

459 Series PICO® Very Fast-Acting Surface Mount Fuse



Description

The 459 Series Very Fast-Acting SMF Fuse is based on Littelfuse PICO® fuse technology, though offered in a surface mount package.

This series of devices meets the requirements of the RoHS directive.




Features

- Very Fast-Acting
- Wide current rating range: 62mA to 5A
- Wide operating temperature range
- Low temperature re-rating
- RoHS compliant

Applications

- Wireless basestation
- Network equipment
- Telecom equipment

Agency Approvals

| AGENCY | AGENCY FILE NUMBER | AMPERE RANGE |
|---|--------------------|--------------|
|  | E10480 | 0.062 - 5A |
|  | 29862 | 0.125 - 5A |
|  | NBK030205-E10480B | 1A - 5A |

Electrical Characteristics for Series

| % of Ampere Rating | Opening Time |
|--------------------|---------------------|
| 100% | 4 hours, Minimum |
| 200% | 1 second, Maximum |
| 300% | 0.1 second, Maximum |

Additional Information



Datasheet






Resources

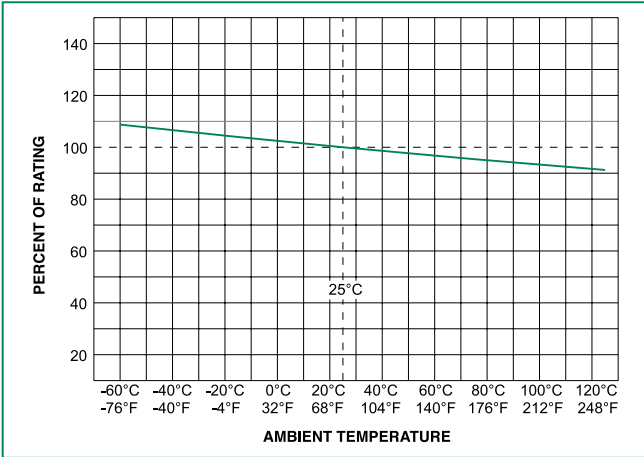


Samples

Electrical Specifications by Item

| Ampere Rating (A) | Amp Code | Max Voltage Rating (V) | Interrupting Rating | Nominal Cold Resistance (Ohms) | Nominal Melting I ² t (A ² sec) | Agency Approvals | | |
|-------------------|----------|------------------------|---------------------------------|--------------------------------|---|---|---|---|
| | | | | | |  |  |  |
| 0.062 | .062 | 125 | 50 A @125 VAC 300 A @125 VDC | 7.0000 | 0.000075 | x | | |
| 0.125 | .125 | 125 | | 1.7000 | 0.00163 | x | x | |
| 0.250 | .250 | 125 | | 0.6650 | 0.0106 | x | x | |
| 0.375 | .375 | 125 | | 0.3950 | 0.0254 | x | x | |
| 0.500 | .500 | 125 | | 0.3020 | 0.0546 | x | x | |
| 0.750 | .750 | 125 | | 0.1750 | 0.155 | x | x | |
| 1.00 | 001. | 125 | | 0.1280 | 0.281 | x | x | x |
| 1.50 | 01.5 | 125 | | 0.0816 | 0.650 | x | x | x |
| 2.00 | 002. | 125 | | 0.0468 | 0.421 | x | x | x |
| 2.50 | 02.5 | 125 | | 0.0350 | 0.721 | x | x | x |
| 3.00 | 003. | 125 | | 0.0290 | 1.23 | x | x | x |
| 3.50 | 03.5 | 125 | | 0.0233 | 1.65 | x | x | x |
| 4.00 | 004. | 125 | | 0.0197 | 2.35 | x | x | x |
| 5.00 | 005. | 125 | | 0.0151 | 3.90 | x | x | x |

Temperature Re-rating Curve



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

Soldering Parameters

| | |
|------------------|------------------------|
| Wave Soldering | 260°C, 10 seconds max. |
| Reflow Soldering | 260°C, 30 seconds max. |

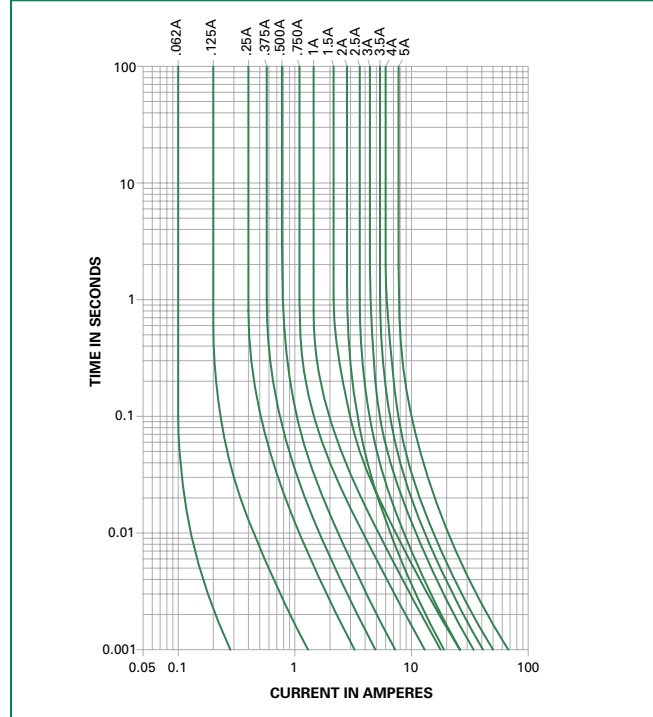
Product Characteristics

| | |
|--|---|
| Materials | Body: Molded Thermoplastic Terminations: 100% Tin-plated Copper |
| Solderability | MIL-STD-202, Method 208 |
| Product Marking | Body: Brand Logo, Current Rating, Voltage Rating, Series Code, Date Code, Agency Approved Logo |
| Moisture Sensitivity | Level 1 J-STD - 020 |
| Operating Temp. | -55°C to 125°C (Consider re-rating) |
| Shock | MIL-STD-202, Method 213, Test Condition I (100 G's peak for 6 msecs.) |
| Vibration | MIL-STD-202, Method 201 (10-55 Hz, 0.06 inch total excursion) |
| Salt Spray | MIL-STD-202, Method 101, Test Condition B (48 hours) |
| Insulation Resistance (After Opening) | MIL-STD-202, Method 302, (10,000 ohms minimum at 100 volts) |
| Thermal Shock | MIL-STD-202, Method 107, Test Condition B (-65 to 125°C) |
| Moisture Resistance | MIL-STD-202, Method 106, High Humidity (90-98 RH), Heat (65°C) |

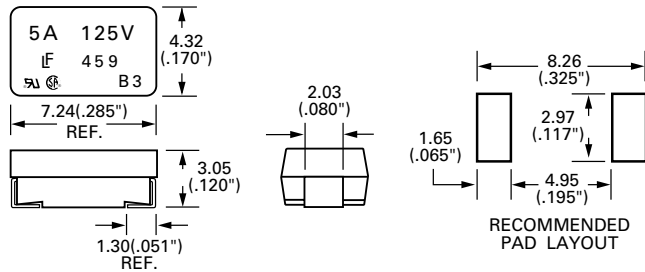
Packaging

| Packaging Option | Packaging Specification | Quantity | Quantity & Packaging Code |
|--------------------|--------------------------------|----------|---------------------------|
| 12mm Tape and Reel | EIA RS-481-1 (IEC 286, part 3) | 500 | UR |
| | | 2500 | ER |

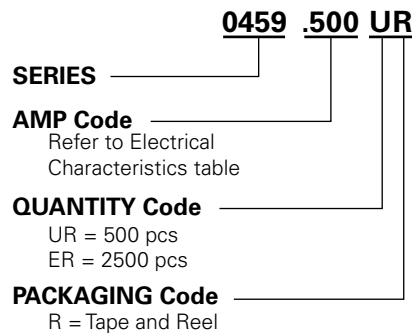
Average Time Current Curves



Dimensions



Part Numbering System



Example:
0.62 Amp product is 0459 .062 UR (.5 Amp product shown above).