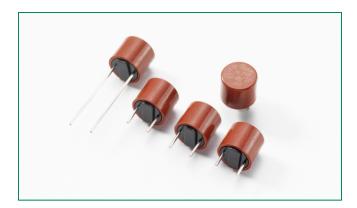
# TR5® > Time-Lag > 372 Series

# 372 Series, TR5®, Time-Lag Fuse





#### **Agency Approvals**

Agency	Agency File Number	Ampere Range			
Ď <sup>V</sup> E	5007679-1170-0003/82447	50mA - 4A			
VDE	5007679-1170-0004/82452	5A - 6.3A			
JET	JET1896-31007-2002	1A - 5A			
$\bigcirc$	1410865	50mA - 6.3A			
c <b>FL</b> °us	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			
Cec	CQC07012021162	5A - 6.3A			
<b>(W)</b>	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
- Power supplies
- Consumer electronics
- Industrial Controllers

# **Electrical Characteristics**

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

#### **Additional Information**











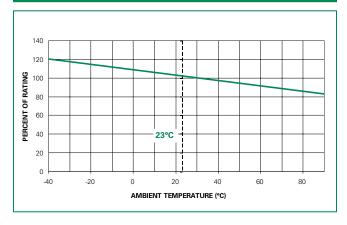
# **Electrical Characteristics**

	D	N. II		Voltage	Power	Melting	Agency Approvals					
Amp Code	Rated Current	Voltage Rating	Breaking Capacity	Drop 1.0×I <sub>N</sub> max. (mV)	Dissipation 1.5×I <sub>N</sub> max. (mW)	Integral 10×I <sub>N</sub> min. (A²s)	DE DE	$\bigcirc$	c <b>71</b> °us	PS JET	<b>@</b>	
0040	40mA	250V		900	90	0.009			Х			
0050	50mA	250V		500	70	0.01	X	X	X		X	Χ
0063	63mA	250V		400	80	0.02	X	Χ	Х		X	X
0800	80mA	250V		370	100	0.023	X	Χ	X		X	X
0100	100mA	250V		300	110	0.047	X	Χ	Х		X	X
0125	125mA	250V		260	120	0.066	X	X	Х		X	X
0160	160mA	250V		200	130	0.14	X	Χ	Х		X	X
0200	200mA	250V		170	140	0.20	X	Х	Х		X	X
0250	250mA	250V		150	150	0.28	X	Χ	X		X	X
0315	315mA	250V	35A/250VAC1	140	160	0.36	X	Х	Х		X	X
0400	400mA	250V	50-60 Hz cos $φ$ = 1.0	130	170	0.9	X	Х	Х		X	X
0500	500mA	250V		125	180	1.3	X	X	Х		X	X
0630	630mA	250V		120	200	2.5	X	Χ	X		X	X
0800	800mA	250V		110	220	3.8	X	X	Х		X	X
1100	1.00A	250V		110	360	5.5	X	Χ	X	X	X	X
1125	1.25A	250V		95	450	9	X	Χ	Х	X	X	X
1160	1.60A	250V		95	450	14	X	Х	X	X	X	X
1200	2.00A	250V		85	600	23	X	Χ	Х	X	X	X
1250	2.50A	250V		80	700	35	X	Х	Х	X	X	X
1315	3.15A	250V		80	1100	60	X	Х	Х	X	X	X
1400	4.00A	250V	40A / 250 VAC	75	1200	95	X	Χ	X	X	X	X
1500	5.00A	250V	E04 /3E0\/AC	80	1300	94	G	Χ	X	X	CQC	X
1630	6.30A*	250V	50A / 250 VAC	58	1250	105	G	Х	Х		cac	X

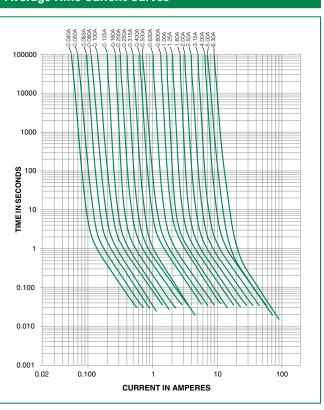
<sup>1</sup> Per UL, approved breaking capacity is 50 A at 250 V.

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

#### **Temperature Re-rating Curve**



## **Average Time Current Curves**

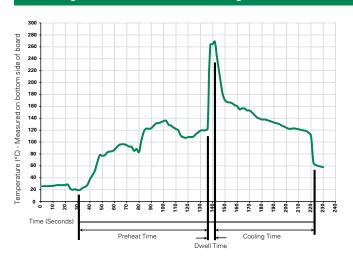


<sup>\*</sup> Conducting path min. 0.2 mm<sup>2</sup>

G = Expert Report



#### **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 DwellTime:	2-5 seconds		

#### **Recommended Hand-Solder Parameters:**

Solder Iron Temperature: 350° C +/- 5°C

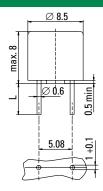
Heating Time: 5 seconds max.

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**

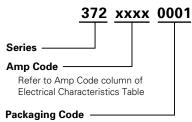


Long Leads (L=18.8mm) Short Leads (L=4.3mm)

## **Packaging**

Packaging Option	O O I I I I I I I I I I I I I I I I I I		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**



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.)