

Fast-Acting Miniature Cartridge Fuses

5mm x 20mm

multicomp PRO

**RoHS
Compliant**



Description

These fast-acting fuse with low breaking capacity provides protection for printed circuit boards and is used in a large variety of applications. This $\Phi 5\text{mm} \times 20\text{mm}$ device is constructed of a glass tube with electro-plated brass end caps. These fuses offers excellent quality and is 100% tested for cold resistance and precise length.

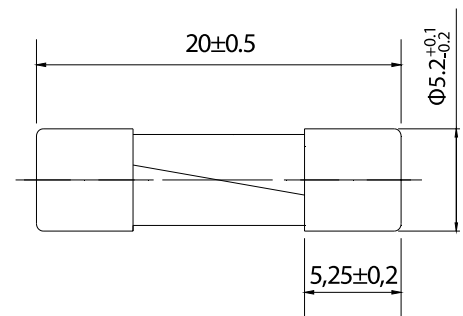
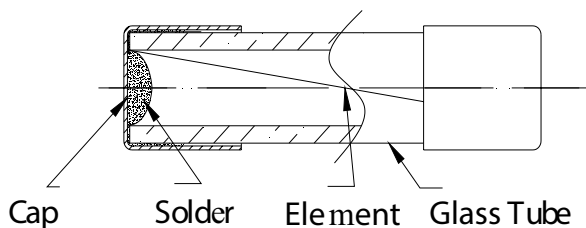


Features

- Miniature fuse with fast-acting, low breaking capacity
- $\Phi 5\text{mm} \times 20\text{mm}$ physical dimensions
- Glass tube, encapsulated design with nickel - plated brass end caps
- Protection against harmful over-currents in primary and secondary applications

Mechanical Specifications

- Operating Temperature : -55°C to 125°C
- Storage Conditions : $+10^{\circ}\text{C}$ to $+60^{\circ}\text{C}$
- Relative humidity : $\leq 75\%$ 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



Dimensions : Millimetres

Electrical Specifications

Time vs Current Characteristics Table

(measured with constant current power supply)

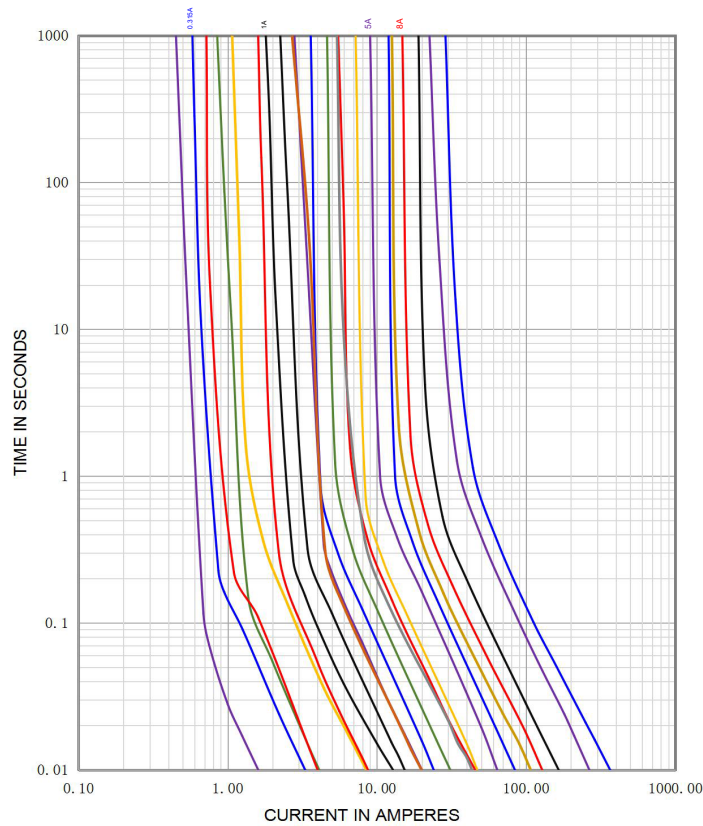
Time vs Current Characteristics: UL248-14					
Rated current	150%	210%	275%	400%	1000%
315mA to 5A	>1h	<30min	50ms~2s	10ms~300ms	$\leq 20\text{ms}$
8A to 10A				10ms~400ms	$\leq 40\text{ms}$

Fast-Acting Miniature Cartridge Fuses 5mm x 20mm



Average Time Current (I-T) Curves

Average Current Curve(I-T Curve)



Electrical characteristics

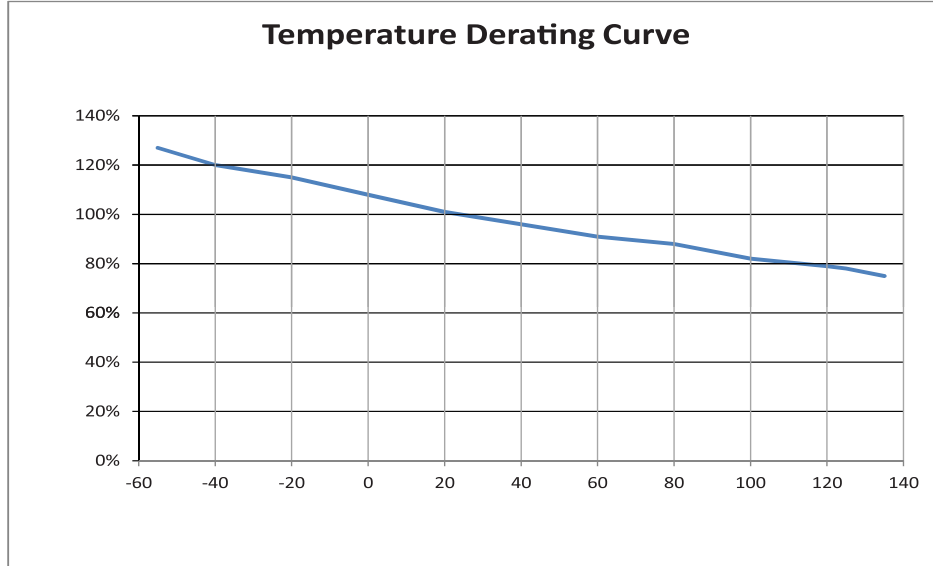
Electrical Characteristics at 25°C												
Part Number	Rated Current	Rated Voltage	Voltage Drop Max(mV)	Max Power Dissipation (W)	Typical Cold Resistance (mΩ)	Nominal Melting I ² T (A ² sec)	Breaking Capacity	Approvals				
								cURus	CQC	VDE	PSE	CCC
MP007113	315mA	250V AC	1300	1.6	860	0.109	10KA/125V AC 100A/250V AC	●	○	●	○	●
MP007114	1A		200		101	1.64		○	○	●		
MP007115	5A		130	2.5	13.5	41		●	●	●	○	○
MP007116	8A				7.5	164		○				
MP007117	10A				6.3	272		○				

- Note: 1. Permissible continuous operating current is ≤100% at ambient temperature of 23°C (73.4°F)
 2. The cURus certification by 125V and 250V; the others certification by 250V.
 3. The current values used for calculating I²t should be within the standard range of 8ms ~ 10ms.

Newark.com/multicomp-pro
 Farnell.com/multicomp-pro
 Element14.com/multicomp-pro



Temperature Derating Curve



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

Part Number Table

Description	Part Number
Fast-Acting Miniature Cartridge Fuse, 315mA, 250V AC, 5mm x 20mm	MP007113
Fast-Acting Miniature Cartridge Fuse, 1A, 250V AC, 5mm x 20mm	MP007114
Fast-Acting Miniature Cartridge Fuse, 5A, 250V AC, 5mm x 20mm	MP007115
Fast-Acting Miniature Cartridge Fuse, 8A, 250V AC, 5mm x 20mm	MP007116
Fast-Acting Miniature Cartridge Fuse, 10A, 250V AC, 5mm x 20mm	MP007117

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