

Type 12T

1206 Slow Blow SMD Fuses



Description

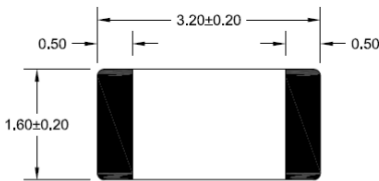
12T Series are the fuses set the industry standard for performance, reliability and quality. The solder-free design provides excellent on-off and temperature cycling characteristics during use and also makes our SMD fuses more heat and shock tolerant than typical subminiature fuses.

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
750mA~3A	4 Hour, Min	1Sec.~60sec.	5Sec.,Max	0.1SEC.~3sec.	-	0.2ms~20ms
3.5A~6A	4 Hour, Min	-	5Sec.,Max	0.1SEC.~3sec.	-	0.2ms~20ms
7A~20A	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 ² t (A2Sec) 3	Alpha Mark
12T0375	72V 63V	0.375	50A@72V 50A@63V 50A@32V	3200	2100	0.0032	E
12T0500		0.500		1425~2375	1500	0.0076	0.5
12T0750		0.750		850	1150	0.019	.75
12T1100		1		480	510	0.11	H
12T1150		1.5		230	367	0.17	K
12T1200		2		140	316	0.41	N
12T1250		2.5		80	240	0.68	O
12T1300		3		50	187	1.5	P
12T1350		3.5		38	180	2	R
12T1400		4		34	173	2.5	S
12T1450	32V 45V	4.5	50A@32V 50A@45V	25	164	2.65	X
12T1500		5		21.5	145	4	T
12T1600		6		16	140	12	F
12T1700		7		12.3	140	6.6	7
12T1800	24V 32V	8	300A@24V 150A@32V	10	123	16	M
12T2100		10		7	110	22	U
12T2120		12		5	85	11.5	12
12T2150		15		3.5	78	16.5	15
12T2200		20		3.4	80	50	Q

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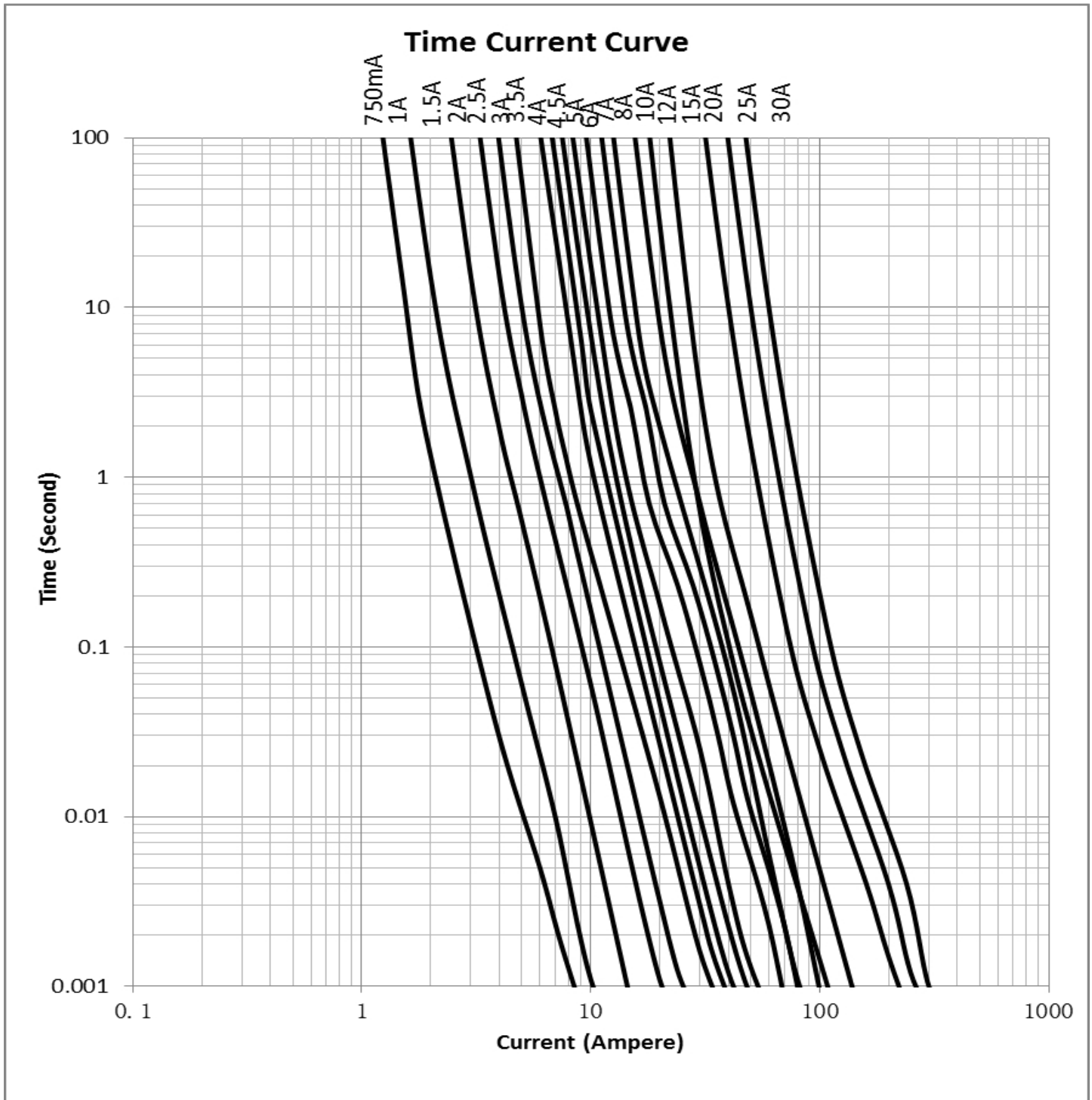
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12T2250		25		1.6	90	60	L
12T2300		30		1.3	90	100	Z

- 1.DC Interrupting Rating (Measured at rated voltage, time constant of less than 50 microseconds, battery source)
- 2.DC Cold Resistance are measured at <10% of rated current in ambient temperature of 25degrees
- 3.Typical Pre-arthing 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
- 4.Internal qualification for 8-30A@32Vdc,UL Approval is pending
- 5.Internal qualification for 4.5-7A@45Vdc,UL Approval is pending

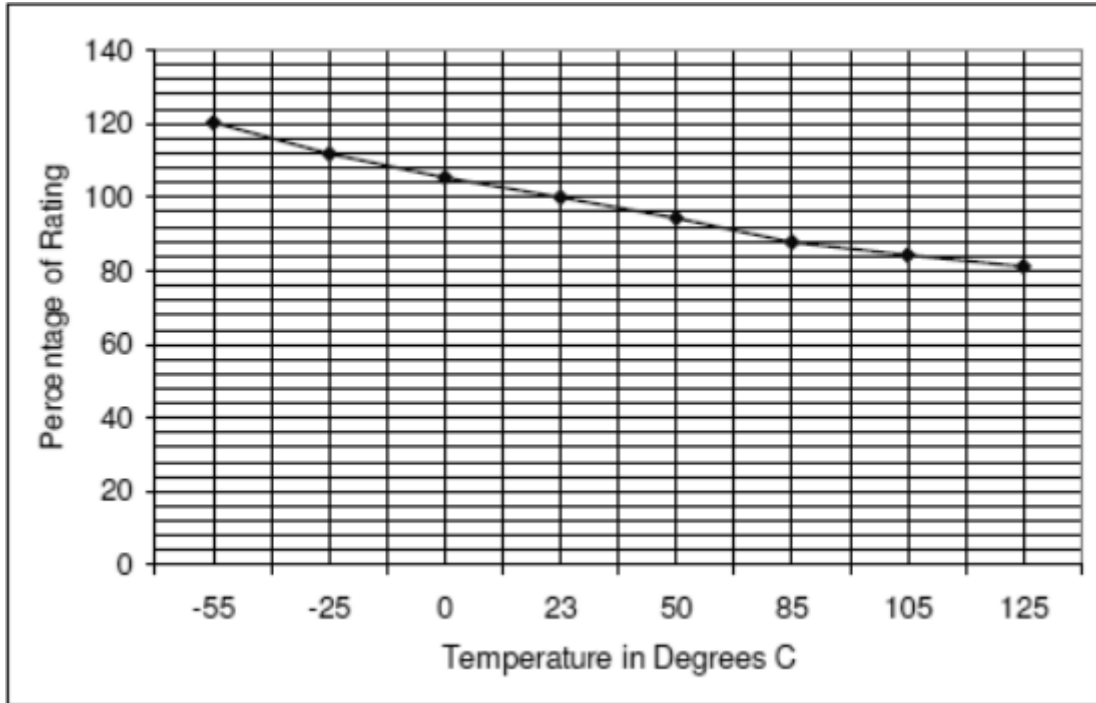
Average Time Current Curves



Temperature Re-rating Curve

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

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



Soldering Method

■ Wave solder

Reservoir temperature: 260°C

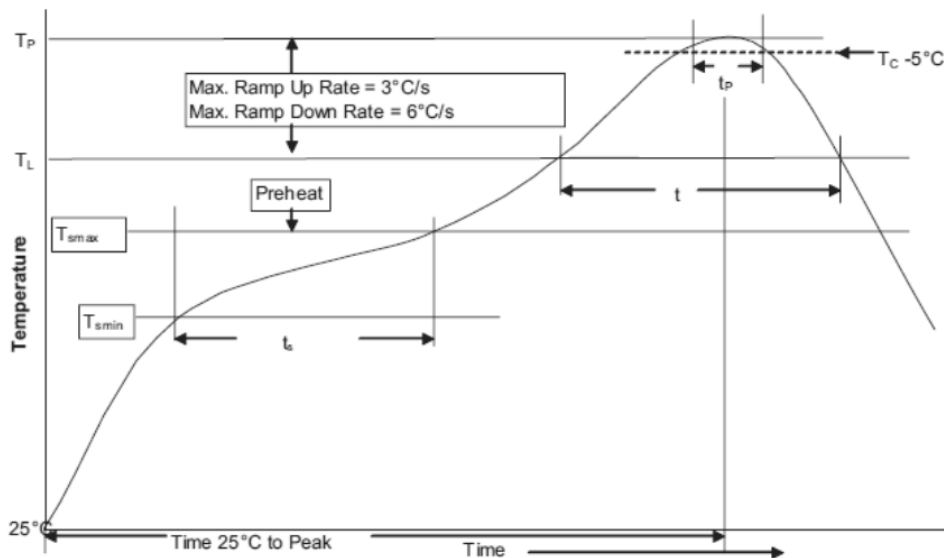
Time in reservoir: 10 seconds maximum

■ Infrared reflow

Temperature: 260°C

Time: 30 seconds maximum

Solder Reflow Profile



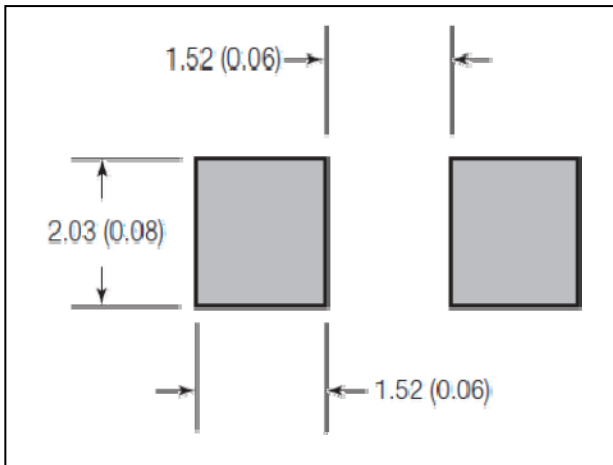
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Profile Feature	Lead(Pb)free solder	
Preheat and soak	Temperature min.(T _{min})	150°C
	Temperature max.(T _{max})	200°C
	Time(T _{min} to T _{max})(ts)	60 - 120 Seconds
Average ramp up rate T _{max} to T _p	3°C / Second Max.	
Liquidous temperature(T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

Mechanical Dimensions(Unit:mm(inch))



Ordering Information

	12T	1200	3	00
FUSE TYPE	_____	_____	_____	_____
12T	_____	_____	_____	_____
AMPERE RATING	_____	_____	_____	_____
2A(10 ¹ x200mA)	_____	_____	_____	_____
VOLTAGE RATING	_____	_____	_____	_____
2:24V 3:32V 6:63V 7:72V	_____	_____	_____	_____
Complement code	_____	_____	_____	_____

Packaging

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