

# Fast Acting High Current Fuse

## PB07 Series



### Description

- Fast Acting High current brick fuse
- Surface mount deign to save space
- Ceramic Suqare body with end cap design
- Designed to UL248-1/14

### Electrical Characteristics

Amp Rate	1.0 In	2.5 In
30A-100A	4 hour min.	<10s

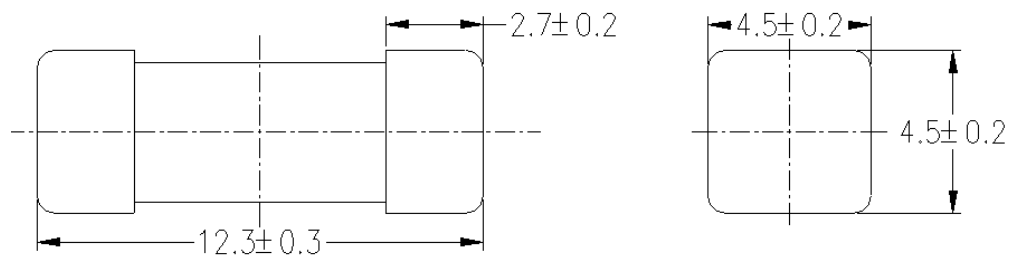
### Specifications

Specification						
Part No.	Rated Voltage	Rated Current	Breaking Capacity	Typ. Cold Resistance	Typical Voltage Drop	Typical Pre-Arcing I <sup>2</sup> t *
	Vdc	A	A	mΩ	(mV)	(A <sup>2</sup> Sec)
PB07030	72 85**	30	1000	1.57	70	820
PB07040		40		1.20	67	1350
PB07050		50		1.00	77	2050
PB07060		60		0.79	72	3200
PB07070		70		0.68	80	4800
PB07080	72	80		0.56	70	6000
PB07100		100		0.41	63	10500

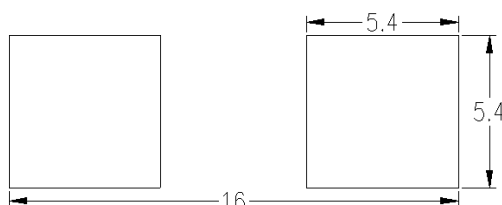
\* Typical Pre-arcing I<sup>2</sup>t are measured at 10In Current

\*\* Internal qualification for 85Vdc

### Dimensions (mm)



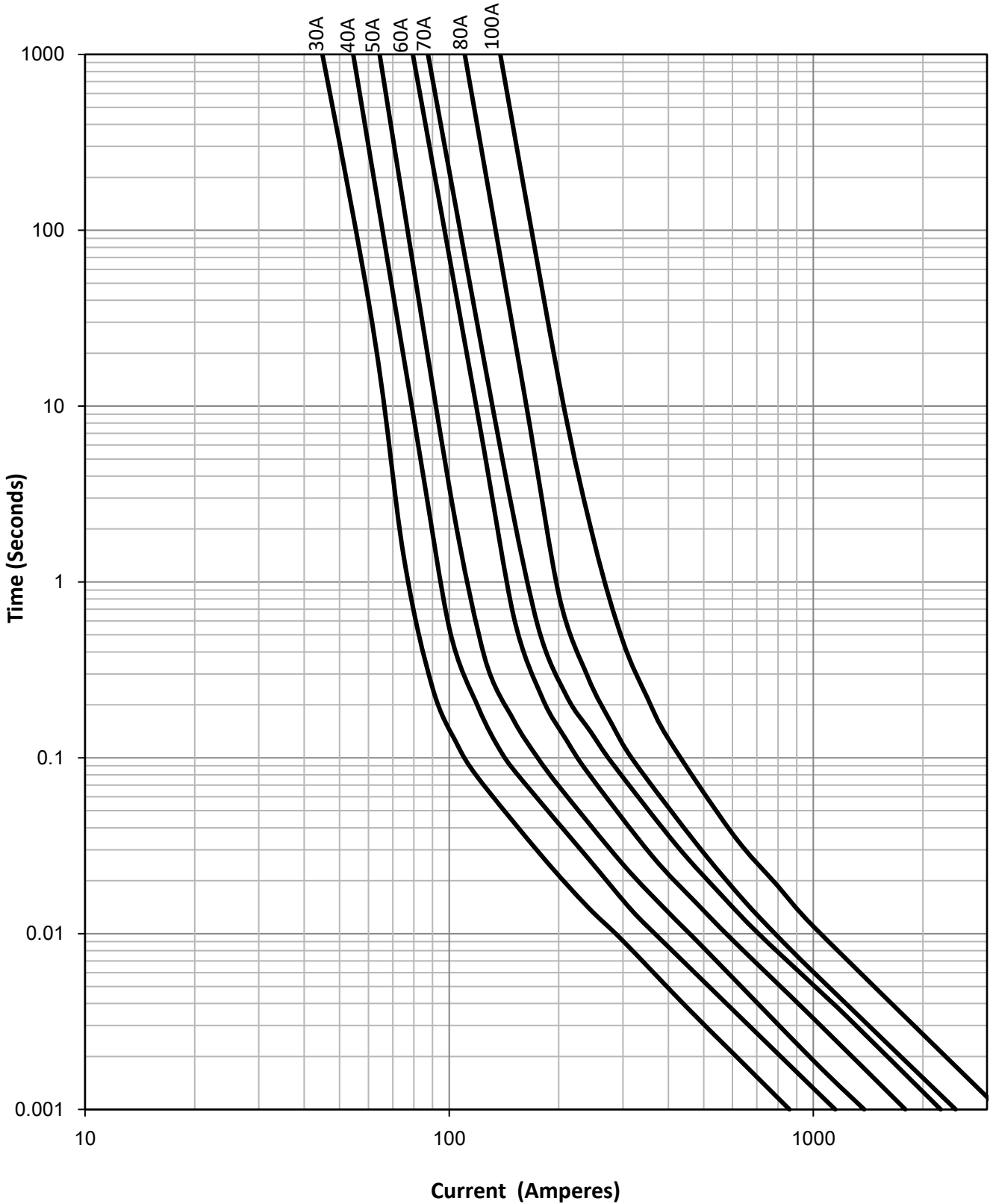
### Recommended Pad Layout (mm)



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### Time Current Curve



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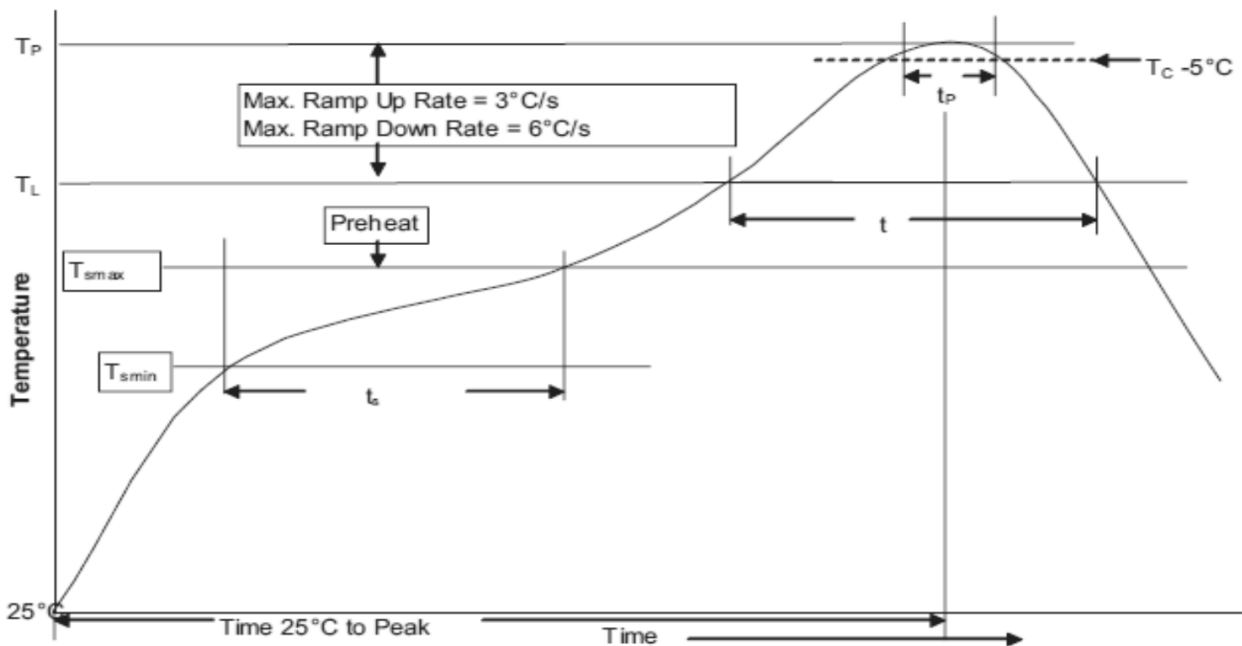
## Soldering Profile

Hand Soldering (not recommended)

- Maximum tip temperature: 350°C
- Maximum soldering time: 5 Seconds Maximum

Infrared Reflow

- Temperature: 260°C
- Time: 30 Seconds Maximum



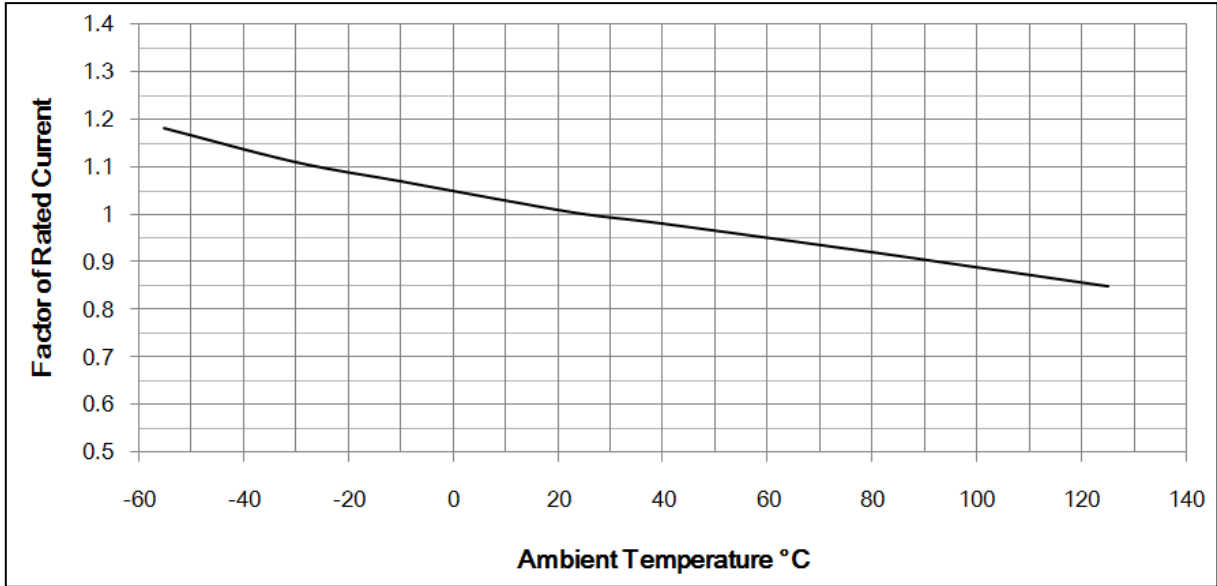
Profile Feature		Lead(Pb) free solder
Preheat and soak	• Temperature min. ( $T_{smin}$ )	150°C
	• Temperature max. ( $T_{smax}$ )	200°C
	• Time ( $T_{smin}$ to $T_{smax}$ ) ( $t_s$ )	60 - 120 Seconds
Average ramp up rate $T_{smax}$ to $T_P$		3°C / Second Max.
Liquidous temperature ( $T_L$ )		217°C
Time at liquidous ( $t_L$ )		60 - 150 Seconds
Peak package body temperature ( $T_P$ )		260°C
Time ( $t_P$ ) within 5°C of the specified classification temperature ( $T_C$ )		30 Seconds
Average ramp-down rate ( $T_P$ to $T_{smax}$ )		6°C / Second Max.
Time (25°C to Peak Temperature)		8 Minutes Max.

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### Temperature derating curve

- Normal Operating Temperature:  $25^{\circ}\text{C} \pm 2^{\circ}\text{C}$
- Operating Temperature:  $-55^{\circ}\text{C}$  to  $125^{\circ}\text{C}$  with proper correction factor applied.
- Chart of correction factor



Note: Derating depicted in this curve is in addition to the standard derating of 25% for continuous operation.

### Package and Minimum order QTY

1000pcs fuses in tape (width 24mm) and reel (dia. 13inch)