Quick-Acting Sub-Miniature Fuses Axial Leaded





RoHS Compliant

Applications

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

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 2mm × 7mm device is constructed of a ceramic body with electro-plated 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.

Features

- · Subminiature fuse with quick-acting, low breaking capacity
- · 2mm × 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

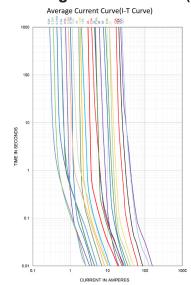
Electrical Characteristics

Time vs Current Characteristics Table

(measured with constant current power supply)

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

Average Time Current (I-T) Curves



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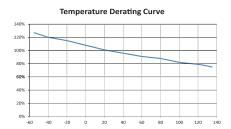
Electrical Characteristics at 25°C

Part Number	Amp Code	Rated Current	Rated Voltage	Typical Cold Resistance (mΩ)	Nominal Melting I ² T (A ² s)	Breaking Capacity
MP001589	0375	375mA	125V AC 250V AC	340	0.2	50A@250V AC 50A@125V AC
MP001590	0500	500mA		201	0.48	
MP001593	1100	1A		60	0.531	
MP001591	1200	2A		30.3	2.4	
MP001595	1300	3A		19	5.9	35A@250V AC
MP001594	1700	7A		5.88	16.6	35A@125V AC

Note:

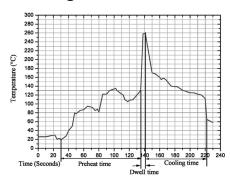
- (1) Permissible continuous operating current is 100% at ambient temperature of 23°C (73.4°F)
- (2) The current values used for calculating I2T should be within the standard range of 8ms~10ms.

Temperature Derating Curve



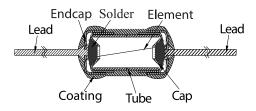
Calculation for ideal fuse selection = $\frac{\text{Operating Current (A)}}{\text{Rating (% × 0.75)}}$

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



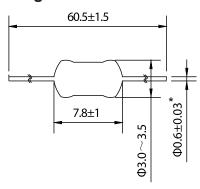
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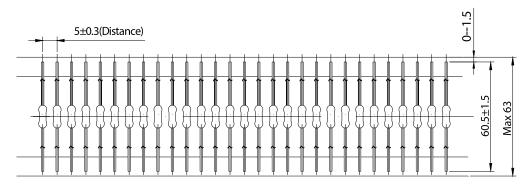


Diagram



*100mA~6.3A: Ф0.6mm 8A~20A: Ф0.8mm

Packing Information



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

Dimensions: Millimetres

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