



Description

BT1206-F 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	2.5In	3.5In
250mA~5A	4 hour min.	5 sec max.	-
6A~30A		-	5 sec max.

Features

- Rapid interruption of excessive current
- Compatible with reflow and wave solder
- Ceramic and glass construction
- 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
					72V	32V	24V				
BT-1206-0.250F	72V	32V	24V	0.25	50A	50A	150A	3608	1407	0.0004	0.25
BT-1206-0.375F				0.375				1882	718	0.0008	E
BT-1206-0.500F				0.5				1028	650	0.0022	0.5
BT-1206-0.750F				0.75				601	616	0.0057	0.75
BT-1206-1.00F				1				490	510	0.10	H
BT-1206-1.25F				1.25				165	184	0.021	▲
BT-1206-1.50F				1.5				240	367	0.15	K
BT-1206-2.00F				2				144	316	0.41	N
BT-1206-2.50F				2.5				83	240	0.65	O
BT-1206-3.00F				3				53	187	1.39	P
BT-1206-3.50F				3.5				40	180	1.68	R
BT-1206-4.00F				4				35	173	1.73	S
BT-1206-4.50F				4.5				27	164	2.62	X
BT-1206-5.00F	5	22	141	2.89	T						
BT-1206-6.00F	6.5	16	140	3.4	F						
BT-1206-7.00F	7	12	140	5.68	7						
BT-1206-10.0F	10	4.4	59	2.16	U						
BT-1206-12.0F	12	3.8	67	7.11	12						
BT-1206-15.0F	15	2.9	66	23.89	15						
BT-1206-20.0F	-	-	-	20	-	200A	1.6	60	47.17	20	
BT-1206-25.0F	25			250A	1.4	57	32	25			
BT-1206-30.0F	30			300A	1	68	43	30			

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

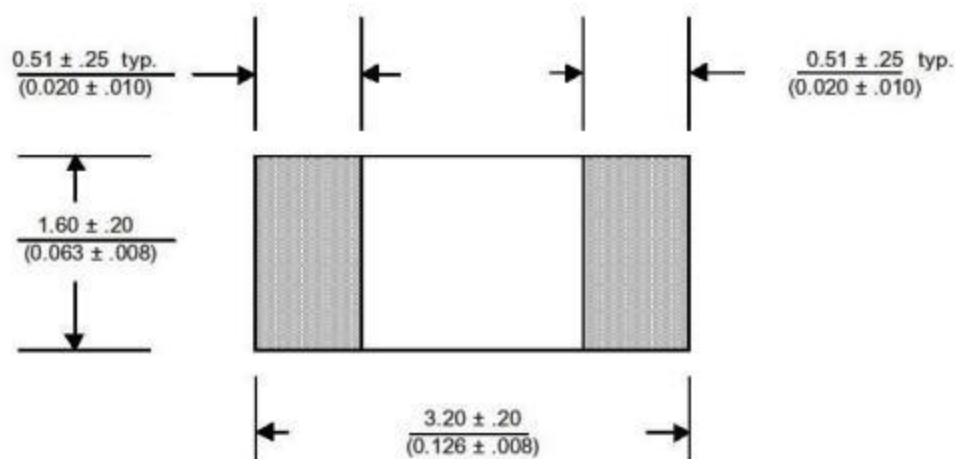
* DC Cold Resistance are measured at <10% of rated current in ambient temperature of 25°C

* Typical Pre-arcing I²t are measured at 10In Current

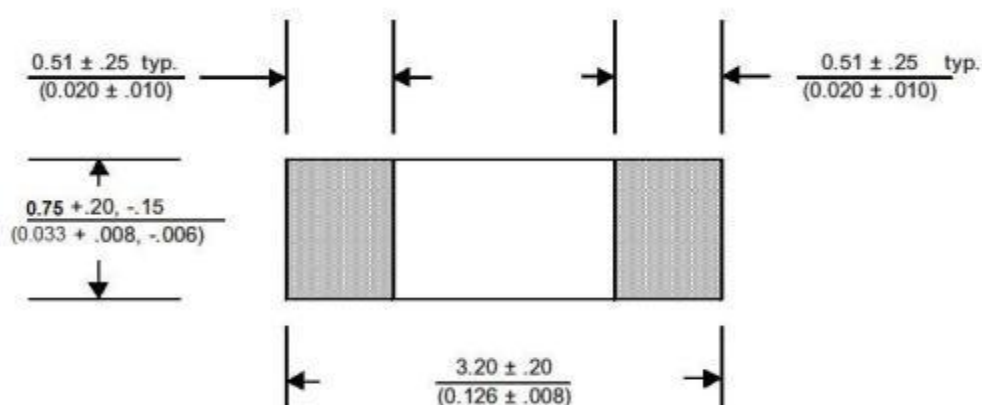
Dimension

Drawing not to scale (Unit: mm/inch)

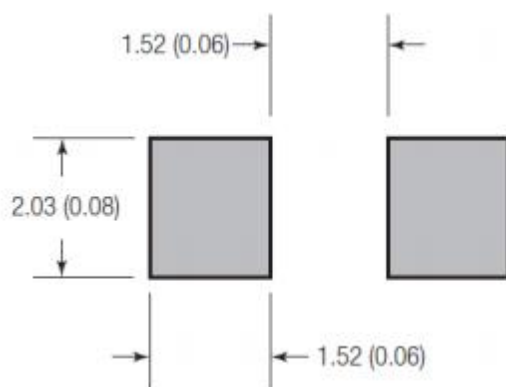
Top view

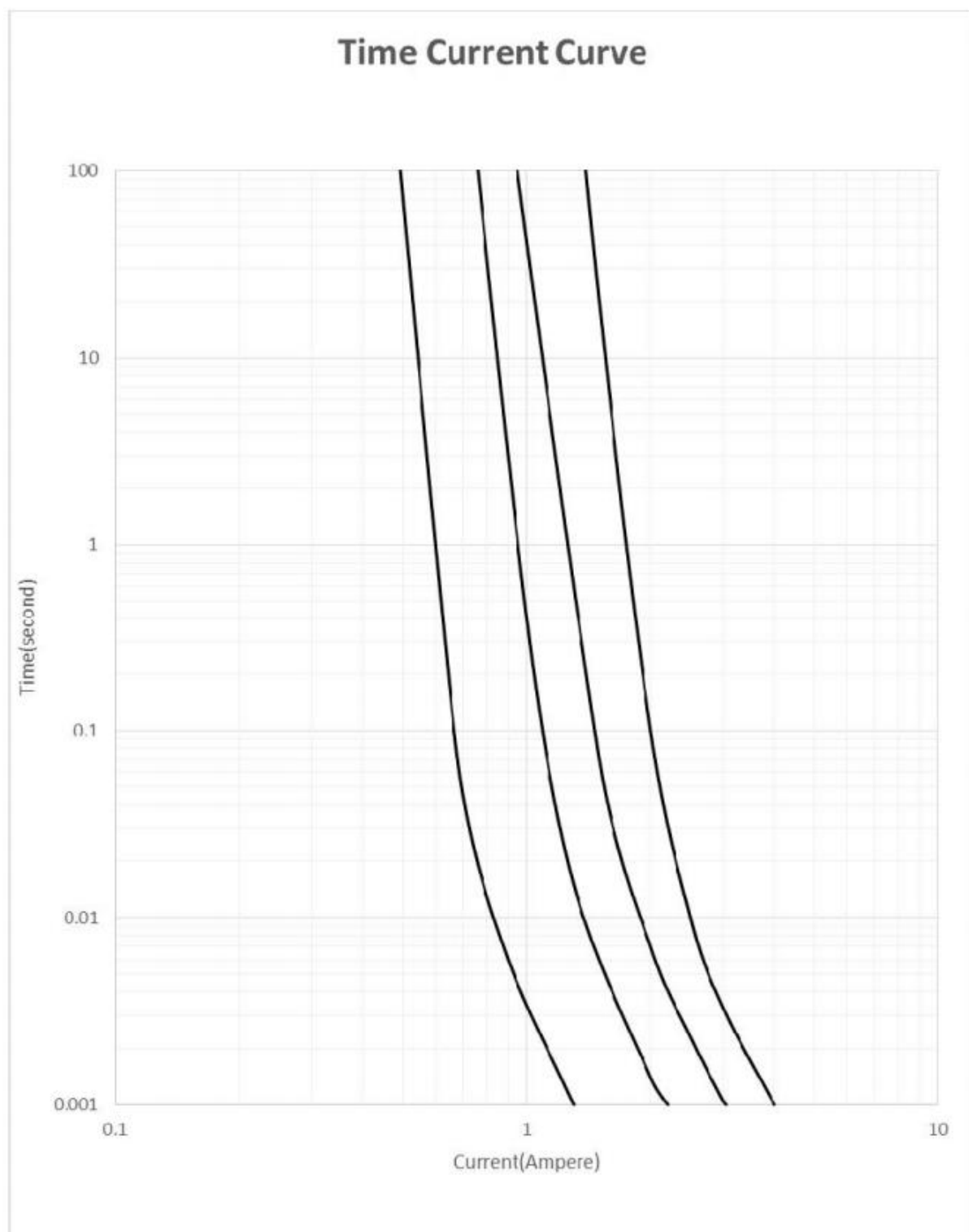


Side view



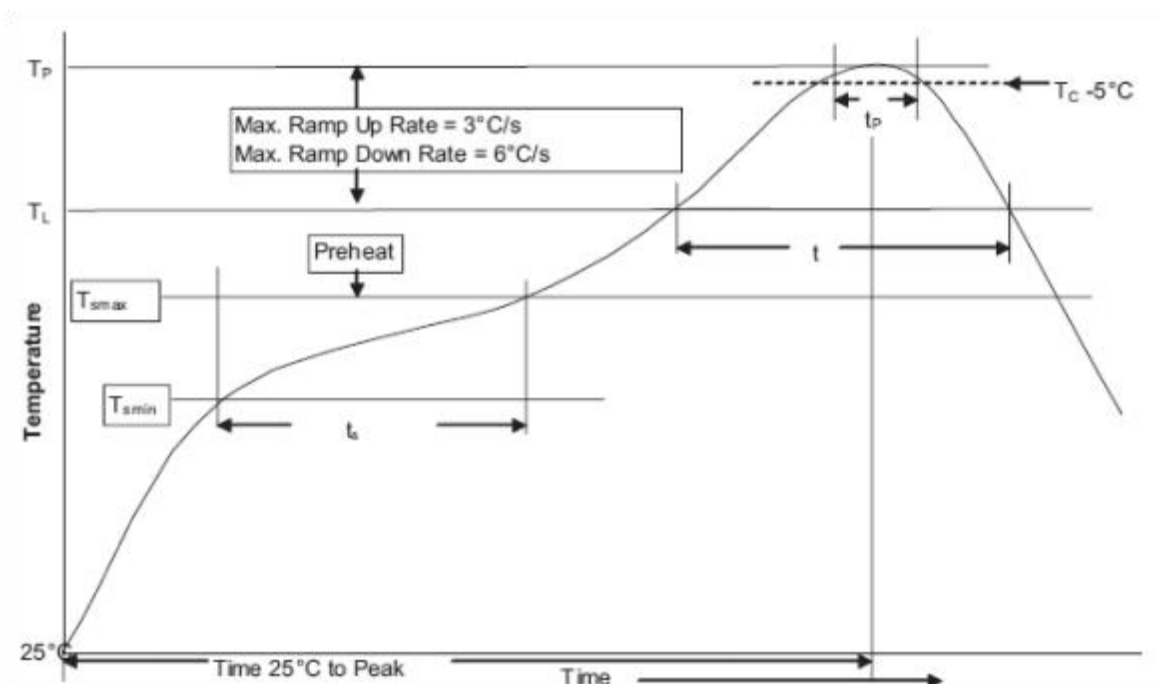
Recommended land pattern (Unit: mm/inch)





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_{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.

Package

3000 fuses on 8mm tape-and-reel on a 7 inch (178mm) reel per EIA Standard 481.