

Fast Acting High Current Brick Fuse

PB06 Series



Description

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



Electrical Characteristics

Amp Rate	1.0In	2.5In
20A-30A	4 hour min.	<10s

Specifications

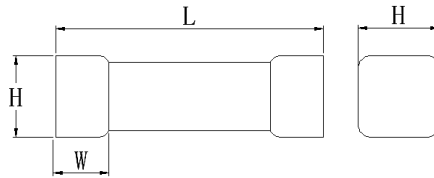
Specification								
Part No.	Rated Voltage		Rated Current	Breaking Capacity		Typ. Cold Resistance	Typical Voltage Drop (mV)	Typical Pre-Arcing I ² t
	AC	DC	A	AC ¹	DC ²	mΩ		(A ² Sec) ³
PB06020A	250V 125V	100V ⁴	20	150A	300A@100Vdc 800A@80Vdc 800A@72Vdc 800A@63Vdc 800A@32Vdc	2.9	105	20
PB06025A		80V	25			2.25	125	35
PB06030A	N/A	72V	30	N/A		1.5	100	90
PB06030A S	N/A	63V	30	N/A	800A@80Vdc 800A@72Vdc 800A@63Vdc 800A@32Vdc	1.35	90	180
		32V						

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 I²t are measured at 10In Current, DC battery bank, but not exceeding the interrupting rating, time constant of calibrated circuit less than 50 microseconds)
4. Internal qualification for 20A-30A @ 100Vdc, UL Approval is pending

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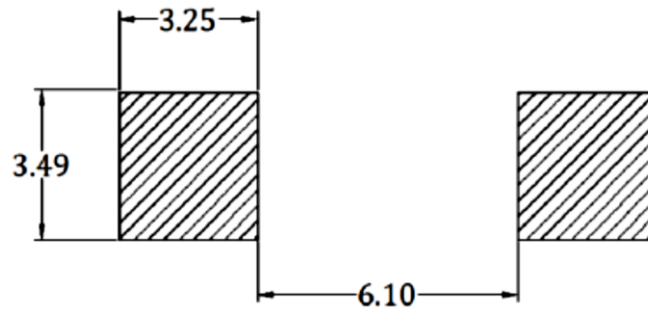


Dimension



Rating	L	W	H
20A-30A	10.0±0.50	1.7±0.20	3.15±0.20

Recommended Pad Layout



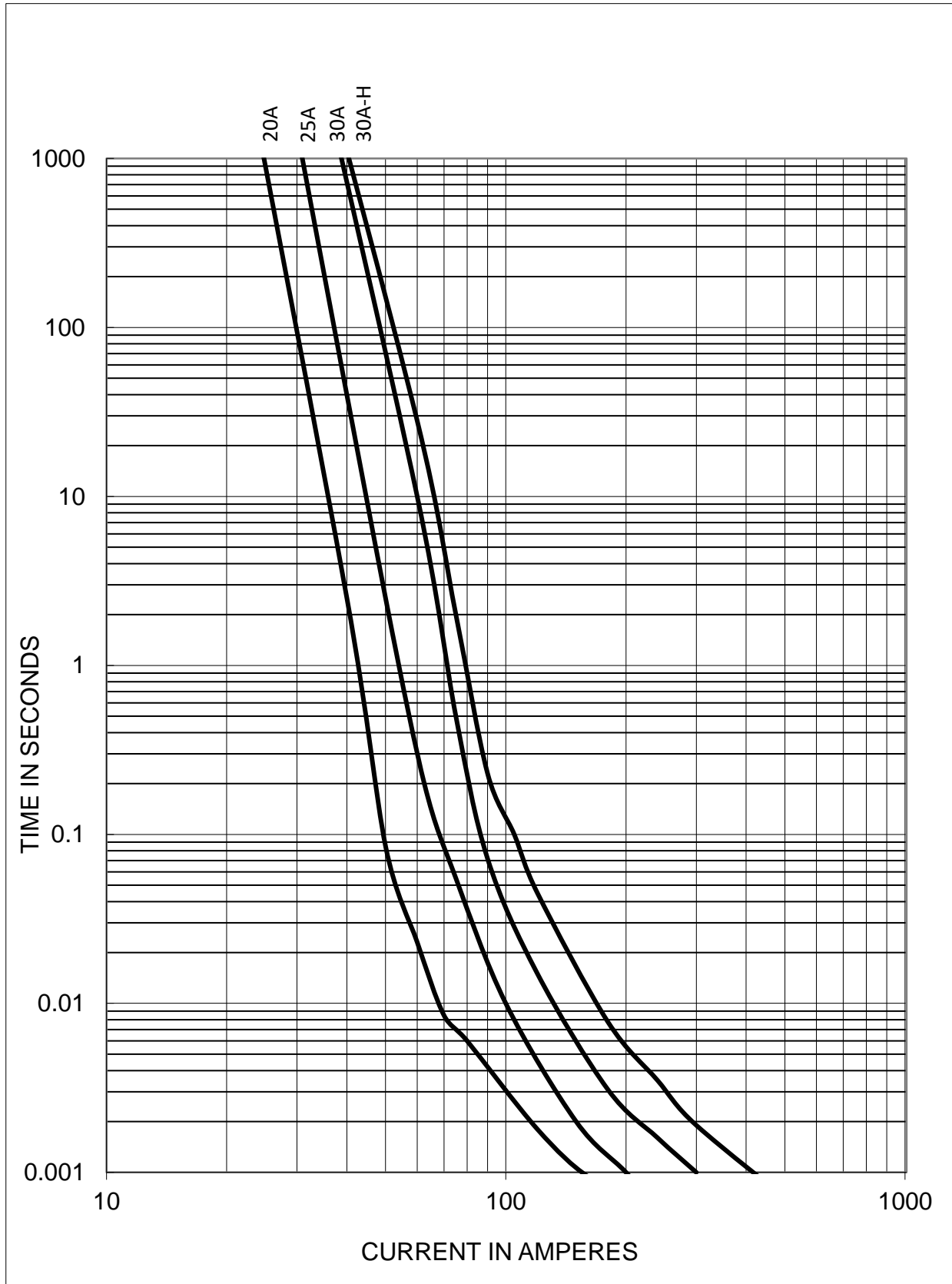
Recommend trace thickness is 3oz; the minimum trace width is 10mm;

Recommend stencil thickness is 0.15mm;

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Time-Current Curves

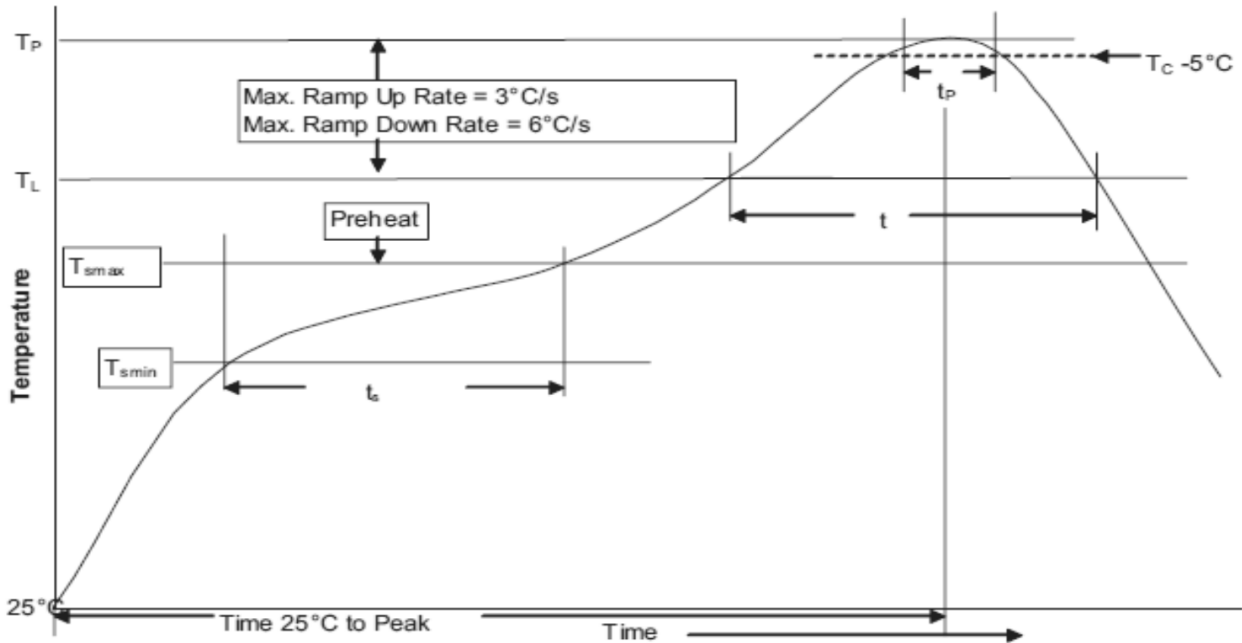


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Infrared Reflow

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



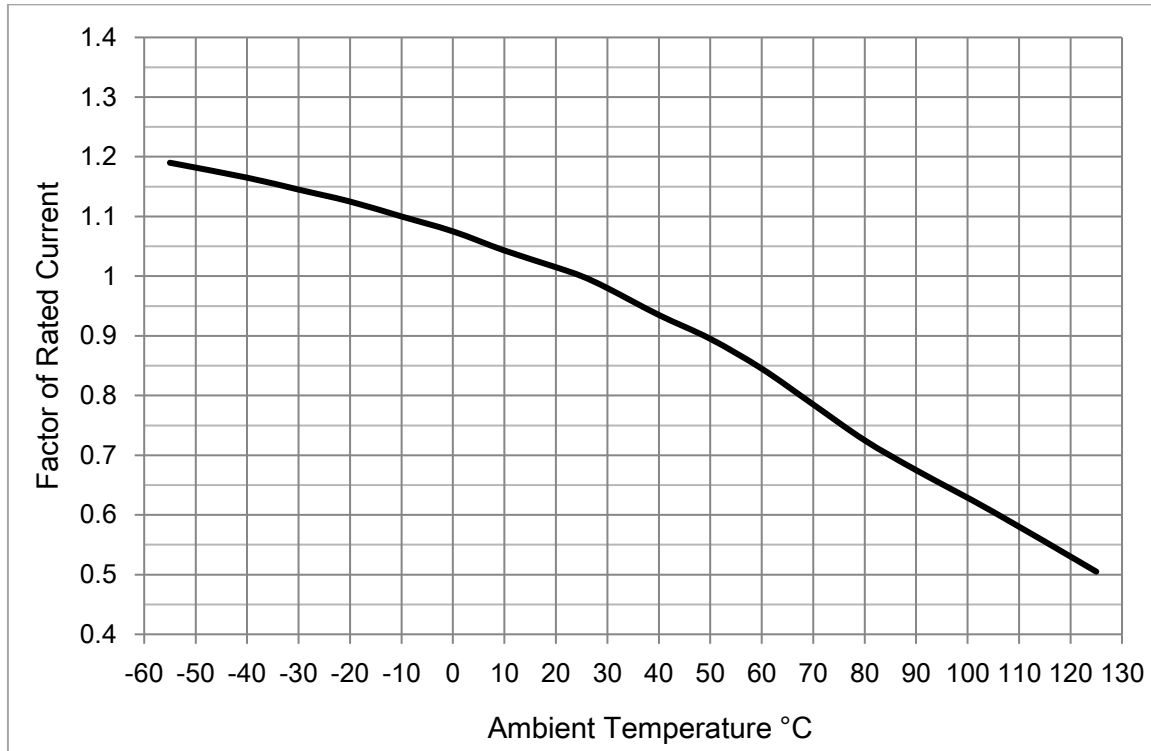
Profile Feature		Lead(Pb) free solder
Preheat and soak	• Temperature min. (T_{smin})	150°C
	• Temperature max. (T_{smax})	200°C
	• Time (T_{smin} to T_{smax}) (t_s)	60 - 120 Seconds
Average ramp up rate T_{smax} to T_P		3°C / Second Max.
Liquidous temperature (T_L)		217°C
Time at liquidous (t_L)		60 - 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°C to 125°C with proper correction factor applied.
- Chart of correction factor



Package and Minimum order QTY

20A-30A: 1500pcs fuses in tape (width 24mm) and reel (dia. 13inch);