Fast-Acting Brick SMD Fuse

multicomp PRO

RoHS Compliant

Description

The SMD fuse for the small size and good electrical performance reliability and quality the solder-free design provides excellent on-off and temperature cycling characteristics during use and also makes our SMD fuses more heat and shock tolerant than typical brick fuses.

Features

- Rapid interruption of excessive current
- Ceramic body and silver plated copper terminal
- Excellent environmental integrity
- One time positive disconnect
- 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

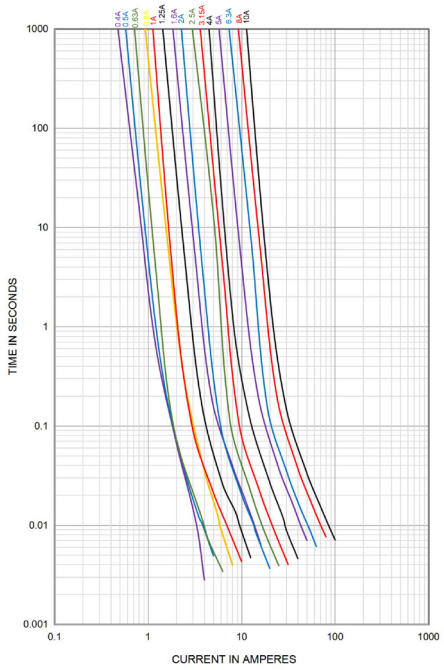
Electrical Characteristics

Time vs Current Characteristics Table

(measured with constant current power supply)

Time vs Current Characteristics		
Rated current	**100%**	**200%**
0.4A to 10A	>4h	<60s

Average Time Current (I-T) Curves



Newark.com/multicomp-pro
Farnell.com/multicomp-pro
sg.element14.com/b/multicomp-pro

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Electrical Characteristics at 25°C

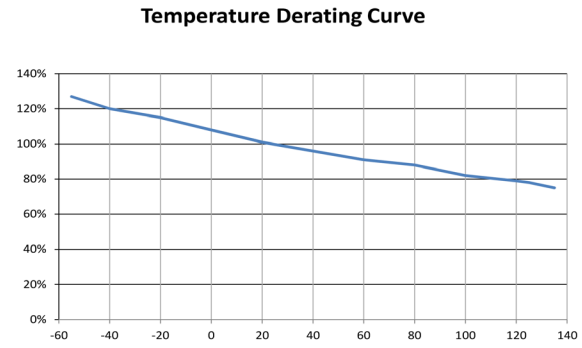
Amp Code	Rated Current	Rated Voltage DC	Max. Voltage Drop (mV)	Breaking Capacity	Typical Melting I²T (A²s)	Typ. Cold Resistance (mΩ)
1100	1A	125V AC 250V AC 125V DC 250V DC 400V DC	300	150A@125V AC 150A@250V AC 150A@125V DC 150A@250V DC 100A@400V DC	0.47	103 to 191
1200	2A		150		1.84	36.7 to 68.1

Note:

(1) Permissible continuous operating current is ≤100% at ambient temperature of 23°C (73.4°F)

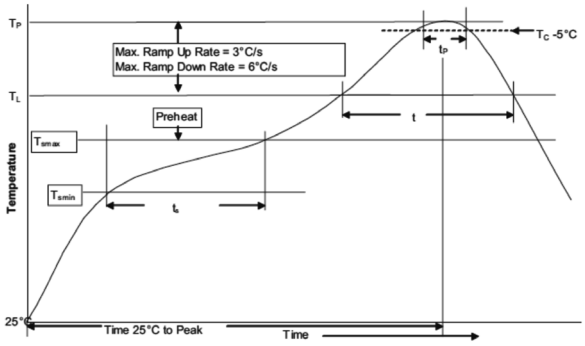
(2) The current values used for calculating I^2T should be within the standard range of 8ms~10ms.

Temperature Re-rating Curve



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

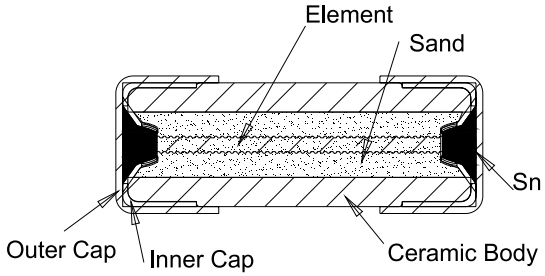
Soldering Parameters



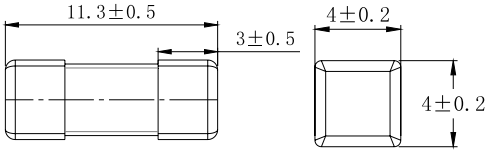
1. Infrared Reflow:
   - Temperature: 260°C
   - Time: 30sec Max.
   - Recommend reflow profile
2. Wave Soldering:
   - Reservoir Temperature: 260°C
   - Time in Reservoir: 10sec Max.

Profile Feature		Pb-Free Assembly
Average Ramp-UP Rate(Tsmax to Tp)		3°C/s Max.
Preheat	Temperature Min (Ts min)	150°C
	Temperature Max (Ts max)	200°C
	Time (Tsmin to Ts max)	60sec to 120sec
Liquidous temperature(TL) Time at liquidous(tL)		217°C 60 to 150S
Peak package body temperature (Tp)		260°C
Time (tP) within 5°C of the specified classification temperature (Tc)		30S
Average ramp-down rate (Tp to Tsmax)		6°C/s Max.
Time (25°C to Peak Temperature)		8 Minutes Max.

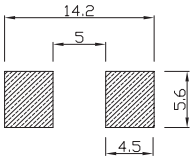
Mechanical Specifications



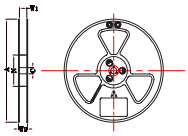
Diagram



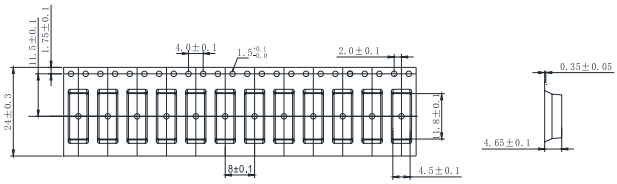
Recommended Land Pattern



Packing Information



A	N (Min.)	W_1	W_2 (Max.)	C
330	100	24.4 $^{+2}$	30.4	13 ±0.25



Part Number Table

Description	Part Number
Brick SMD Fuse, Fast-Acting, 1A, 250V AC / 400V DC	MP001615
Brick SMD Fuse, Fast-Acting, 1A, 250V AC / 400V DC	MP006276
Brick SMD Fuse, Fast-Acting , 2A, 250V AC / 400V DC	MP006277

Dimensions : Millimetres