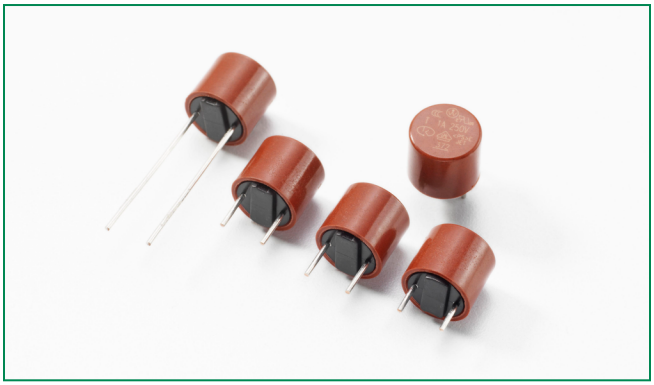
372 Series, TR5®, Time-Lag Fuse



Agency Approvals

Agency	Agency File Number	Ampere Range
	5007679-1170-0003/82447	50mA - 4A
	5007679-1170-0004/82452	5A - 6.3A
	JET1896-31007-2002	1A - 5A
	1010253	50mA - 6.3A
	E67006	40mA - 6.3A
	SU05024-7010 SU05024-7011 SU05024-7006 SU05024-7007 SU05024-7008 SU05024-7009 SU05024-7012	50mA - 100mA 125mA - 800mA 1A - 2.5A 3.15A 4A 5A 6.3A
	CQC07012021162	5A - 6.3A
	2007010207240346	40mA - 4A

Description

The 372 Series are TR5®, time-Lag type, 250V rated fuses, that are designed in accordance to IEC 60127-3.

Features

- Lead-free
- Reduced PCB space requirements
- Direct solderable or plug-in versions
- Internationally approved
- Low internal resistance
- Shock safe casing
- Vibration resistant
- Halogen free
- Available from 40mA to 6.3A

Applications

- Battery Chargers
- Consumer electronics
- Power supplies
- Industrial Controllers

Electrical Characteristics

% of Ampere Rating	Opening Time
150%	1 Hour, **Min.**
210%	2 Minutes, **Max.**
275%	400 ms, **Min.** ; 10 Sec., **Max.**
400%	150 ms, **Min.** ; 3 Sec., **Max.**
1000%	20 ms, **Min.** ; 150 ms, **Max.**

Additional Information

Datasheet | **Resources** | **Samples**

Revised: 12/19/13

Electrical Characteristics

Amp Code	Rated Current	Voltage Rating	Breaking Capacity	Voltage Drop $1.0 \times I_N$ max. (mV)	Power Dissipation $1.5 \times I_N$ max. (mW)	Melting Integral $10 \times I_N$ min. (A^2s)	Agency Approvals					
							VDE		c UL us	PSE JET		
0040	40mA	250V	35A/250VAC[1] 50-60 Hz cos φ = 1.0	900	90	0.009			X			
0050	50mA	250V		500	70	0.01	X	X	X		X	X
0063	63mA	250V		400	80	0.02	X	X	X		X	X
0080	80mA	250V		370	100	0.023	X	X	X		X	X
0100	100mA	250V		300	110	0.047	X	X	X		X	X
0125	125mA	250V		260	120	0.066	X	X	X		X	X
0160	160mA	250V		200	130	0.14	X	X	X		X	X
0200	200mA	250V		170	140	0.20	X	X	X		X	X
0250	250mA	250V		150	150	0.28	X	X	X		X	X
0315	315mA	250V		140	160	0.36	X	X	X		X	X
0400	400mA	250V		130	170	0.9	X	X	X		X	X
0500	500mA	250V		125	180	1.3	X	X	X		X	X
0630	630mA	250V		120	200	2.5	X	X	X		X	X
0800	800mA	250V		110	220	3.8	X	X	X		X	X
1100	1.00A	250V		110	360	5.5	X	X	X	X	X	X
1125	1.25A	250V		95	450	9	X	X	X	X	X	X
1160	1.60A	250V		95	450	14	X	X	X	X	X	X
1200	2.00A	250V		85	600	23	X	X	X	X	X	X
1250	2.50A	250V		80	700	35	X	X	X	X	X	X
1315	3.15A	250V		80	1100	60	X	X	X	X	X	X
1400	4.00A	250V	40A / 250 VAC	75	1200	95	X	X	X	X	X	X
1500	5.00A	250V	50A / 250 VAC	80	1300	94	G	X	X	X	CQC	X
1630	6.30A*	250V		58	1250	105	G	X	X		CQC	X

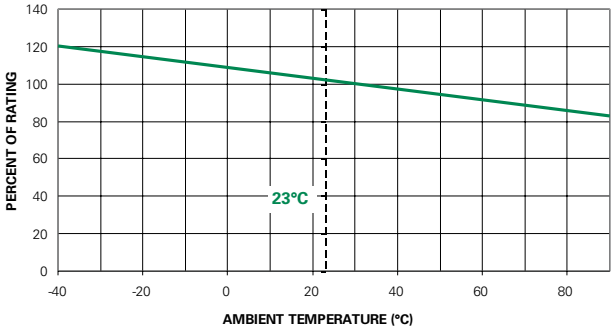
1 Per UL, approved breaking capacity is 50 A at 250 V.

* Conducting path min. 0.2 mm²

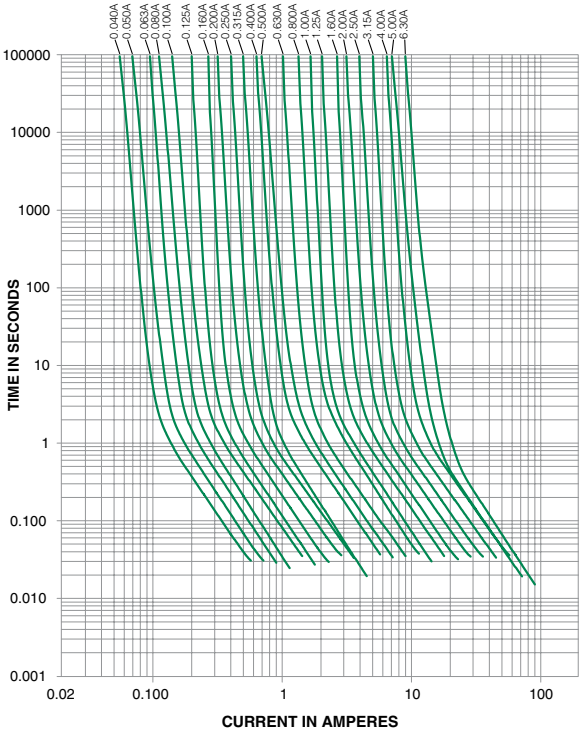
G = Expert Report

Note: 1.00 means the number one with two decimal places. 1,000 means the number one thousand.

Temperature Rerating Curve



Average Time Current Curves

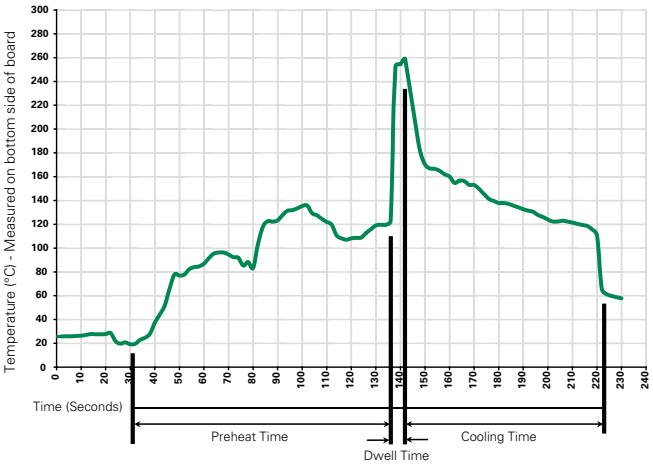


Revised: 12/19/13

Radial Lead Fuses

TR5® > Time-Lag > 372 Series

Soldering Parameters - Wave Soldering



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:

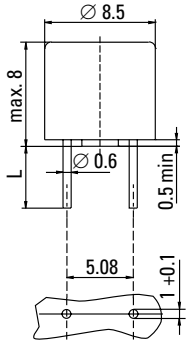
Solder Iron Temperature: 350° C +/- 5°C
Heating Time: 5 seconds max.

Note: These devices are not recommended for IR or Convection Reflow process.

Product Characteristics

Materials	Base/Cap: Brown Thermoplastic Polyamide PA 6.6, UL 94 V-0 Round Pins: Copper, Tin-plated
Lead Pull Strength	10 N (EN 60068-2-21)
Solderability	260°C, ≤ 3s. (Wave) 350°C, ≤ 1s. (Soldering Iron)
Soldering Heat Resistance	260°C, 10s. (IEC 60068-2-20) 350°C, 3s. (Soldering Iron)
Operating Temperature	-40°C to +85°C (consider de-rating)
Climatic Category	-40°C/+85°C/21 days (IEC 60068-1,-2-1,-2-2,-2-78)
Stock Conditions	+10°C to +60°C RH ≤ 75% yearly average, without dew, maximum value for 30 days-95%
Vibration Resistance	24 cycles at 15 min. each (EN 60068-2-6) 10 - 60 Hz at 0.75 mm amplitude 60 - 2000 Hz at 10G's acceleration

Dimensions



Long Leads (L=18.8mm)
Short Leads (L=4.3mm)

Packaging

Packaging Option	Packaging Specification	Quantity	Quantity & Packaging Code	Taping Width
372 Series				
Tape & Ammopack	N/A	1,000	0001	N/A
Short Leads	N/A	1,000	0411	N/A
Short Leads	N/A	200	0431	N/A
3.3mm Leads	N/A	1,000	0511	N/A

Part Numbering System

372 xxxx 0001

Series

Amp Code
Refer to Amp Code column of Electrical Characteristics Table

Packaging Code
0001 Tape/Ammopack (1,000 pcs.)
0411 Short Leads - Bulk (1,000 pcs.)
0431 Short Leads - Bulk (200 pcs.)
0511 3.3 mm Leads - Bulk (1000 pcs.)

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