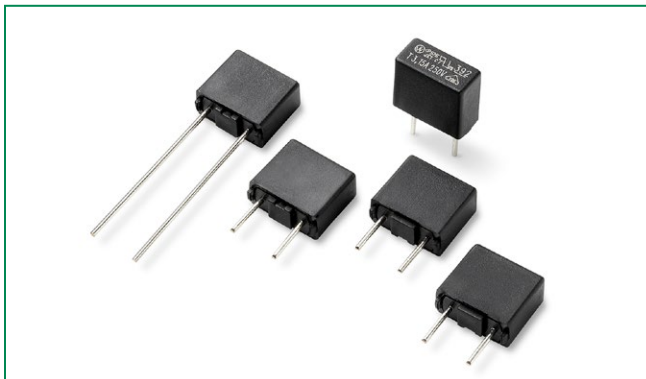


### 392 Series, TE5 Time-Lag Fuse



#### Description

TE5 Fuse, Time-Lag type, 250V rated, designed in accordance to IEC 60127-3.

#### Features

- Reduced PCB space requirements
- Direct solderable or plug-in versions
- Internationally approved
- Low internal resistance
- Shock safe casing
- Vibration resistant
- Halogen free, Lead-free and RoHS compliant
- Red Phosphorus Free

#### Applications

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

#### Additional Information



Datasheet



Resources









Samples

#### Electrical Characteristics for Series







% of Ampere Rating	Opening Time
150%	1 Hour, <b>Min.</b>
210%	120 s, <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>

#### Agency Approvals

Agency	Agency File Number	Ampere Range
	126983	0.28A - 6.3A*
	1606079	0.8A - 6.3A
	E67006	0.28A - 6.3A
	JET1896-31007-2002	1A - 5A
	CQC07012021162	0.8A - 6.3A
	SU05024 - 7013A SU05024 - 7014B SU05024 - 7015B SU05024 - 7016B SU05024 - 7017B SU05024 - 7018B	0.8A 1A - 2.5A 3.15A 4A 5A 6.3A

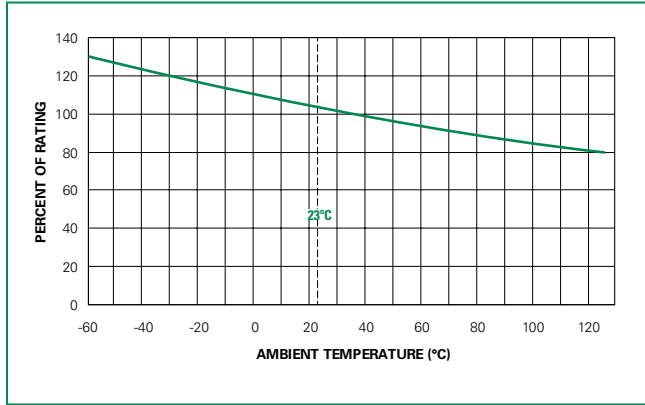
\*Red Phosphorus Free from 0.28A to 5A.

#### Electrical Characteristic Specifications by Item

Rated Current	Amp Code	Voltage Rating	Breaking Capacity	Nominal Cold Resistance (Ohms)	Voltage Drop 1.0xI <sub>N</sub> max. (mV)	Power Dissipation 1.5xI <sub>N</sub> max. (mW)	Melting Integral 10xI <sub>N</sub> max. (A <sup>2</sup> s)	Agency Approvals						
														
280 mA	0280	250V	35A@250VAC	0.3300	115	168	0.048	x		x				
800 mA	0800	250V	25A@250VAC	0.0960	110	280	5.120	x	x	x		x	x	
1.00 A	1100	250V		0.0715	115	400	8.00	x	x	x	x	x	x	
1.25 A	1125	250V		0.0569	100	500	11.95	x	x	x	x	x	x	
1.60 A	1160	250V		0.0400	95	600	18.43	x	x	x	x	x	x	
2.00 A	1200	250V		0.0298	90	700	29.00	x	x	x	x	x	x	
2.50 A	1250	250V		0.0240	85	750	47.81	x	x	x	x	x	x	
3.15 A	1315	250V	32A@250VAC	0.0170	80	1100	78.39	x	x	x	x	x	x	
4.00 A	1400	250V	40A@250VAC	0.0128	75	1200	126.40	x	x	x	x	x	x	
5.00 A	1500	250V	50A@250VAC	0.0101	70	1000	106.25	x	x	x	x	x	x	
6.30 A	1630	250V	63A@250VAC	0.0077	65	1200	160.74	x	x	x		x	x	

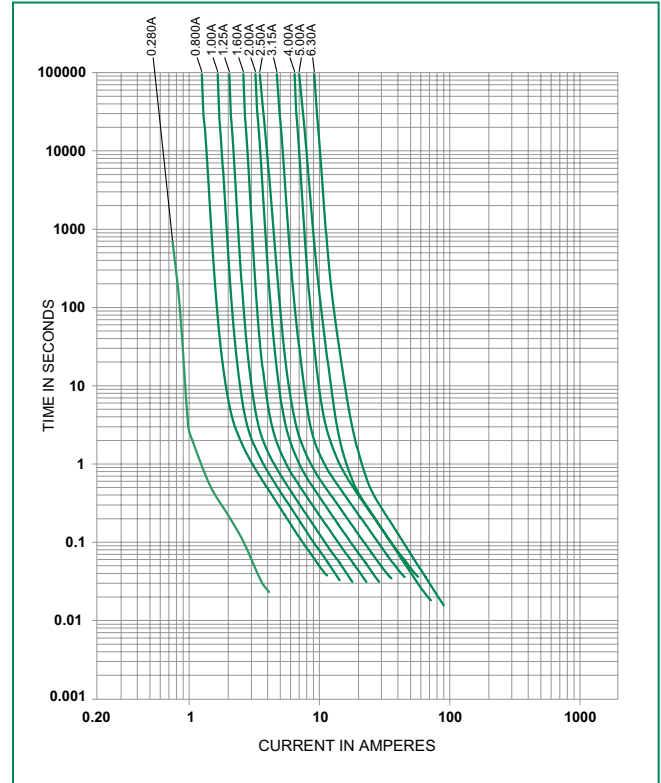
Notes:  
 1) 1.00 means the number one with two decimal places. 1,000 means the number one thousand.  
 2) Resistance is measured at 10% of rated current, 25°C.

## Temperature Re-rating Curve

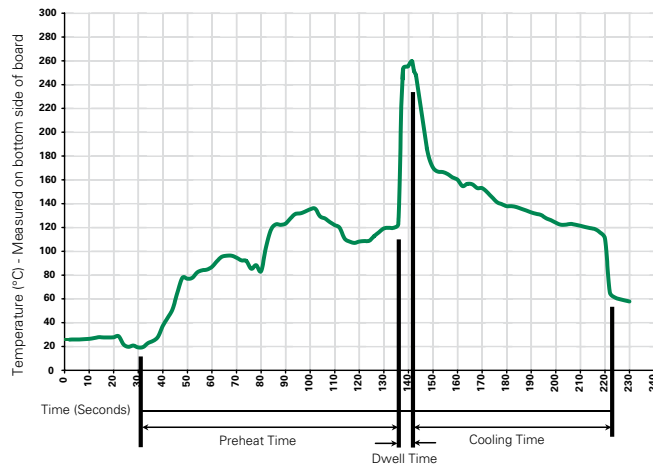


Note:  
1. Rerating depicted in this curve is in addition to the standard derating of 25% for continuous operation.

## 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.

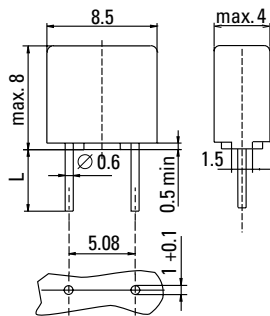
**Note: These devices are not recommended for IR or Convection Reflow process.**

### Product Characteristics

<b>Materials</b>	Base/Cap: 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, ≤ 3 sec. (Wave) 350°C, ≤ 3 sec. (Soldering iron)
<b>Soldering Heat Resistance</b>	260°C, 10 sec. (IEC 60068-2-20) 350°C, ≤ 3 sec. (Soldering iron)

<b>Operating Temperature</b>	-40°C to +125°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 Condition</b>	+10°C to +60°C Relative humidity ≤ 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 – 60Hz at 0.75mm amplitude 60 – 2000Hz at 10g acceleration

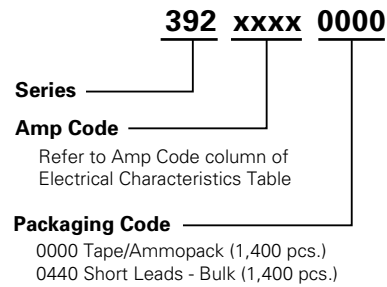
### Dimensions



Holes in the printed circuit board

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

### Part Numbering System



### Packaging

Packaging Option	Packaging Specification	Quantity	Quantity & Packaging Code	Taping Width
Tape and Ampopack	N/A	1,400	0000	N/A
Short Leads	N/A	1,400	0440	N/A