ROHS **316 Series** PICO[®]II, Very Fast-Acting Fuse

ittelfuse

Expertise Applied | Answers Delivered



| Agency Approvals | | | |
|------------------|--------------------|--------------|--|
| Agency | Agency File Number | Ampere Range | |
| | 2007010207241295 | 0.50mA-5A | |

Electrical Characteristics

| % of Ampere Rating | OpeningTime | |
|--------------------|----------------------------|--|
| 100% | 4 Hours, Min. | |
| 200% | 5 Seconds, Max. | |
| 275% | 0.30 Seconds, Max. | |
| 400% | 0.03 Seconds, Max. | |
| 1000% | 0.004 Seconds, Max. | |

de

The 316 Series PICO[®] II Very Fast-Acting Fuse is designed to meet an extensive array of performance characteristics in a space-saving subminiature package while complying with the requirements of CCC.

Features

Description

- CCC certified Axial Lead and Cartridge Fuse
- Fully compatible with Lead–free solder alloys and higher temperature profiles associated with Lead–free assembly
- RoHS compliant
- Available in ratings of 0.50A, 1.00A, 2.00A, 3.15A and 5.00 amperes

 (\mathbf{m})

Applications

Secondary protection for space constrained applications

- Flat-panel Display TV
- LCD monitor
- LCD backlight inverter
- Office machines
- Power supply
- Audio/Video system
- Lighting system
- Medical equipment

Electrical Characteristics

| Ampere Rating (A) | Amp Code | Max Voltage Rating (V) | Interrupting Rating | Nominal Cold Resistance (Ohms) | Nominal Melting I²t (A² sec) | Max Voltage Drop (mV) | Agency Approvals |
|-------------------------|----------|---------------------------------|------------------------------|--------------------------------------|------------------------------------|--------------------------|---------------------|
| 0.50 | .500 | 125 | 50A @ 125VAC 50A @ 125VDC | 0.280 | 0.0598 | 0.202 | Х |
| 1.00 | 001. | 125 | | 0.128 | 0.256 | 0.186 | X |
| 2.00 | 002. | 125 | | 0.0473 | 0.405 | 0.158 | Х |
| 3.15 | 3.15 | 125 | | 0.0290 | 1.190 | 0.160 | X |
| 5.00 | 005. | 125 | | 0.0155 | 4.140 | 0.110 | X |

Notes:

1. Cold resistance measured at less than 10% of rated current at 23°C.

2. Agency Approval Table Key: X=Approved or Certified, P=Pending and Blank=Not Approved

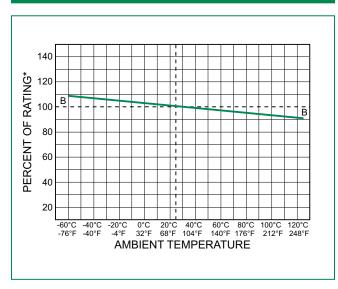
3. Have special electrical characteristic needs? Contact Littelfuse to learn more about application specific options.

Axial Lead & Cartridge Fuses PICO[®] II > Very Fast Acting > 316 Series

Littelfuse Expertise Applied Answers Delivered

Temperature Rerating Curve

Average Time Current Curves



Note:

 Derating depicted in this curve is in addition to the standard derating of 25% for continuous operation.

Soldering Parameters

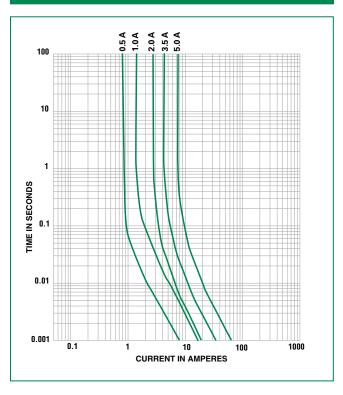
Recommended Process Parameters:

| 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 DwellTime: | 10 Seconds, Maximum | |

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.





Axial Lead & Cartridge Fuses PICO[®] II > Very Fast Acting > 316 Series

Product Characteristics

| Materials | Body: Ceramic Leads: Tin-coated Copper Encapsulated: Epoxy-Coated body | | |
|-----------------|---|--|--|
| Product Marking | Body: Brand Logo, Current Rating Certification mark | | |
| Lead Pull Force | MIL-STD-202, Method 211, Test Condition A (will withstand a 7lbs. axial pull test) | | |
| Solderability | MIL-STD-202, Method 208 | | |

62.7 (2.468") 52.4 (2.062")*

7.11 (.280")

1 a E

front and back markings

(((

27.78 (1.094")

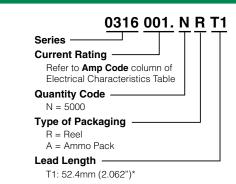
2.80 (.11")

epoxy coating

7/-

| Operating Temperature | -55°C to +125°C with proper de-rating | |
|--------------------------|---|--|
| Shock | MIL-STD-202, Method 213, Test Condition 1 (100G's peak for millisecond) | |
| Vibration | MIL-STD-202F, Method 201A (10-55 Hz); Method 204, Test Condition C | |
| Moisture Resistance | MIL-STD-202, Method 106 | |

Part Numbering System



Packaging

6.35 (.25")

tape

Dimensions

27.78

(1.094")-

0.64 (.025")

7/

5.0 (.197")

| Pac | kaging Option | Packaging Specification | Quantity | Quantity & Packaging Code |
|-----|--|-------------------------|----------|--|
| | 52.4mm (2.062") Axial Lead Reel or Ammo Pack | EIA 296 | 5000 | NAT1 = 5000 Ammo Pack T1 NRT1 = 5000 Tape & Reel T1 |

6.35 (.25") tape

Notes: * T1 dimension is defined as the length of the component between the two tapes. The full component length is 62.7mm (2.468").