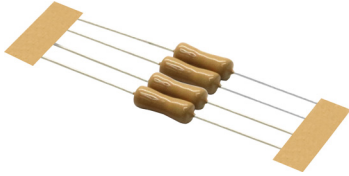


RoHS  
Compliant



## Description

These series time-lag fuse with low breaking capacity for use with printed circuit boards and is used in a variety of applications. This  $\Phi 2\text{mm} \times 7\text{mm}$  device is constructed of a ceramic body with electroplated brass end caps. This series comes with 250V AC rating and 50 Ampere breaking capacity, offers excellent quality and is 100% tested for cold resistance and precise length.

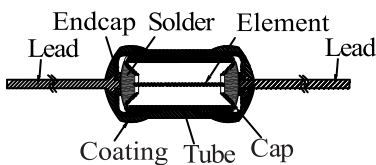
## Features

- Micro fuse with time-lag, low breaking capacity
- $\Phi 2\text{mm} \times 7\text{mm}$  physical size
- Ceramic tube, encapsulated with epoxy coating and nicked plated brass end cap
- Optional axial leads are  $0.6\text{mm} \times 26.5\text{mm}$
- Protection against harmful over-currents in primary and secondary applications.
- Designed compliant to UL 248-14 IEC60127-3

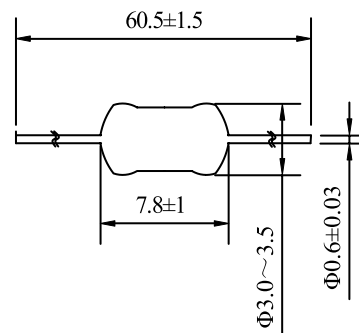
## Specifications

Operating Temperature	: -55°C to 125°C
Storage Conditions	: +10°C to +60°C
Relative humidity	: $\leq 75\%$ yearly average without dew, maximum 30 days at 95%
Vibration Resistance	: 120 cycles in 1 direction at 1 min. each 10-55Hz, 3 directions (X, Y, Z) in total According to MIL-STD-202 Method 201A

## Mechanical Specifications



## Dimensions



Dimensions : Millimetres

## Electrical Specifications

### Time vs Current Characteristics Table

(measured with constant current power supply)

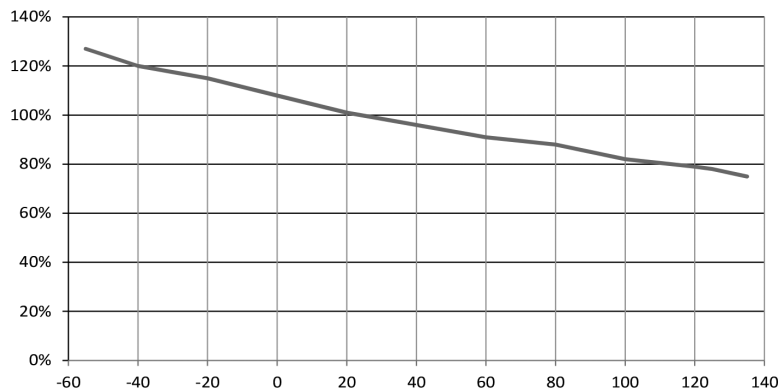
Rated Current	100 %	210 %	300%	800%
100mA~10A	>4h	1s~60s	0.2s~3s	10ms~100ms

## Electrical characteristics

Electrical Characteristics at 25°C					
Amp Code	Rated Current	Rated Voltage	Nominal Melting I <sup>2</sup> t (A <sup>2</sup> sec)	Typical Cold Resistance (mΩ)	Breaking Capacity
MP014117	500mA	125V AC 250V AC	0.44	242	50A @ 125V AC 50A @ 250V AC
MP014118	1A		3.59	84.2	
MP014119	3.15		15.4	21.5	
MP014120	4A		30.5	17.4	35A @ 125V AC 35A @ 250V AC
MP014121	5A		50.9	11.2	35A @ 250V AC

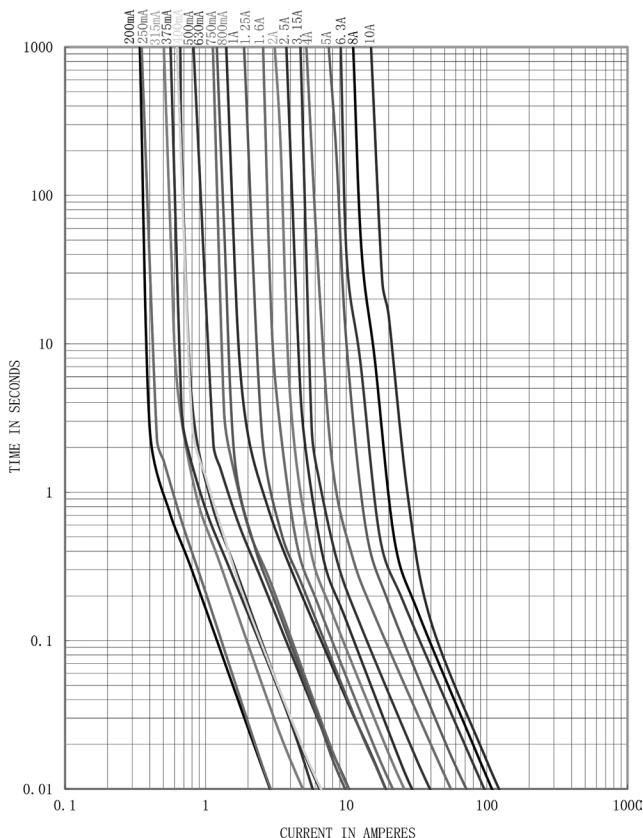
- Notes: (1) Permissible continuous operating current is 100% at ambient temperature of 23°C (73.4°F)  
 (2) The cURus and cULus certification by 125V and 250V; the others certification only by 250V..  
 (3) The current values used for calculating I<sup>2</sup>T should be within the standard range of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

## Temperature Derating Curve



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

## Average Time Current (I-T) Curves



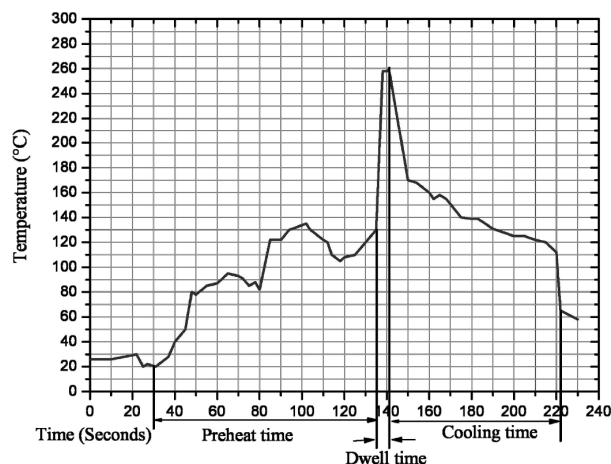
## Soldering Parameters

260°C. ≤5 sec (Wave Soldering)

350°C. ≤3 sec (Hand Soldering)

Soldering Peak:

260°C - 10 sec (IEC 60068-20)



## Part Number Table

Description	Part Number
Time lag Micro fuse, 500mA/250V, 2mm × 7mm	MP014117
Time lag Micro fuse, 1A/250V, 2mm × 7mm	MP014118
Time lag Micro fuse, 3.15A/250V, 2mm × 7mm	MP014119
Time lag Micro fuse, 4A/250V, 2mm × 7mm	MP014120
Time lag Micro fuse, 5A/250V, 2mm × 7mm	MP014121

**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.