ROHS HF 471 Series, PICO[®] II, Time-Lag Fuse

.ittelfuse

Expertise Applied | Answers Delivered





Agency Approvals

Agency	Agency File Number	Ampere Range
91 °	E10480	500mA - 5A
(Sfr)	LR 29862	500mA - 2.5A
PSE	JET 1896-31007-1001	1A - 5A

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 (500mA to 5A)
- RoHS compliant
- Halogen-free available

Medical equipment

Industrial equipment

- Wide operating temperature range
- Low temperature de-rating

Applications

- Flat-panel display TV
- LCD monitor
- Lighting system

Electrical Characteristics

% of Ampere Rating	OpeningTime
100%	4 Hours, Min.
200%	120 Seconds, Max .

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Electrical Characteristics

•		Max Nominal No		Nom	Agency Approvals				
Ampere Rating (A)	Amp Code	Voltage Rating (V)	Interrupting Rating	Cold Resistance (Ohms)	Nominal Melting I²t (A² sec)	Voltage Drop (mV)	71	()	PSE
.500	.500	125	50 amperes at 125 VAC and VDC	0.189	0.159		х	х	
1.00	001.	125		0.085	0.722		X	х	x
1.50	01.5	125		0.054	1.610		х	х	х
2.00	002.	125		0.039	2.500		х	х	x
2.50	02.5	125		0.030	4.390		х	х	х
3.00	003.	125		0.023	6.960		x		x
4.00	004.	125		0.012	10.600		х		х
5.00	005.	125		0.008	15.400		X		x

Axial Lead & Cartridge Fuses PICO[®] II > Time-Lag > 471 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.**





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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	UL 94V-0	
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	
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



Option Codes -

- L = RoHS HF = RoHS and Halogen-free

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").

