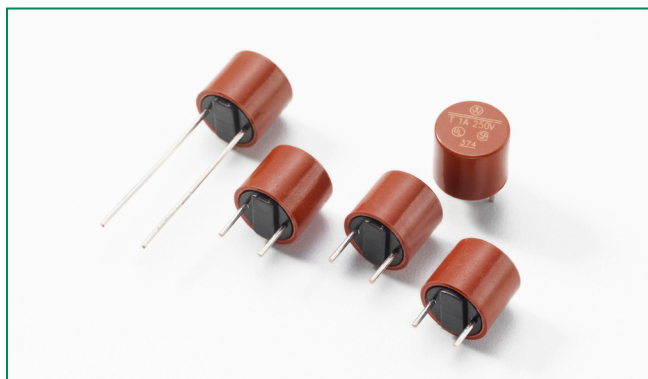




Radial Lead Fuses

TR5® > Time-Lag Fuse > 374 Series

374 Series, TR5 Fuse, Time Lag



Agency Approvals

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

Description

The TR5® 374 Series fuses are Time-Lag 250V rated and designed in accordance to UL 248-14.

Features

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

Applications

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

Electrical Characteristics

| % of Ampere Rating | Opening Time |
|--------------------|--------------|
| 200% | 60 Seconds, |

Additional Information



[Datasheet](#)



[Resources](#)



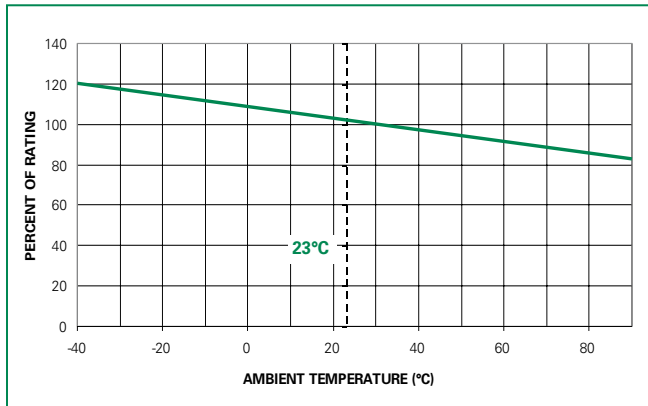
[Samples](#)

Electrical Characteristics

| Amp Code | Rated Current | Voltage Rating | Breaking Capacity | Nominal Cold Resistance (Ohms) | Voltage Drop $1.0 \times I_N$ max. (mV) | Power Dissipation $1.0 \times I_N$ max. (mW) | Melting Integral $10 \times I_N$ min. (A ² s) | Agency Approvals | |
|----------|---------------|----------------|-------------------|--------------------------------|-----------------------------------------|----------------------------------------------|----------------------------------------------------------|------------------|--------|
| | | | | | | | | SP® | cUL US |
| 0050 | 50mA | 250V | 50A@250VAC | 12.5000 | 900 | 45 | 0.011 | x | x |
| 0063 | 63mA | 250V | | 7.9200 | 800 | 50 | 0.015 | x | x |
| 0080 | 80mA | 250V | | 5.8500 | 700 | 55 | 0.025 | x | x |
| 0100 | 100mA | 250V | | 3.8400 | 600 | 60 | 0.039 | x | x |
| 0125 | 125mA | 250V | | 2.9000 | 550 | 70 | 0.052 | x | x |
| 0160 | 160mA | 250V | | 1.8300 | 480 | 80 | 0.083 | x | x |
| 0200 | 200mA | 250V | | 1.2000 | 390 | 80 | 0.146 | x | x |
| 0250 | 250mA | 250V | | 0.7600 | 350 | 90 | 0.313 | x | x |
| 0315 | 315mA | 250V | | 0.5450 | 300 | 95 | 0.298 | x | x |
| 0400 | 400mA | 250V | | 0.3510 | 250 | 100 | 0.552 | x | x |
| 0500 | 500mA | 250V | | 0.2600 | 220 | 110 | 0.875 | x | x |
| 0630 | 630mA | 250V | | 0.1700 | 210 | 135 | 1.191 | x | x |
| 0800 | 800mA | 250V | | 0.1250 | 160 | 130 | 2.112 | x | x |
| 1100 | 1.00A | 250V | | 0.1050 | 155 | 155 | 3.100 | x | x |
| 1125 | 1.25A | 250V | | 0.0800 | 145 | 185 | 4.453 | x | x |
| 1160 | 1.60A | 250V | | 0.0540 | 130 | 210 | 6.272 | x | x |
| 1200 | 2.00A | 250V | | 0.0395 | 125 | 250 | 11.800 | x | x |
| 1250 | 2.50A | 250V | | 0.0300 | 120 | 300 | 18.125 | x | x |
| 1315 | 3.15A | 250V | | 0.0227 | 110 | 350 | 29.966 | x | x |
| 1400 | 4.00A | 250V | | 0.0170 | 100 | 400 | 56.000 | x | x |
| 1500 | 5.00A | 250V | | 0.0122 | 95 | 475 | 87.500 | x | x |
| 1630 | 6.30A | 250V | 0.0094 | 90 | 570 | 144.869 | x | x | |
| 1800 | 8.00A | 250V | 0.0060 | 80 | 1000 | 220.800 | | x | |
| 2100 | 10.00A | 250V | 0.0050 | 90 | 1250 | 430.000 | | x | |

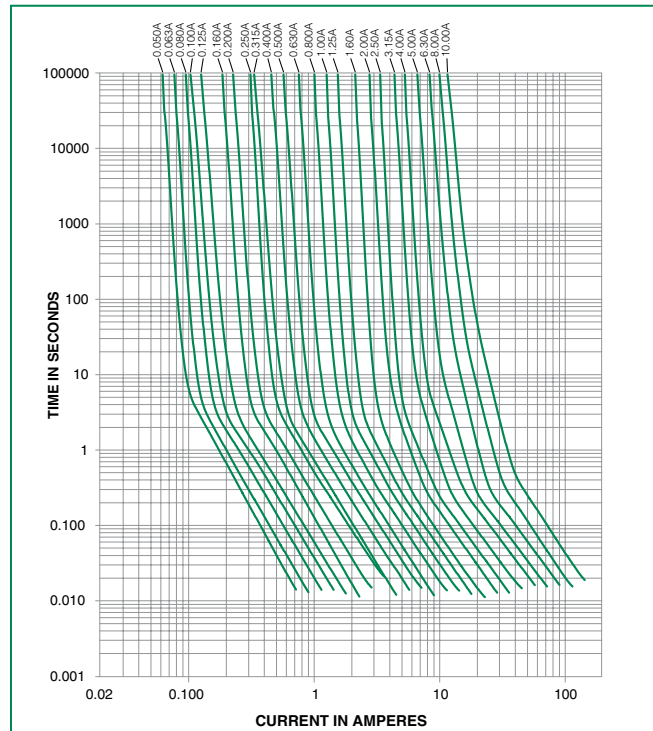
Notes:
 1) 1.00 means the number one with two decimal places. 1,000 means the number one thousand.
 2) Resistance is measured at 10% of rated current, 25°C.

Temperature Re-rating Curve

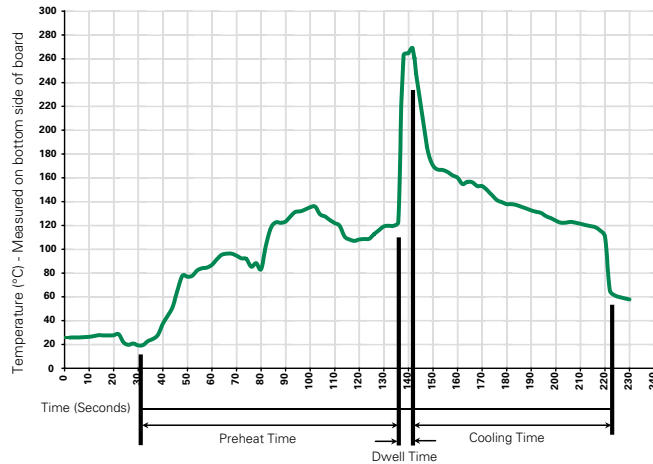


Note:
 1. Rerating depicted in this curve is in addition to the standard derating of 25% for continuous operation.

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.

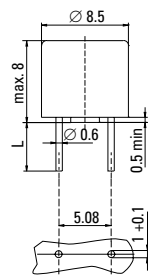
Note: These devices are not recommended for IR or Convection Reflow process.

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 (IEC 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% |
| Vibration Resistance | 24 cycles at 15 min. each (IEC 60068-2-6) 10 - 60 Hz at 0.75 mm amplitude 60 - 2000 Hz at 10G's acceleration |

Dimensions



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

Part Numbering System

| | | | |
|-----------------------|---------------------------------------------------------------------------------------------------------------|-------------|-------------|
| | 374 | xxxx | 0000 |
| Series | | | |
| Amp Code | | | |
| | Refer to Amp Code column of Electrical Characteristics Table | | |
| Packaging Code | | | |
| | 0000 Tape/Ampopack (1,000 pcs.) 0410 Short Leads - Bulk (1,000 pcs.) 0430 Short Leads - Bulk (200 pcs.) | | |

Packaging

| Packaging Option | Packaging Specification | Quantity | Quantity & Packaging Code | Taping Width |
|-------------------|-------------------------|----------|---------------------------|--------------|
| 374 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 |