

**RoHS** **Pb** **382 Series, TR5®, Time-Lag Fuse**


### Description

The 382 Series are TR5®, time-Lag type, 250V rated fuses, with enhanced breaking capacity designed in accordance to IEC 60127-3.









### Features

- Lead-free
- Reduced PCB space requirements
- Direct solderable or plug-in versions
- 100A breaking capacity
- Internationally approved
- Low internal resistance
- Shock safe casing
- Vibration resistant
- Halogen free
- Available from 1A to 10A

### Applications

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

### Agency Approvals

Agency	Agency File Number	Ampere Range
	5007679-1170-0038/82455	1A - 4A
	License number: 5007679-1170-0006/82571	5A - 6.3A
	Certification: 1026674	1A - 6.3A
	File number: E 67006	1A - 10A
	JET1896-31007-2001 JET1896-31007-1003	1A - 10A
	2007010207240344	1A - 4A
	CQC07012021162	5A - 6.3A
	SU05024-7003 SU05024-7002 SU05024-7001 SU05024-7004 SU05024-7005	1A - 6.3A

### Electrical Characteristics

% of Ampere Rating	Opening Time	
	1A - 6.3A	8A - 10A
150%	1 Hour, <b>Min.</b>	1 Hour, <b>Min.</b>
210%	2 Minutes, <b>Max.</b>	300 s, <b>Max.</b>
275%	400 ms, <b>Min.</b> ; 10 Sec., <b>Max.</b>	1 s, <b>Min.</b> ; 20 s, <b>Max.</b>
400%	150 ms, <b>Min.</b> ; 3 Sec., <b>Max.</b>	150 ms, <b>Min.</b> ; 3 Sec., <b>Max.</b>
1000%	20 ms, <b>Min.</b> ; 150 ms, <b>Max.</b>	20 ms, <b>Min.</b> ; 150 ms, <b>Max.</b>

### 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 <sup>2</sup> s)	Agency Approvals					
												
1100	1.00 A	250 V	100A / 250VAC 50-60 Hz $\cos \phi = 1.0$	100	400	3.0	X	X	X	X	X	X
1125	1.25 A	250 V		95	465	4.5	X	X	X	X	X	X
1160	1.60 A	250 V		90	490	9.0	X	X	X	X	X	X
1200	2.00 A	250 V		85	670	12	X	X	X	X	X	X
1250	2.50 A	250 V		80	750	22	X	X	X	X	X	X
1315	3.15 A	250 V		75	900	32	X	X	X	X	X	X
1400	4.00 A	250 V		70	1200	58	X	X	X	X	X	X
1500	5.00 A	250 V		65	1250	90	G	X	X	X	QCC	X
1630	6.30 A	250 V		65	1400	105	G	X	X	X	CQC	X
1800	8.00 A	250 V		63	1600	180			X	X		
2100	10.00 A	250 V		57	1600	260			X	X		

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



### Soldering Parameters - Wave Soldering



### Recommended Process Parameters:

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

### Recommended Hand-Solder Parameters:

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

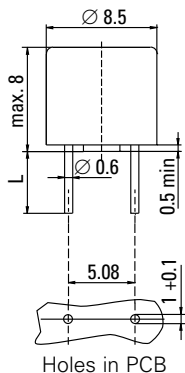
**Note: These devices are not recommended for IR or Convection Reflow process.**

### Product Characteristics

<b>Materials</b>	Base/Cap: Brown Thermoplastic Polyamide PA 6.6, UL 94 V-0 Round Pins: Copper, Tin-plated
<b>Lead Pull Strength</b>	10 N (EN 60068-2-21)
<b>Solderability</b>	260°C, ≤ 3s. (Wave) 350°C, ≤ 1s. (Soldering Iron)
<b>Soldering Heat Resistance</b>	260°C, 10s. (IEC 60068-2-20) 350°C, 3s. (Soldering Iron)

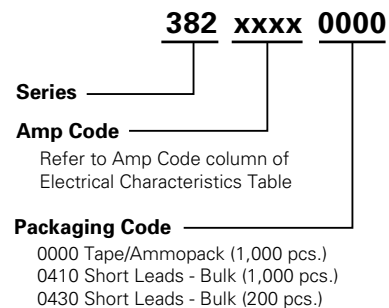
<b>Operating Temperature</b>	-40°C to +85°C (consider de-rating)
<b>Climatic Category</b>	-40°C to +85°C /21 days (EN 60068-1,-2-1,-2-2,-2-78)
<b>Stock Conditions</b>	+10°C to +60°C RH ≤ 75% yearly average, without dew, maximum value for 30 days-95%
<b>Vibration Resistance</b>	24 cycles at 15 min. each (EN 60068-2-6) 10 - 60 Hz at 0.75 mm amplitude 60 - 2000 Hz at 10 g acceleration

### Dimensions



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

### Part Numbering System



### Packaging

Packaging Option	Packaging Specification	Quantity	Quantity & Packaging Code	Taping Width
<b>382 Series</b>				
Tape & Ampopack	N/A	1,000	0000	N/A
Short Leads	N/A	1,000	0410	N/A
Short Leads	N/A	200	0430	N/A