471 Series, PICO® II Time-Lag Fuse



Agency Approvals

Agency	Agency File Number	Ampere Range
91	E10480	1A - 5A
(Sft)	29862	0.500A - 5A
PSE	NBK200416-JP1021	1A - 5A

Additional Information



Datasheet





Samples

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

ROHS HF W St.

- Wide operating temperature range
- Low temperature de-rating

• Medical equipments

• Industrial equipments

Applications

• Flat-panel display TV

LCD monitor

Lighting systems

Electrical Characteristics

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

Electrical	Characteristics
Electrical	Characteristics

A		Max			Newsing	Age	ncy Appro	ovals
Ampere Rating (A)	Amp Code	Voltage Rating (V)	Interrupting Rating	Nominal Cold Resistance (Ohms)	Nominal Melting I²t (A² sec)	7 1	()	PSE
.500	.500	125		0.1890	0.159		х	
1.00	001.	125		0.0851	0.722	х	х	х
1.50	01.5	125		0.5350	1.610	х	х	х
2.00	002.	125		0.3850	2.500	х	х	х
2.50	02.5	125	50A@125VAC/DC	0.0300	4.390	х	х	x
3.00	003.	125		0.0231	6.960	х	х	х
3.50	03.5	125		0.0180	9.900	х	х	x
4.00	004.	125		0.1310	10.600	х	x	x
5.00	005.	125		0.0084	15.400	х	x	х

Axial Lead & Cartridge Fuses

PICO[®] II > Time-Lag Fuse > 471 Series



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 PotTemperature:	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





Axial Lead & Cartridge Fuses PICO[®] II > Time-Lag Fuse > 471 Series

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)	
ShockMIL-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 Version) Markings 62.7 (2.468") 52.4 (2.062") 27.78 27.78 (1.094") 7.11 (.280") -(1.094") 2.8 (.110") MAX 0.64 (.025") E 1 A ٦Ŀ 6.35 (.25") 6.35 (.25" 5.0 (.197") tape tape 1 A т

471 Series (RoHS and Halogen-free Version) Markings





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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").

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