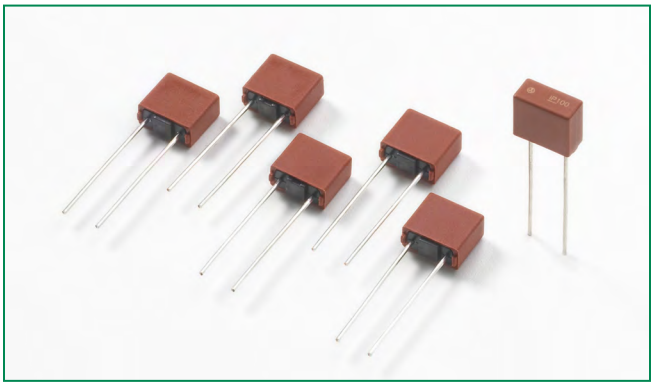
399 Series, TE5® Inrush Protector Fuse



Description

The 399 Series TE5 Fuses are Time-Lag type, and are 65V rated. For Short Circuit Protection of Sensitive Electronic Components and Assemblies.

Features

- Reduced PCB space requirements
- Highly defined cut-off times
- Low internal resistance
- Flame resistant encapsulated casing
- Lead-free, Halogen free and RoHS Compliant
- Available from 0.125A to 4A

Agency Approvals

Agency	Agency File Number	Ampere Range
c UL us	E67006	0.125A - 4A

Applications

- IC Chip Protection

Additional Information

Datasheet | Resources | Samples

Electrical Characteristics

% of Ampere Rating	Opening Time
300	20 Seconds, **Max.**

Electrical Characteristics

Amp Code	Rated Current	Marking Code*	Voltage Rating	Breaking Capacity	Nominal Cold Resistance (Ohms)	Cold Resistance 0.1xI_N typ. (mΩ)	Power Disspation 1.0xI_N max. (mW)	Melting Integral 10xI_N max. (A^2s)	Agency Approvals c UL us
0125	125 mA	IP13	65 V	50A@65 VAC/ DC	1.7450	1600	125	0.1461	x
0160	160 mA	IP16	65 V		1.1000	1103	140	0.2099	x
0200	200 mA	IP20	65 V		0.7800	775	155	0.30	x
0250	250 mA	IP25	65 V		0.5500	550	170	0.42	x
0315	315 mA	IP32	65 V		0.3810	382	190	0.62	x
0400	400 mA	IP40	65 V		0.2650	264	220	0.92	x
0500	500 mA	IP50	65 V		0.1900	191	240	1.40	x
0630	630 mA	IP63	65 V		0.1300	129	265	2.04	x
0800	800 mA	IP80	65 V		0.0920	92	300	3.33	x
1100	1.00 A	IP100	65 V		0.0650	66	330	4.30	x
1125	1.25 A	IP125	65 V		0.0470	46	370	6.88	x
1160	1.60 A	IP160	65 V		0.0330	33	420	12.03	x
1200	2.00 A	IP200	65 V		0.0230	25	460	14.00	x
1250	2.50 A	IP250	65 V		0.0170	18	520	23.13	x
1315	3.15 A	IP315	65 V		0.0132	13	580	44.65	x
1400	4.00 A	IP400	65 V		0.0095	10	650	76.80	x

* Physical Marking on top of the device

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, 25ºC.

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Specifications are subject to change without notice. Application testing is strongly recommended.

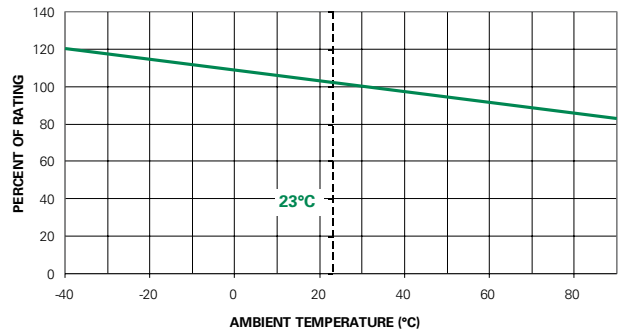
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Radial Lead Fuses

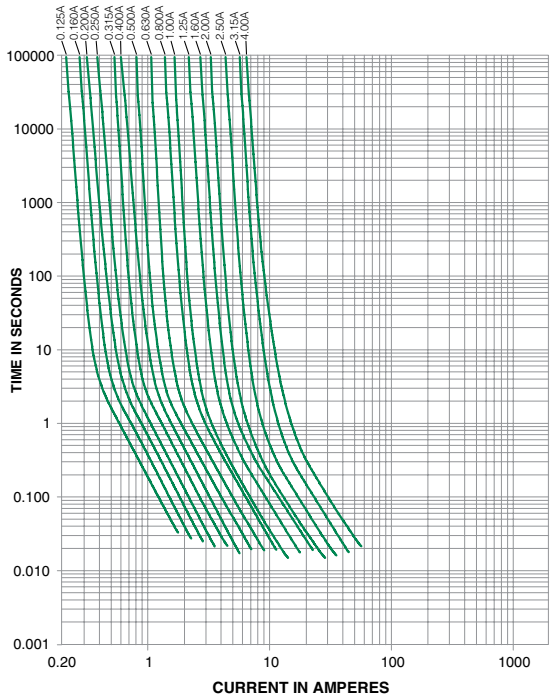
TE5® > Time-Lag Fuse > 399 Series

Temperature Re-rating Curve

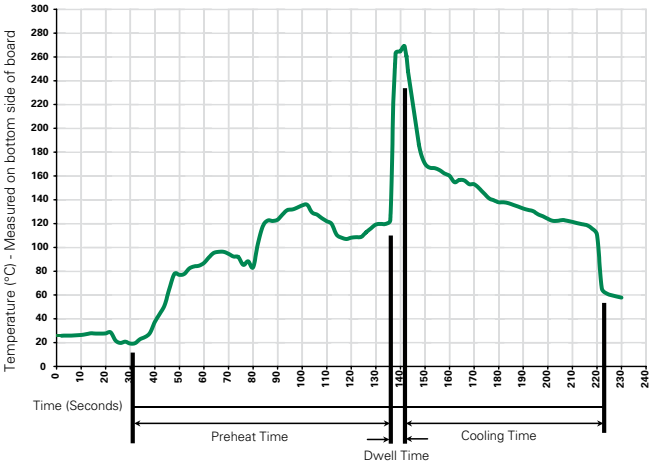


Note:
1. Rerating depicted in this curve is in addition to the standard derating of 25% for continuous operation.

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.

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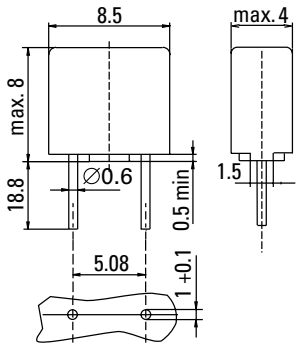
Product Characteristics

Materials	Base/Cap: Brown Thermoplastic Polyamide PA 6.6, UL 94V-0 Round Pins: Copper, Tin-plated
Lead Pull Strength	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 +85°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 (IEC 60068-2-6) 10 - 60Hz at 0.75mm amplitude 60 - 2000Hz at 10g acceleration

Dimensions

Dimensions (mm)



Holes in the printed circuit board

Part Numbering System

399 xxxx 0000

Series — 399

Amp. Code — xxxx
Refer to Amp Code column of Electrical Characteristic Table

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

Packaging

Packaging Option	Packaging Specification	Quantity	Quantity & Packaging Code	Reel Size
399 Series				
Tape & Ammopack	N/A	1,400	0000	N/A

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