

RoHS  **372 Series, TR5®, Time-Lag Fuse**



### Agency Approvals

| Agency                                                                              | Agency File Number                                                                                           | Ampere Range                                                            |
|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------|
|    | 5007679-1170-0003/82447                                                                                      | 50mA - 4A                                                               |
|    | 5007679-1170-0004/82452                                                                                      | 5A - 6.3A                                                               |
|    | JET1896-31007-2002                                                                                           | 1A - 5A                                                                 |
|   | 1010253                                                                                                      | 50mA - 6.3A                                                             |
|  | E67006                                                                                                       | 40mA - 6.3A                                                             |
|  | SU05024-7010<br>SU05024-7011<br>SU05024-7006<br>SU05024-7007<br>SU05024-7008<br>SU05024-7009<br>SU05024-7012 | 50mA - 100mA<br>125mA - 800mA<br>1A - 2.5A<br>3.15A<br>4A<br>5A<br>6.3A |
|  | CQC07012021162                                                                                               | 5A - 6.3A                                                               |
|  | 2007010207240346                                                                                             | 40mA - 4A                                                               |

### Description

The 372 Series are TR5®, time-Lag type, 250V rated fuses, that are designed in accordance to IEC 60127-3.

### Features

- Lead-free
- Reduced PCB space requirements
- Direct solderable or plug-in versions
- Internationally approved
- Low internal resistance
- Shock safe casing
- Vibration resistant
- Halogen free
- Available from 40mA to 6.3A

### Applications

- Battery Chargers
- Consumer electronics
- Power supplies
- Industrial Controllers

### Electrical Characteristics

| % of Ampere Rating | Opening Time                               |
|--------------------|--------------------------------------------|
| 150%               | 1 Hour, <b>Min.</b>                        |
| 210%               | 2 Minutes, <b>Max.</b>                     |
| 275%               | 400 ms, <b>Min.</b> ; 10 Sec., <b>Max.</b> |
| 400%               | 150 ms, <b>Min.</b> ; 3 Sec., <b>Max.</b>  |
| 1000%              | 20 ms, <b>Min.</b> ; 150 ms, <b>Max.</b>   |

### Electrical Characteristics

| Amp Code | Rated Current | Voltage Rating | Breaking Capacity                               | Voltage Drop<br>$1.0 \times I_N$<br>max. (mV) | Power Dissipation<br>$1.5 \times I_N$<br>max. (mW) | Melting Integral<br>$10 \times I_N$<br>min. (A <sup>2</sup> s) | Agency Approvals                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
|----------|---------------|----------------|-------------------------------------------------|-----------------------------------------------|----------------------------------------------------|----------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|          |               |                |                                                 |                                               |                                                    |                                                                |  |  |  |  |  |  |
| 0040     | 40mA          | 250V           | 35A/250VAC <sup>1</sup><br>50-60 Hz cos φ = 1.0 | 900                                           | 90                                                 | 0.009                                                          |                                                                                     |                                                                                     | X                                                                                   |                                                                                     |                                                                                     |                                                                                     |
| 0050     | 50mA          | 250V           |                                                 | 500                                           | 70                                                 | 0.01                                                           | X                                                                                   | X                                                                                   | X                                                                                   |                                                                                     | X                                                                                   | X                                                                                   |
| 0063     | 63mA          | 250V           |                                                 | 400                                           | 80                                                 | 0.02                                                           | X                                                                                   | X                                                                                   | X                                                                                   |                                                                                     | X                                                                                   | X                                                                                   |
| 0080     | 80mA          | 250V           |                                                 | 370                                           | 100                                                | 0.023                                                          | X                                                                                   | X                                                                                   | X                                                                                   |                                                                                     | X                                                                                   | X                                                                                   |
| 0100     | 100mA         | 250V           |                                                 | 300                                           | 110                                                | 0.047                                                          | X                                                                                   | X                                                                                   | X                                                                                   |                                                                                     | X                                                                                   | X                                                                                   |
| 0125     | 125mA         | 250V           |                                                 | 260                                           | 120                                                | 0.066                                                          | X                                                                                   | X                                                                                   | X                                                                                   |                                                                                     | X                                                                                   | X                                                                                   |
| 0160     | 160mA         | 250V           |                                                 | 200                                           | 130                                                | 0.14                                                           | X                                                                                   | X                                                                                   | X                                                                                   |                                                                                     | X                                                                                   | X                                                                                   |
| 0200     | 200mA         | 250V           |                                                 | 170                                           | 140                                                | 0.20                                                           | X                                                                                   | X                                                                                   | X                                                                                   |                                                                                     | X                                                                                   | X                                                                                   |
| 0250     | 250mA         | 250V           |                                                 | 150                                           | 150                                                | 0.28                                                           | X                                                                                   | X                                                                                   | X                                                                                   |                                                                                     | X                                                                                   | X                                                                                   |
| 0315     | 315mA         | 250V           |                                                 | 140                                           | 160                                                | 0.36                                                           | X                                                                                   | X                                                                                   | X                                                                                   |                                                                                     | X                                                                                   | X                                                                                   |
| 0400     | 400mA         | 250V           |                                                 | 130                                           | 170                                                | 0.9                                                            | X                                                                                   | X                                                                                   | X                                                                                   |                                                                                     | X                                                                                   | X                                                                                   |
| 0500     | 500mA         | 250V           |                                                 | 125                                           | 180                                                | 1.3                                                            | X                                                                                   | X                                                                                   | X                                                                                   |                                                                                     | X                                                                                   | X                                                                                   |
| 0630     | 630mA         | 250V           |                                                 | 120                                           | 200                                                | 2.5                                                            | X                                                                                   | X                                                                                   | X                                                                                   |                                                                                     | X                                                                                   | X                                                                                   |
| 0800     | 800mA         | 250V           |                                                 | 110                                           | 220                                                | 3.8                                                            | X                                                                                   | X                                                                                   | X                                                                                   |                                                                                     | X                                                                                   | X                                                                                   |
| 1100     | 1.00A         | 250V           |                                                 | 110                                           | 360                                                | 5.5                                                            | X                                                                                   | X                                                                                   | X                                                                                   | X                                                                                   | X                                                                                   | X                                                                                   |
| 1125     | 1.25A         | 250V           |                                                 | 95                                            | 450                                                | 9                                                              | X                                                                                   | X                                                                                   | X                                                                                   | X                                                                                   | X                                                                                   | X                                                                                   |
| 1160     | 1.60A         | 250V           |                                                 | 95                                            | 450                                                | 14                                                             | X                                                                                   | X                                                                                   | X                                                                                   | X                                                                                   | X                                                                                   | X                                                                                   |
| 1200     | 2.00A         | 250V           |                                                 | 85                                            | 600                                                | 23                                                             | X                                                                                   | X                                                                                   | X                                                                                   | X                                                                                   | X                                                                                   | X                                                                                   |
| 1250     | 2.50A         | 250V           |                                                 | 80                                            | 700                                                | 35                                                             | X                                                                                   | X                                                                                   | X                                                                                   | X                                                                                   | X                                                                                   | X                                                                                   |
| 1315     | 3.15A         | 250V           |                                                 | 80                                            | 1100                                               | 60                                                             | X                                                                                   | X                                                                                   | X                                                                                   | X                                                                                   | X                                                                                   | X                                                                                   |
| 1400     | 4.00A         | 250V           | 40A / 250 VAC                                   | 75                                            | 1200                                               | 95                                                             | X                                                                                   | X                                                                                   | X                                                                                   | X                                                                                   | X                                                                                   | X                                                                                   |
| 1500     | 5.00A         | 250V           | 50A / 250 VAC                                   | 80                                            | 1300                                               | 94                                                             | G                                                                                   | X                                                                                   | X                                                                                   | X                                                                                   | CQC                                                                                 | X                                                                                   |
| 1630     | 6.30A*        | 250V           |                                                 | 58                                            | 1250                                               | 105                                                            | G                                                                                   | X                                                                                   | X                                                                                   |                                                                                     | CQC                                                                                 | X                                                                                   |

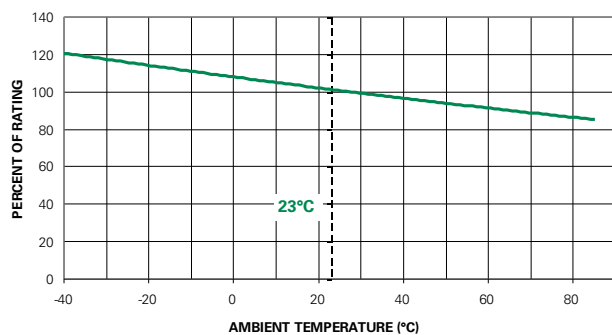
<sup>1</sup> Per UL, approved breaking capacity is 50 A at 250 V.

\* Conducting path min. 0.2 mm<sup>2</sup>

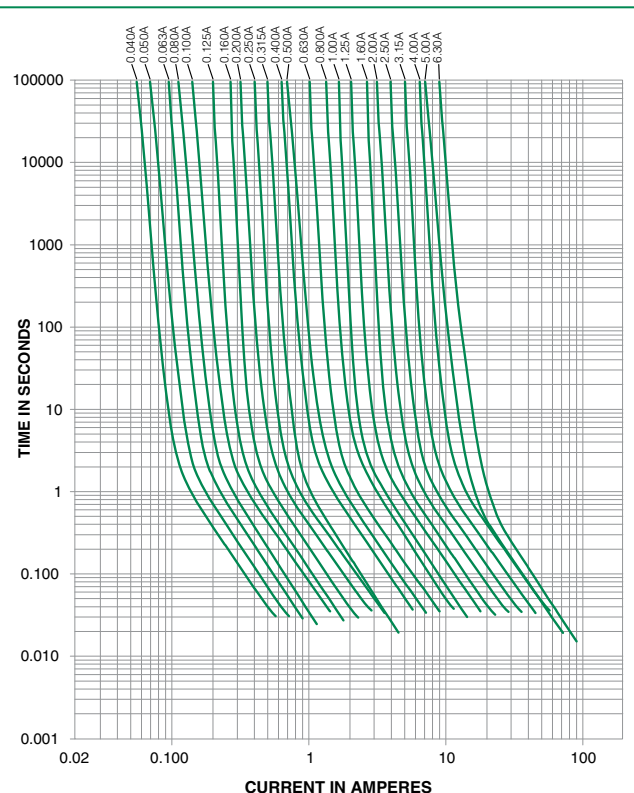
G = Expert Report

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

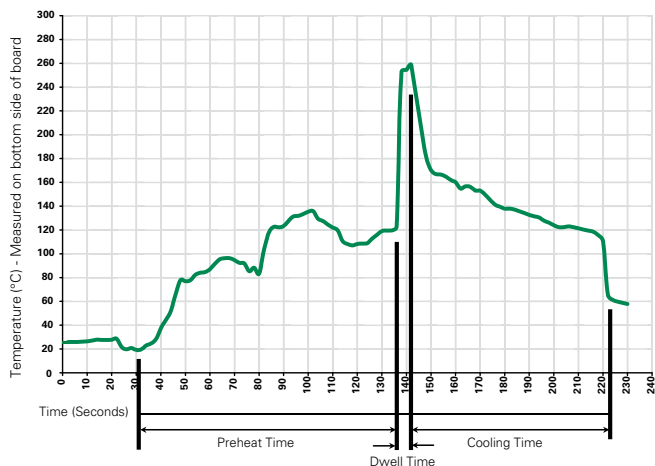
### Temperature Derating Curve



### 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.

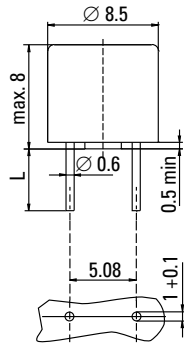
**Note: These devices are not recommended for IR or Convection Reflow process.**

## Product Characteristics

|                                  |                                                                                             |
|----------------------------------|---------------------------------------------------------------------------------------------|
| <b>Materials</b>                 | Base/Cap: Brown Thermoplastic Polyamide PA 6.6, UL 94 V-0<br>Round Pins: Copper, Tin-plated |
| <b>Lead Pull Strength</b>        | 10 N (EN 60068-2-21)                                                                        |
| <b>Solderability</b>             | 260°C, ≤ 3s. (Wave)<br>350°C, ≤ 1s. (Soldering Iron)                                        |
| <b>Soldering Heat Resistance</b> | 260°C, 10s. (IEC 60068-2-20)<br>350°C, 3s. (Soldering Iron)                                 |

|                              |                                                                                                                      |
|------------------------------|----------------------------------------------------------------------------------------------------------------------|
| <b>Operating Temperature</b> | -40°C to +85°C (consider de-rating)                                                                                  |
| <b>Climatic Category</b>     | -40°C/+85°C/21 days<br>(IEC 60068-1,-2-1,-2-2,-2-78)                                                                 |
| <b>Stock Conditions</b>      | +10°C to +60°C<br>RH ≤ 75% yearly average, without dew, maximum value for 30 days-95%                                |
| <b>Vibration Resistance</b>  | 24 cycles at 15 min. each<br>(EN 60068-2-6)<br>10 - 60 Hz at 0.75 mm amplitude<br>60 - 2000 Hz at 10G's acceleration |

## Dimensions



Long Leads (L=18.8mm)  
Short Leads (L=4.3mm)

## Part Numbering System

**372    xxxx    0001**

**Series** ————

**Amp Code** ————  
Refer to Amp Code column of  
Electrical Characteristics Table

**Packaging Code** ————  
0001 Tape/Ammopack (1,000 pcs.)  
0411 Short Leads - Bulk (1,000 pcs.)  
0431 Short Leads - Bulk (200 pcs.)  
0511 3.3 mm Leads - Bulk (1000 pcs.)

## Packaging

| Packaging Option  | Packaging Specification | Quantity | Quantity & Packaging Code | Taping Width |
|-------------------|-------------------------|----------|---------------------------|--------------|
| <b>372 Series</b> |                         |          |                           |              |
| Tape & Ammopack   | N/A                     | 1,000    | 0001                      | N/A          |
| Short Leads       | N/A                     | 1,000    | 0411                      | N/A          |
| Short Leads       | N/A                     | 200      | 0431                      | N/A          |
| 3.3mm Leads       | N/A                     | 1,000    | 0511                      | N/A          |



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- Техническая поддержка проекта;
- Защита от снятия компонента с производства.



#### Как с нами связаться

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