Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

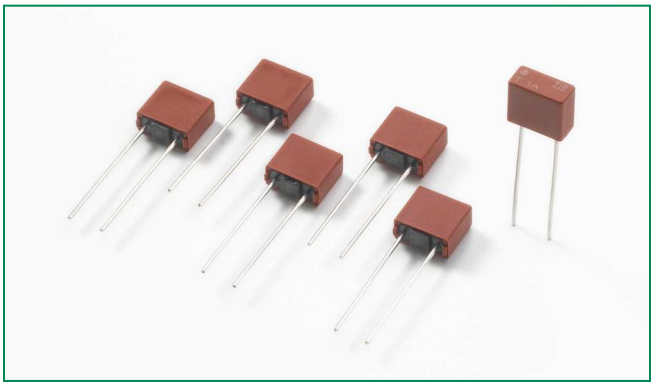
We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!

Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832
Email & Skype: info@chipsmall.com Web: www.chipsmall.com
Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China

389 Series

RoHS



Description

The 389 Series are TR5®, time-lag type, 250V rated fuses. For Short Circuit Protection of Sensitive

Electronic Components and Assemblies

Features

- For worldwide applications
- Reduced PCB space requirements
- Highly defined cut-off times
- Irreversible physical separation
- Low internal resistance
- Flame resistant encapsulated casing
- RoHS compliant and Lead-free
- Available for 60MA only

Agency Approvals

Agency	Agency File Number	Ampere Range
c UL us		60mA

Applications

- Telecom equipment
- Data processing equipment
- Input/output modules
- Household appliances
- Medical equipment

Additional Information

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

Electrical Characteristics

% of Ampere Rating	Opening Time
166	600 ms, **Min.**
250	45 ms, **Max.**

Electrical Characteristics

Continous Current I_C	Type	Amp Code	Voltage Rating	Fault Current max.	Cold Resistance 0.1 x I_C typ. (mΩ)	Power Dissipation 1.0 x I_C max. (mW)	Melting Integral 10 x I_C typ. (A^2s)
60mA		0060	250 VAC	10A / 250VAC/DC 50-60 Hz cos φ = 1.0	80	100	0.033

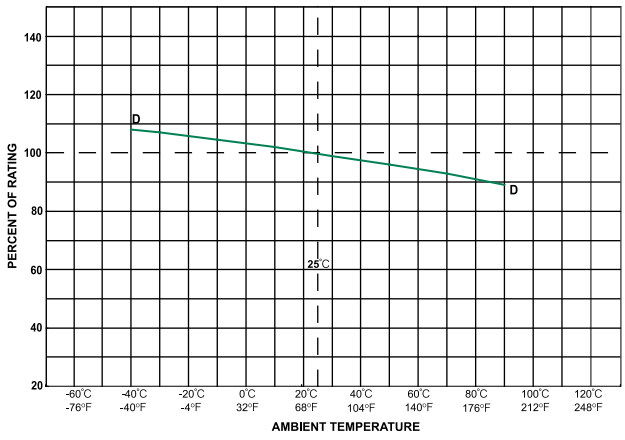
Note: 1.00 means the number one with two decimal places. 1,000 means the number one thousand.

Revised: 12/19/13

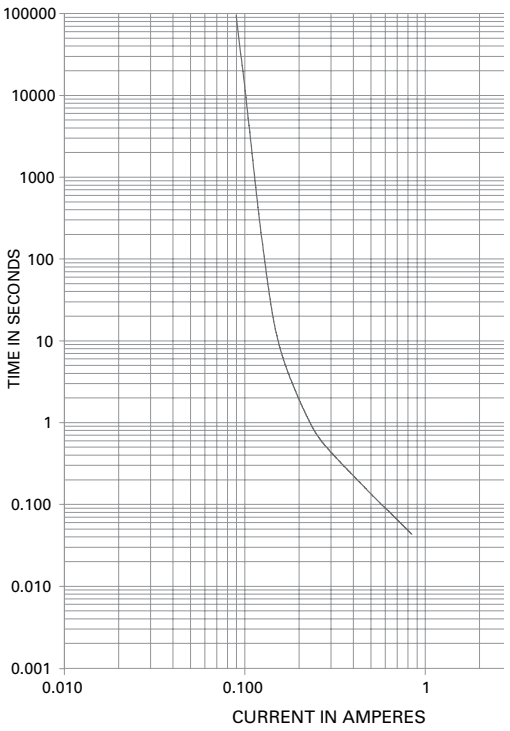
Axial Lead & Cartridge Fuses

TE5® >Time Lag > 389 Series

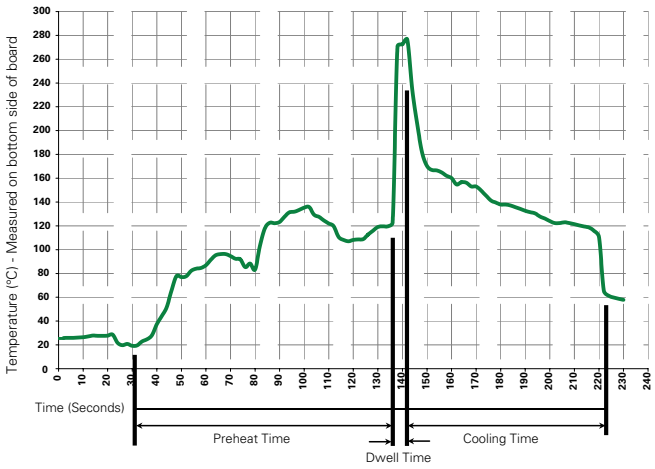
Temperature Rerating Curve



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:	280°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.

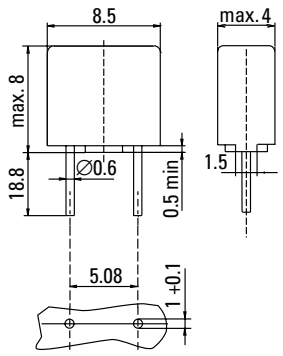
Revised: 12/19/13

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, ≤ 3 sec. (Wave) 350°C, ≤ 1 sec. (Hand)
Soldering Heat Resistance	260°C, 10 sec. (IEC 60068-2-20)

Operating Temperature	–40°C to +85°C (consider de-rating)
Climatic Category	–25°C/+70°C/21 days (EN 60068-1..3)
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



Holes in PCB

Part Numbering System

389 0060 000

- 000 — Packaging Code
  - 000 Tape/Ammopack (1,400 pcs.)
- 0060 — Amp. Code
  - (See Electrical Characteristics Chart)
- 389 — Series

Packaging

Packaging Code	Packing Option	Quantity
000	Tape/Ammopack	1400

Revised: 12/19/13