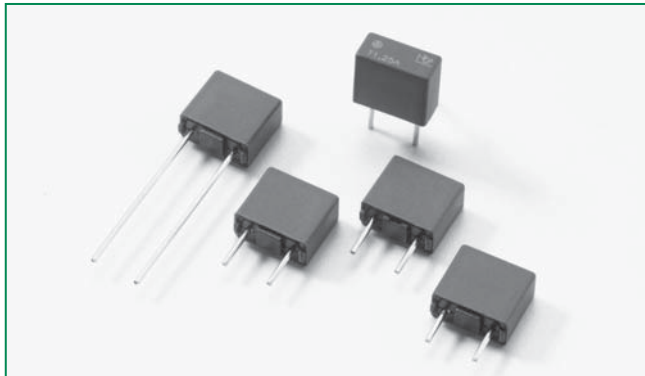


RoHS **397 Series, TE5®, Transient Tolerant Fuse**



**Description**

The 397 Series are TE5®, time-Lag type, 125V rated fuses, designed in accordance to UL248-14.

**Features**

- Surge Proof for telecom applications
- Reduced PCB space requirements
- Direct solderable or plug-in versions
- Shock safe casing
- Vibration resistant
- Halogen free
- RoHS compliant and Lead-free
- Available from 350mA to 1.5A

**Applications**

- Battery chargers
- Consumer Electronics
- Power supplies
- Industrial controllers

**Agency Approvals**

Agency	Agency File Number	Ampere Range
	File No.: E67006	350mA - 1.5A
	File No.: E67006	350mA - 1.5A

**Electrical Characteristics**

% of Ampere Rating	Opening Time
200%	60 Seconds, <b>Min.</b>
570%	80 ms. <b>Min.</b> ; 2 Sec. <b>Max.</b>
1700%	200 s., <b>Max.</b>

**Electrical Characteristics**

Amp Code	Rated Current	Voltage Rating	Breaking Capacity	Voltage Drop $1.0 \times I_N$ max. (mV)	Power Dissipation $1.0 \times I_N$ max. (mW)	Melting Integral $10 \times I_N$ min. (A <sup>2</sup> s)	Surge Amplitude (A) <sup>1</sup>			Agency Approvals	
							FCC	Bellcore	ITU		
0350	350 mA	125 V	50A / 125 VAC 50-60 Hz cos φ = 1.0	400	140	0.38	25	15	29	x	x
0500	500 mA	125 V		340	170	0.79	30	17	38	x	x
0800	800 mA	125 V		300	240	2.4	60	31	50	x	x
1100	1.00 A	125 V		240	240	3.5	78	40	65	x	x
1125	1.25 A	125 V		200	250	5	100	50	67	x	x
1150	1.50 A	125 V		190	285	8.5	155	78	67	x	x

<sup>1</sup> FCC 47 Part 68: Minimum pulse load quantity is 2 pulses at a test generator output of 800 V and 10x560 μs waveform.

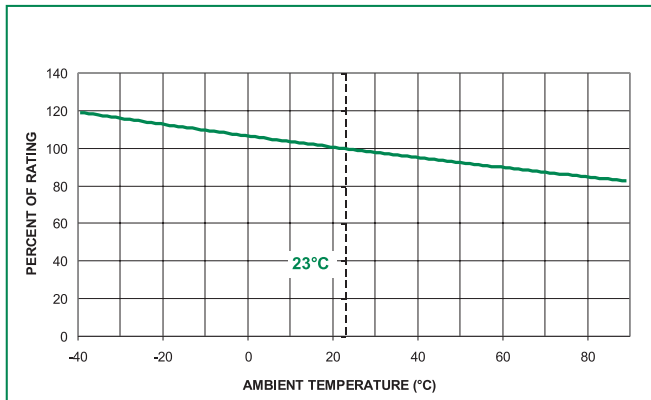
ITU-T K.20: Minimum pulse load quantity is 30 pulses at a test generator output of 1000 V, 67 A and 10x700 μs waveform.

Bellcore GR-1089: Minimum pulse load quantity is 50 pulses at a test generator output of 1000 V and 10x1000 μs.

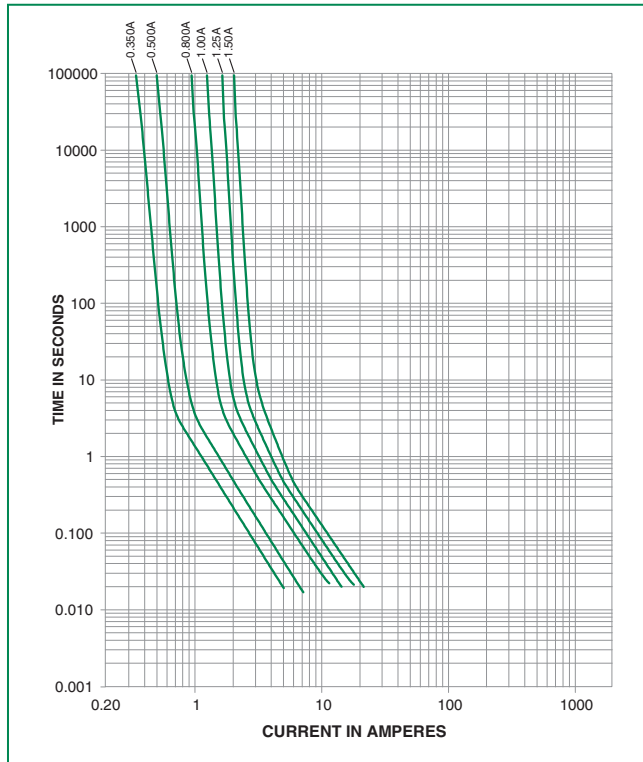
Note: 1.00 means the number one with two decimal places. 1,000 means the number one thousand.

**397 Series**

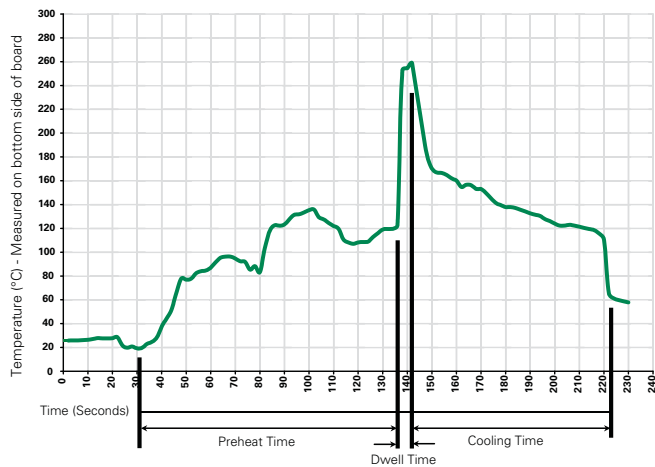
## Temperature Derating Curve



## 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.

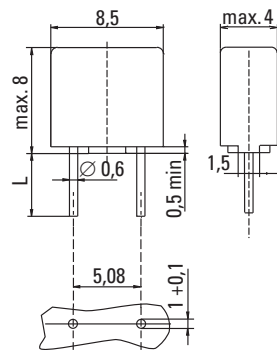
**Note: These devices are not recommended for IR or Convection Reflow process.**

### Product Characteristics

<b>Materials</b>	Base/Cap: Brown Thermoplastic Polyamide PA 6.6, UL 94V-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)

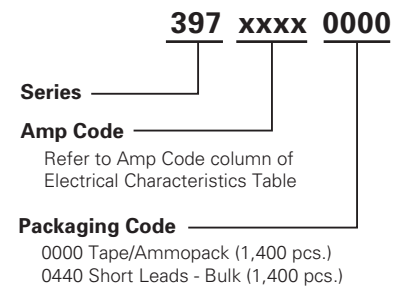
<b>Operating Temperature</b>	-40°C to +85°C (consider de-rating)
<b>Climatic Category</b>	-40°C to +85°C/21 days (EN 60068-1,-2-1,-2-2,-78)
<b>Stock Conditions</b>	+10 °C to +60 °C RH, ≤ 75% yearly average, without dew, maximum value for 30 days-95%
<b>Vibration Resistance</b>	24 cycles at 15 min. each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

### Dimensions



Dimensions (mm)  
 Holes in PCB  
 Long Leads (L=18.8 mm)  
 Short Leads (L=4.3 mm)

### Part Numbering System



### Packaging

Packaging Option	Packaging Specification	Quantity	Quantity & Packaging Code	Taping Width
<b>397 Series</b>				
Tape & Ammopack	N/A	1,400	0000	N/A
Short Leads	N/A	1,400	0440	N/A