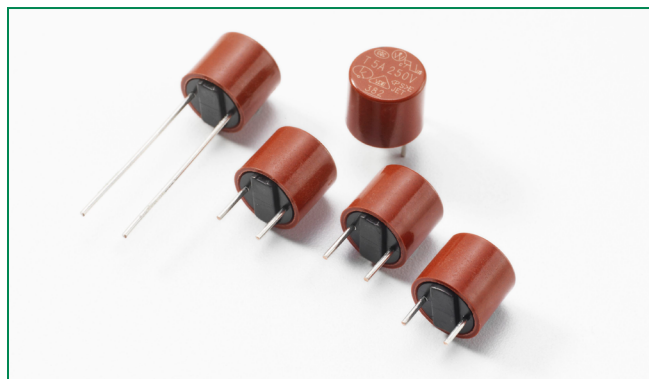










382 Series, TR5®, Time-Lag Fuse



Agency Approvals

| Agency | Agency File Number | Ampere Range |
|---|--|--------------|
|  | 5007679-1170-0038/82455 | 1A - 4A |
|  | License number: 5007679-1170-0006/82571 | 5A - 6.3A |
|  | Certification: 1026674 | 1A - 6.3A |
|  | File number: E 67006 | 1A - 10A |
|  | JET1896-31007-2001 JET1896-31007-1003 | 1A - 10A |
|  | 2007010207240344 | 1A - 4A |
|  | CQC07012021162 | 5A - 6.3A |
|  | SU05024-7003 SU05024-7002 SU05024-7001 SU05024-7004 SU05024-7005 | 1A - 6.3A |

Description

The 382 Series are TR5®, time-Lag type, 250V rated fuses, with enhanced breaking capacity designed in accordance to IEC 60127-3.

Features

- Lead-free
- Reduced PCB space requirements
- Direct solderable or plug-in versions
- 100A breaking capacity
- Internationally approved
- Low internal resistance
- Shock safe casing
- Vibration resistant
- Halogen free
- Available from 1A to 10A

Applications

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

Electrical Characteristics

| % of Ampere Rating | Opening Time | |
|--------------------|---|--|
| | 1A - 6.3A | 8A - 10A |
| 150% | 1 Hour, Min. | 1 Hour, Min. |
| 210% | 2 Minutes, Max. | 300 s, Max. |
| 275% | 400 ms, Min. ; 10 Sec., Max. | 1 s, Min. ; 20 s, Max. |
| 400% | 150 ms, Min. ; 3 Sec., Max. | 150 ms, Min. ; 3 Sec., Max. |
| 1000% | 20 ms, Min. ; 150 ms, Max. | 20 ms, Min. ; 150 ms, Max. |

Additional Information



Datasheet



Resources



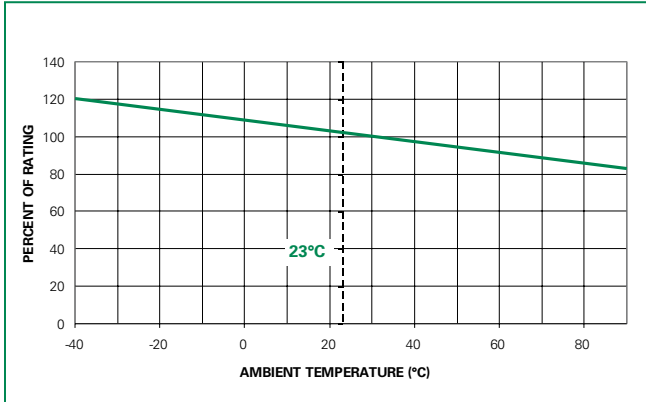
Samples

Electrical Characteristics

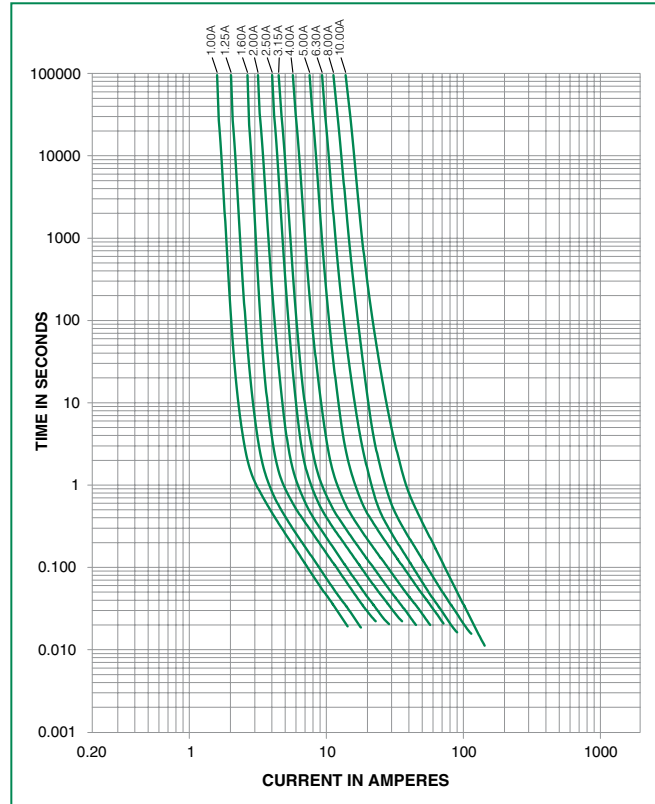
| Amp Code | Rated Current | Voltage Rating | Breaking Capacity | Voltage Drop 1.0xI _N max. (mV) | Power Dissipation 1.5xI _N max. (mW) | Melting Integral 10xI _N min. (A²s) | Agency Approvals | | | | | |
|----------|---------------|----------------|---|---|---|--|------------------|---|---|---|-----|---|
| | | | | | | | | | | | | |
| 1100 | 1.00 A | 250 V | 100A / 250VAC 50-60 Hz cos φ = 1.0 | 100 | 400 | 3.0 | X | X | X | X | X | X |
| 1125 | 1.25 A | 250 V | | 95 | 465 | 4.5 | X | X | X | X | X | X |
| 1160 | 1.60 A | 250 V | | 90 | 490 | 9.0 | X | X | X | X | X | X |
| 1200 | 2.00 A | 250 V | | 85 | 670 | 12 | X | X | X | X | X | X |
| 1250 | 2.50 A | 250 V | | 80 | 750 | 22 | X | X | X | X | X | X |
| 1315 | 3.15 A | 250 V | | 75 | 900 | 32 | X | X | X | X | X | X |
| 1400 | 4.00 A | 250 V | | 70 | 1200 | 58 | X | X | X | X | X | X |
| 1500 | 5.00 A | 250 V | | 65 | 1250 | 90 | G | X | X | X | QCC | X |
| 1630 | 6.30 A | 250 V | | 65 | 1400 | 105 | G | X | X | X | QCC | X |
| 1800 | 8.00 A | 250 V | | 63 | 1600 | 180 | | | X | X | | |
| 2100 | 10.00 A | 250 V | | 57 | 1600 | 260 | | | X | X | | |

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

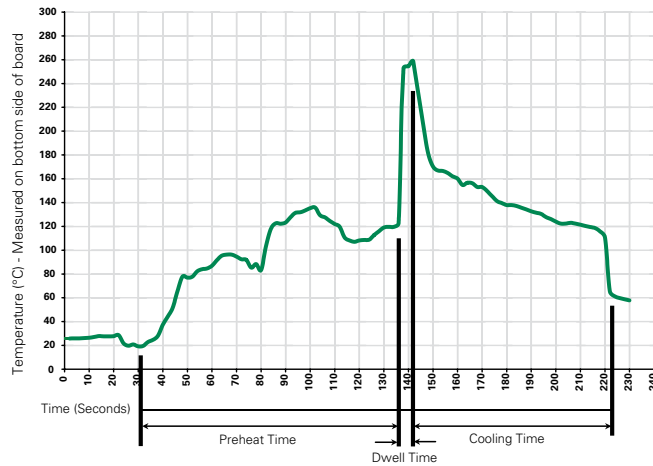
Temperature Derating Curve



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.

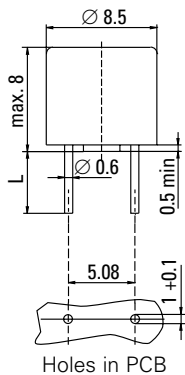
Note: These devices are not recommended for IR or Convection Reflow process.

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) |

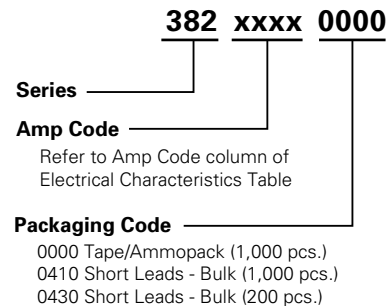
| | |
|------------------------------|---|
| Operating Temperature | -40°C to +85°C (consider de-rating) |
| Climatic Category | -40°C to +85°C /21 days (EN 60068-1,-2-1,-2-2,-2-78) |
| Stock Conditions | +10°C to +60°C RH ≤ 75% yearly average, without dew, maximum value for 30 days-95% |
| Vibration Resistance | 24 cycles at 15 min. each (EN 60068-2-6) 10 - 60 Hz at 0.75 mm amplitude 60 - 2000 Hz at 10 g acceleration |

Dimensions



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

Part Numbering System



Packaging

| Packaging Option | Packaging Specification | Quantity | Quantity & Packaging Code | Taping Width |
|-------------------|-------------------------|----------|---------------------------|--------------|
| 382 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 |