

RoHS  
Compliant



MP008048



MP008049



MP008050



MP008051



MP008052

## Specifications

Applications : Rechargeable battery packs, Lithium cell and battery packs  
 Product Features : Low profile, Solid state  
 Operation Current : 1.2A to 4.2A  
 Maximum Voltage : 15V to 30VDC  
 Temperature Range : -40°C to 85°C  
 UL and TUV Approved

## Electrical Characteristics (23°C)

| Part Number | Hold Current       | Trip Current       | Max. Time to Trip         | Rated Voltage                      | Max. Current         | Typ. Power         | Resistance       |                  |                   |
|-------------|--------------------|--------------------|---------------------------|------------------------------------|----------------------|--------------------|------------------|------------------|-------------------|
|             |                    |                    |                           |                                    |                      |                    | R <sub>MIN</sub> | R <sub>MAX</sub> | R <sub>1MAX</sub> |
|             | I <sub>H</sub> , A | I <sub>T</sub> , A | at 5 × I <sub>H</sub> , S | V <sub>MAX</sub> , V <sub>DC</sub> | I <sub>MAX</sub> , A | P <sub>d</sub> , W | Ω                | Ω                | Ω                 |
| MP008048    | 1.2                | 2.7                | 5                         | 15                                 | 100                  | 1.2                | 0.085            | 0.16             | 0.22              |
| MP008049    | 1.75               | 3.8                |                           |                                    |                      | 1.5                | 0.05             | 0.09             | 0.12              |
| MP008050    | 2                  | 4.4                | 4                         | 30                                 |                      | 1.9                | 0.03             | 0.06             | 0.1               |
| MP008051    | 3.5                | 6.3                | 3                         |                                    |                      | 2.5                | 0.017            | 0.031            | 0.05              |
| MP008052    | 4.2                | 7.6                | 6                         |                                    |                      | 2.9                | 0.012            | 0.024            | 0.04              |

I<sub>H</sub>=Hold current-maximum current at which the device will not trip at 23°C still air.

I<sub>T</sub>=Trip current-minimum current at which the device will always trip at 23°C still air.

V<sub>MAX</sub>=Maximum voltage device can withstand without damage at its rated current.

I<sub>MAX</sub>= Maximum fault current device can withstand without damage at rated voltage (V<sub>MAX</sub>).

P<sub>d</sub>=Typical power dissipated from device when in tripped state in 23°C still air environment.

R<sub>MIN</sub>=Minimum device resistance at 23°C.

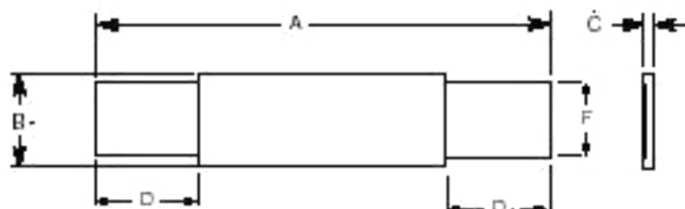
R<sub>1MAX</sub>=Maximum device resistance at 23°C, 1 hour after tripping .

Physical specifications:

Lead material:0.13mm nominal thickness, quarter-hard nickel.

Insulating material: Polyester tape.

## Production Dimensions (millimeter)

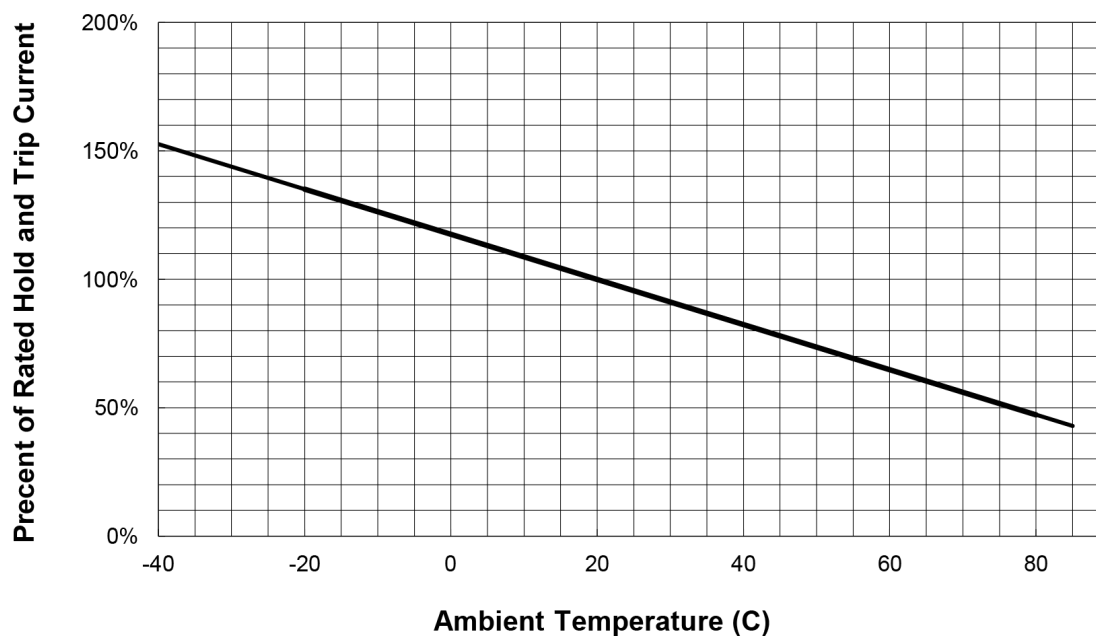


Top view

| Part Number | A    |      | B    |      | C   |     | D   |     | F   |     |
|-------------|------|------|------|------|-----|-----|-----|-----|-----|-----|
|             | Min  | Max  | Min  | Max  | Min | Max | Min | Max | Min | Max |
| MP008048    | 19.9 | 22.1 | 4.9  | 5.2  | 0.6 | 1.0 | 5.5 | 7.5 | 3.9 | 4.1 |
| MP008049    | 20.9 | 23.1 | 4.9  | 5.2  | 0.6 | 1.0 | 4.1 | 5.5 | 3.9 | 4.1 |
| MP008050    | 21.3 | 23.4 | 10.2 | 11.0 | 0.5 | 1.1 | 5.0 | 7.6 | 4.8 | 5.4 |
| MP008051    | 28.4 | 31.8 | 13.0 | 13.5 | 0.5 | 1.1 | 6.3 | 8.9 | 5.9 | 6.1 |
| MP008052    | 30.6 | 32.4 | 12.9 | 13.6 | 0.5 | 1.1 | 5.0 | 7.5 | 5.9 | 6.1 |

## Thermal Derating Curve

### FSR Series

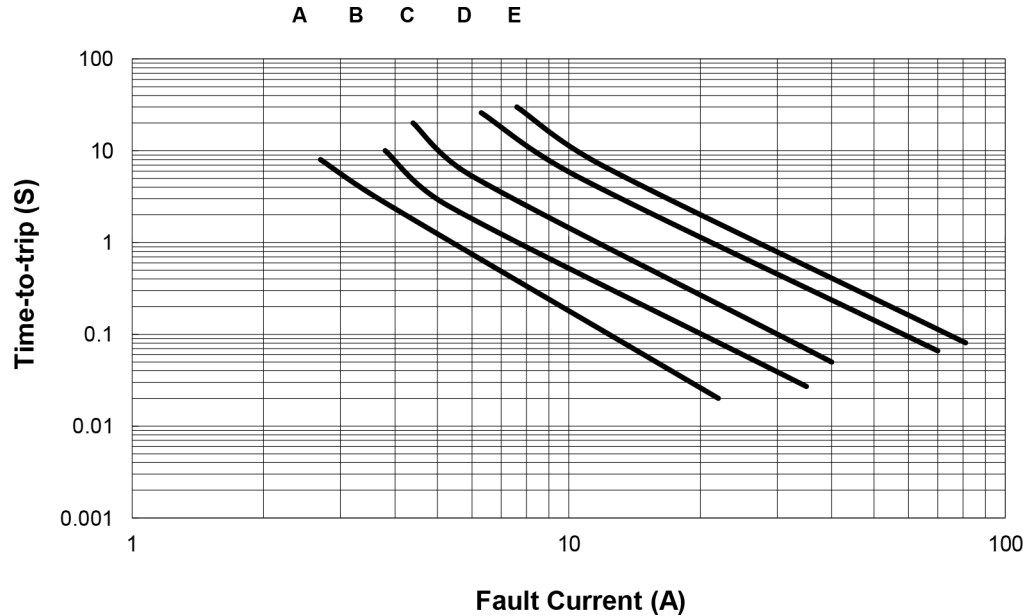


# Axial Leaded PTC Resettable Fuse

**multicomp**PRO

## Typical Time-To-Trip at 23°C

- A = MP008048
- B = MP008049
- C = MP008050
- D = MP008051
- E = MP008052



## Material Specification

Lead material: 0.13 mm nominal thickness, quarter-hard nickel  
Insulating material: Polyester tape

## Part Number Table

| Description                              | Part Number |
|--|-------------|
| PTC Resettable Fuse, 1.2A, Axial Leaded  | MP008048    |
| PTC Resettable Fuse, 1.75A, Axial Leaded | MP008049    |
| PTC Resettable Fuse, 2A, Axial Leaded    | MP008050    |
| PTC Resettable Fuse, 3.5A, Axial Leaded  | MP008051    |
| PTC Resettable Fuse, 4.2A, Axial Leaded  | MP008052    |

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