

# 471 Series

## PICO® II Time-Lag Fuse



### 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 & Benefits

- 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

### Additional Information



Resources



Accessories



Samples

### Applications

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

### Agency Approvals

Agency	Agency File Number	Ampere Range
	E10480	0.5A - 5A
	29862	0.5A - 5A
	NBK200416-JP1021	1A - 5A
	NA	0.5 - 5A

### Electrical Characteristics

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

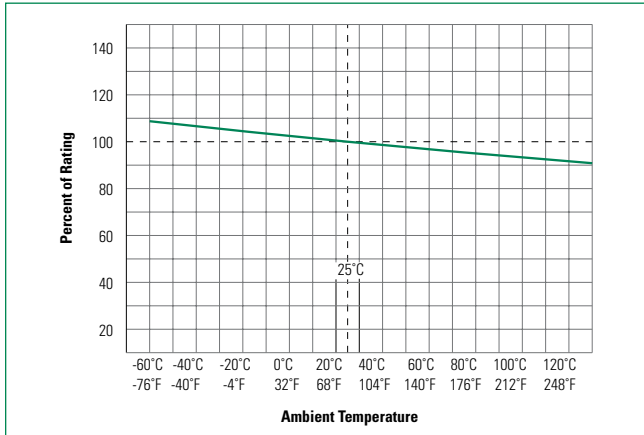
### Electrical Characteristics

Ampere Rating(A)	Amp Code	Max Voltage Rating (V)	Interrupting Rating	Nominal Cold Resistance (Ohms)	Nominal Melting I²t (A² sec)	Agency Approvals			
.500	.500	125	50A@125VAC/DC	0.1890	0.159	-	X	-	X
1.00	001.	125		0.0851	0.722	X	X	X	X
1.50	01.5	125		0.0535	1.610	X	X	X	X
2.00	002.	125		0.0385	2.500	X	X	X	X
2.50	02.5	125		0.0300	4.390	X	X	X	X
3.00	003.	125		0.0231	6.960	X	X	X	X
3.50	03.5	125		0.0180	9.900	X	X	X	X
4.00	004.	125		0.0115	10.600	X	X	X	X
5.00	005.	125		0.0084	15.400	X	X	X	X

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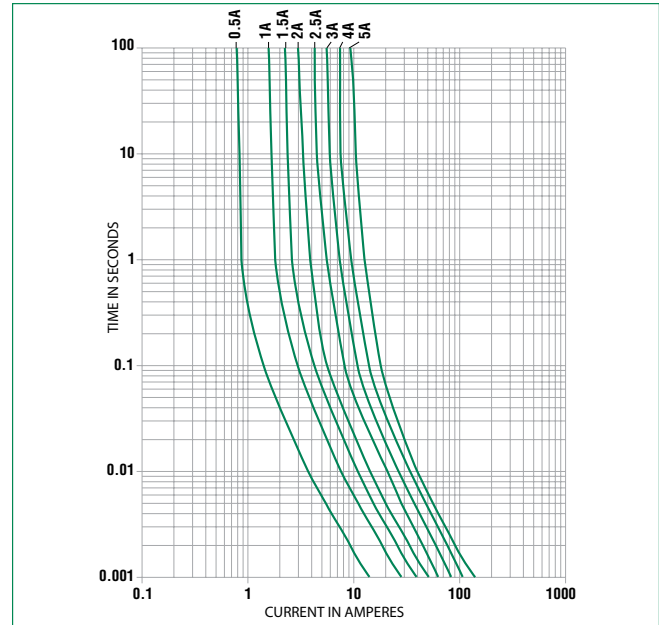
## PICO® II Time-Lag Fuse

**Temperature Re-rating Curve**



**Note:** Re-rating depicted in this curve is in addition to the standard derating of 25% for continuous operation.

**Average Time Current Curves**



### 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.

### Product Characteristics

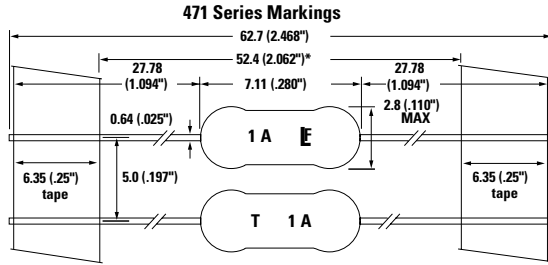
<b>Materials</b>	Encapsulated, Epoxy-Coated Body; Solder Coated Copper wire leads; RoHS compliant Product: Pure Tin-coated Copper wire leads
<b>Flammability Rating</b>	UL 94V-0
<b>Solderability</b>	MIL-STD-202, Method 208
<b>Lead Pull Force</b>	MIL-STD-202, Method 211, Test Condition A (will withstand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

<b>Operating Temperature</b>	-55°C to +125°C (Consider re-rating)
<b>Shock</b>	MIL-STD-202, Method 213, Test Condition I (100 G's peak for 6 milliseconds)
<b>Vibration</b>	MIL-STD-202, Method 201 (10-55 Hz); Method 204, Test Condition C (55-2000 Hz at 10 G's Peak)
<b>Moisture Resistance</b>	MIL-STD-202, Method 106
<b>Resistance to Soldering Heat</b>	Withstands 60 seconds above 200°C and up to 260°C, maximum

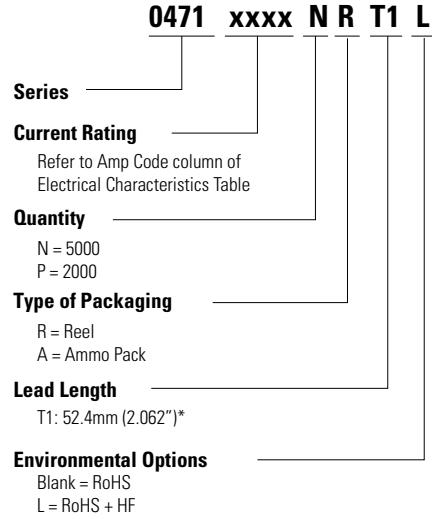
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## PICO® II Time-Lag Fuse

### Dimensions



### Part Numbering System



### 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").

**Disclaimer Notice** - Information furnished is believed to be accurate and reliable. However, users should independently evaluate the suitability of and test each product selected for their own applications. Littelfuse products are not designed for, and may not be used in, all applications. Read complete Disclaimer Notice at: [www.littelfuse.com/disclaimer-electronics](http://www.littelfuse.com/disclaimer-electronics)