

Type 12T

1206 Slow Blow SMD Fuses

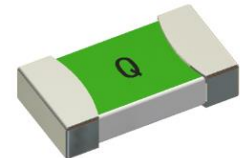


12T Series are the fuses set the industry standard for performance, reliability and quality. The solder-free design provides excellent on-off and temperature cycling characteristics during use and also makes our SMD fuses more heat and shock tolerant than typical subminiature fuses.

Electrical Characteristics						
Rated Current	1.0In	2.0In	2.5In	3.0In	3.5In	10.0In
630mA~3A	4 hour min.	1sec~60sec	5 sec max.	0.1sec~3sec	-	0.2ms~20ms
3.5A~5A		-			-	
6A~30A		-	-	-	5 sec max.	

Features

- ▲AEC-Q200 Automotive Grade Certified
- ▲High inrush current withstanding capability
- ▲Compatible with reflow and wave solder
- ▲Ceramic and glass construction
- ▲Excellent environmental integrity
- ▲One time positive disconnect
- ▲Lead Free and Halogen free material



Specifications

Part No.	Rated Voltage DC	Rated Current A	Breaking Capacity A ¹	Typical Cold Resistance (mOhms) ²	Typical Voltage Drop(mV)	Typical Pre-Arcing I ² T (A ² Sec) ³	Alpha Marking
12T0630	72V 63V	0.63A	50A	1080	950	0.009	B
12T0750		0.75A		850	900	0.01	.75
12T1100		1A		480	510	0.11	H
12T1150		1.5A		230	465	0.17	K
12T1175		1.75A		180	450	0.20	E
12T1200		2A		135	316	0.41	N
12T1250		2.5A		75	240	0.68	O
12T1300		3A		47	187	1.5	P
12T1350		3.5A		38	180	2.0	R
12T1400		4A		34	173	2.5	S
12T1450	32V 24V	4.5A	50A@32Vdc 300A@24Vdc	29	164	2.65	X
12T1500		5A		24	145	4	T
12T1600		6A		16	140	12	F
12T1700		7A		12.3	130	14	7
12T1800	32V 24V	8A	150A@32Vdc 300A@24Vdc	8.3	123	16	M
12T2100		10A		6.5	110	22	U
12T2120		12A		5	85	11.5	12
12T2120.HW		12A		5.3	80	40	W
12T2150		15A		3.7	78	16.5	15
12T2150.HW		15A		4.5	85	45	Y
12T2200		20A		3.4	80	50	Q
12T2250		25A		1.6	90	60	L
12T2300		30A		1.3	90	100	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 25 °C

*Typical Pre-arcing I²T are measured at 10In Current

Choice fuse for surge application (USB charger etc.), make sure the I²T of fuse is 4 times than surge.

*12T2120&12T2150 are higher I²T version than 12T2120&12T2150

Specifications are subject to change without notice. Application testing is strongly recommended.

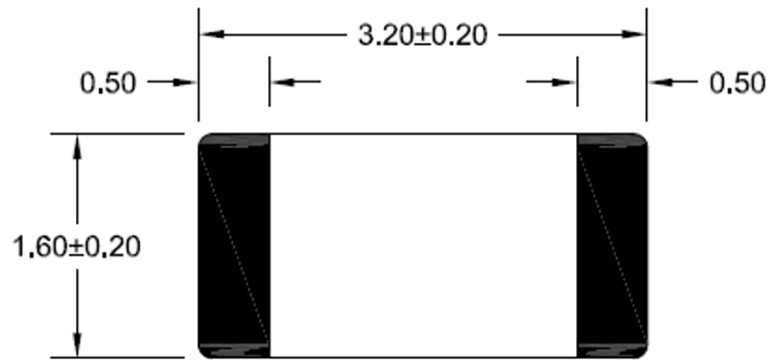
Type 12T

1206 Slow Blow SMD Fuses

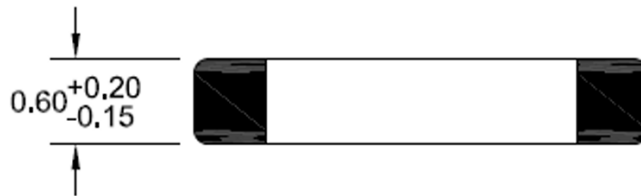


Dimension Drawing not to scale(Unit:mm)

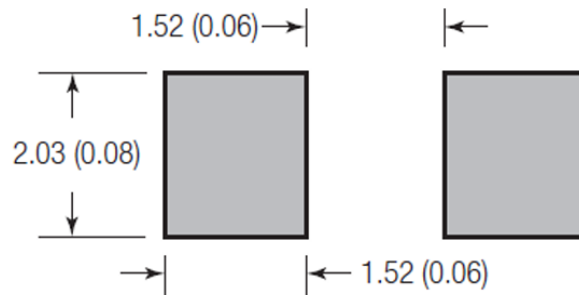
Top view



Side view

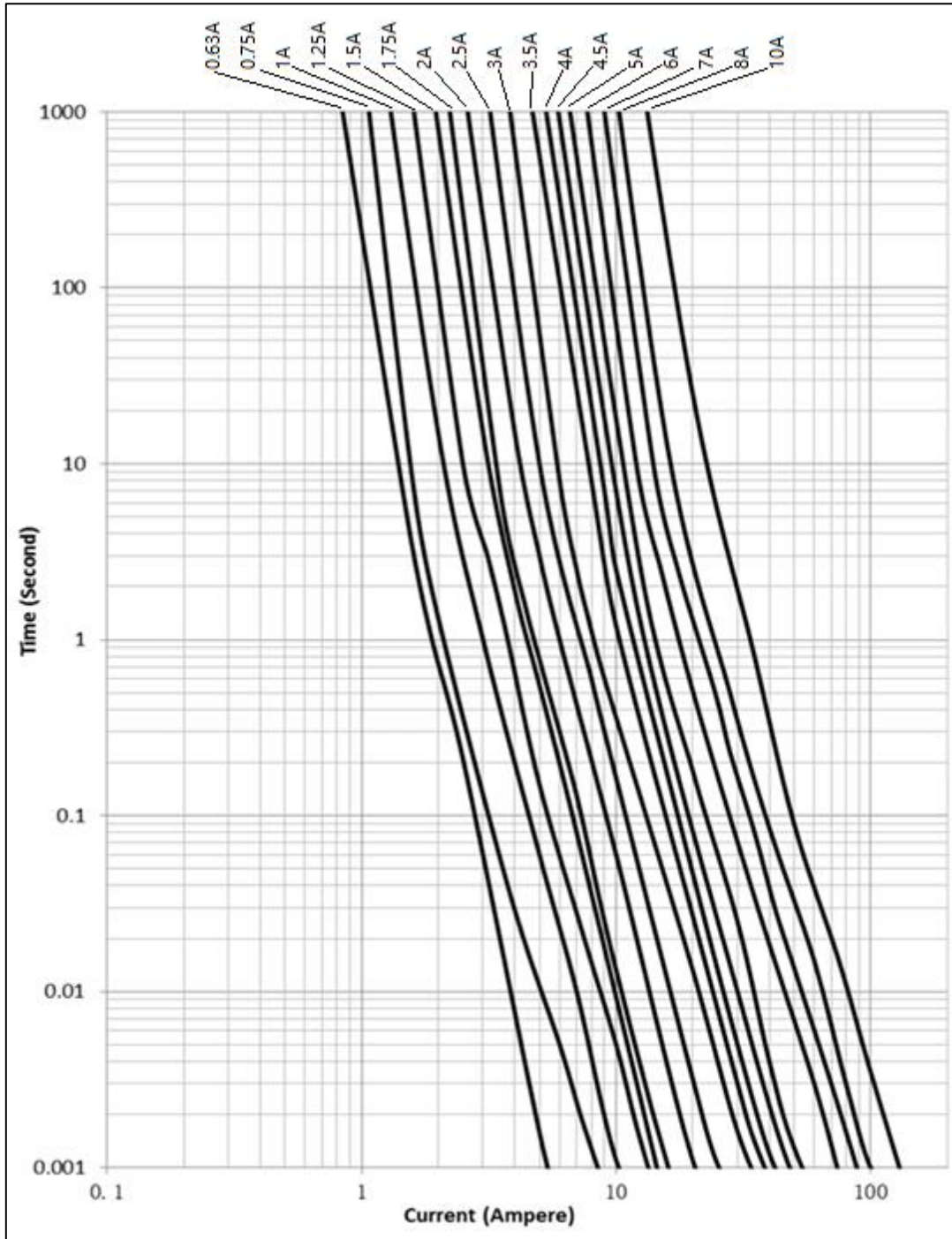


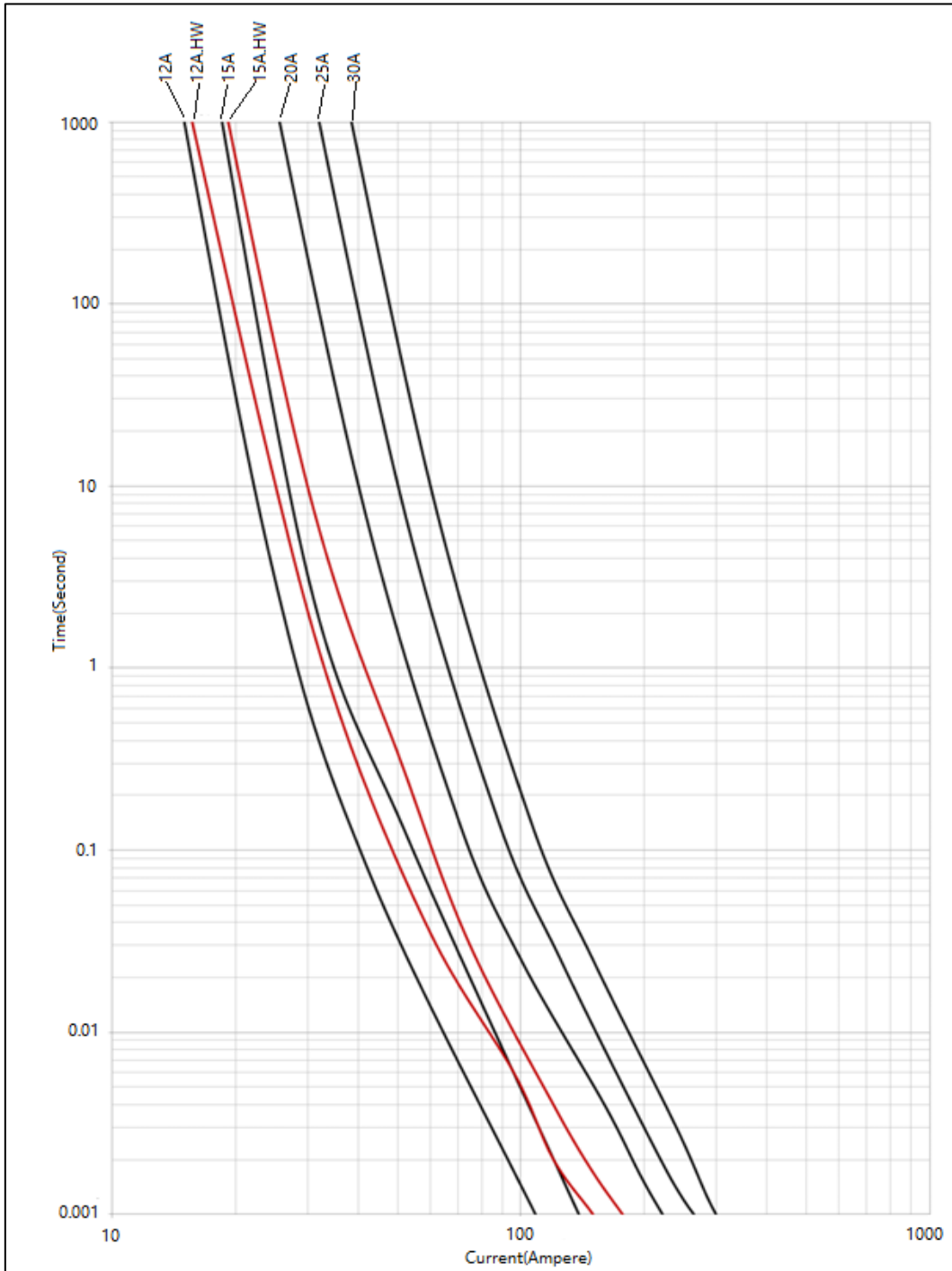
Recommended land pattern Unit: mm(inch)



Recommended stencil thickness is 0.15mm (10A-30A)

Average Time Current Curves





Type 12T

1206 Slow Blow SMD Fuses



Soldering method

■ Wave solder

Reservoir temperature: 260°C

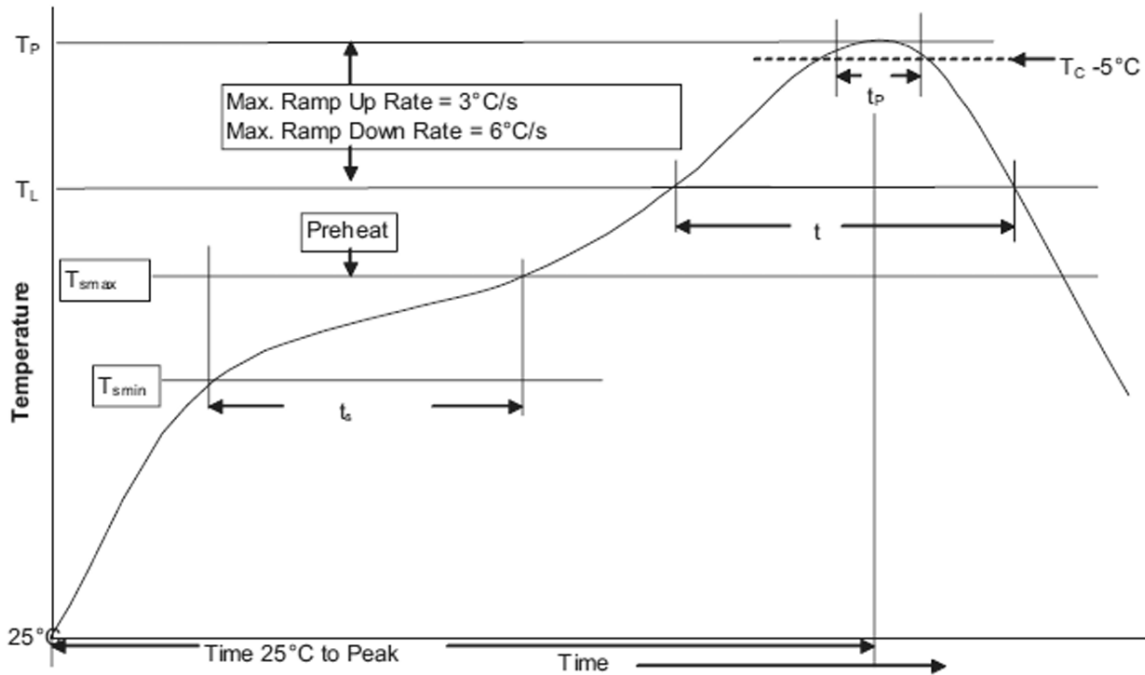
Time in reservoir: 10 seconds maximum

■ Infrared reflow

Temperature: 260°C

Time: 30 seconds maximum

Solder reflow profile

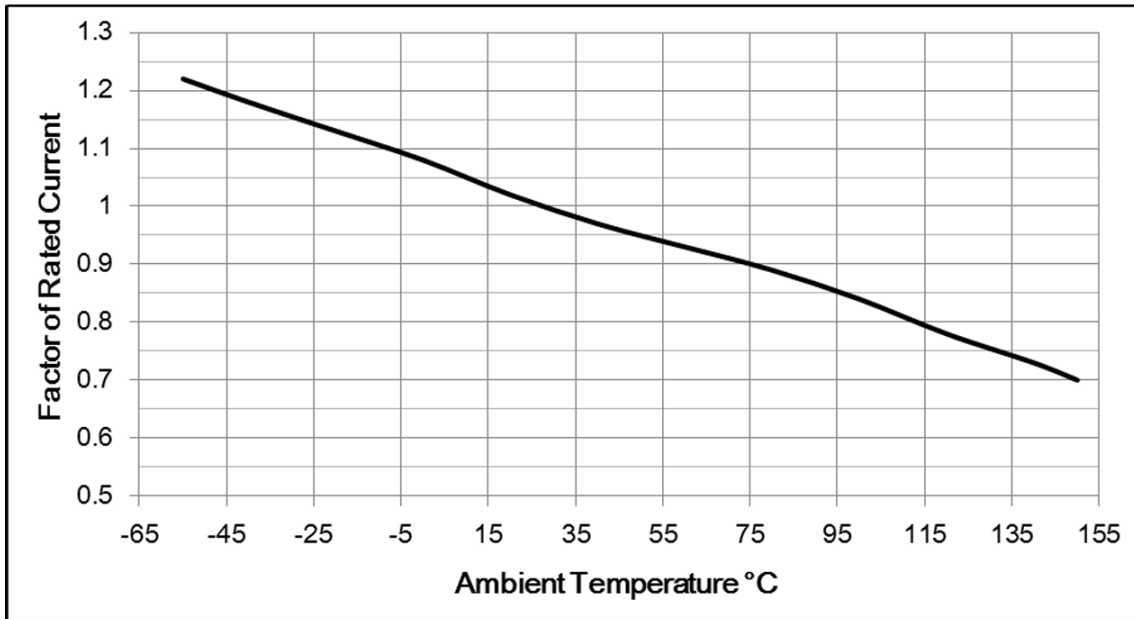


Profile Feature		Lead(Pb) free solder
Preheat and soak	• Temperature min.(T _{smin})	150°C
	• Temperature max. (T _{smax})	200°C
	• Time (T _{smin} to T _{smax}) (ts)	60 - 120 Seconds
Average ramp up rate T _{smax} to T _p		3°C / Second Max.
Liquidous temperature (T _L)		217°C
Time at liquidous (t _L)		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.

Temperature Derating Curve

■ Normal ambient temperature: 23+/-3°C

■ Operating temperature: -55~150°C, with proper correction factor applied



Package

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

--- End of Document ---