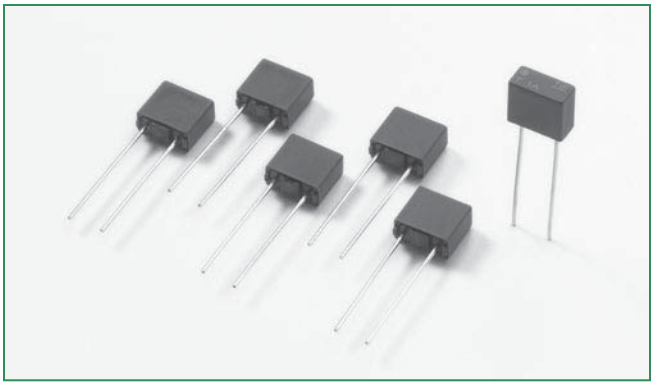
385 Series, TE5®, Telecom Interface Protector Fuse



Description

The 385 Series are TE5®, protector, time-Lag type, 125V rated fuses, that are designed in accordance to UL 248-14.

Features

- Surge proof for telecom applications
- Reduced PCB space requirements
- Highly defined cut-off times
- Low internal resistance
- Irreversible physical separation
- Flame resistant encapsulated casing
- Available from 350mA to 1.5A

Applications

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

Agency Approvals

Agency	Agency File Number	Ampere Range
c UL us	E67006	350mA - 1.5A

Electrical Characteristics

% of Ampere Rating	Opening Time
100%	2 Hours, **Max.**
300%	300 ms, **Min.** ; 5 Seconds, **Max.**

Electrical Characteristics

Amp Code	Rated Current	Voltage Rating	Breaking Capacity	Voltage Drop 1.0 x I_N max. (mV)	Power Disspation 1.0 x I_N max. (mW)	Melting Integral 10 x I_N min. (A^2s)	Surge Amplitude (A)[1]			Agency Approvals
							FCC	Bellcore	ITU	c UL us
0350	350mA	125V	50 A / 125 VAC 50-60 Hz cosφ=1.0	250	90	0.6	32	19	36	x
0500	500mA	125V		220	110	1.2	48	26	61	x
0800	800mA	125V		170	130	2.7	80	42	67	x
1100	1.00A	125V		140	130	4.5	100	52	67	x
1125	1.25A	125V		125	140	6.7	128	65	67	x
1150	1.50A	125V		120	170	9.0	155	78	67	x

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

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

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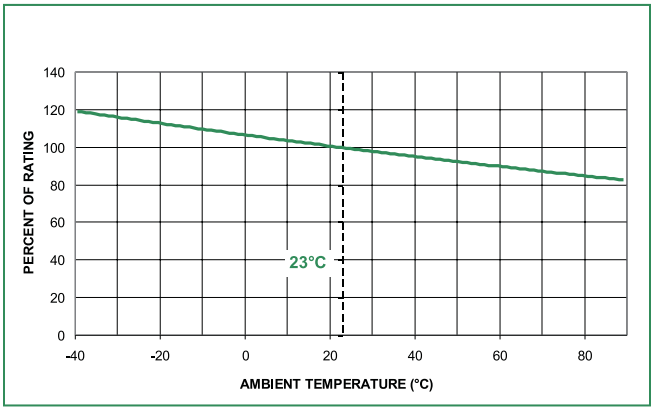
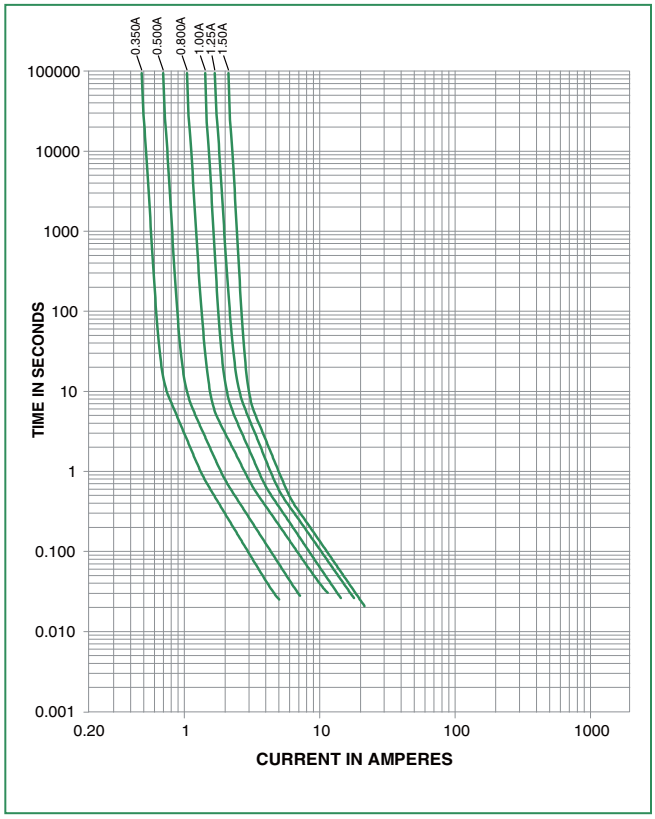
Please refer to www.littelfuse.com/series/385.html for current information.

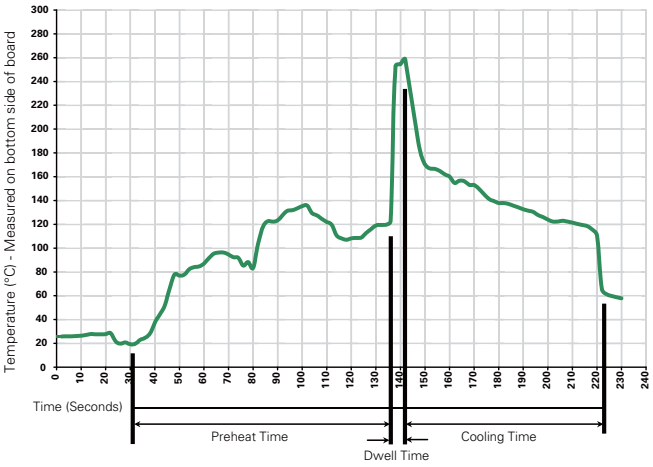
Temperature Rerating Curve



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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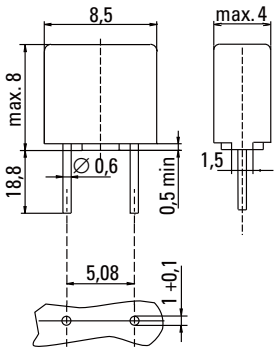
Product Characteristics

Materials	Base/Cap: Brown Thermoplastic Polyamide PA 6.6, UL 94V-0 Round Pins: Copper, Tin-plated
Lead Pull Strength	10N (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,-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=18.8mm)

Part Numbering System

385 xxxx 0000

Series

Amp Code
Refer to Amp Code column of Electrical Characteristics Table

Packaging Code
0000 Tape/Ammopack (1,400 pcs.)

Packaging

Packaging Option	Packaging Specification	Quantity	Quantity & Packaging Code	Taping Width
385 Series				
Tape & Ammopack	N/A	1,400	0000	N/A

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