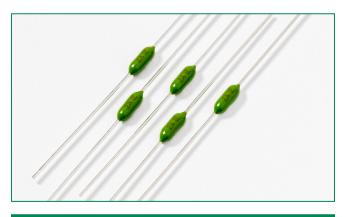
# **Axial Lead & Cartridge Fuses**

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



# 471 Series, PICO® II Time-Lag Fuse



# **Agency Approvals**

Agency	Agency File Number	Ampere Range
<b>91</b> °	E10480	500mA - 5A
(SP)	LR 29862	500mA - 2.5A
PS	JET 1896-31007-1001	1A - 5A

# **Additional Information**







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 (500mA to 5A)
- RoHS compliant
- Halogen-free available
- Wide operating temperature range
- Low temperature de-rating

• Medical equipment

• Industrial equipment

# Applications

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

# **Electrical Characteristics**

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

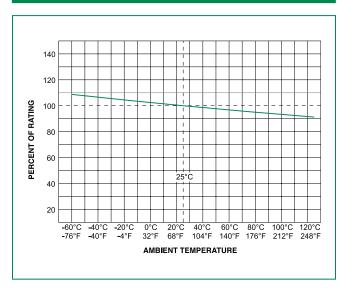
# **Electrical Characteristics**

A		Max			Newsinel	Age	ncy Appro	ovals
Ampere Rating (A)	Amp Code	Voltage Rating (V)	Interrupting Rating	Nominal Cold Resistance (Ohms)	Nominal Melting I²t (A² sec)	<b>7N</b>	<b>()</b>	PS
.500	.500	125		0.189	0.159	х	x	
1.00	001.	125		0.085	0.722	х	x	x
1.50	01.5	125		0.054	1.610	х	x	х
2.00	002.	125		0.039	2.500	х	x	x
2.50	02.5	125	50 amperes at 125 VAC and VDC	0.030	4.390	х	x	Х
3.00	003.	125		0.023	6.960	х		x
3.50	03.5	125		0.018	9.900	х		х
4.00	004.	125		0.012	10.600	х		x
5.00	005.	125		0.008	15.400	х		х

# ROHS HF TU SP. CPS



#### **Temperature Rerating Curve**



Note: 1. Derating depicted in this curve is in addition to the standard derating of 25% for . continuous operation.

#### **Soldering Parameters**

#### **Recommended Process Parameters:**

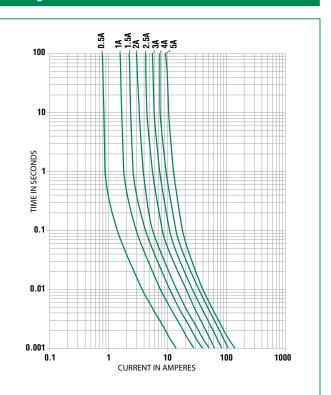
Wave Parameter	Lead-Free Recommendation	
Preheat:		
(Depends on Flux Activation Temperature)	(Typical Industry Recommendation)	
Temperature Minimum:	100° C	
Temperature Maximum:	150° C	
Preheat Time:	60-180 seconds	
Solder Pot Temperature:	260° C Maximum	
Solder Dwell Time:	2-5 seconds	

### **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<sup>®</sup> II > Time-Lag > 471 Series

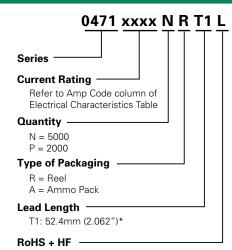


# **Product Characteristics**

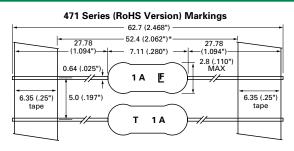
Materials	Encapsulated, Epoxy-Coated Body; Solder Coated Copper wire leads; RoHS compliant Product: Pure Tin-coated Copper wire leads	
Flammability Rating	UL 94V-0	
Solderability	MIL-STD-202, Method 208	
Lead Pull Force	MIL-STD-202, Method 211, Test Condition A (will withstand a 7 lbs. axial pull test)	

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	

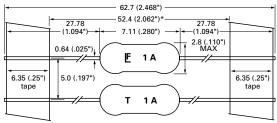
# Part Numbering System



#### 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").

# **Mouser Electronics**

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

Littelfuse:

<u>0471.500MAT1L</u> <u>0471001.MAT1L</u> <u>0471004.MAT1L</u> <u>0471005.MAT1L</u> <u>047101.5MAT1L</u> <u>047102.5MAT1L</u> <u>0471003.MAT1L</u> <u>047103.5MAT1L</u>