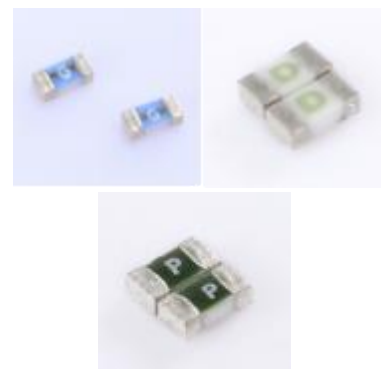




Description

BT0603-T Series are the fuses 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.



Electrical Characteristics			
Rated Current	1.0In	2.0In	2.5In
1A~8A	4 hour minimum	1~60 sec	5 sec maximum

Features

- High inrush current withstanding capability
- Compatible with reflow and wave solder
- Excellent environmental integrity
- One time positive disconnect
- Lead Free and Halogen free material

Specifications

Specification							
Part No.	Rated Voltage DC	Rated Current (A)	Breaking Capacity ¹	Typical Cold Resistance (mOhms) ²	Typical Voltage Drop (mV)	Typical Pre- Arcing I ² t (A ² Sec) ³	Alpha Mark
BT-0603-1.00T	32V	1	50A	257.5	295	0.018	H
BT-0603-1.50T		1.5	50A	137.5	220	0.065	K
BT-0603-2.00T		2	50A	72	160	0.115	N
BT-0603-2.50T		2.5	50A	52	145	0.14	O
BT-0603-3.00T		3	50A	35	130	0.21	P
BT-0603-3.50T		3.5	50A	23.8	130	0.55	R
BT-0603-4.00T		4	50A	21	120	0.52	S
BT-0603-5.00T		5	50A	14	110	1.70	T
BT-0603-6.00T		6	50A	8	110	2.30	V
BT-0603-7.00T		7	50A	6.2	90	3.0	X*
BT-0603-8.00T		8	50A	4.1	80	4.5	Z**

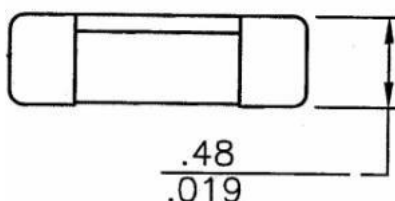
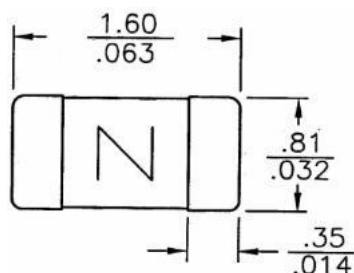
*DC Interrupting Rating (Measured at rated voltage, time constant of less than 50 microseconds, battery source)

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

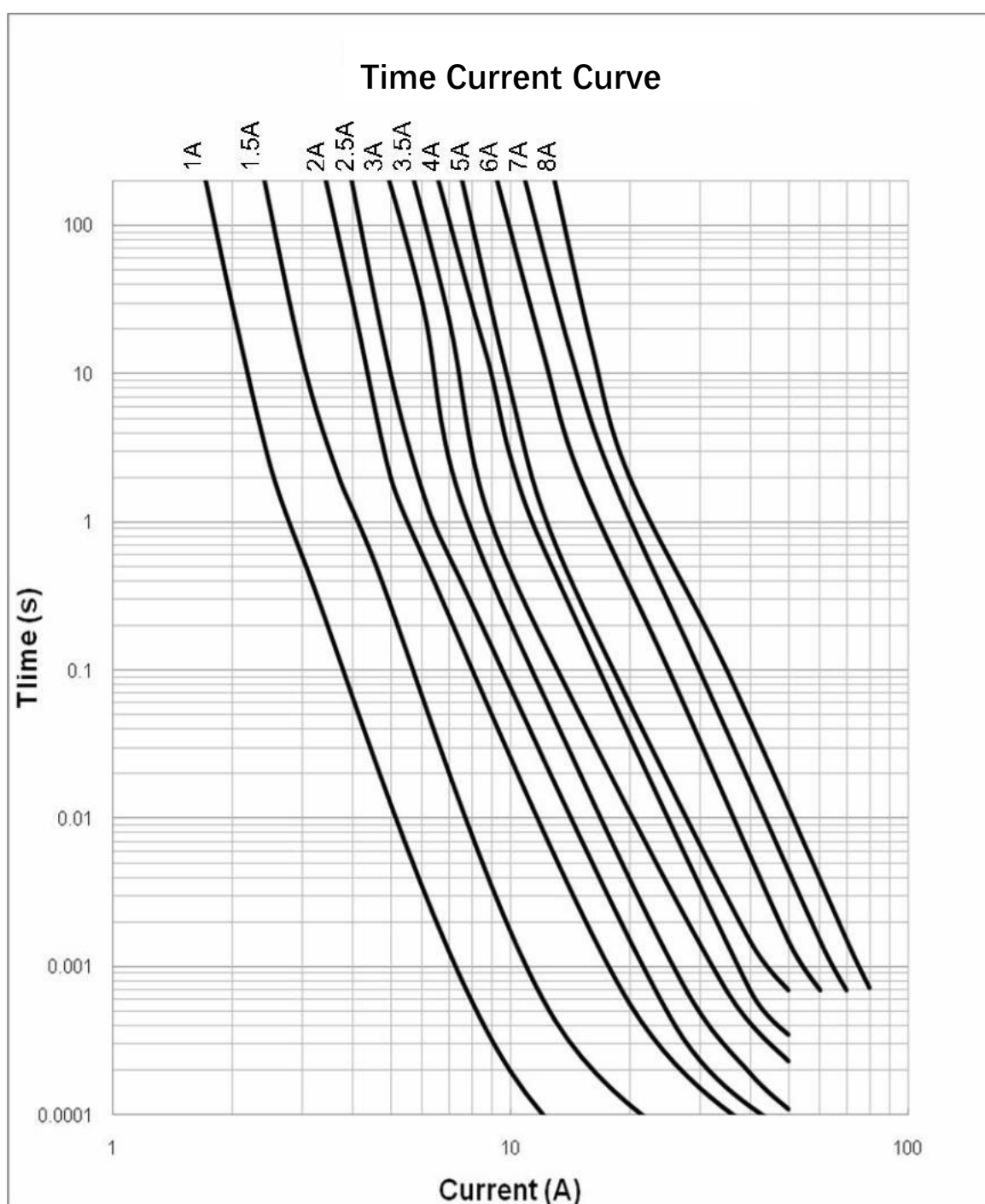
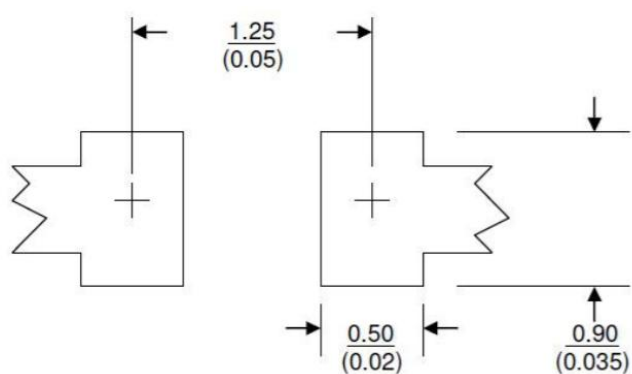
* Typical Pre-arching I² t are measured at 10In Current

*Different with other ratings, The color of glass cover of 6A, 7A and 8A is BLUE color

Dimension Drawing not to scale (Unit: mm/inch)



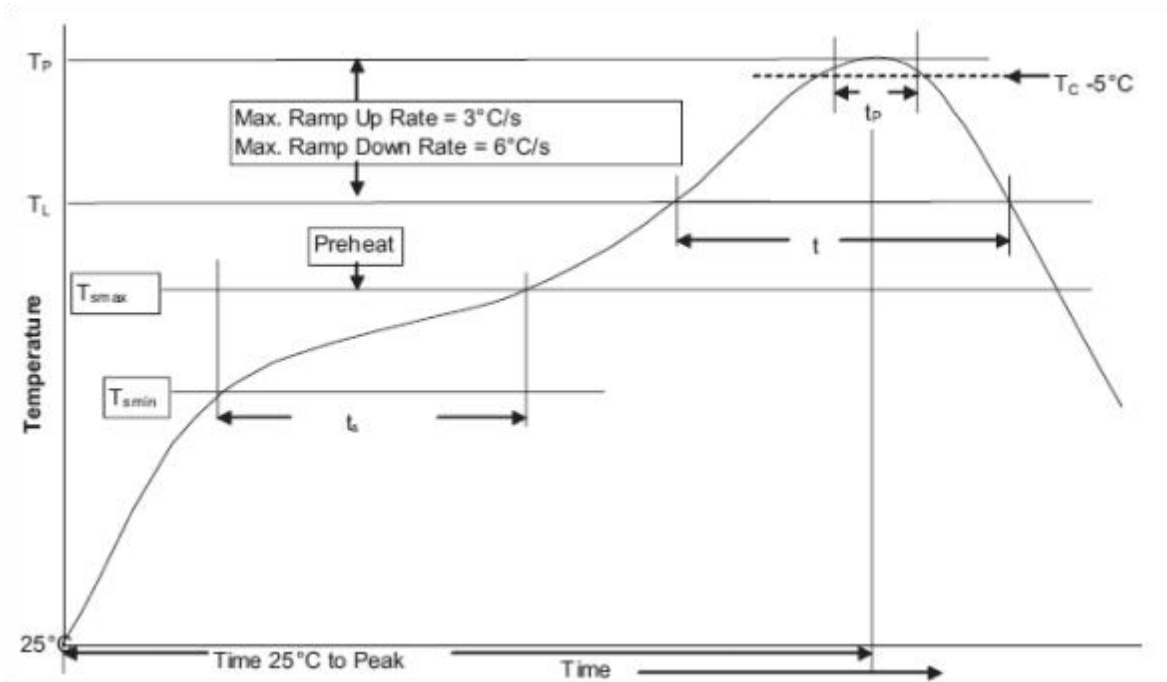
Recommended land pattern (Unit: mm/inch)



Soldering method

- Wave solder
 - Reservoir temperature: 260°C
 - Time in reservoir: 10 seconds maximum
- Infrared reflow
 - Temperature: 260°C
 - Time: 30 seconds maximum

Solder reflow profile



Profile Feature		Lead(Pb) free solder
Preheat and soak	• Temperature min. (T_{min})	150°C
	• Temperature max. (T_{max})	200°C
	• Time (T_{min} to T_{max}) (t_s)	60 - 120 Seconds
Average ramp up rate T_{max} 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_{max})		6°C / Second Max.
Time (25°C to Peak Temperature)		8 Minutes Max.

Package

5000 fuses on 8mm tape-and-reel on a 7 inch (178mm) reel per EIA Standard 481.