

Time-Lag Cartridge Fuses

5mm × 20mm

multicomp PRO

**RoHS
Compliant**



Description

The time-lag fuse with low breaking capacity for use with printed circuit boards is used in a large variety of applications. This 5mm × 20mm device is constructed of a glass tube with electro-plated brass end caps. It is with 250V AC rating and 35A or 10In Ampere breaking capacity, offers excellent quality and is 100% tested for cold resistance and precise length

The time-lag fuse is ideal for supplementary protection in electrical appliances and equipment to provide excellent protection for components or circuits.

Features

- Miniature fuse with fast-acting, low breaking capacity
- \varnothing 5mm × 20mm physical dimensions
- Glass tube, encapsulated design with nickel - plated brass end caps
- Optional axial leads are \varnothing 0.65mm × 38mm @ 0.5A to 2A
- Protection against harmful over-currents in primary and secondary applications
- Lead-free and Halogen-free
- Designed compliant to IEC 60127-2/II

Specifications

Operating Temperature	: -55°C to +125°C
Stock Temperature	: +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 Characteristics

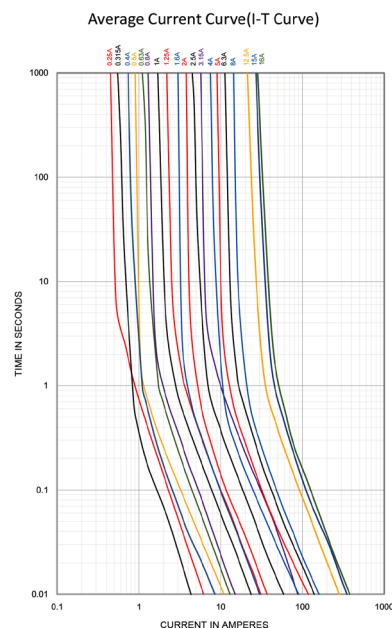
Time vs Current Characteristics Table

(measured with constant current power supply)

Time vs Current Characteristics			
Rated current	150%	210%	275%
0.1A	>1h	<2min	200ms-10s
0.125A~10A	>1h	<2min	600ms~10s
12A~16A	>30min	<5min	600ms~15s

Time vs Current Characteristics		
Rated current	400%	1000%
0.1A	40ms-3s	10ms~300ms
0.125A~10A	150ms~3s	20ms~300ms
12A~16A	150ms~5s	20ms~400ms

Average Time Current (I-T) Curves



multicomp PRO

Time-Lag Cartridge Fuses

5mm × 20mm

Electrical Characteristics at 25°C

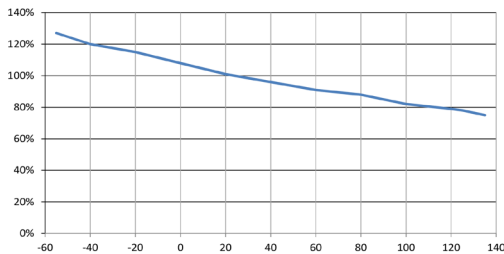
Amp Code	Rated Current	Rated Voltage DC	Max. Voltage Drop (mV)	Max. Power Dissipation (W)	Nominal Melting I ² t(A ² sec)	Typ. Cold Resistance (mΩ)	Breaking Capacity
0500	0.5A	250V AC	900	1.6	1.21	185.3	35A or 10In@250V AC
1100	1A		150	1.6	5.52	71	
1160	1.6A		150	1.6	9	42	
1200	2A		150	1.6	13.7	32	
1250	2.5A		120	1.6	36	41.5	
1400	4		100	1.6	81	14.3	
1630	6.3		100	1.6	196	8.2	
1800	8		100	4	256	6.5	
2100	10		100	4	435	5.3	

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.

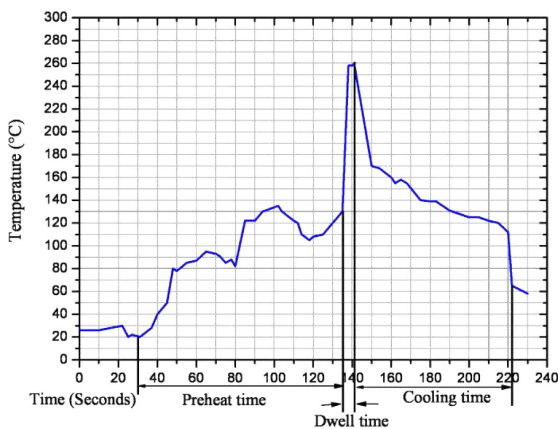
Temperature Derating Curve

Temperature Derating Curve



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

Soldering Parameters

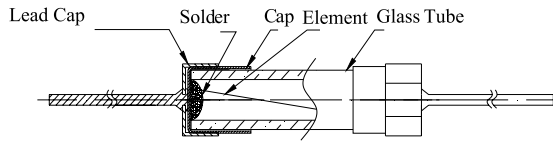
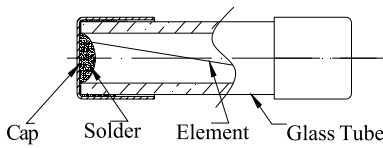


- 260°C ≤ 5 sec (Wave Soldering)
- 350°C ≤ 3 sec (Hand Soldering)
- Soldering Peak: 260°C - 10 sec (IEC 60068-20)

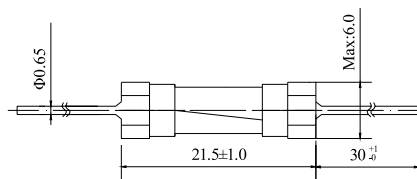
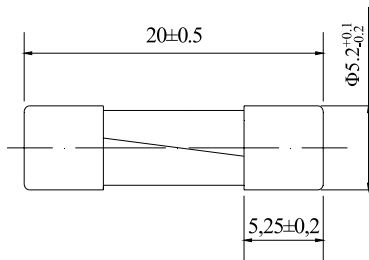
Time-Lag Cartridge Fuses

5mm × 20mm

Construction



Diagram



Part Number Table

Description	Part Number
Cartridge Fuse, Time-Lag, 0.5A, 250V AC, 5mm × 20mm	MP006248
Cartridge Fuse, Time-Lag, 1A, 250V AC, 5mm × 20mm	MP006247
Cartridge Fuse, Time-Lag, 1.6A, 250V AC, 5mm × 20mm	MP007124
Cartridge Fuse, Time-Lag, 2A, 250V AC, 5mm × 20mm	MP006249
Cartridge Fuse, Time-Lag, 2A, 250V AC, 5mm x 20mm	MP007119
Cartridge Fuse, Time-Lag, 2.5A, 250V AC, 5mm x 20mm	MP007125
Cartridge Fuse, Time-Lag, 4A, 250V AC, 5mm x 20mm	MP007120
Cartridge Fuse, Time-Lag, 6.3A, 250V AC, 5mm x 20mm	MP007121
Cartridge Fuse, Time-Lag, 8A, 250V AC, 5mm x 20mm	MP007122
Cartridge Fuse, Time-Lag, 10A, 250V AC, 5mm x 20mm	MP007123

Dimensions : Millimetres

Important Notice : This data sheet and its contents (the "Information") belong to the members of the AVNET group of companies (the "Group") or are licensed to it. No licence is granted for the use of it other than for information purposes in connection with the products to which it relates. No licence of any intellectual property rights is granted. The Information is subject to change without notice and replaces all data sheets previously supplied. The Information supplied is believed to be accurate but the Group assumes no responsibility for its accuracy or completeness, any error in or omission from it or for any use made of it. Users of this data sheet should check for themselves the Information and the suitability of the products for their purpose and not make any assumptions based on information included or omitted. Liability for loss or damage resulting from any reliance on the Information or use of it (including liability resulting from negligence or where the Group was aware of the possibility of such loss or damage arising) is excluded. This will not operate to limit or restrict the Group's liability for death or personal injury resulting from its negligence. Multicomp Pro is the registered trademark of Premier Farnell Limited 2019.