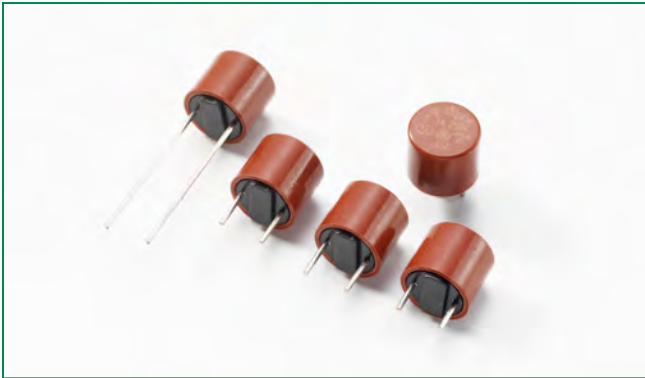


372 Series, TR5®, Time-Lag Fuse



Description

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

Features

- Lead-free
- Reduced PCB space requirements
- Direct solderable or plug-in versions
- Internationally approved
- Low internal resistance
- Shock safe casing
- Vibration resistant
- Halogen free
- Available from 40mA to 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. |

Agency Approvals

| Agency | Agency File Number | Ampere Range |
|--------|--|---|
| | 5007679-1170-0003/82447 | 50mA - 4A |
| | 5007679-1170-0004/82452 | 5A - 6.3A |
| | JET1896-31007-2002 | 1A - 5A |
| | 1010253 | 50mA - 6.3A |
| | E67006 | 40mA - 6.3A |
| | SU05024-7010 SU05024-7011 SU05024-7006 SU05024-7007 SU05024-7008 SU05024-7009 SU05024-7012 | 50mA - 100mA 125mA - 800mA 1A - 2.5A 3.15A 4A 5A 6.3A |
| | CQC07012021162 | 5A - 6.3A |
| | 2007010207240346 | 40mA - 4A |

Additional Information



Datasheet









Resources



Samples

Electrical Characteristics

| Amp Code | Rated Current | Voltage Rating | Breaking Capacity | Voltage Drop $1.0 \times I_N$ max. (mV) | Power Dissipation $1.5 \times I_N$ max. (mW) | Melting Integral $10 \times I_N$ min. (A ² s) | Agency Approvals | | | | | | |
|----------|---------------|----------------|---|---|--|--|---|---|---|---|---|---|--|
| | | | | | | |  |  |  |  |  |  | |
| 0040 | 40mA | 250V | 35A/250VAC ¹ 50-60 Hz cos φ = 1.0 | 900 | 90 | 0.009 | | | X | | | | |
| 0050 | 50mA | 250V | | 500 | 70 | 0.01 | X | X | X | | X | X | |
| 0063 | 63mA | 250V | | 400 | 80 | 0.02 | X | X | X | | X | X | |
| 0080 | 80mA | 250V | | 370 | 100 | 0.023 | X | X | X | | X | X | |
| 0100 | 100mA | 250V | | 300 | 110 | 0.047 | X | X | X | | X | X | |
| 0125 | 125mA | 250V | | 260 | 120 | 0.066 | X | X | X | | X | X | |
| 0160 | 160mA | 250V | | 200 | 130 | 0.14 | X | X | X | | X | X | |
| 0200 | 200mA | 250V | | 170 | 140 | 0.20 | X | X | X | | X | X | |
| 0250 | 250mA | 250V | | 150 | 150 | 0.28 | X | X | X | | X | X | |
| 0315 | 315mA | 250V | | 140 | 160 | 0.36 | X | X | X | | X | X | |
| 0400 | 400mA | 250V | | 130 | 170 | 0.9 | X | X | X | | X | X | |
| 0500 | 500mA | 250V | | 125 | 180 | 1.3 | X | X | X | | X | X | |
| 0630 | 630mA | 250V | | 120 | 200 | 2.5 | X | X | X | | X | X | |
| 0800 | 800mA | 250V | | 110 | 220 | 3.8 | X | X | X | | X | X | |
| 1100 | 1.00A | 250V | | 110 | 360 | 5.5 | X | X | X | X | X | X | |
| 1125 | 1.25A | 250V | | 95 | 450 | 9 | X | X | X | X | X | X | |
| 1160 | 1.60A | 250V | | 95 | 450 | 14 | X | X | X | X | X | X | |
| 1200 | 2.00A | 250V | | 85 | 600 | 23 | X | X | X | X | X | X | |
| 1250 | 2.50A | 250V | | 80 | 700 | 35 | X | X | X | X | X | X | |
| 1315 | 3.15A | 250V | | 80 | 1100 | 60 | X | X | X | X | X | X | |
| 1400 | 4.00A | 250V | 40A / 250 VAC | 75 | 1200 | 95 | X | X | X | X | X | | |
| 1500 | 5.00A | 250V | 50A / 250 VAC | 80 | 1300 | 94 | G | X | X | X | CQC | X | |
| 1630 | 6.30A* | 250V | | 58 | 1250 | 105 | G | X | X | | CQC | X | |

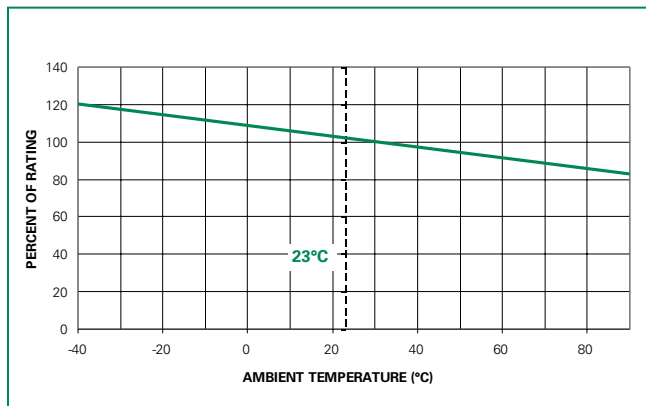
¹ Per UL, approved breaking capacity is 50 A at 250 V.

* Conducting path min. 0.2 mm²

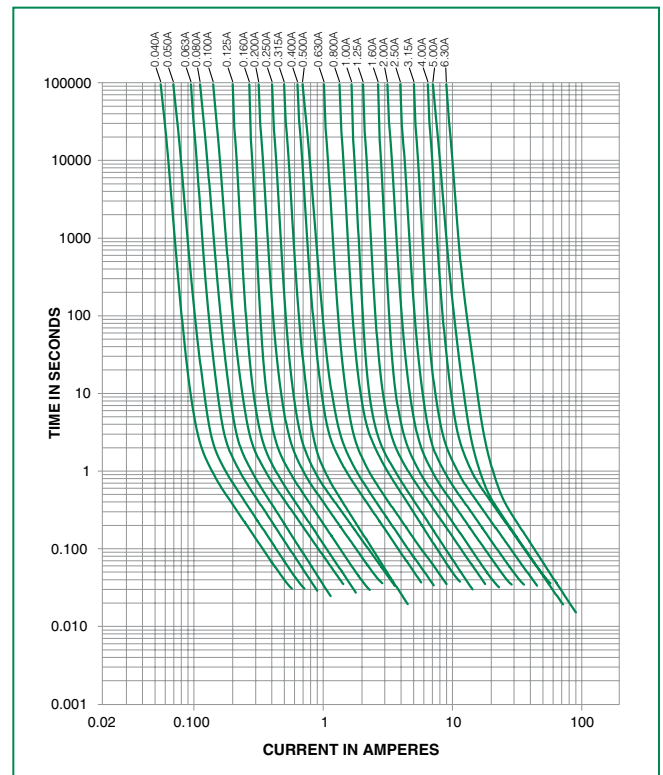
G = Expert Report

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

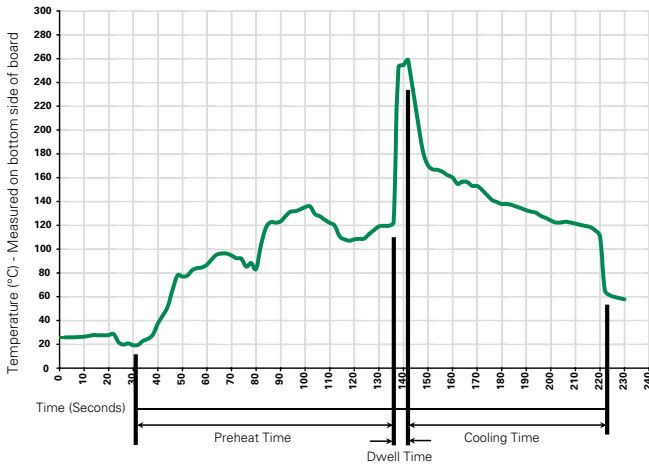
Temperature Derating Curve



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:

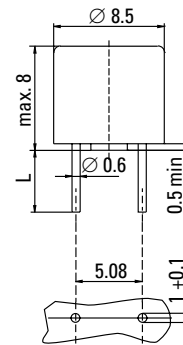
Solder Iron Temperature: 350° C +/- 5° C
Heating Time: 5 seconds max.

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 (EN 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 (EN 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)

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

