## **SMD Fuses**





## Description

The brick 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 brick fuses more heat and shock tolerant than typical brick fuses.

### Features

- Fast Acting High current brick fuse
- · Surface mount design to save space
- Ceramic Square body with end cap design
- 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 to UL248-1

## **Electrical Characteristics**

Part Number	Rated Current	Rated Voltage	Max. Voltage Drop (mV)	Typical Melting I²t(A²sec)	Typical Cold Resistance (mΩ)	Breaking Capacity
MP012928	80A	125V AC 72V DC	55	1700	0.44	1000A@72/63/32V DC
MP012929	100A		65	5000	0.29	500A@125V AC

Note:

(1) AC Interrupting Rating (Measured at designated voltage, 100% power factor random closing)

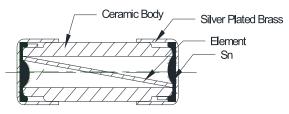
(2) DC Interrupting Rating (Measured at designated voltage, time constant of less than 50 microseconds, battery source)
(3) Typical Pre-arcing I<sup>2</sup>T are measured at 10In Current, DC battery bank, but not exceeding the interrupting rating, time constant of calibrated circuit less than 50 microseconds.

#### Time VS Current Characteristics Table

(Measured with constant current power supply)

Rated Current	100%	350%
80A to 100A	>4H	<10s

### Construction

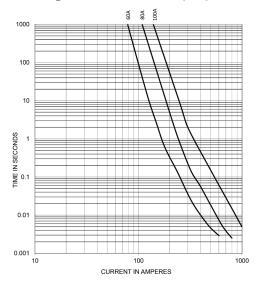


Newark.com/multicomp-pro Farnell.com/multicomp-pro sg.element14.com/b/multicomp-pro



# multicomp PRO

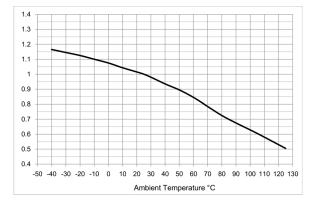
## Average Time Current (I-T) Curves



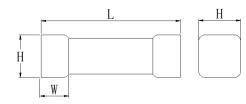
#### Temperature Derating Curve

Normal Operating Temperature: 25°C ±2°C

Operating Temperature: -55°C to +125°C with proper correction factor applied. Chart of correction factor

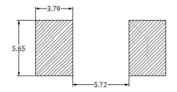


### Diagram



L	W	Н	
(mm)	(mm)	(mm)	
12.3 ±0.4	2.7 ±0.2	4.5 ±0.2	

## **Recommended Land Pattern**



#### Recommend trace thickness is 3oz; the minimum trace width is 15mm Recommended solder thickness: >1.5mm

#### Part Number Table

Description	Part Number
SMD Brick Fuse, Fast Acting, 1245 size, 80A	MP012928
SMD Brick Fuse, Fast Acting, 1245 size, 100A	MP012929

#### 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 sheet sheet 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.

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

