## **Axial Lead & Cartridge Fuses**

PICO<sup>®</sup> II > Time-Lag Fuse > 471 Series



## 471 Series, PICO® II Time-Lag Fuse



#### **Agency Approvals**

Agency	Agency File Number	Ampere Range
<b>91</b> °	E10480	0.500A - 5A
(SP)	29862	0.500A - 2.5A
PSE	JET 1896-31007-1004	1A - 5A

### **Additional Information**







#### Description

The 471 Series PICO® II Time-Lag Fuse is designed for applications that require moderate in-rush withstand and is in a space-saving subminiature package.

#### **Features**

- Moderate in-rush withstand
- Small size
- Wide range of current ratings available (0.500A to 5A)
- RoHS compliant
- Halogen-free available
- Wide operating temperature range
- Low temperature de-rating

#### Applications

- Flat-panel display TV
- LCD monitor
- Lighting systems
- Medical equipments • Industrial equipments

# **Electrical Characteristics**

% of Ampere Rating	OpeningTime
100%	4 Hours, <b>Min</b> .
200%	120 Seconds, <b>Max.</b>

#### **Electrical Characteristics**

A 177 17 0 110		Max		Nominal Cold	Nominal	Age	ncy Appro	ovals
Ampere Rating (A)	Amp Code	Voltage Rating (V)	Interrupting Rating	Resistance (Ohms)	Melting I <sup>2</sup> t (A <sup>2</sup> sec)	<b>7N</b>	<b>()</b>	PSE
.500	.500	125		0.1890	0.159	х	х	
1.00	001.	125		0.0851	0.722	х	х	X
1.50	01.5	125		0.5350	1.610	х	х	Х
2.00	002.	125		0.3850	2.500	х	х	x
2.50	02.5	125	50A@125VAC/DC	0.0300	4.390	х	х	Х
3.00	003.	125		0.0231	6.960	х		X
3.50	03.5	125		0.0180	9.900	х		Х
4.00	004.	125		0.1310	10.600	х		x
5.00	005.	125		0.0084	15.400	х		X

# ROHS HF TA SP. CPS



#### **Temperature Re-rating Curve**



Note: Rerating 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 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.** 

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



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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	
Flammability Rating		
Solderability MIL-STD-202, Method 208		
Lead Pull Force	MIL-STD-202, Method 211, Test Condition A (will withstand a 7 lbs. axial pull test)	

Operating Temperature	-55°C to +125°C (Consider re-rating)	
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); Method 204, Test Condition C (55–2000 Hz at 10 G's Peak)	
Moisture Resistance	MIL-STD-202, Method 106	
Resistance to Soldering Heat	Withstands 60 seconds above 200°C and up to 260°C, maximum	

#### Part Numbering System



### Dimensions



#### 471 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').