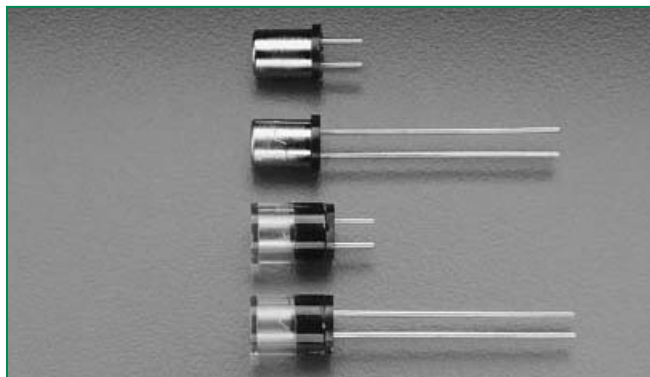


## 272/273/274/278/279 Series, MICRO™ Very Fast-Acting Fuse



### 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 1/500 to 5A to suit a wide variety of design needs.

### Features

- Military grade available
- High breaking capacity
- Clear cover option to view fuse element status
- Available from very low ampere of 2mA to 5A
- Plug-in with short or long leads option

### Applications

- Printed circuit boards and similar equipment
- Electronic components

### Electrical Characteristics

| % of Ampere Rating | Ampere Rating | Opening Time           |
|--------------------|---------------|------------------------|
| 100%               | 1/500–5       | 4 Hours, <b>Min.</b>   |
| 200%               | 1/500–3/10    | 5 Seconds, <b>Max.</b> |
|                    | 4/10–5        | 2 Seconds, <b>Max.</b> |

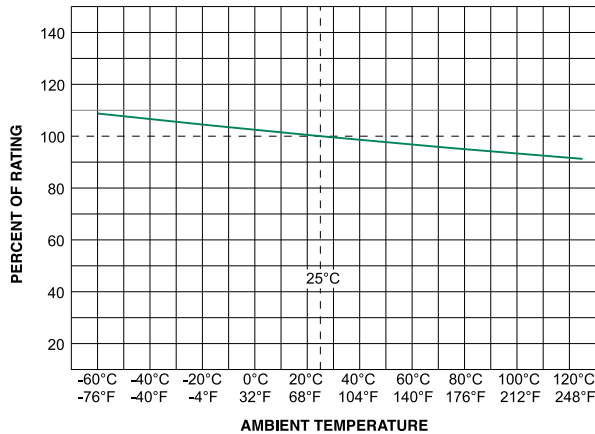
### Agency Approvals

| Agency                                                                            | Agency File Number | Ampere Range |
|-----------------------------------------------------------------------------------|--------------------|--------------|
|  | E10480             | 2mA - 5A     |
|  | LR 29862           | 2mA - 5A     |
|  | FM02               | 2mA - 5A     |

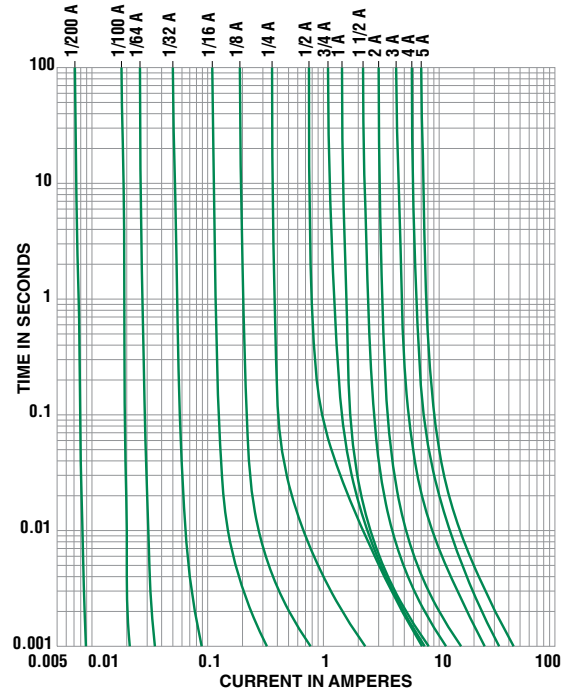
### Electrical Characteristics

| Ampere Rating (A) | Amp Code (for all above series) | Max Voltage Rating (V) | Interrupting Rating            | Nominal Cold Resistance (Ohms) | Nominal Melting I²t (A² sec) | Agency Approvals                                                                      |                                                                                       |                                                                                       |
|-------------------|---------------------------------|------------------------|--------------------------------|--------------------------------|------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
|                   |                                 |                        |                                |                                |                              |  |  |  |
| .002              | .002                            | 125                    | 10,000 amperes at 125 VAC/VDC. | 2200                           | 0.00000000845                | X                                                                                     | X                                                                                     | X                                                                                     |
| .005              | .005                            | 125                    |                                | 280                            | 0.00000000810                | X                                                                                     | X                                                                                     | X                                                                                     |
| .010              | .010                            | 125                    |                                | 80.0                           | 0.000000462                  | X                                                                                     | X                                                                                     | X                                                                                     |
| .015              | .015                            | 125                    |                                | 44.0                           | 0.00000123                   | X                                                                                     | X                                                                                     | X                                                                                     |
| .031              | .031                            | 125                    |                                | 16.0                           | 0.00000810                   | X                                                                                     | X                                                                                     | X                                                                                     |
| .050              | .050                            | 125                    |                                | 3.20                           | 0.0000666                    | X                                                                                     | X                                                                                     | X                                                                                     |
| .062              | .062                            | 125                    |                                | 2.32                           | 0.000115                     | X                                                                                     | X                                                                                     | X                                                                                     |
| .100              | .100                            | 125                    |                                | 1.25                           | 0.000385                     | X                                                                                     | X                                                                                     | X                                                                                     |
| .125              | .125                            | 125                    |                                | 1.0                            | 0.000691                     | X                                                                                     | X                                                                                     | X                                                                                     |
| .200              | .200                            | 125                    |                                | 2.30                           | 0.00409                      | X                                                                                     | X                                                                                     | X                                                                                     |
| .250              | .250                            | 125                    |                                | 1.75                           | 0.00640                      | X                                                                                     | X                                                                                     | X                                                                                     |
| .300              | .300                            | 125                    |                                | 1.25                           | 0.00945                      | X                                                                                     | X                                                                                     | X                                                                                     |
| .400              | .400                            | 125                    |                                | 0.227                          | 0.0251                       | X                                                                                     | X                                                                                     | X                                                                                     |
| .500              | .500                            | 125                    |                                | 0.167                          | 0.0716                       | X                                                                                     | X                                                                                     | X                                                                                     |
| .600              | .600                            | 125                    |                                | 0.430                          | 0.0411                       | X                                                                                     | X                                                                                     | X                                                                                     |
| .700              | .700                            | 125                    |                                | 0.324                          | 0.0710                       | X                                                                                     | X                                                                                     | X                                                                                     |
| .750              | .750                            | 125                    |                                | 0.293                          | 0.0900                       | X                                                                                     | X                                                                                     | X                                                                                     |
| .800              | .800                            | 125                    |                                | 0.271                          | 0.113                        | X                                                                                     | X                                                                                     | X                                                                                     |
| 1.00              | .001                            | 125                    |                                | 0.0880                         | 0.0648                       | X                                                                                     | X                                                                                     | X                                                                                     |
| 01.5              | 01.5                            | 125                    |                                | 0.0578                         | 0.160                        | X                                                                                     | X                                                                                     | X                                                                                     |
| 2.00              | .002                            | 125                    |                                | 0.0425                         | 0.300                        | X                                                                                     | X                                                                                     | X                                                                                     |
| 3.00              | .003                            | 125                    |                                | 0.0275                         | 0.759                        | X                                                                                     | X                                                                                     | X                                                                                     |
| 4.00              | .004                            | 125                    |                                | 0.0202                         | 1.38                         | X                                                                                     | X                                                                                     | X                                                                                     |
| 5.00              | .005                            | 125                    |                                | 0.0156                         | 2.21                         | X                                                                                     | X                                                                                     | X                                                                                     |

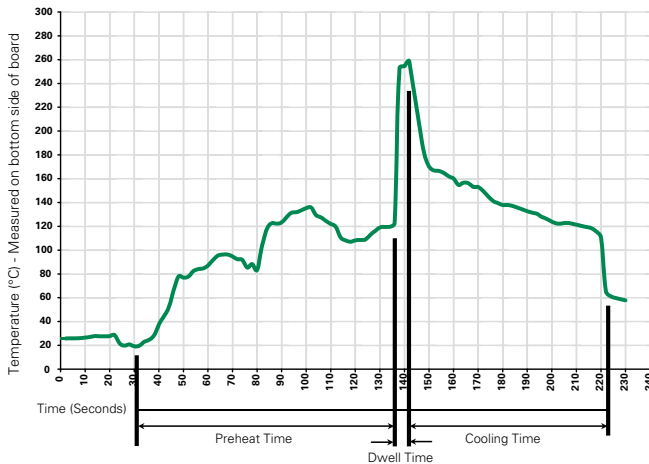
## Temperature Derating Curve



## Average Time Current Curves



## Soldering Parameters - Wave Soldering



### Recommended Process Parameters:

| Wave Parameter                                              | Lead-Free Recommendation          |
|-------------------------------------------------------------|-----------------------------------|
| <b>Preheat:</b><br>(Depends on Flux Activation Temperature) | (Typical Industry Recommendation) |
| Temperature Minimum:                                        | 100° C                            |
| Temperature Maximum:                                        | 150° C                            |
| Preheat Time:                                               | 60-180 seconds                    |
| <b>Solder Pot Temperature:</b>                              | 260° C Maximum                    |
| <b>Solder Dwell Time:</b>                                   | 2-5 seconds                       |

### Recommended Hand-Solder Parameters:

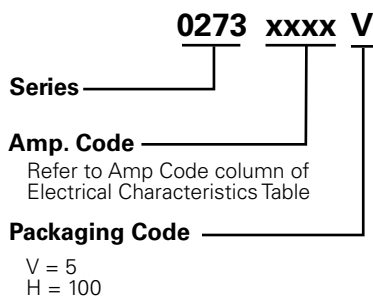
Solder Iron Temperature: 350° C +/- 5°C  
Heating Time: 5 seconds max.

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

### Product Characteristics

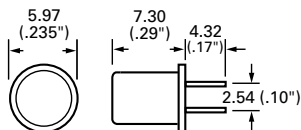
|                               |                                                                                                                                                               |
|-------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Operating Temperature:</b> | 273 and 279: -55°C to +85°C;<br>272 and 278: -55°C to +125°C                                                                                                  |
| <b>Fuses to MIL SPEC</b>      | 273 Series is available in CSA LR 29862. Military QPL type (FM02). To order, change 273 to 274.                                                               |
| <b>Materials</b>              | 272 and 278 series cap:<br>Nickel Plated Brass<br>273, 274 and 279 series cap:<br>Mirror polished Polycarbonate<br>Base: R-4 Ryton<br>Pins: Tin Plated Copper |
| <b>Product Marking</b>        | Current and voltage ratings stamped on cap                                                                                                                    |

### Part Numbering System

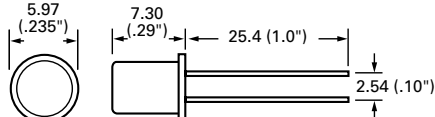


### Dimensions

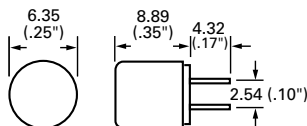
#### 272 000 Series (Short Lead, Metal Cap)



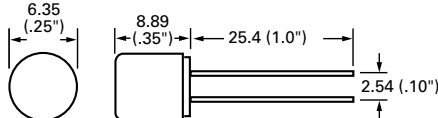
#### 278 000 Series (Long Lead, Metal Cap)



#### 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      | H                         |



Компания «ЭлектроПласт» предлагает заключение долгосрочных отношений при поставках импортных электронных компонентов на взаимовыгодных условиях!

Наши преимущества:

- Оперативные поставки широкого спектра электронных компонентов отечественного и импортного производства напрямую от производителей и с крупнейших мировых складов;
- Поставка более 17-ти миллионов наименований электронных компонентов;
- Поставка сложных, дефицитных, либо снятых с производства позиций;
- Оперативные сроки поставки под заказ (от 5 рабочих дней);
- Экспресс доставка в любую точку России;
- Техническая поддержка проекта, помощь в подборе аналогов, поставка прототипов;
- Система менеджмента качества сертифицирована по Международному стандарту ISO 9001;
- Лицензия ФСБ на осуществление работ с использованием сведений, составляющих государственную тайну;
- Поставка специализированных компонентов (Xilinx, Altera, Analog Devices, Intersil, Interpoint, Microsemi, Aeroflex, Peregrine, Syfer, Eurofarad, Texas Instrument, Miteq, Cobham, E2V, MA-COM, Hittite, Mini-Circuits, General Dynamics и др.);

Помимо этого, одним из направлений компании «ЭлектроПласт» является направление «Источники питания». Мы предлагаем Вам помощь Конструкторского отдела:

- Подбор оптимального решения, техническое обоснование при выборе компонента;
- Подбор аналогов;
- Консультации по применению компонента;
- Поставка образцов и прототипов;
- Техническая поддержка проекта;
- Защита от снятия компонента с производства.



#### Как с нами связаться

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