# ROHS **316 Series** PICO<sup>®</sup>II, Very Fast-Acting Fuse

ittelfuse

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

## **Electrical Characteristics**

% of Ampere Rating	Opening Time
100%	4 Hours, <b>Min.</b>
200%	5 Seconds, <b>Max.</b>
275%	0.30 Seconds, <b>Max.</b>
400%	0.03 Seconds, <b>Max.</b>
1000%	0.004 Seconds, <b>Max.</b>

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The 316 Series PICO<sup>®</sup> 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

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#### 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	Х
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<sup>®</sup> II > Very Fast Acting > 316 Series

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#### **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<sup>®</sup> 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

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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")

Packaging Option	Packaging Specification	Quantity	Quantity & Packaging Code
*T1: 52.4mm (2.062") Axial Lead Tape and 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").