imall

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!



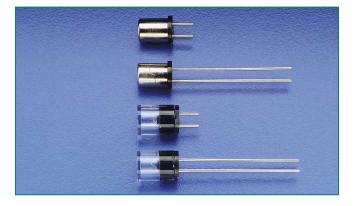
Contact us

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





272/273/274/278/279 Series, MICRO™ Very Fast-Acting Fuse



Agency Approvals

Electrical Characteristic

| Agency | Agency File Number | Ampere Range |
|-----------|--------------------|--------------|
| 91 | E10480 | 0.002A - 5A |
| () () | 29862 | 0.002A - 5A |
| QPL | FM02 | 0.002A - 5A |

Description

Developed originally for the U.S. Space Program, MICRO[™] fuse provides reliability in a compact design. The MICRO[™] fuse is available in plug–in or radial lead styles and a complete range of ampere ratings from 0.002A to 5A to suit a wide variety of design needs.

Features

- Military grade available
- High breaking capacity
- Available from very low ampere of 0.002A to 5A

91 🚯 QPL

- Clear cover option to view
 fuse element status
- Plug-in with short or long leads option

Applications

- Printed circuit boards and similar equipment
- Electronic components

Electrical Characteristics

| % of Ampere Rating | Ampere Rating | OpeningTime | |
|-----------------------|---------------|------------------------|--|
| 100% | 0.002 – 5 | 4 Hours, Min. | |
| 200% | 0.002 – 0.3 | 5 Seconds, Max. | |
| 200 % | 0.4 - 5 | 2 Seconds, Max. | |

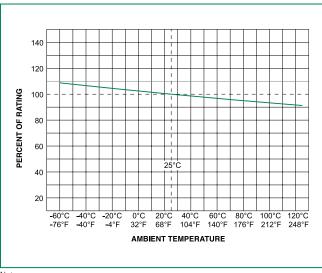
| Ampere | Amp Code | Max | | Nominal | Nominal | Agency Approvals | | |
|--------------------------------------|------------------------------|-------------------------|--------------------|----------|--------------|------------------|---|---|
| Bating (for all voltage Interrupting | Cold Resistance (Ohms) | Melting I²t (A² sec) | 71 | (| QPL | | | |
| .002 | .002 | 125 | | 2200 | 0.0000000845 | Х | Х | X |
| .005 | .005 | 125 | | 280 | 0.000000766 | Х | X | X |
| .010 | .010 | 125 | | 80.0 | 0.000000462 | Х | X | X |
| .015 | .015 | 125 | | 44.0 | 0.00000123 | Х | X | X |
| .031 | .031 | 125 | | 16.0 | 0.00000810 | Х | Х | X |
| .050 | .050 | 125 | | 3.52 | 0.0000666 | Х | X | X |
| .062 | .062 | 125 | | 2.55 | 0.000115 | Х | X | X |
| .100 | .100 | 125 | | 1.38 | 0.000385 | Х | X | X |
| .125 | .125 | 125 | | 1.0 | 0.000691 | Х | Х | X |
| .200 | .200 | 125 | | 2.30 | 0.00409 | Х | X | Х |
| .250 | .250 | 125 | | 1.75 | 0.00640 | Х | Х | X |
| .300 | .300 | 125 | 10,000A@125VAC/VDC | 1.25 | 0.00945 | Х | Х | X |
| .400 | .400 | 125 | 10,000A@125VAC/VDC | 0.227 | 0.0251 | Х | Х | Х |
| .500 | .500 | 125 | | 0.167 | 0.0716 | Х | X | X |
| .600 | .600 | 125 | | 0.430 | 0.0411 | Х | Х | X |
| .700 | .700 | 125 | | 0.324 | 0.0710 | Х | Х | Х |
| .750 | .750 | 125 | | 0.293 | 0.0563 | Х | Х | Х |
| .800 | .800 | 125 | | 0.271 | 0.113 | Х | Х | Х |
| 1.00 | 001. | 125 | | 0.0880 | 0.0648 | Х | Х | Х |
| 01.5 | 01.5 | 125 | | 0.0578 | 0.160 | Х | X | Х |
| 2.00 | 002. | 125 | | 0.0425 | 0.300 | Х | X | Х |
| 3.00 | 003. | 125 | | 0.0275 | 0.759 | Х | X | Х |
| *4.00 | 004. | 125 | | 0.0202 | 1.38 | Х | X | Х |
| *5.00 | 005. | 125 | | 0.0156 | 2.21 | Х | X | X |

* The fuses of 4A and 5A for 272 and 278 Series are obsolete.

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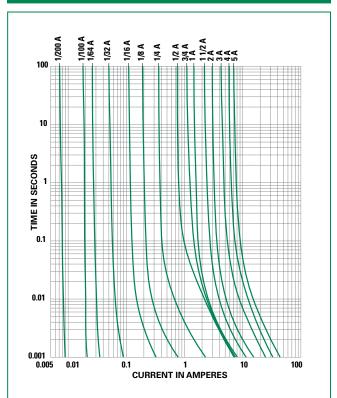
Temperature Re-rating Curve



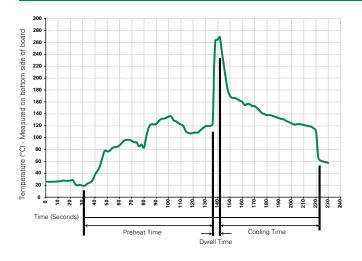
Note:

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





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 PotTemperature: | 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.

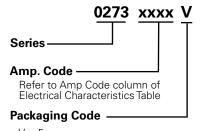
Note: These devices are not recommended for IR or Convection Reflow process.



Product Characteristics

| Operating Temperature: | 273 and 279: –55°C to +85°C; 272 and 278: –55°C to +125°C | |
|------------------------|---|--|
| Fuses to MIL SPEC | Military QPL type (FM02). To order, change 273 to 274. | |
| | 272 and 278 series cap: Nickel Plated Brass | |
| Materials | 273, 274 and 279 series cap: Mirror polished Polycarbonate | |
| | Base: R-4 Ryton | |
| | Pins: Tin Plated Copper | |
| Product Marking | Current and voltage ratings stamped on cap | |

Part Numbering System



V = 5 H = 100

Additional Information



Datasheet 272 Series



Datasheet 273 Series



Datasheet 274 Series



Datasheet 278 Series



Datasheet 279 Series

|--|--|

Resources 272 Series

Resources

273 Series

Resources 274 Series

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Resources 278 Series

Resources

279 Series



Samples 273 Series



Samples 274 Series

Samples

272 Series



Samples 278 Series

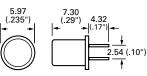


Samples 279 Series

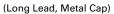
Dimensions

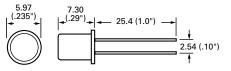
272 000 Series

(Short Lead, Metal Cap)



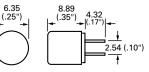
278 000 Series





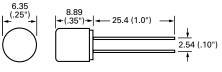
273 000 and 274 000 Series

(Short Lead, Clear Plastic Cap)



279 000 Series

(Long Lead, Clear Plastic Cap)



NOTE: Amperage and voltage rating stamped on cap. Leads are tin plated copper; .025" diameter.

Packaging

| Packaging Option | Packaging Specification | Quantity | Quantity & Packaging Code |
|---------------------|----------------------------|----------|---------------------------------|
| Bulk | N/A | 5 | V |
| Bulk | N/A | 100 | Н |