Fast-Acting Miniature Cartridge Fuses 6mm × 30mm





Description

RoHS Compliant

These fast-acting fuse with high interrupting ratings and high voltage ratings provides protection for printed circuit boards and is used in a large variety of applications. This 6mm × 30mm device is constructed of a ceramic tube with electro-plated brass end caps. These fuses with 250V AC rating and 100A to 200 Ampere breaking capacity, offers excellent quality and is 100% tested for cold resistance and precise length.

Features

- Miniature quick-acting fuse with high interrupting ratings and voltage ratings
- Ø6.35mm × 31.8mm physical dimensions
- · Ceramic tube, encapsulated design with nickel plated brass end caps
- · Protection against harmful over-currents in primary and secondary applications.
- · Lead-free and Halogen-free
- Designed compliant to UL248-14

Mechanical Specifications

Operating Temperature : -55°C to 125°C Storage Conditions : +10°C to +60°C

Relative humidity : ≤ 75% yearly average without dew, maximum 30 days at 95%

Vibration Resistance : 24 cycles at 15 min. each (60068-6)

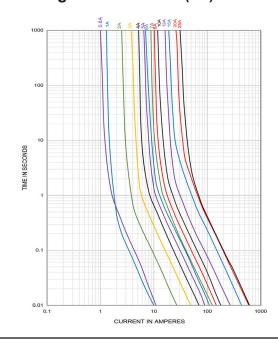
10-60Hz at 0.75mm amplitude 60-2000Hz at 10g acceleration

Electrical Specifications

Time vs Current Characteristics Table (measured with constant current power supply)

| Time vs Current Characteristics: UL248-14 | | | | | | |
|---|-----------|-----|------|--|--|--|
| Rated current | 100% 135% | | 200% | | | |
| 2A to 20A | >4h | <1h | <10s | | | |

Average Time Current (I-T) Curves



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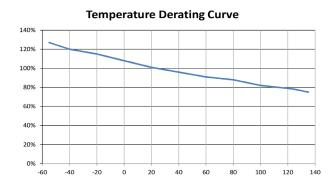
Electrical characteristics at 25°C

| Part Number | Amp Code | Rated Current | Rated Voltage | Nominal Melting I ² t (A ² sec) | Typical cold Resistance (mΩ) | Breaking Capacity |
|-------------|-------------|---------------|--------------------|---|------------------------------------|------------------------------|
| MP007102 | 1200 | 2A | 125V AC 250V AC | 7.29 | 68 | 10KA/125V AC 100A/250V AC |
| MP007104 | 2150 | 15A | | 1936 | 4.4 | 400A/125V AC |
| MP007103 | 2200 | 20A | | 3600 | 3.3 | 200A/250V AC |

Notes:

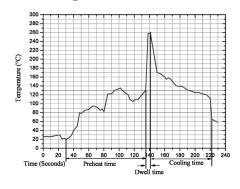
- (1) Permissible continuous operating current is ≤100% at ambient temperature of 23°C (73.4°F)
- (2) The current values used for calculating I²T should be within the standard range of 8ms ~ 10ms.

Temperature Derating Curve



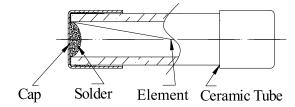
Calculation for ideal fuse selection = $\frac{\text{Operating Current (A)}}{\text{Rating (\% \times 0.75)}}$

Soldering Parameters



260°C ≤5 sec (Wave Soldering) 350°C ≤3 sec (Hand Soldering) Soldering Peak: 260°C - 10 sec (IEC 60068-20)

Mechanical Specifications



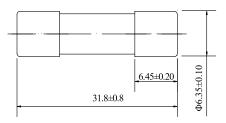
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Fast-Acting Miniature Cartridge Fuses 6mm × 30mm



Diagram



Part Number Table

| Description | Part Number |
|--|-------------|
| Fast-Acting Miniature Cartridge Fuse, 2A, 250V AC, 6mm × 30mm | MP007102 |
| Fast-Acting Miniature Cartridge Fuse, 15A, 250V AC, 6mm × 30mm | MP007104 |
| Fast-Acting Miniature Cartridge Fuse, 20A, 250V AC, 6mm × 30mm | MP007103 |

Dimensions: Millimetres

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