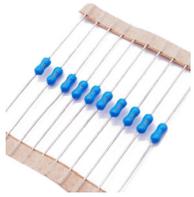


# Quick-Acting Sub-Miniature Fuses

## Axial Leaded

**multicomp** PRO

**RoHS  
Compliant**



### Description

The product is a quick-acting fuse with low breaking capacity for use with printed circuit boards and is used in a variety of applications. This 3mm × 7mm device is constructed of a ceramic body with electroplated brass end caps. The product comes with 250V AC rating and 50 Ampere breaking capacity, offers excellent quality and is 100% tested for cold resistance and precise length.

### Applications

Flatpanel TVs, medical equipment, LCD monitors, lighting systems and industrial equipment.

### Features

- Subminiature fuse with quick-acting, low breaking capacity
- 3mm × 7mm physical dimensions
- Ceramic tube, encapsulated with epoxy coating and with nickel plated brass end caps
- Optional axial leads are 0.6mm × 26.5mm
- Protection against harmful over-currents in primary and secondary applications.
- Lead-free and Halogen-free
- Designed to UL 248-14

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

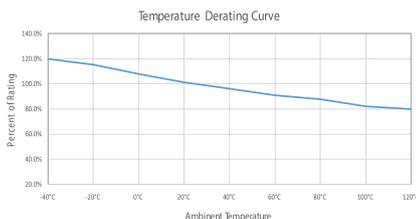
### Electrical Characteristics

Part Number	Rated Current	Rated Voltage	Breaking Capacity	Typical Melting I <sup>2</sup> t (A <sup>2</sup> sec)
MP001589	375mA	250V AC	50A@250V AC 50A@125V AC	0.2
MP001590	500mA			0.48
MP001593	1A			0.49
MP001591	2A			3.61
MP001595	3A		35A@250V AC 35A@125V AC	5.9
MP001594	7A		16.6	

#### Note:

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

### Temperature Derating Curve



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

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Element14.com/multicomp-pro

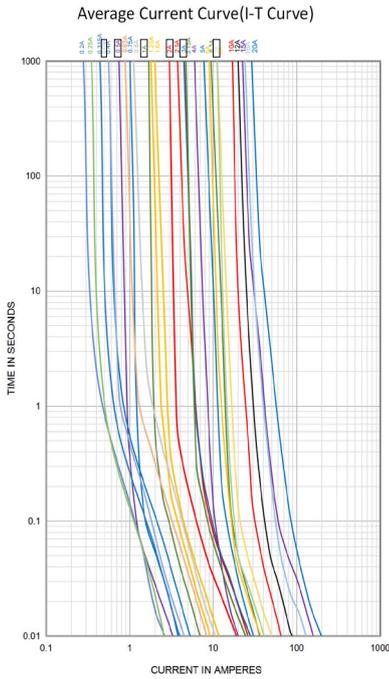
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# Quick-Acting Sub-Miniature Fuses Axial Leaded



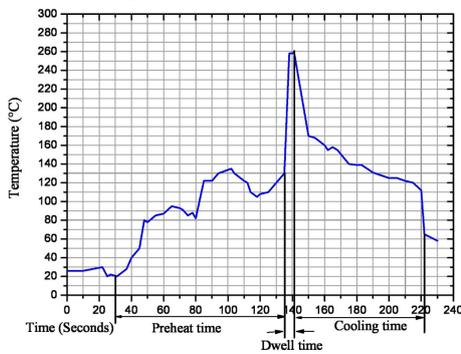
## Time vs Current Characteristics Table

### Average Time Current (I-T) Curves



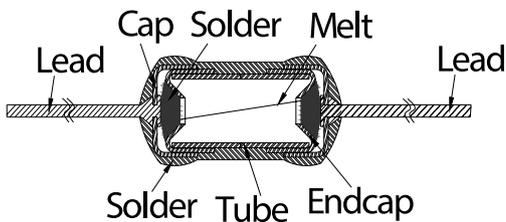
Time vs Current Characteristics: UL-248-14		
Rated Current	100%	200%
375mA to 7A	>4h	<60s

## 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



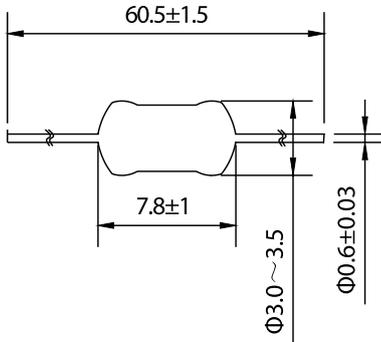
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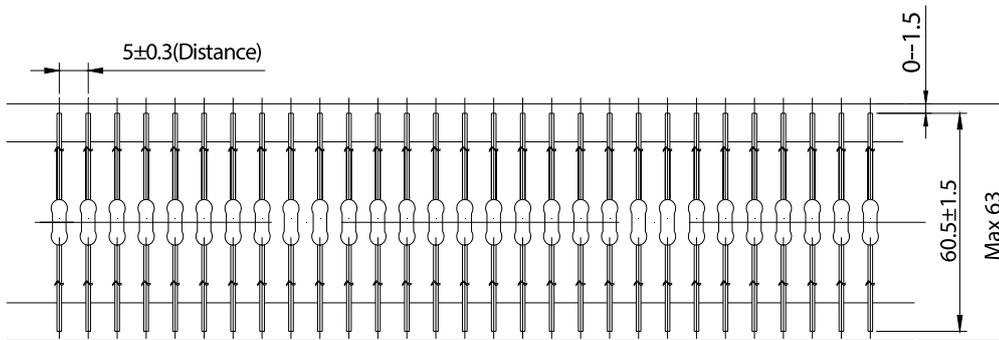
# Quick-Acting Sub-Miniature Fuses Axial Leaded



## Diagram



## Packing Information



Dimensions : Millimetres

## Part Number Table

Description	Part Number
Sub-Miniature Fuse, Quick-Acting, 0.375A, 250V AC, Axial Leaded	MP001589
Sub-Miniature Fuse, Quick-Acting, 0.5A, 250V AC, Axial Leaded	MP001590
Sub-Miniature Fuse, Quick-Acting, 1A, 250V AC, Axial Leaded	MP001593
Sub-Miniature Fuse, Quick-Acting, 2A, 250V AC, Axial Leaded	MP001591
Sub-Miniature Fuse, Quick-Acting, 3A, 250V AC, Axial Leaded	MP001595
Sub-Miniature Fuse, Quick-Acting, 7A, 250V AC, Axial Leaded	MP001594

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