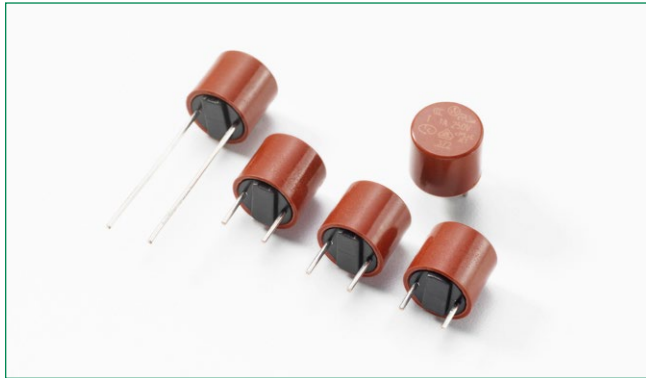


372 Series, TR5 Fuse, Time Lag









Description

The 372 Series are TR5® Fuses, Time-Lag type, 250V rated fuses, that are designed in accordance to IEC 60127-3.

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 0.040A to 6.3A

Agency Approvals

| Agency | Agency File Number | Ampere Range |
|---|--|--|
|  | 97187 116448 | 0.050A - 4A 5A - 6.3A |
|  | JET1896-31007-2002 | 1A - 5A |
|  | 1410865 | 0.050A - 6.3A |
|  | E67006 | 0.040A - 6.3A |
|  | SU05024-7010 SU05024-7011 SU05024-7006 SU05024-7007 SU05024-7008 SU05024-7009 SU05024-7012 | 0.050 - 0.100A 0.125 - 0.800A 1A - 2.5A 3.15A 4A 5A 6.3A |
|  | 2007010207240346 | 0.040A - 6.3A |

Applications

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

Electrical Characteristics

| % of Ampere Rating | Opening Time |
|--------------------|--|
| 150% | 1 Hour, Min. |
| 210% | 2 Minutes, Max. |
| 275% | 400 ms, Min. ; 10 Sec., Max. |
| 400% | 150 ms, Min. ; 3 Sec., Max. |
| 1000% | 20 ms, Min. ; 150 ms, Max. |

Additional Information



Datasheet



Resources



Samples

Electrical Characteristics

| Amp Code | Rated Current | Voltage Rating | Breaking Capacity | Nominal Cold Resistance (Ohms) | Voltage Drop 1.0xI _N max. (mV) | Power Dissipation 1.5xI _N max. (mW) | Melting Integral 10xI _N min. (A ² s) | Agency Approvals | | | | | | |
|----------|---------------|----------------|-------------------|--------------------------------|---|--|--|------------------|---|---|---|---|---|---|
| | | | | | | | | | | | | | | |
| 0040 | 40mA | 250V | 35A@250VAC | 10.1650 | 900 | 90 | 0.0090 | | | X | | | | |
| 0050 | 50mA | 250V | | 6.4950 | 500 | 70 | 0.0108 | X | X | X | | | X | X |
| 0063 | 63mA | 250V | | 3.8000 | 400 | 80 | 0.0278 | X | X | X | | | X | X |
| 0080 | 80mA | 250V | | 2.8750 | 370 | 100 | 0.0384 | X | X | X | | | X | X |
| 0100 | 100mA | 250V | | 1.7030 | 300 | 110 | 0.0800 | X | X | X | | | X | X |
| 0125 | 125mA | 250V | | 1.3500 | 260 | 120 | 0.1094 | X | X | X | | | X | X |
| 0160 | 160mA | 250V | | 0.7780 | 200 | 130 | 0.1792 | X | X | X | | | X | X |
| 0200 | 200mA | 250V | | 0.5750 | 170 | 140 | 0.3120 | X | X | X | | | X | X |
| 0250 | 250mA | 250V | | 0.4000 | 150 | 150 | 0.4938 | X | X | X | | | X | X |
| 0315 | 315mA | 250V | | 0.2760 | 140 | 160 | 0.3969 | X | X | X | | | X | X |
| 0400 | 400mA | 250V | | 0.2050 | 130 | 170 | 1.4080 | X | X | X | | | X | X |
| 0500 | 500mA | 250V | | 0.1550 | 125 | 180 | 2.0000 | X | X | X | | | X | X |
| 0630 | 630mA | 250V | | 0.1150 | 120 | 200 | 3.0958 | X | X | X | | | X | X |
| 0800 | 800mA | 250V | | 0.1000 | 110 | 220 | 5.7600 | X | X | X | | | X | X |
| 1100 | 1.00A | 250V | | 0.0790 | 110 | 360 | 7.5000 | X | X | X | X | | X | X |
| 1125 | 1.25A | 250V | | 0.0550 | 95 | 450 | 13.7500 | X | X | X | X | | X | X |
| 1160 | 1.60A | 250V | | 0.0420 | 95 | 450 | 19.9680 | X | X | X | X | | X | X |
| 1200 | 2.00A | 250V | | 0.0300 | 85 | 600 | 30.0000 | X | X | X | X | | X | X |
| 1250 | 2.50A | 250V | | 0.0220 | 80 | 700 | 35.0000 | X | X | X | X | | X | X |
| 1315 | 3.15A | 250V | | 0.0173 | 80 | 1100 | 77.3955 | X | X | X | X | | X | X |
| 1400 | 4.00A | 250V | 0.0129 | 75 | 1200 | 126.4000 | X | X | X | X | | X | X | |
| 1500 | 5.00A | 250V | 0.0094 | 80 | 1300 | 115.0000 | X | X | X | X | | X | X | |
| 1630 | 6.30A* | 250V | 0.0070 | 58 | 1250 | 138.9150 | X | X | X | X | | X | X | |

1 Per UL, approved breaking capacity is 50 A at 250 V.

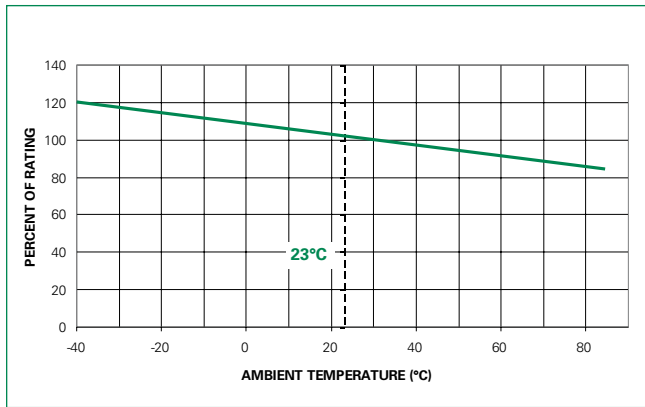
* Conducting path min. 0.2 mm²

Notes:

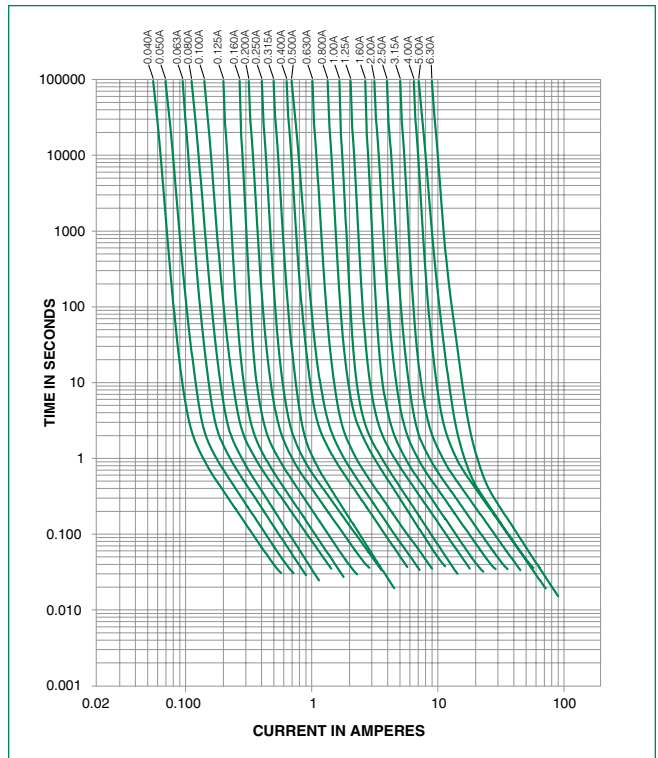
1) 1.00 means the number one with two decimal places. 1,000 means the number one thousand.

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

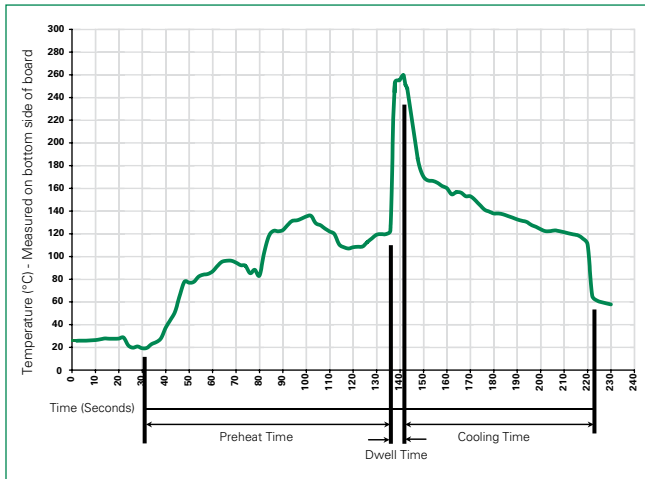
Temperature Re-rating Curve



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:

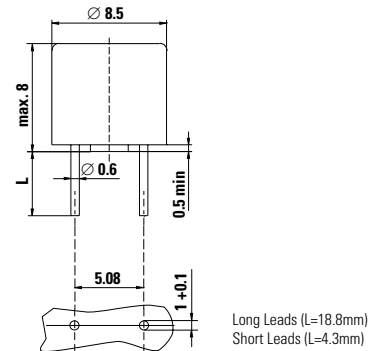
Solder Iron Temperature: 350°C +/- 5°C
Heating Time: 5 seconds max.

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 re-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



Packaging

| Packaging Option | Packaging Specification | Quantity | Quantity & Packaging Code | Taping Width |
|-------------------|-------------------------|----------|---------------------------|--------------|
| 372 Series | | | | |
| Tape & Ammopack | N/A | 1,000 | 0001 | N/A |
| Short Leads | N/A | 1,000 | 0411 | N/A |
| Short Leads | N/A | 200 | 0431 | N/A |
| 3.3mm Leads | N/A | 1,000 | 0511 | N/A |

Part Numbering System

