### RoHS HF 473 Series, PICO<sup>®</sup> II, Slo-Blo<sup>®</sup> Fuse

Littelfuse

Expertise Applied | Answers Delivered

## 



#### **Agency Approvals**

Agency	Agency File Number	Ampere Range
<b>9</b> L°	E10480	375mA - 7A
<b>S</b> ₽₀	LR 29862	375mA - 7A
PSE	JET 1896-31007-1001	1A - 5A

#### Description

The PICO® II Slo-Blo® Fuse combines time-delay performance characteristics with the proven reliability of a PICO® Fuse.

#### Features

- Enhanced inrush withstand
- Small size
- Wide range of current ratings (375mA 7A)
- RoHS compliant
- Applications
- Flat-panel Display TV
- LCD monitor
- Medical equipment

• Halogen-free available

• Wide operating temperature range

• Low temperature de-rating)

- Industrial equipment
- Lighting system

### **Electrical Characteristics**

% of Ampere Rating	OpeningTime	
100%	4 Hours, Min.	
200%	1 Sec., <b>Min.</b> ; 60 Sec., <b>Max.</b>	
300%	0.2 Sec., <b>Min.</b> ; 3 Sec., <b>Max.</b>	
800%	0.02 Sec., Min.; 0.1 Sec., Max.	

#### **Electrical Characteristics**

Ampere		Max Nominal Cold Nominal Nom		Nom	Agency Approvals				
Rating (A)	Amp Code	Voltage Rating (V)	Interrupting Rating	Resistance (Ohms)	Melting I <sup>2</sup> t (A <sup>2</sup> sec)	Voltage Drop (mV)	<b>7</b> .	<b>∰</b> ₀	PS E
0.375	.375	125		1.7400	0.085	0.840	Х	Х	
0.500	.500	125		1.1300	0.210	0.775	Х	Х	
0.750	.750	125		0.4600	0.760	0.429	Х	Х	
1.00	001.	125		0.2670	2.010	0.353	Х	Х	Х
1.50	01.5	125		0.1160	3.940	0.208	Х	Х	Х
2.00	002.	125		0.0712	7.600	0.180	Х	Х	Х
2.25	2.25	125	50 amperes at 125 VDC/ VAC	0.0630	9.280	0.164	Х	Х	X
2.50	02.5	125	VAC	0.0520	13.00	0.153	Х	Х	Х
3.00	003.	125		0.0380	21.00	0.140	Х	Х	Х
3.50	03.5	125		0.0240	26.80	0.094	Х	Х	X
4.00	004.	125		0.0194	35.00	0.086	Х	Х	Х
5.00	005.	125		0.0133	54.80	0.074	Х	Х	Х
7.00	007.	125		0.0092	105.00	0.070	X	Х	

# Cartridge and Axial Lead Fuses PICO<sup>®</sup> II > Slo-Blo<sup>®</sup> > 473 Series



#### **Temperature Rerating Curve**

#### **Average Time Current Curves**



Note:

1. 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:	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.** 





## **Cartridge and Axial Lead Fuses**

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#### **Product Characteristics**

Materials	Encapsulated, Epoxy-Coated Body; Solder Coated Copper wire leads; RoHS compliant Product: Pure Tin-coated Copper wire leads	
Solderability	MIL-STD-202, Method 208	
Lead Pull Force	MIL-STD-202, Method 211, Test Condition A (will withstand 7 lbs. axial pull test)	
Operating Temperature	–55°C to +125°C	
Shock	MIL-STD-202, Method 213, Test Condition I (100 G's peak for 6 milliseconds)	

Vibration	MIL-STD-202, Method 201 (10–55 Hz); MIL-STD-202, Method 204, Test Condition C (55–2000 Hz at 10 G's Peak)	
Salt Spray	MIL-STD-202, Method 101, Test Condition B	
Insulation Resistance (After Opening):	MIL-STD-202, Method 302, (10,000 ohms minimum at 100 volts)	
Resistance to Soldering Heat	MIL-STD-202, Method 210, Test Condition C (20 sec at 260°C)	
Thermal Shock	MIL-STD-202, Method 107, Test Condition B (–65°C to 125°C)	
Moisture Resistance	MIL-STD-202, Method 106 (90–98% RH), Heat (65°C)	

#### **Dimensions**



#### 473 Series (RoHS and Halogen-free Version) Markings



#### Packaging

Packaging Option	Packaging Specification	Quantity & Packaging Code	
*T1: 52.4mm (2.062") Tape and Reel	EIA 296	Please refer to available quantities above in "Part Numbering System"	

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

#### Part Numbering System



- L = RoHS
- HF = RoHS and Halogen-free

