.2200 | 230 | 95 | 0.0160 | X | X | X |
| 0500 | 500mA | 250V | | 0.1570 | 220 | 110 | 0.0250 | X | X | X |
| 0630 | 630mA | 250V | | 0.1180 | 210 | 135 | 0.0450 | X | X | X |
| 0800 | 800mA | 250V | | 0.0970 | 200 | 160 | 0.0690 | X | X | X |
| 1100 | 1.00A | 250V | | 0.0710 | 190 | 190 | 0.1250 | X | X | X |
| 1125 | 1.25A | 250V | | 0.0665 | 180 | 225 | 0.2000 | X | X | X |
| 1160 | 1.60A | 250V | | 0.0480 | 170 | 275 | 0.3800 | X | X | X |
| 1200 | 2.00A | 250V | | 0.0359 | 160 | 320 | 0.6300 | X | X | X |
| 1250 | 2.50A | 250V | | 0.0305 | 150 | 375 | 1.2000 | X | X | X |
| 1315 | 3.15A | 250V | | 0.0240 | 140 | 445 | 1.9000 | X | X | X |
| 1400 | 4.00A | 250V | | 0.0185 | 130 | 520 | 3.5000 | X | X | X |
| 1500 | 5.00A | 250V | 0.0144 | 120 | 630 | 6.2000 | X | X | X | |
| 1630 | 6.30A | 250V | 0.0133 | 115 | 1000 | 9.1000 | X | X | X | |
| 1800 | 8.00A ¹ | 250V | 0.0074 | 120 | 1600 | 30.0000 | - | X | X | |
| 2100 | 10.00A ¹ | 250V | 0.0059 | 110 | 2000 | 55.0000 | - | X | X | |

¹ Conducting path cross-section minimum ≥ 0.2mm²

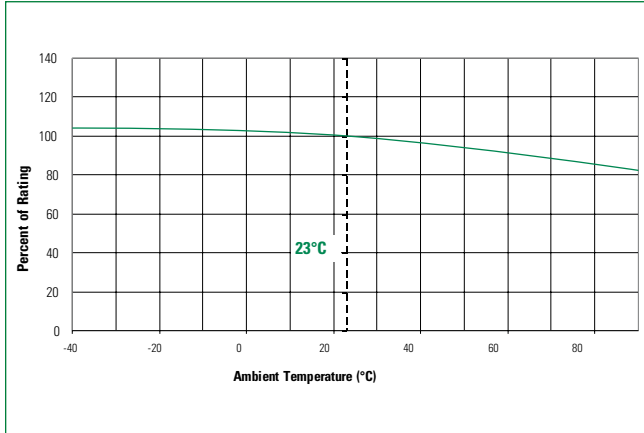
Notes: 1) 1.00 means the number one with two decimal places, 1.000 means the number one thousand.

2) Resistance is measured at 10% of rated current, 25°C.

373 Series

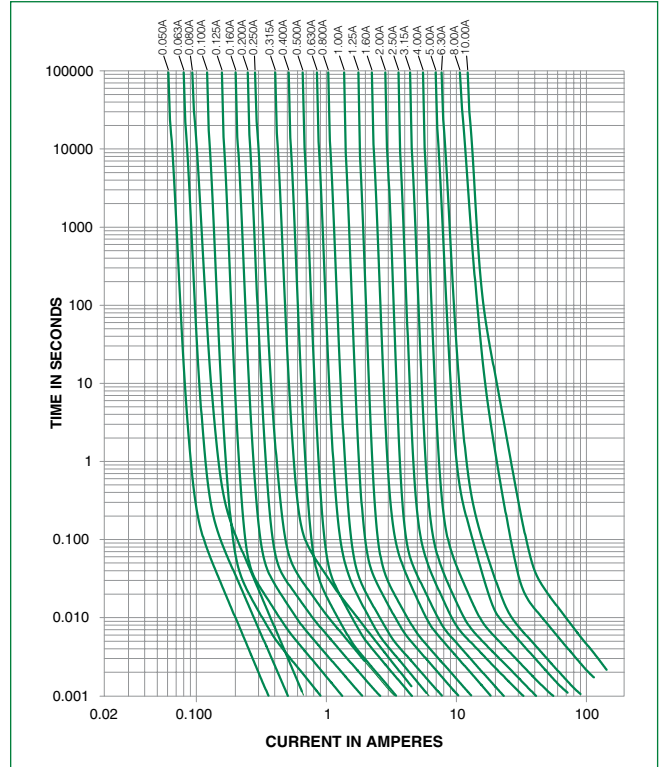
TR5® Fuse, Fast Acting

Temperature Re-rating Curve

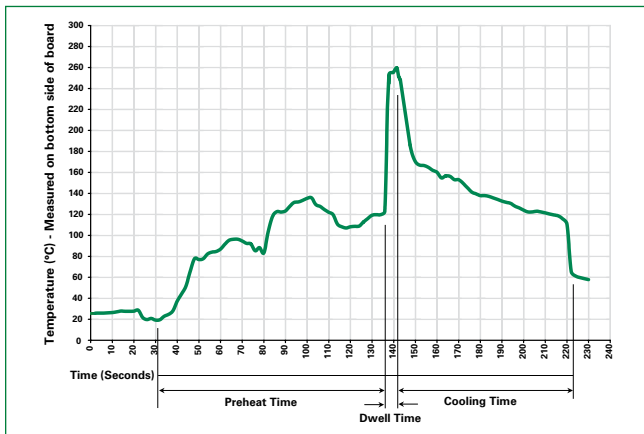


Note: 1. Rerating depicted in this curve is in addition to the standard derating of 25% for continuous operation.

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: | 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.

373 Series

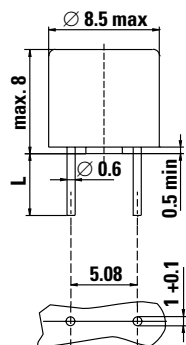
TR5® Fuse, Fast Acting

Product Characteristics

| | |
|----------------------------------|--|
| Materials | Base/Cap: Brown Thermoplastic Polyamide PA 6.6, UL 94 V-0 Round Pins: Copper, Tin-plated |
| Lead Pull Strength | 10 N (IEC 60068-2-21) |
| 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 +85°C (consider de-rating) |
| Climatic Category | -40°C/+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 for 30 days-95% 24 cycles at 15 min. each (IEC 60068-2-6) |
| Vibration Resistance | 10 - 60 Hz at 0.75 mm amplitude 60 - 2000 Hz at 10G's acceleration |

Dimensions

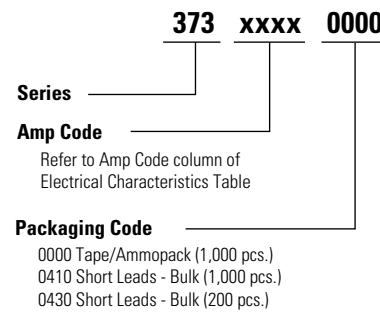


Holes in PCB

Long Leads (L=18.8mm ± 0.3 mm)

Short Leads (L=4.3mm ± 0.3 mm)

Part Numbering System



Packaging

| Packaging Option | Packaging Specification | Quantity | Quantity & Packaging Code | Taping Width |
|-------------------|-------------------------|----------|---------------------------|--------------|
| 373 Series | | | | |
| Tape & Ampopack | N/A | 1,000 | 0000 | N/A |
| Short Leads | N/A | 1,000 | 0410 | N/A |
| Short Leads | N/A | 200 | 0430 | N/A |

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