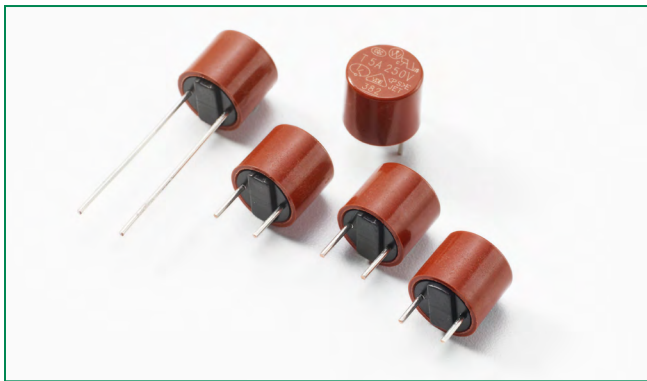


382 Series, TR5® Fuse, Time-Lag



**Description**

The 382 Series are TE5 Time-Lag type Fuses, 250V rated, with enhanced breaking capacity and designed in accordance to IEC 60127-3.

**Features**

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

**Applications**

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

**Agency Approvals**

Agency	Agency File Number	Ampere Range
	40018249	1A - 4A
	40018250	5A - 6.3A
	1609346	1A - 6.3A
	E67006	1A - 10A
	JET1896-31007-2001 JET1896-31007-1006	1 - 5A 6.3 - 10A
	2007010207240344	1A - 4A
	CQC07012020713	5A - 6.3A
	SU05024-7003 SU05024-7002 SU05024-7001 SU05024-7004 SU05024-7005	1-2.5A 3.15A 4A 5A 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>

**Additional Information**



Datasheet









Resources



Samples

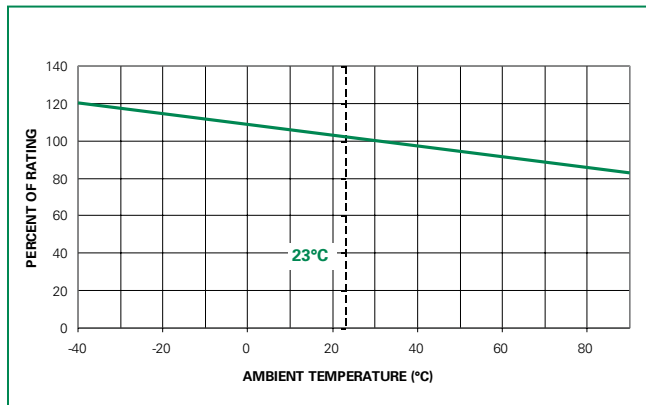
## Electrical Characteristics

Amp Code	Rated Current	Voltage Rating	Breaking Capacity	Nominal Cold Resistance (Ohms)	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	0.0625	100	400	4.85	X	X	X	X	X	X
1125	1.25 A	250 V		0.0500	95	465	6.88	X	X	X	X	X	X
1160	1.60 A	250 V		0.0377	90	490	12.67	X	X	X	X	X	X
1200	2.00 A	250 V		0.0280	85	670	17.80	X	X	X	X	X	X
1250	2.50 A	250 V		0.0215	80	750	29.69	X	X	X	X	X	X
1315	3.15 A	250 V		0.0176	75	900	45.35	X	X	X	X	X	X
1400	4.00 A	250 V		0.0138	70	1200	72.00	X	X	X	X	X	X
1500	5.00 A	250 V		0.0108	65	1250	121.25	X	X	X	X	CQC	X
1630	6.30 A	250 V		0.0076	65	1400	148.84	X	X	X	X	CQC	X
1800	8.00 A	250 V		0.0059	63	1600	233.60			X	X		
2100	10.00 A	250 V		0.0042	57	1600	365.00			X	X		

Notes:

- 1.00 means the number one with two decimal places. 1,000 means the number one thousand.
- Resistance is measured at 10% of rated current, 25°C.

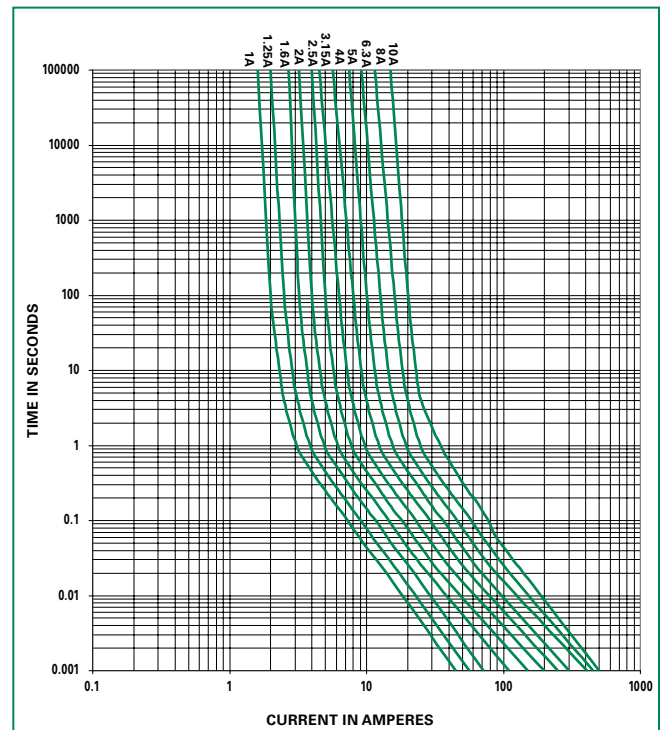
## Temperature Re-rating Curve



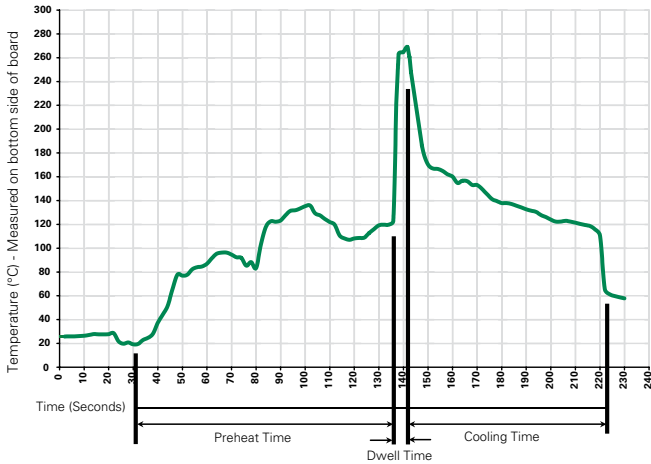
Note:

1. Rerating depicted in this curve is in addition to the standard derating of 25% for continuous operation.

## 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.

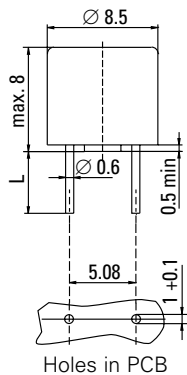
**Note: These devices are not recommended for IR or Convection Reflow process.**

## 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 (IEC 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 re-rating)
<b>Climatic Category</b>	-40°C to +85°C /21 days (IEC 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 (IEC 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

	382	xxxx	0000
<b>Series</b>			
<b>Amp Code</b>	Refer to Amp Code column of Electrical Characteristics Table		
<b>Packaging Code</b>	0000 Tape/Ampack (1,000 pcs.) 0410 Short Leads - Bulk (1,000 pcs.) 0430 Short Leads - Bulk (200 pcs.)		

## 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