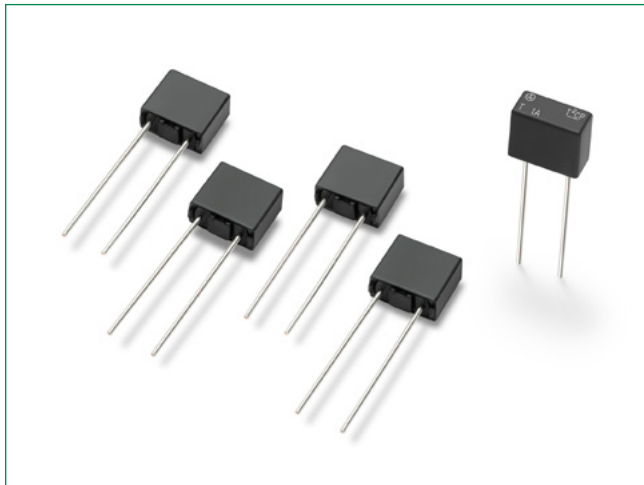


397 Series, TE5 Transient Tolerant Fuse



Description

The 397 Series TE5 Fuses are SLO BLO® type, 125V rated and 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
- Lead-free, Halogen free and RoHS compliant
- Available from 0.35A to 1.5A
- Listed to UL/CSA/NMX 248-1 and UL/CSA/NMX 248-14

Agency Approvals

Agency	Agency File Number	Ampere Range
	E67006	0.35A - 1.5A

Applications

- Battery chargers
- Consumer Electronics
- Telecom Applications
- 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	Nominal Cold Resistance (Ohms)	Voltage Drop 1.0xI _N max. (mV)	Power Dissipation 1.0xI _N max. (mW)	Melting Integral 10xI _N min. (A²s)	Surge Amplitude (A) ¹			Agency Approvals
								FCC	Bellcore	ITU	
0350	350 mA	125 V	50A@125 VAC	0.5665	400	140	0.60	25	15	29	x
0500	500 mA	125 V		0.3424	340	170	1.10	30	17	38	x
0800	800 mA	125 V		0.1616	300	240	3.26	60	31	50	x
1100	1.00 A	125 V		0.1000	240	240	4.85	78	40	65	x
1125	1.25 A	125 V		0.0716	200	250	7.34	100	50	67	x
1150	1.50 A	125 V		0.0522	190	285	10.91	155	78	67	x

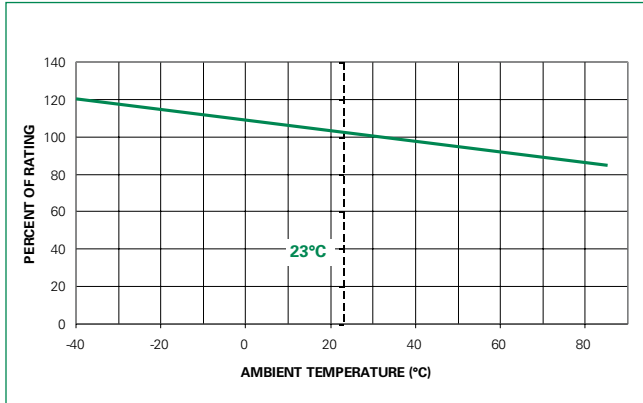
Notes:

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

B. Resistance is measured at 10% of rated current, 25°C.

- FCC 47 Part 68: Minimum pulse load quantity is 2 pulses at a test generator output of 800 V and 10x560µs waveform.
ITU-T K.20: Minimum pulse load quantity is 30 pulses at a test generator output of 1000 V, 67 A and 10x700µs waveform.
Bellcore GR-1089: Minimum pulse load quantity is 50 pulses at a test generator output of 1000 V and 10x1000µs.

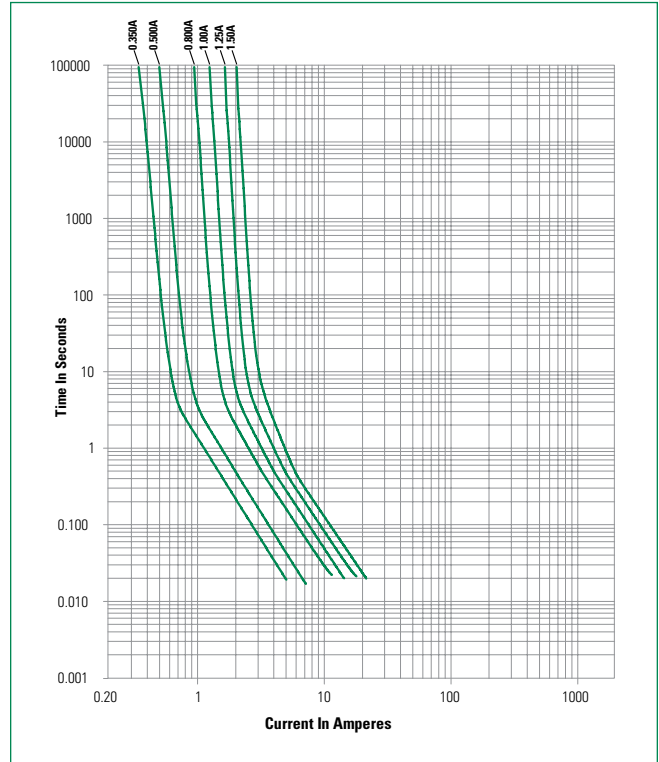
Temperature Re-rating Curve



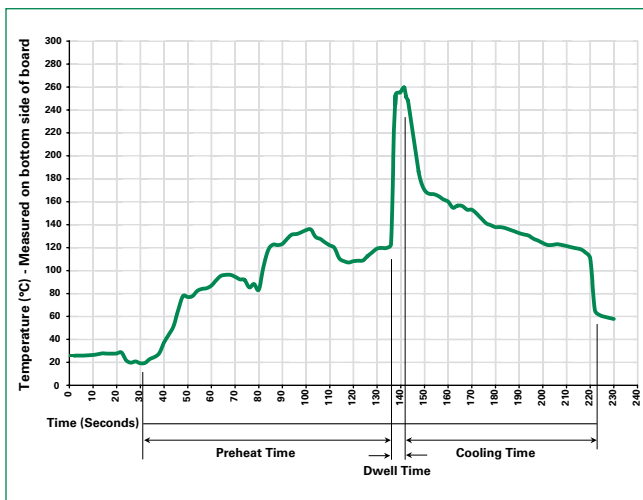
Note:

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
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.

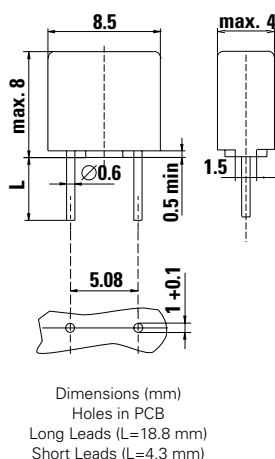
Note: These devices are not recommended for IR or Convection Reflow process.

Product Characteristics

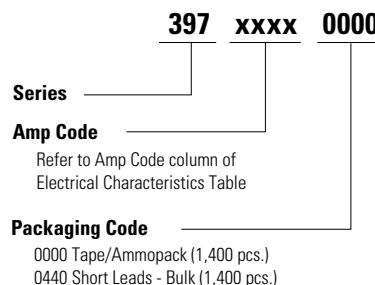
Materials	Base/Cap: Thermoplastic Polyamide PA 6.6, UL 94V-0 Round Pins: Copper, Tin-plated
Lead Pull Strength	10 N (IEC 60068-2-21)
Solderability	260°C, ≤ 3s. (Wave) 350°C, ≤ 1s. (Soldering Iron)
Soldering Heat Resistance	260°C, 10s. (IEC 60068-2-20) 350°C, 3s. (Soldering Iron)

Operating Temperature	-40°C to +125°C (consider de-rating)
Climatic Category	-40°C to +85°C/21 days (IEC 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 60068-2-6) 10 - 60Hz at 0.75mm amplitude 60 - 2000Hz at 10g acceleration

Dimensions



Part Numbering System



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

Disclaimer Notice - Littelfuse products are not designed for, and shall not be used for, any purpose (including, without limitation, automotive, military, aerospace, medical, life-saving, life-sustaining or nuclear facility applications, devices intended for surgical implant into the body, or any other application in which the failure or lack of desired operation of the product may result in personal injury, death, or property damage) other than those expressly set forth in applicable Littelfuse product documentation. Warranties granted by Littelfuse shall be deemed void for products used for any purpose not expressly set forth in applicable Littelfuse documentation. Littelfuse shall not be liable for any claims or damages arising out of products used in applications not expressly intended by Littelfuse as set forth in applicable Littelfuse documentation. The sale and use of Littelfuse products is subject to Littelfuse Terms and Conditions of Sale, unless otherwise agreed by Littelfuse. Information furnished is believed to be accurate and reliable. However, users should independently evaluate the suitability of and test each product selected for their own applications. Littelfuse products are not designed for, and may not be used in, all applications. Read complete Disclaimer Notice at www.littelfuse.com/disclaimer-electronics.