

PB03 Fast Acting SMD 125VAC/DC Fuses

PB03 Series

Description

PB03 SMD fuse for the small size and good electrical performance, reliability and quality.

Electrical Characteristics		
Rated Current	1.0In	2.0In
0.5A~15A	4 hours minimum	5sec maximum

Features

- Designed to UL 248-14
- Compatible with reflow
- One time positive disconnect
- RoHS compliant

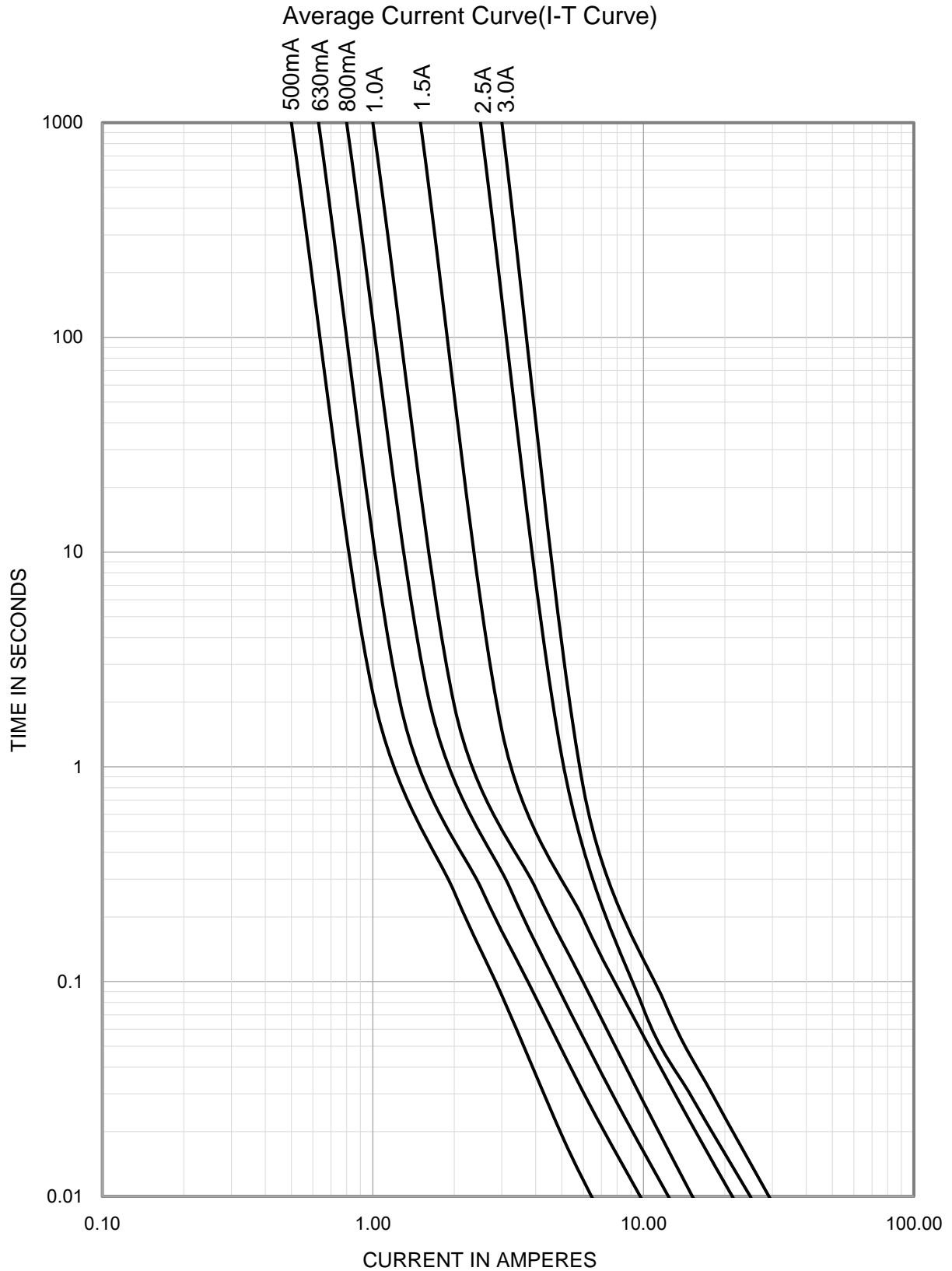


Specification

Part No.	Rated Voltage	Rated Current	Breaking Capacity (A) ¹	Typical Cold Resistance (mOhms) ²	Typical Voltage Drop (mV)	Typical Pre-Arcing I ² t (A ² Sec) ³
	(V)	(A)				
PB03.0.5	125Vac/Vdc	0.5A	50A	281.1	185	0.48
PB03.0.63		0.63A		230.2	200	1.08
PB03.0.8		0.8A		136.8	150	1.7
PB03.1		1A		103.1	140	2.8
PB03.1.5		1.5A		60.90	140	4.9
PB03.2		2A		26.72	110	1.45
PB03.2.5		2.5A		17.86	110	6.17
PB03.3		3A		20.44	110	8.42
PB03.3.15		3.15A		17.98	110	3.11
PB03.3.5		3.5A		15.48	110	4.08
PB03.4		4A		12.81	110	5.12
PB03.5		5A		10.04	110	8.68
PB03.6.3		6.3A		8.09	110	13.5
PB03.7		7A		7.30	110	17.5
PB03.8		8A		6.35	110	22.8
PB03.10		10A		5.10	110	35.3
PB03.12		12A		4.10	110	63.4
PB03.15	15A	3.14	110	102.8		

1. 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)
2. DC Cold Resistance are measured at <10% of rated current in the ambient temperature of 25°C
3. Typical Pre-arcing I²t are measured at 10In Current

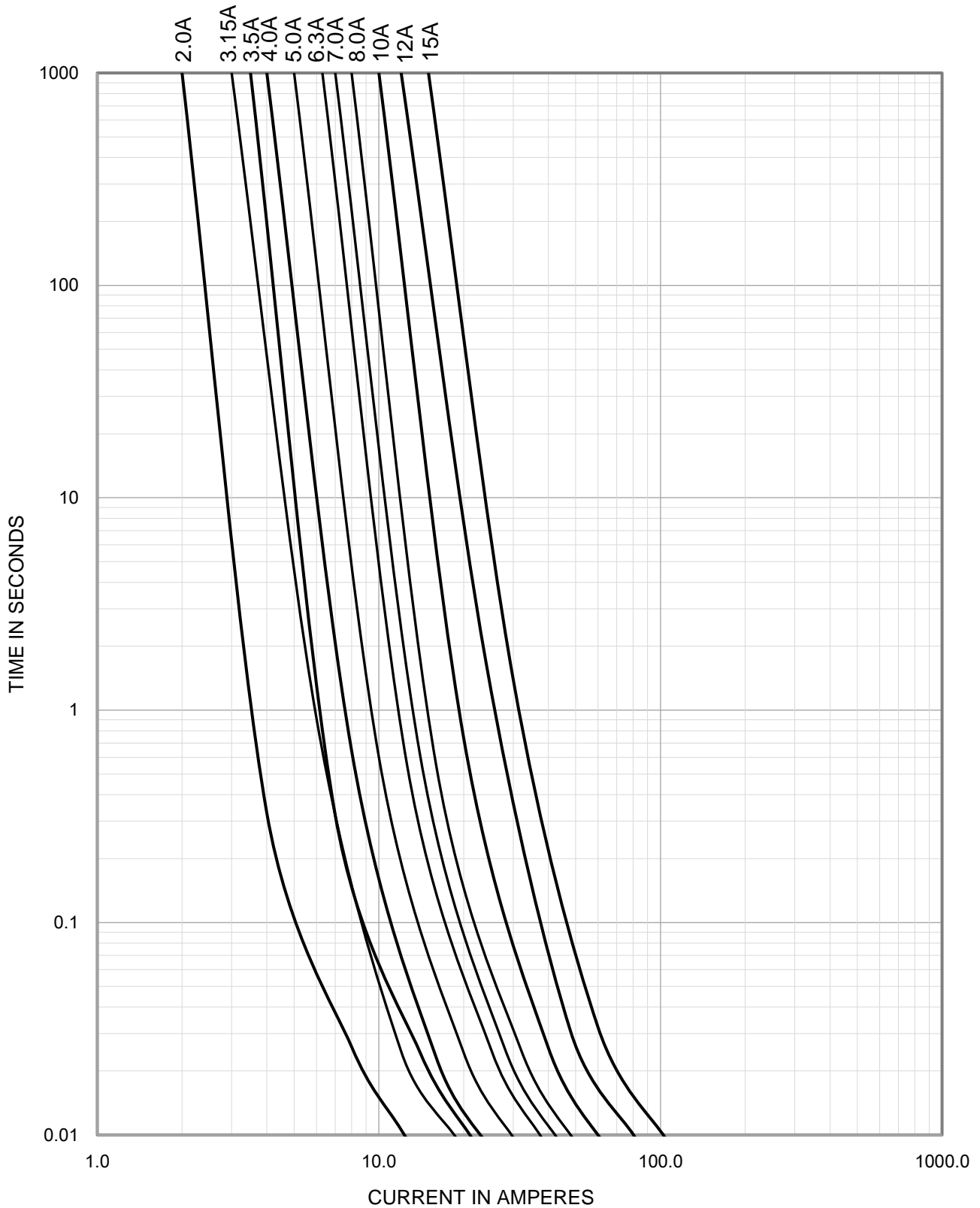
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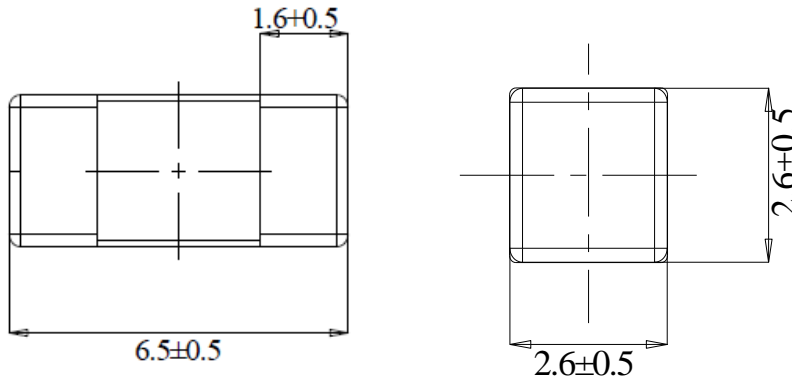
Average Current Curve(I-T Curve)



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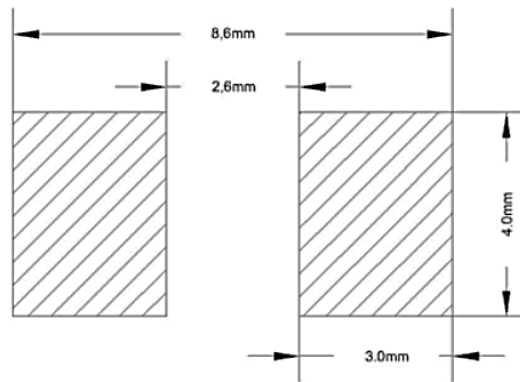
Dimension

Drawing not to scale (Unit: mm)

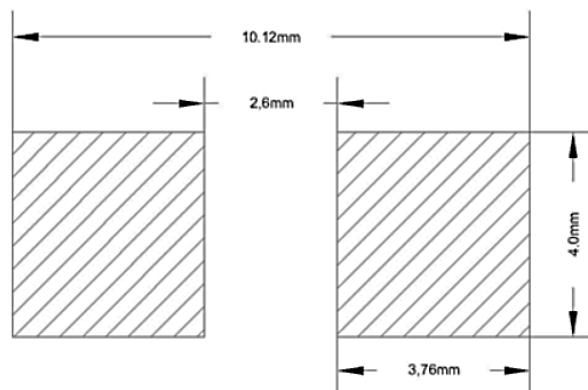


Soldering method

- Recommended land pattern (mm)



1A-10A Pad Layout



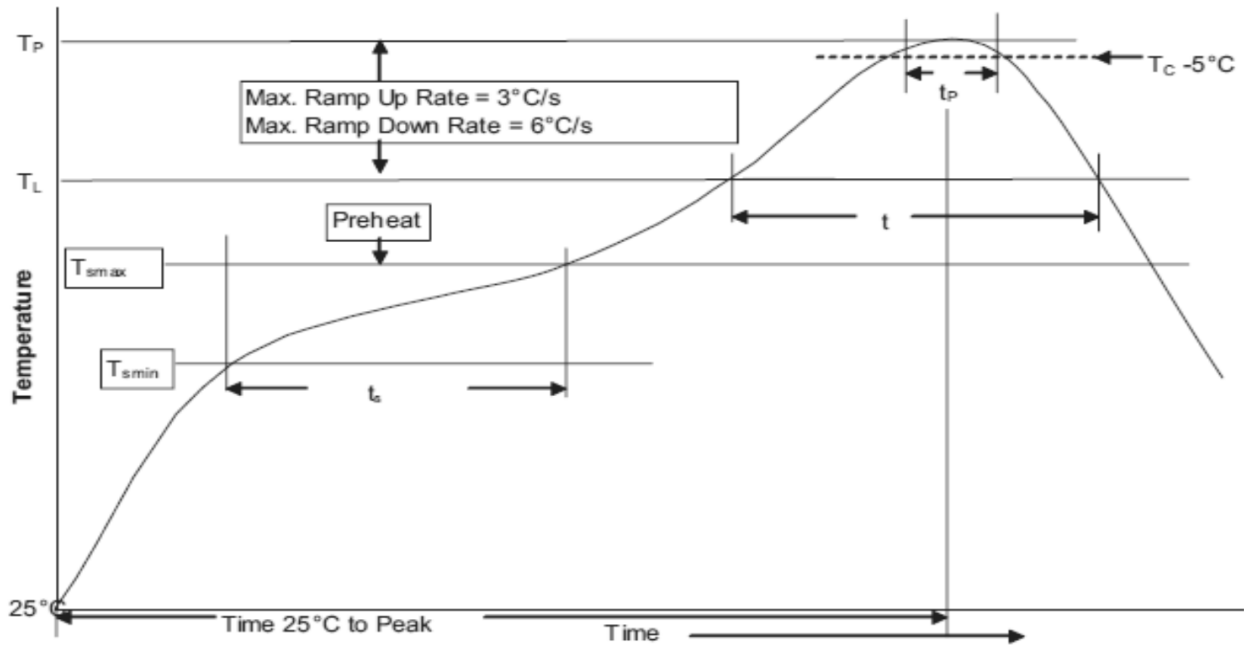
12A-15A Pad Layout

Recommend Stencil thickness is 0.15mm

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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.

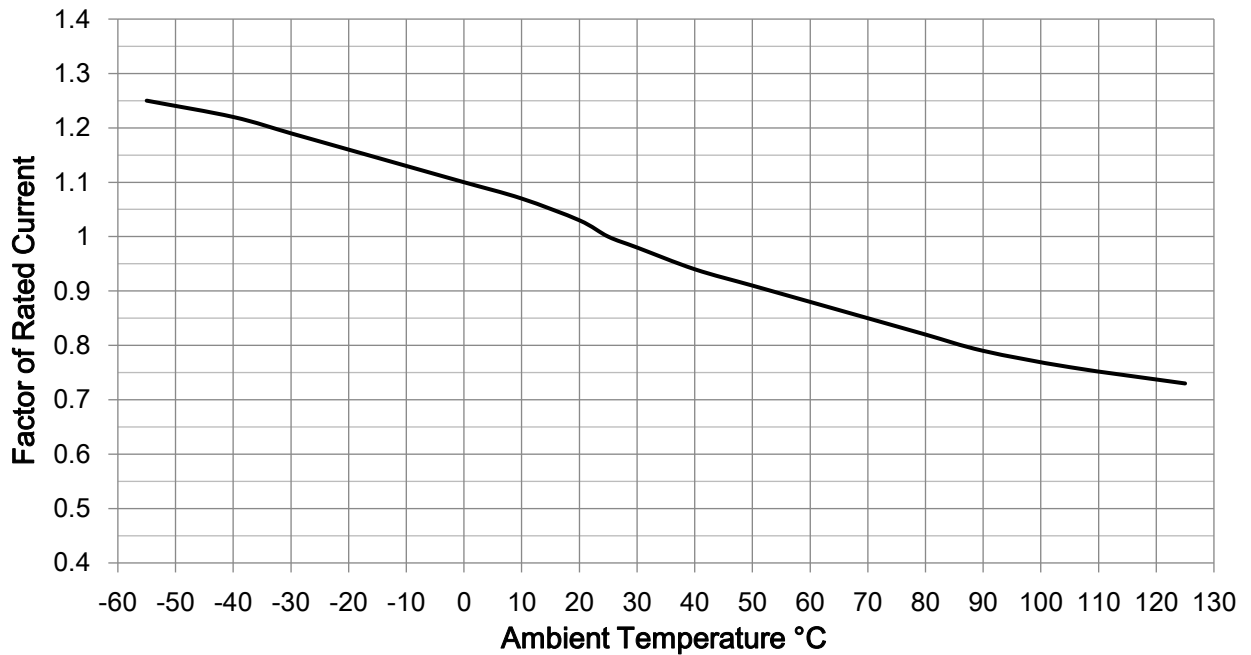
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Temperature Derating Curve

Normal Operating Temperature: 25°C ± 2°C

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

Chart of correction factor



Storage Temperature: -55°C to 125°C

Package

1000 fuses on 12mm tape-and-reel per EIA Standard 481.

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