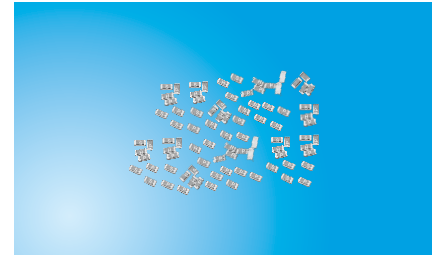


1206 Time Delay SMD Fuses 1206TD Series

Description

- ▶ 1206TD 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.

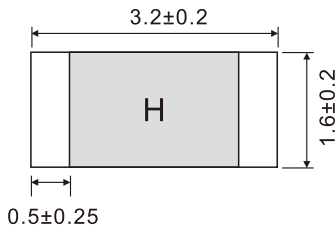


Features

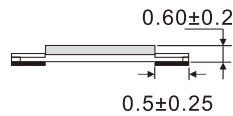
- ▶ High inrush current withstanding capability
- ▶ AEC-Q200 Automotive Grade Certified
- ▶ Compatible with reflow and wave solder
- ▶ Ceramic and glass construction
- ▶ Excellent environmental integrity
- ▶ One time positive disconnect
- ▶ Lead Free and Halogen free material

1206 Time Delay SMD Fuses 1206TD Series

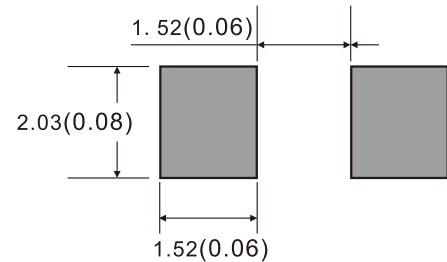
Dimensions(Unit:mm)



Side View



Recommended Pad Layout(mm)



Specifications

Specification								
Part No.	Rated Voltage DC	Rated Current (A)	Breaking Capacity(A) ¹	Typical Cold Resistance (Ohm) ² Ref	Typical Voltage Drop (mV)	Typical Pre-Arcing I ² t (A ² Sec)	Marking	
1206TD1A	72V 63V	1	50A	0.480	510	0.11	H	
1206TD1.5A		1.5		0.230	367	0.17	K	
1206TD2A		2		0.140	316	0.41	N	
1206TD2.5A		2.5		0.080	240	0.68	O	
1206TD3A		3		0.050	187	1.5	P	
1206TD3.5A		3.5		0.038	180	2	R	
1206TD4A		4		0.034	173	2.5	S	
1206TD4.5A		4.5		0.025	164	2.65	X	
1206TD5A	32V	5	300A	0.0215	145	4	T	
1206TD7A		7		0.0123	140	6.6	7	
1206TD8A	24V	8	300A	0.010	123	16	M	
1206TD10A		10		0.007	110	18	U	
1206TD12A		12		0.005	85	22	12	
1206TD15A		15		0.0035	78	30	15	
1206TD20A		20		20	0.002	80	50	Q

- ▶ 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°
- ▶ Typical Pre-arching I²t are measured at 10In Current

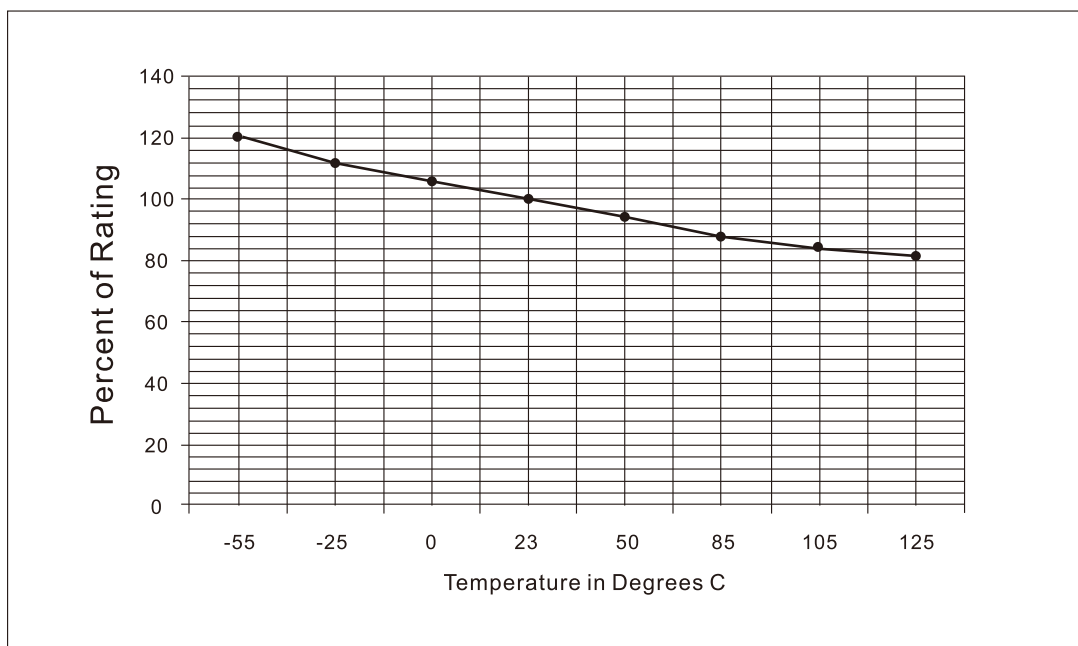
1206 Time Delay SMD Fuses 1206TD Series

Electrical Characteristics						
Rated Current	1.0 In	2.0 In	2.5 In	3.0 In	3.5 In	10 In
1A-3A	4 Hour Min	1-60 Sec	5 Sec Max	0.1-3 Sec	-	0.2-20ms
3.5A-5A		-	5 Sec Max	0.1-3 Sec	-	0.2-20ms
7A-20A		-	-	-	5 Sec Max	0.2-10ms

Temperature Derating Curve

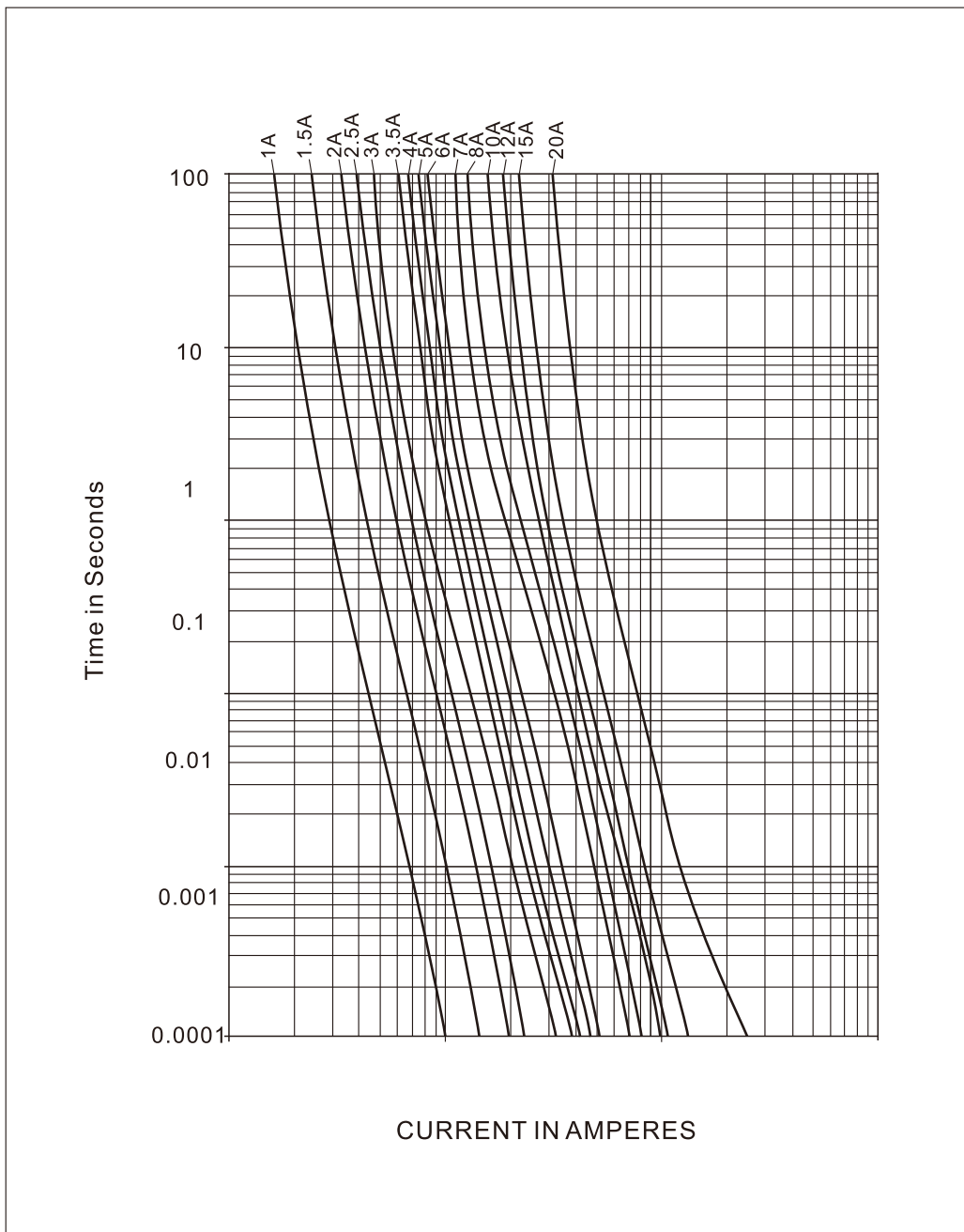
► Normal ambient temperature: $25 \pm 2^\circ\text{C}$

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



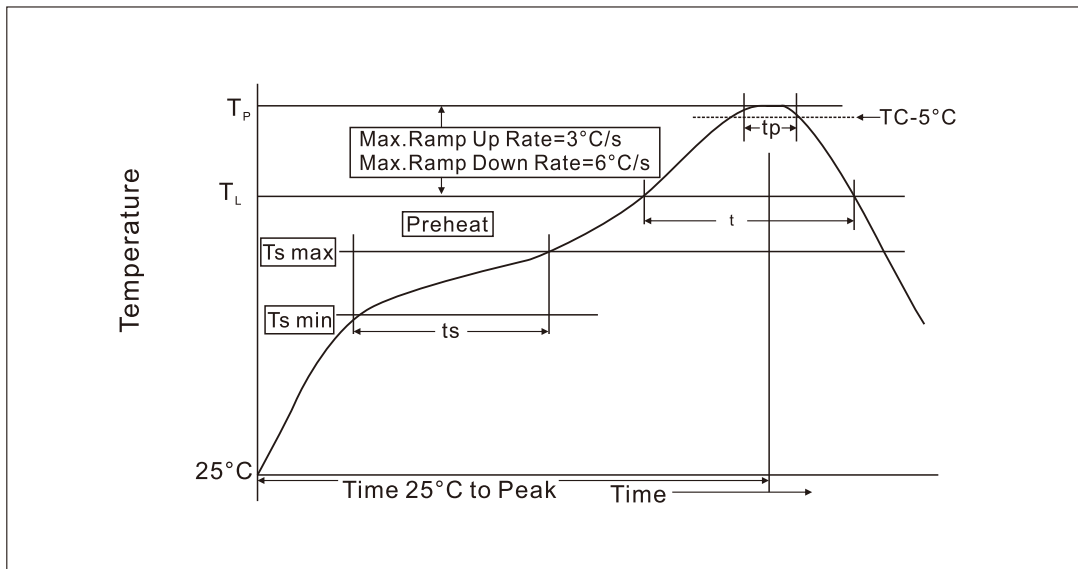
1206 Time Delay SMD Fuses 1206TD Series

Time Current Characteristic Curve



1206 Time Delay SMD Fuses 1206TD Series

Solder reflow profile



Profile Feature		Lead(Pb)free solder
Preheat and soak	Temperature min .(Ts min)	150°C
	Temperature max .(Ts max)	200°C
	Time (Ts min to Ts max)(ts)	60-120 Seconds
Average ramp up rate Ts max to Tp		3°C/Second Max.
Liquidous temperature(TL) Time at liquidous(tL)		217°C 60-150 Seconds
Peak package body temperature(Tp)		260°C
Time(tp) within 5°C of the specified classification temperature(Tc)		30 Seconds
Average ramp-down rate (Tp to Ts max)		6°C/Second Max.
Time(25°C to Peak Temperature)		8 Minutes Max.

1206 Time Delay SMD Fuses 1206TD Series

Soldering method

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

Packaging

- ▶ On Tape: 1206TD-3000 pcs Per Reel
- ▶ 1206TD-30000 pcs outer box