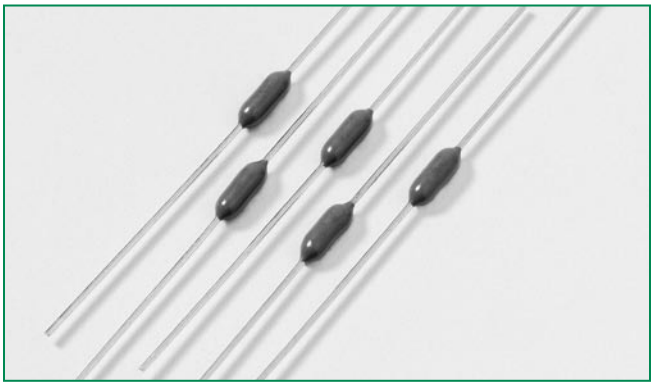
RoHS HF 471 Series, PICO® II, Time-Lag Fuse



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

- 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

Applications

- Flat–panel display TV
- LCD monitor
- Lighting system
- Medical equipment
- Industrial equipment

Agency Approvals

Agency	Agency File Number	Ampere Range
	E10480	500mA - 5A
	LR 29862	500mA - 2.5A
	JET 1896-31007-1001	1A - 5A

Electrical Characteristics

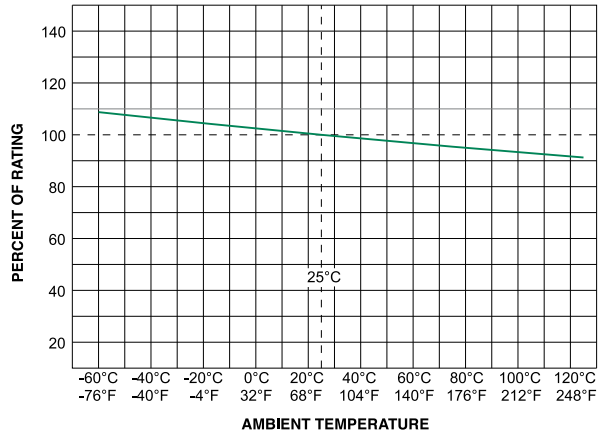
% of Ampere Rating	Opening Time
100%	4 Hours, **Min.**
200%	120 Seconds, **Max.**

Electrical Characteristics

Ampere Rating (A)	Amp Code	Max Voltage Rating (V)	Interrupting Rating	Nominal Cold Resistance (Ohms)	Nominal Melting I^2t (A^2 sec)	Nom Voltage Drop (mV)	Agency Approvals		
.500	.500	125	50 amperes at 125 VAC and VDC	0.189	0.159		X	X	
1.00	001.	125		0.085	0.722		X	X	X
1.50	01.5	125		0.054	1.610		X	X	X
2.00	002.	125		0.039	2.500		X	X	X
2.50	02.5	125		0.030	4.390		X	X	X
3.00	003.	125		0.023	6.960		X		X
4.00	004.	125		0.012	10.600		X		X
5.00	005.	125		0.008	15.400		X		X

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Please refer to www.littelfuse.com/series/471.html for current information.

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:

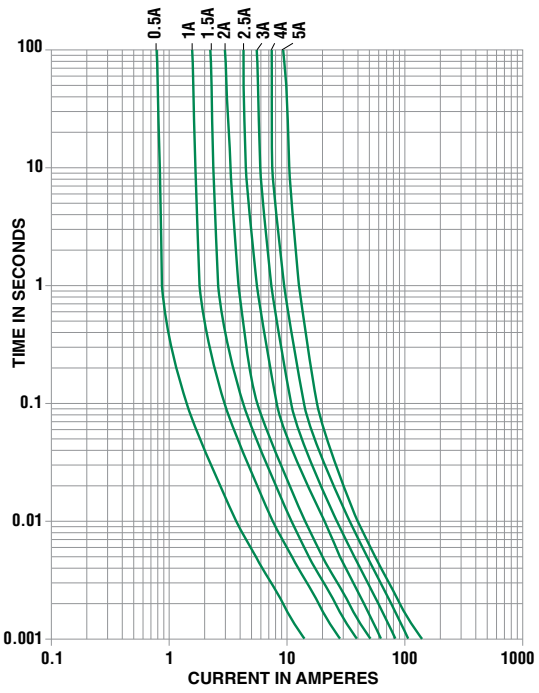
Wave Parameter	Lead-Free Recommendation
Preheat: (Depends on Flux Activation Temperature)	(Typical Industry Recommendation)
Temperature Minimum:	100° C
Temperature Maximum:	150° C
Preheat Time:	60-180 seconds
Solder Pot Temperature:	260° C Maximum
Solder Dwell Time:	2-5 seconds

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



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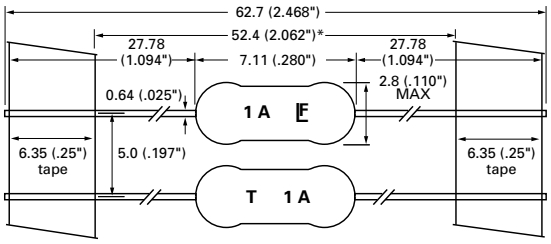
Product Characteristics

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)

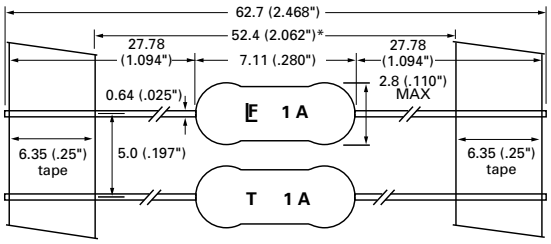
Operating Temperature	–55°C to +125°C
Shock	MIL-STD-202, Method 213, Test Condition I (100 G's peak for 6 milliseconds)
Vibration	MIL-STD-202, Method 201 (10–55 Hz); Method 204, Test Condition C (55–2000 Hz at 10 G's Peak)
Moisture Resistance	MIL-STD-202, Method 106
Resistance to Soldering Heat	Withstands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

Dimensions

471 Series (RoHS Version) Markings



471 Series (RoHS and Halogen-free Version) Markings



Part Numbering System

0471 xxxx N R T1 L

Series

Current Rating
Refer to Amp Code column of Electrical Characteristics Table

Quantity
N = 5000
P = 2000

Type of Packaging
R = Reel
A = Ammo Pack

Lead Length
T1: 52.4mm (2.062")*

RoHS + HF

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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