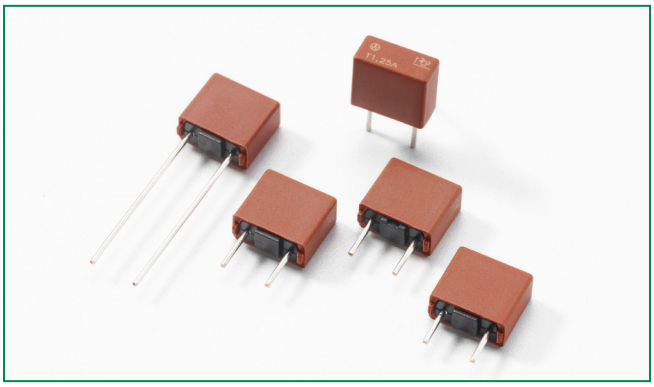
397 Series, TE5® Transient Tolerant Fuse



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

Agency Approvals

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

Applications

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

Electrical Characteristics

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

Additional Information

Datasheet | **Resources** | **Samples**

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^2s)	Surge Amplitude (A)[1]			Agency Approvals	
							FCC	Bellcore	ITU	UL	cUL
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

[1] 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.

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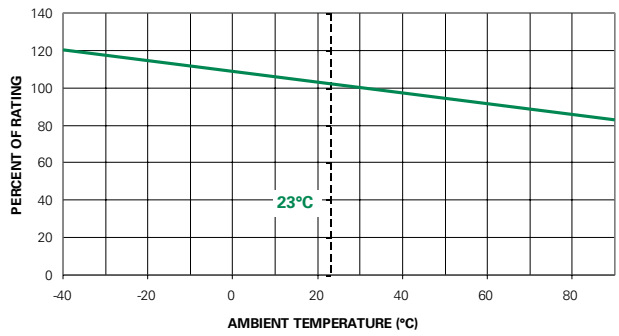
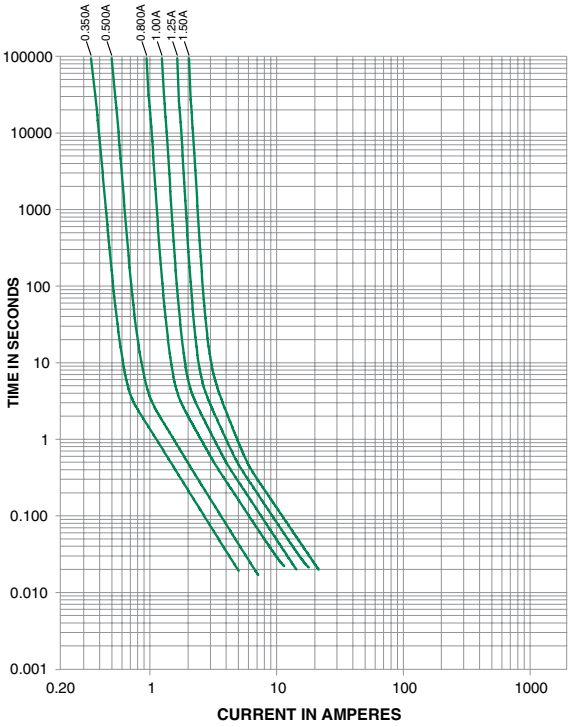
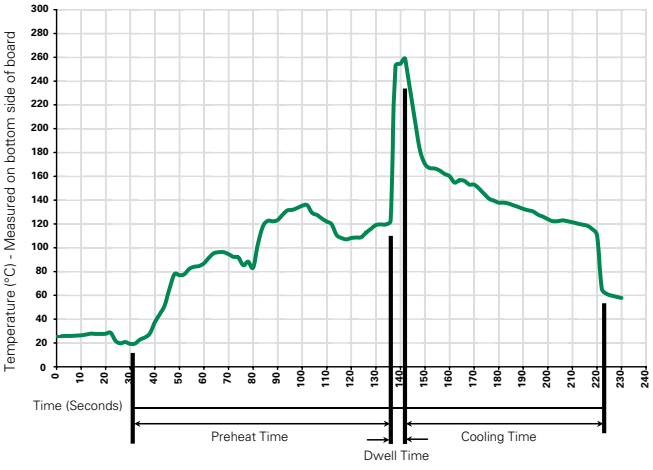
Temperature Rerating Curve



Average Time Current Curves



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 Dwell Time:	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.

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Radial Lead Fuses

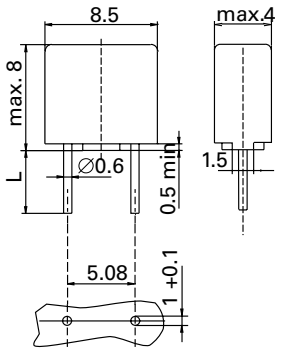
TE5® > Transient Tolerant Fuse > 397 Series

Product Characteristics

Materials	Base/Cap: Brown Thermoplastic Polyamide PA 6.6, UL 94V-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 to +85°C/21 days (EN 60068-1,-2-1,-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 60068-6) 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

397 xxxx 0000

Series

Amp Code
Refer to Amp Code column of Electrical Characteristics Table

Packaging Code
0000 Tape/Ammopack (1,400 pcs.)
0440 Short Leads - Bulk (1,400 pcs.)

Packaging

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

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