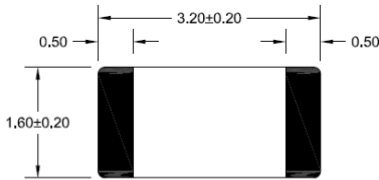


# Type 12T

## 1206 Slow-Blow SMD Fuses



### Description

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.

### Features

- AEC-Q200 Automotive Grade Certified
- 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

### Applications

- Power supplies
- Battery Chargers
- Consumer Electronicsii
- Industrial Controllers

### Electrical Characteristics for Series

Rating Current	100% of Ampere Rating	200% of Ampere Rating	250% of Ampere Rating	300% of Ampere Rating	350% of Ampere Rating	1000% of Ampere Rating
630mA~3A	4 Hour, Min	1Sec.~60sec.	5Sec.,Max	0.1SEC.~3sec.	-	0.2ms~20ms
3.5A~5A	4 Hour, Min	-	5Sec.,Max	0.1SEC.~3sec.	-	0.2ms~20ms
6A~30A	4 Hour, Min	-	-	-	5Sec.,Max	0.2ms~20ms

### Electrical Characteristic Specifications by Item

Part No	Rated Voltage DC	Rated Current (A)	Breaking Capacity (A) 1	Cold. Resistance (mOhms) 2	Max. Voltage Drop (mV)	Typical Pre-Arcing I <sup>2</sup> t (A <sup>2</sup> Sec) 3	Alpha Mark
12T0630	72V 63V 32V	0.630	50A@72V	1080	950	0.009	B
12T0750		0.750		850	900	0.010	.75
12T1100		1		480	510	0.11	H
12T1125		1.25		330	500	0.15	H
12T1150		1.5		230	367	0.17	K
12T1200		2	135	316	0.41	N	
12T1250		2.5	75	240	0.68	O	
12T1300		3	47	187	1.5	P	
12T1350		3.5	38	180	2	R	
12T1400		4	34	173	2.5	S	
12T1450	32V	4.5	50A@32V	29	164	2.65	X
12T1500		5		24	145	4	T
12T1600		6		16	140	12	F
12T1700		7		12.3	130	14	7
12T1800	32V 24V	8	300A@24V 150A@32V	8.3	123	16	M
12T2100		10		6.5	110	22	U
12T2120		12		5.0	85	11.5	12
12T2120.HW		12		5.3~6.3	80	18~25	12
12T2150		15		3.7	78	16.5	15
12T2150.HW		15		4.5	85	45	Y
12T2200		20		3.4	80	50	Q
12T2250		25		1.6	90	60	L
12T2300		30		1.3	90	100	Z

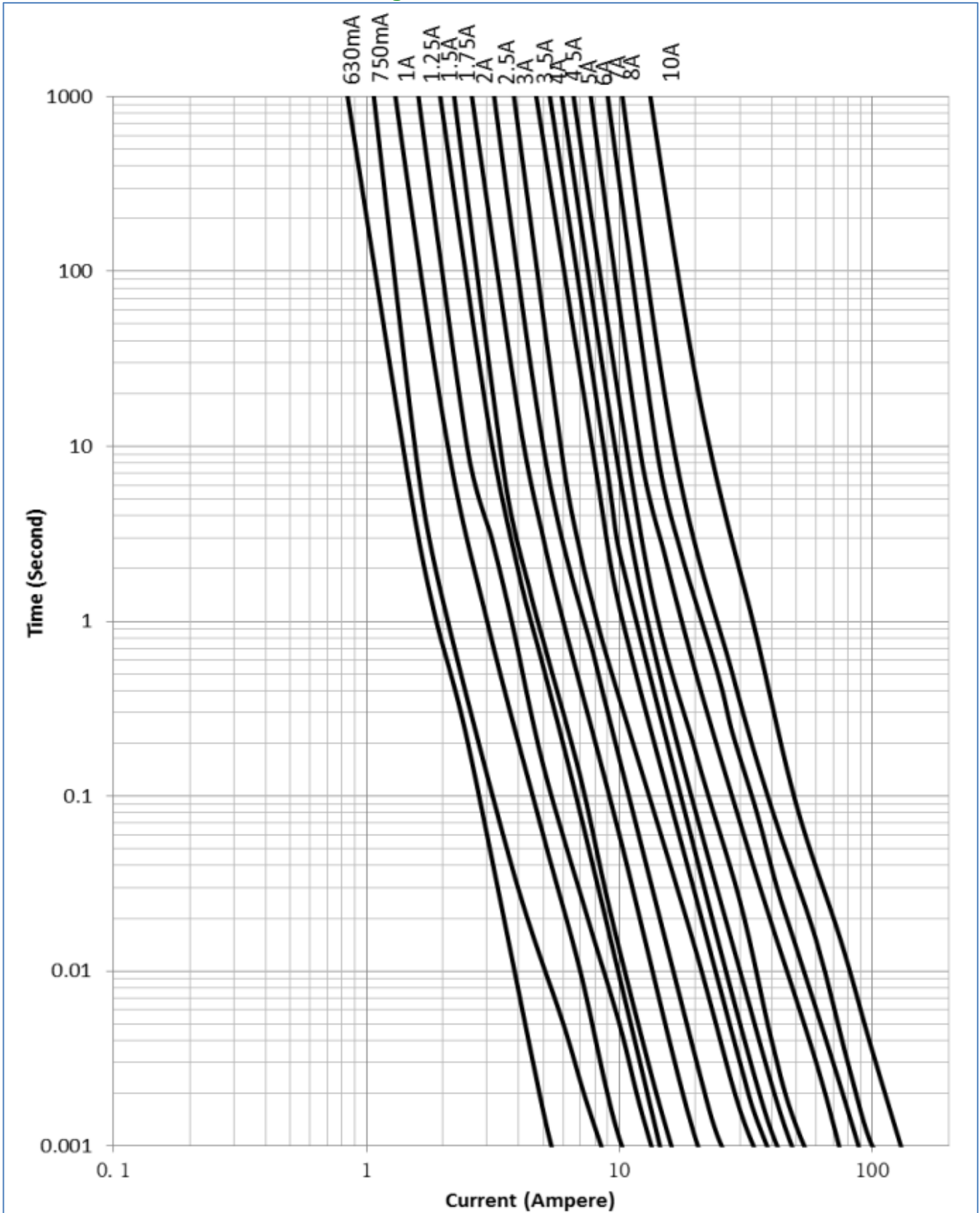
# Type 12T

## 1206 Slow-Blow SMD Fuses

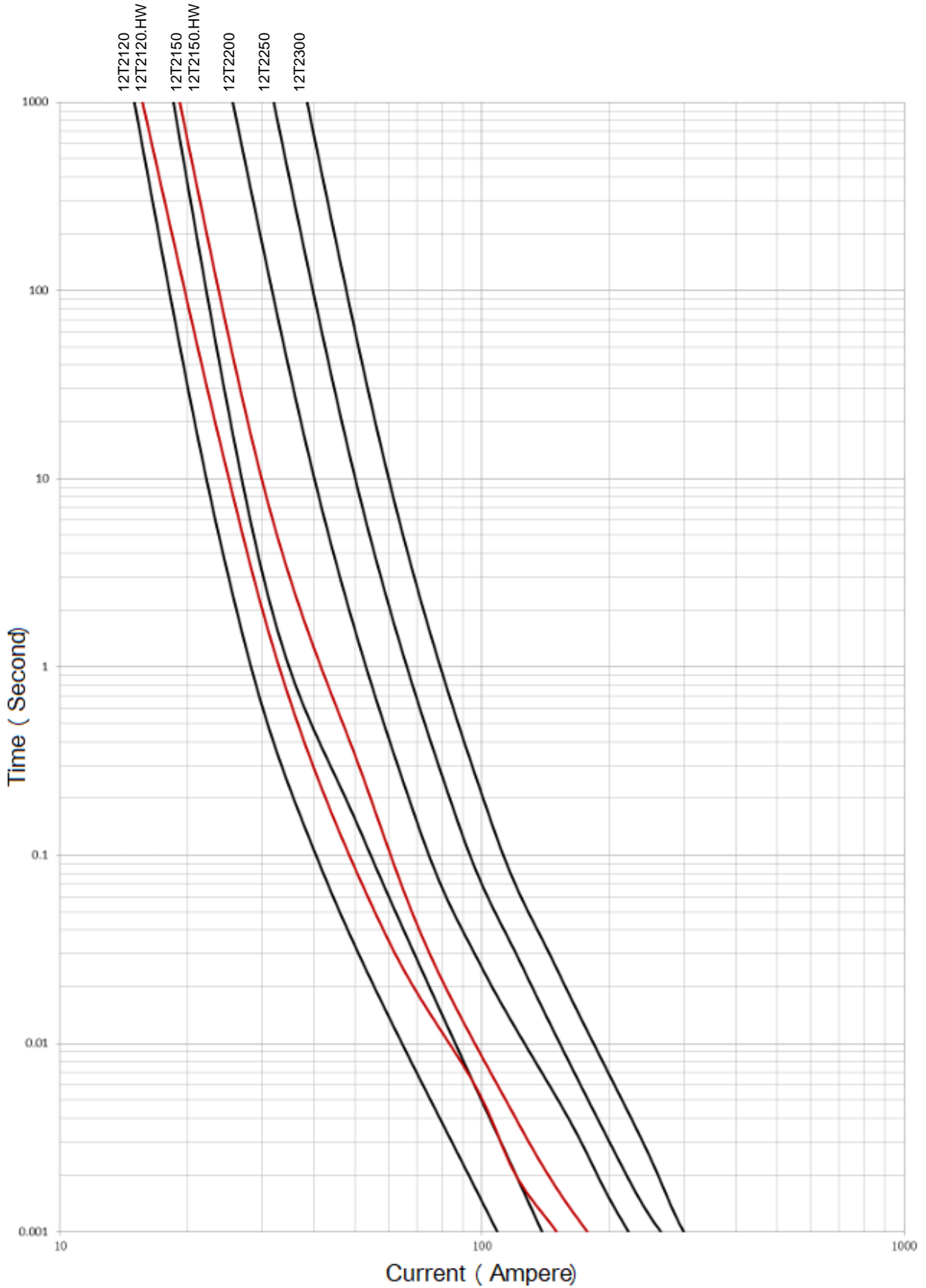


- \* DC Interrupting Rating (Measured at rated voltage, time constant of less than 50 microseconds, battery source)
- \* DC Cold Resistance are measured at <10% of rated current in ambient temperature of 25degrees
- \* Typical Pre-arching  $I^2t$  are measured at 10In Current  
For 1A-5A, the color of glass coating is Green; for others, it's Blue.

Average Time Current Curves



# Type 12T 1206 Slow-Blow SMD Fuses



# Type 12T

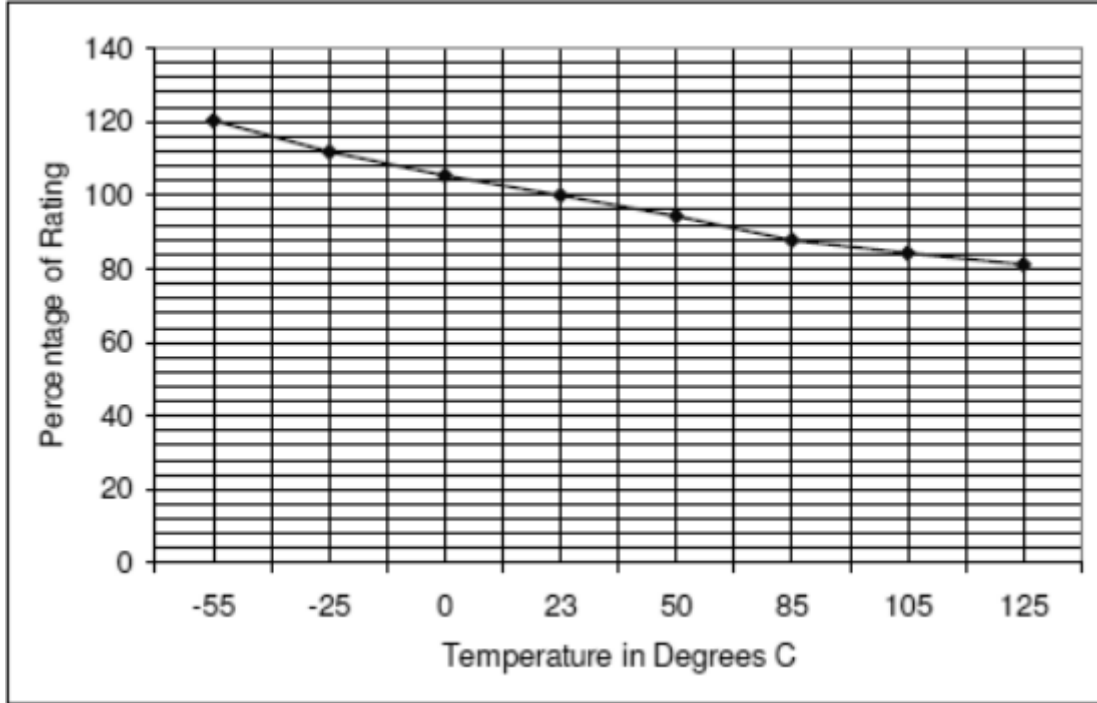
## 1206 Slow-Blow SMD Fuses



### Temperature Re-rating Curve

\* Normal ambient temperature: 23+/-3°C

\* Operating temperature: -55 ~ 125°C, with proper correction factor applied



Note: Derating depicted in this curve is in addition to the standard derating of 25% of continuous operation

### Soldering method

Wave solder

Reservoir temperature: 260°C

Time in reservoir: 10 seconds maximum

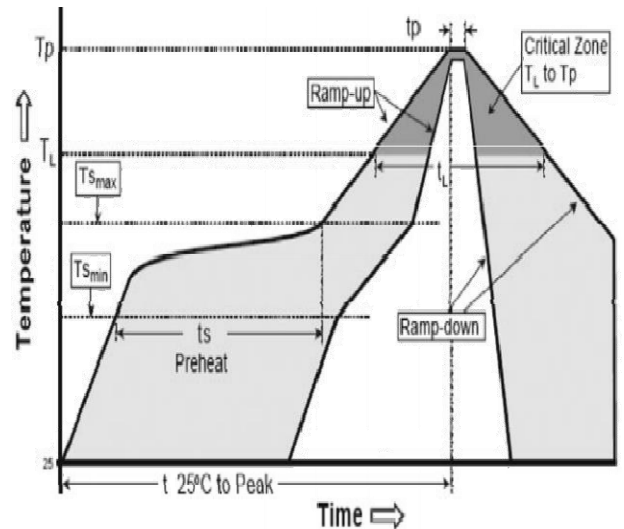
Infrared reflow

Temperature: 260°C

Time: 30 seconds maximum

### Solder Reflow Profile

Reflow Condition		Pb-Free assembly
Pre Heat	-Temperature Min( $T_{s(min)}$ )	150°C
	-Temperature Max( $T_{s(max)}$ )	200°C
	-Time (Min to Max)( $t_s$ )	60-180 secs
Average ramp up rate (Liquidus Temp( $T_L$ ) to peak)		5°C/second max
Ts(max) to $T_L$ Ramp-up rate		5°C/second max
Reflow	-Temperature( $T_L$ )(liquidus)	217°C
	-Temperature( $t_L$ )	60-150 seconds
Time within 5°C of actual peak Temperature( $t_p$ )		20-40 seconds
Ramp-down Rate		5°C/second max
Time 25°C to peak Temperature ( $T_p$ )		8 minutes Max.
Do not exceed		260°C

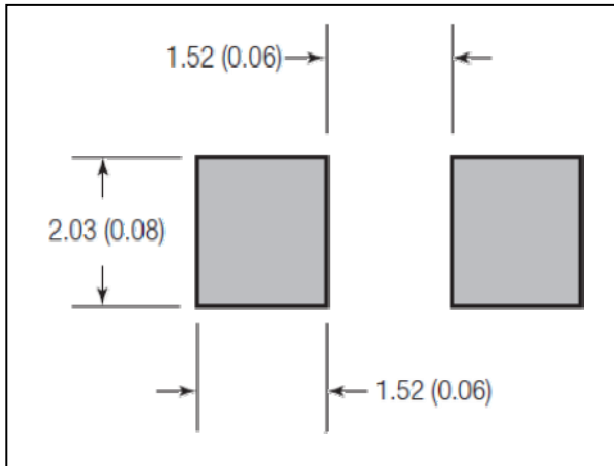


# Type 12T

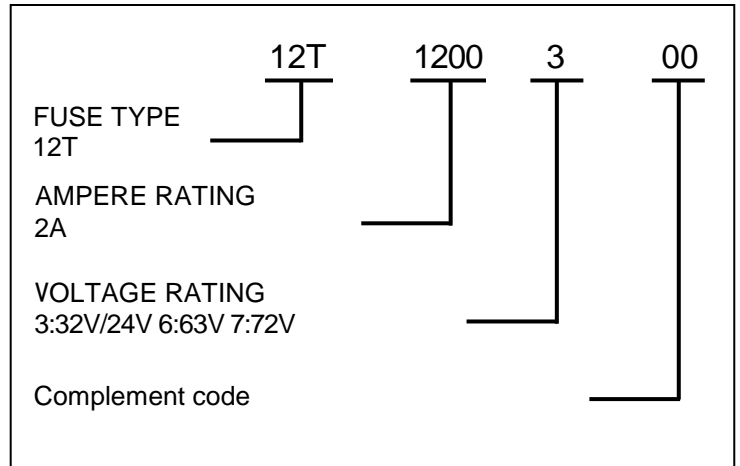
## 1206 Slow-Blow SMD Fuses



### Pad Layout(Unit:mm/inch)



### Ordering Information



### Packaging

Packaging Option	Packaging Specification	Quantity
12T	tape-and-reel	3000