Time-Lag Cartridge Fuses - Axial Leaded 5mm × 20mm

RoHS Compliant

Description

The time-lag fuse with high breaking capacity for use with printed circuit boards is used in a large variety of applications. This 5mm × 20mm device is constructed of a ceramic tube with electro-plated brass end caps. The 524 series with 250V AC rating and 1500 Ampere breaking capacity, offers excellent quality and is 100% tested for cold resistance and precise length.

Features

- Miniature fuse with time-lag, high breaking capacity
- 5mm x 20mm physical dimensions
- Ceramic tube, encapsulated design with nickel - plated brass end caps
- Optional axial leads are Φ0.65mm × 38mm @ 1A to 5A
- Protection against harmful over-currents in primary and secondary applications.
- Operating Temperature: -55°C to +125°C
- Storage Conditions: +10°C to +60°C
- Vibration Resistance: 24 cycles at 15 min. each (60068-6)
- Lead-free and Halogen-free
- Designed compliant to IEC 60127-2/V

Electrical Characteristics

Part Number	Rated Current (A)	Max. Voltage	Max. Voltage Drop (mV)	Max. Power Dissipation (W)	Nominal Melting I²t(A²sec)	Breaking capacity
MP006245	1	125V AC / 250V AC	350	2.5	3.42	10kA@125V AC 1500A@250V AC 50-60Hz Cosφ=0.7-0.8
MP006251	5		100	4	49	

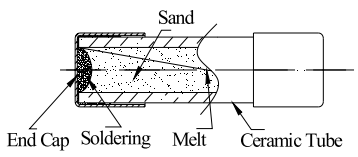
Note: (1) Permissible continuous operating current is ≤100% at ambient temperature of 23°C (73.4°F)
(2) The cURus certification by 125V and 250V; the others certification only by 250V.

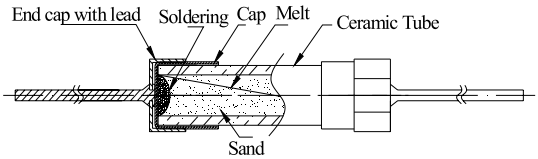
Time VS Current Characteristics Table

Time vs Current Characteristics: IEC 60127-2/V

Rated Current	150%	210%	275%	400%	1000%
1A	>1h	<30min	750ms~80s	95ms~5s	10ms~150ms
5A	>1h	<30min	750ms~80s	150ms~5s	10ms~150ms

Construction





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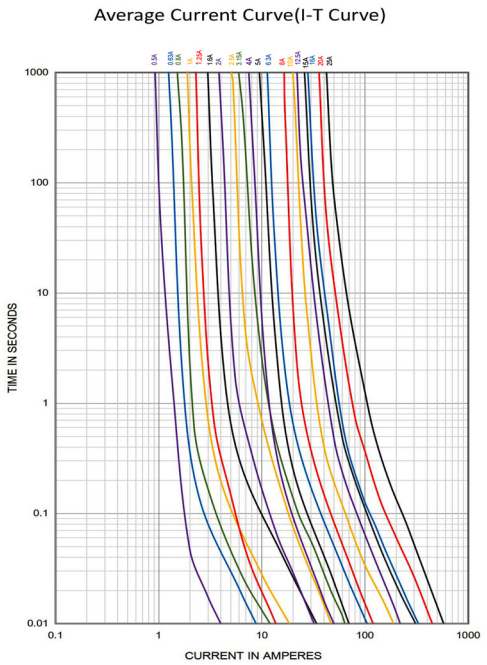
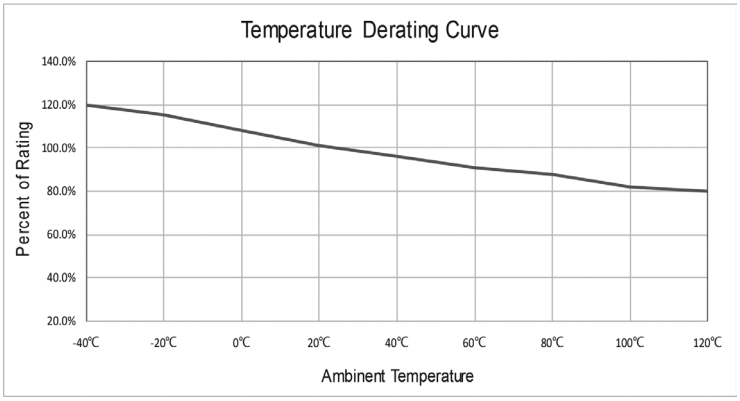
Average Time Current (I-T) Curves

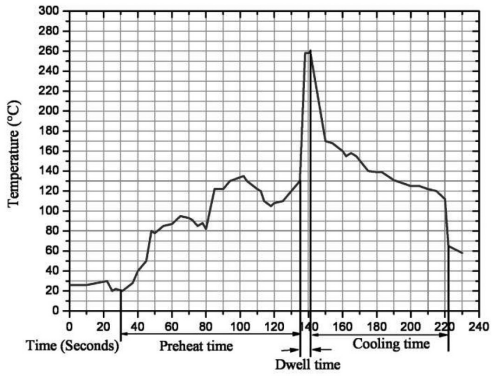


Temperature Re-rating Curve



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

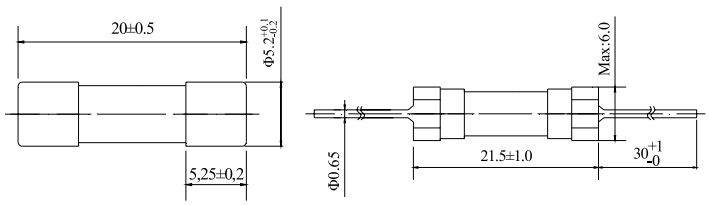
Soldering Parameters



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

Dimensions : Millimetres

Diagram



Part Number Table

Description	Part Number
Cartridge Fuse, Time-Lag, 1A, 250V AC, Axial Leaded	MP006245
Cartridge Fuse, Time-Lag, 5A, 250V AC, Axial Leaded	MP006251