

Fast Acting High Current Brick Fuse 4012BC Series

Descriptions

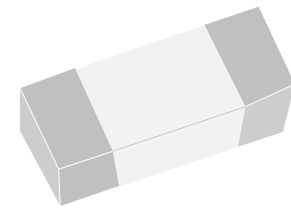
Chip Fuse devices are set the industry standard for performance, reliability and quality. The solder-free design provides excellent on-off and temperature cycling characteristics during use and also makes our SMD fuses more heat and shock tolerant than typical subminiature fuses.

4012BC SMD fuse s for the small size and good electrical performance, reliability and quality.

Electrical Characteristics		
Rated Current	1.0In	2.0In
20A~30A	4 hour minimum	60 sec maximum

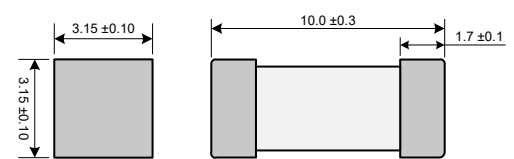
Features

- Fast Acting High current brick fuse
- Surface mount deign to save space
- Ceramic Suqare body with end cap
- Designed to UL248-1
- Fully compatible with lead-free solder and high temperature profile associated with lead-free assembly



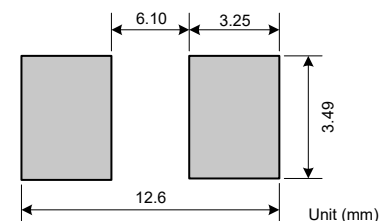
Top View (4012BC)

Product Dimensions



Unit (mm)

Recommended land pattern



Unit (mm)

Recommend trace thickness is 3oz, the minimum trace width is 10mm

Electrical information (Tamb=25°C)

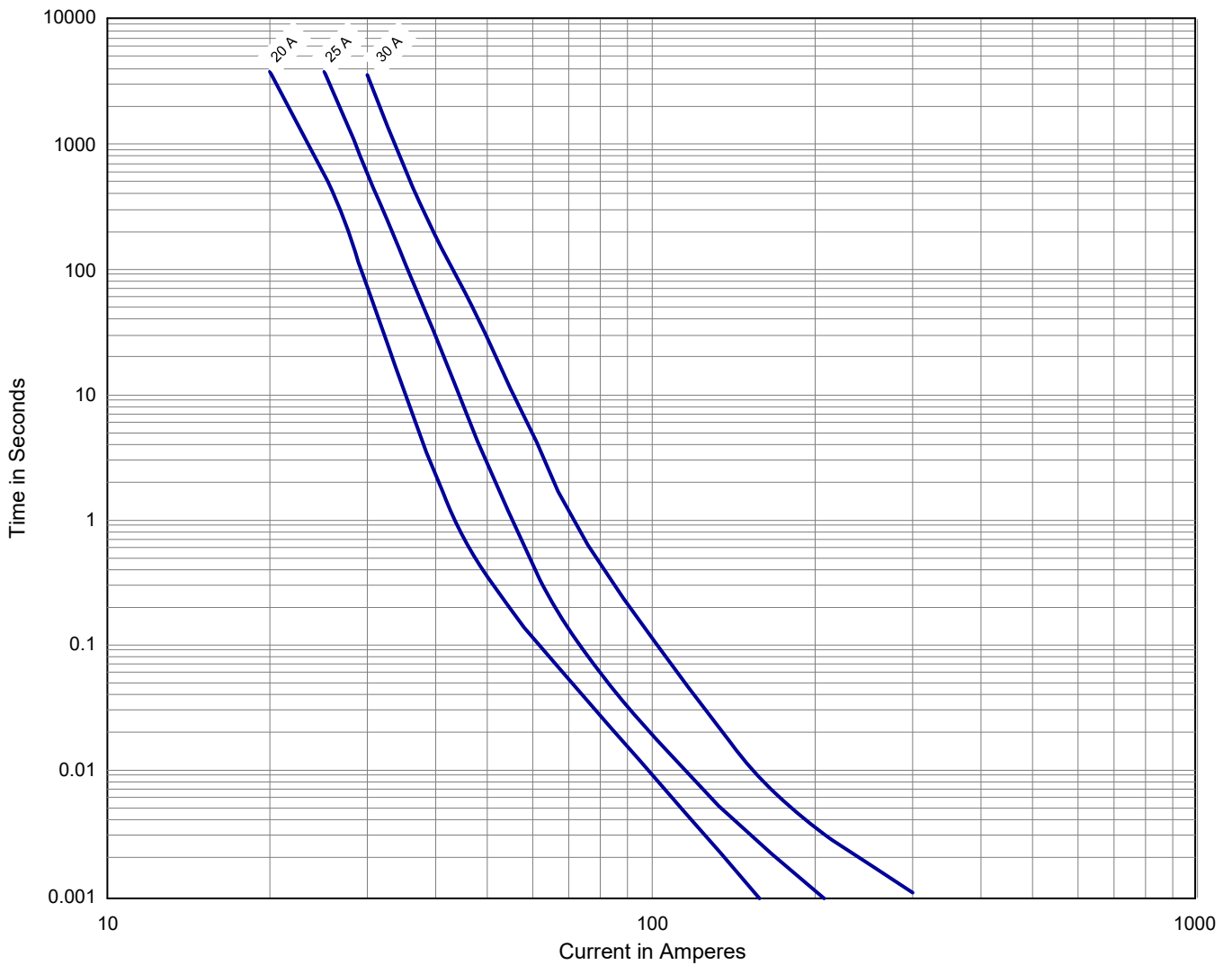
Part number	Rated Voltage		Rated Current (A)	Breaking Capacity * (A)		Typical Cold. Resistance * (mΩ)	Typical Prearcing I ² t * (A ² Sec)
	AC (V)	DC (V)		125V AC	72V DC		
4012BC72-2000	125	72	20	150	500	2.90	25
4012BC72-2500	125	72	25	150	500	2.25	45
4012BC72-3000	125	72	30	150	500	1.50	110

* AC Interrupting Rating (measured at designated voltage, 100% power factor); DC Interrupting Rating (measured at designated voltage, time constant of less than 50 microseconds, battery source)

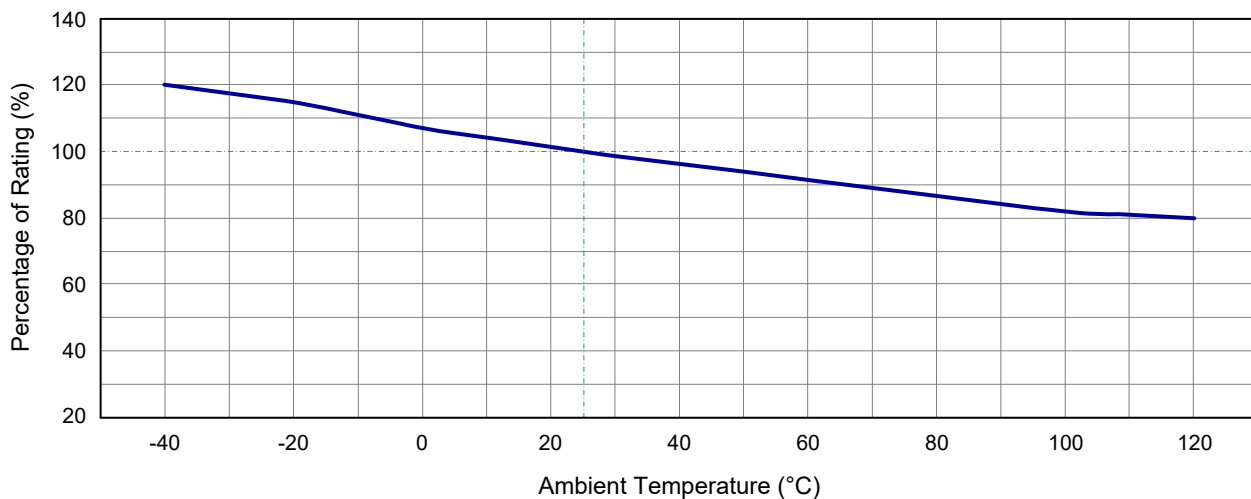
* DC Cold Resistance are measured at <10% of rated current in ambient temperature of 25 °C

* Typical Pre-arcing I²t are measured at 10In Current, DC battery bank, but not exceeding the interrupting rating, time constant of calibrated circuit less than 50 microseconds)

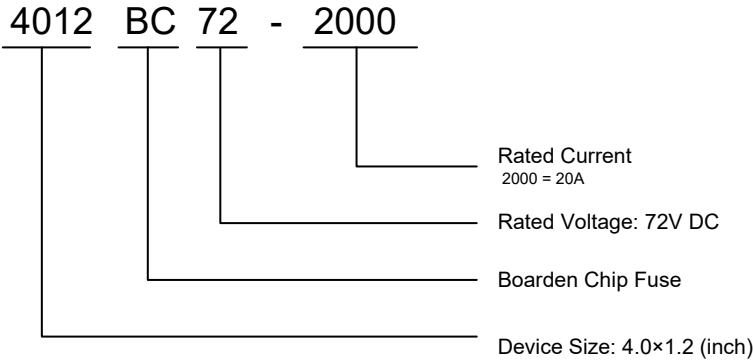
Time-Current Curves



Temperature Derating Curve



Part Numbering System

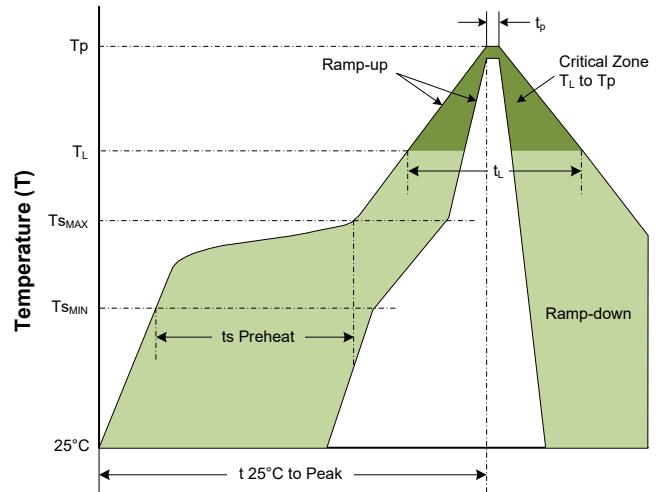


Order Information

Device	Quantity	Reel Size
4012BC Series	1500 pcs	13 Inch

Soldering Parameters

Profile Feature	Lead-Free Assembly
Average Ramp-up Rate ($T_{S_{MAX}}$ to T_p) Average Ramp-down Rate (T_p to T_L)	3°C/second max. 6°C/second max.
Preheat • Temperature Min ($T_{S_{MIN}}$) • Temperature Max ($T_{S_{MAX}}$) • Time (t_s Preheat)	150°C 200°C 60-180 seconds
Time maintained above: • Temperature (T_L) • Time (t_L)	217°C 60-150 seconds
Peak/Classification Temperature • Temperature (T_p)	260 ^{+0/-5} °C
Time within 5°C of actual Peak Time (t_p)	20-40 seconds
Time 25°C to peak Temperature	8 minutes max
Do not exceed	280 °C



© 2016 Boarden Electronics Ltd.
Specifications are subject to change without notice.

Website: www.boarden.com.cn
Tel: 86-21-61401058
Fax: 86-21-61730538