

Time Delay | 0.126x0.064 inch Thick Film Chip Fuses

1206TD AS

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.

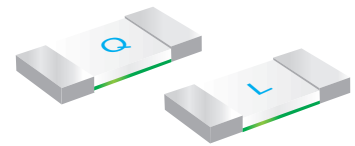


Features

- 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

Applications

- Flat panel displays and televisions
- Automotive infotainment and ECU
- Computer servers
- Portable electronics
- Mobile device chargers
- Power Battery Packs



Electrical Characteristics

Rated Current	1.0In	2.5In	3.0In	3.5In	10.0In
4.5A~5A	4 hour min.	5 sec max.	0.1sec – 3sec	-	0.2ms – 20ms
6A~40A	4 hour min.	-	-	5 sec max.	0.2ms – 20ms

Specifications

Part Number	Ampere Rating (A)	Voltage Rating	Interrupting Rating	Typical Cold Resistance (Ohms)	Typical Melting I ² t (A ² Sec)	Typical Voltage Drop (V)	Marking Code		
1206TD-4.5AS	4.50	72Vdc @ 50A		0.027	2.65	0.164	X		
1206TD-5AS	5.00			0.022	4	0.145	T		
1206TD-6AS	6.00			0.0145	12	0.140	F		
1206TD-7AS	7.00			0.0105	14	0.130	7		
1206TD-8AS	8.00			0.0070	16	0.123	V		
1206TD-10AS	10.0			0.0050	22	0.110	U		
1206TD-12AS	12.0			48Vdc @ 200A		0.0043	40	0.080	W
1206TD-15AS	15.0					0.0035	45	0.085	Y
1206TD-20AS	20.0					0.0022	50	0.080	Q
1206TD-25AS	25.0					0.00155	58	0.090	L
1206TD-30AS	30.0	0.00132	95			0.090	Z		
1206TD-40AS	40.0	32Vdc @ 200A				0.00085	240	0.095	XL
		36Vdc @ 200A							

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

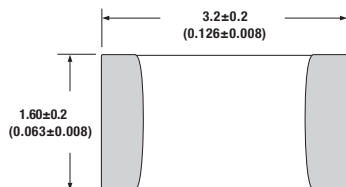
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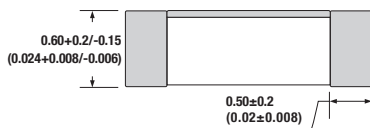
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Dimension

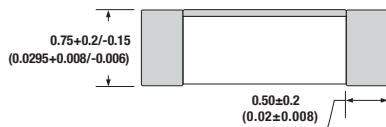
Unit: mm/inch



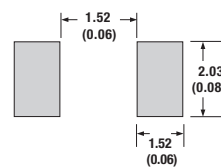
Side view: 4.5A-30A



Side view: 40A



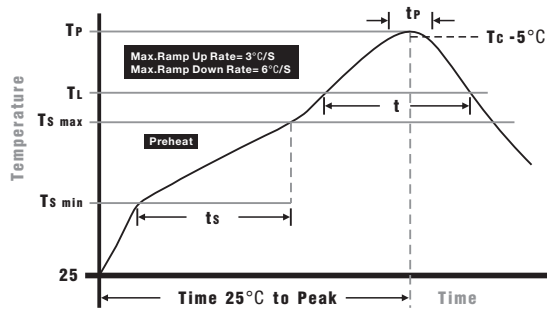
Pad layout



Packaging

- Quantity: 3,000pcs
- 8mm wide tape on 178mm(7 inch) diameter reel -specification EIA Standard 481.

Soldering Parameters

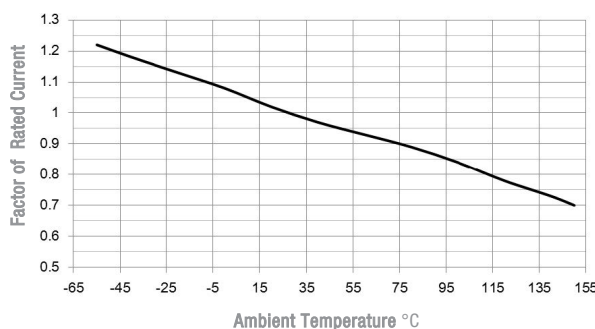


Wave Soldering: 260°C, 10 seconds max.
Infrared Reflow: 260°C, 30 seconds max.

IR Reflow Profile

Preheat Heat	
Temperature min (T _{min})	150°C
Temperature max (T _{max})	200°C
Time (T _{min} to T _{max}) (t _s)	60 -120 seconds
Average ramp-up rate (T _{max} to T _p)	3°C/second max.
Liquidous temperature (T_l)	
Time at liquidous (t _l)	60 - 150 seconds
Peak temperature(T_p)	
Time within 5°C of actual peak Temperature (t _p)	10 - 30 seconds
Average ramp-down rate (T _p to T _{max})	6°C/second max.
Time 25 °C to peak temperature	8 minutes max.

Temperature Derating Curve



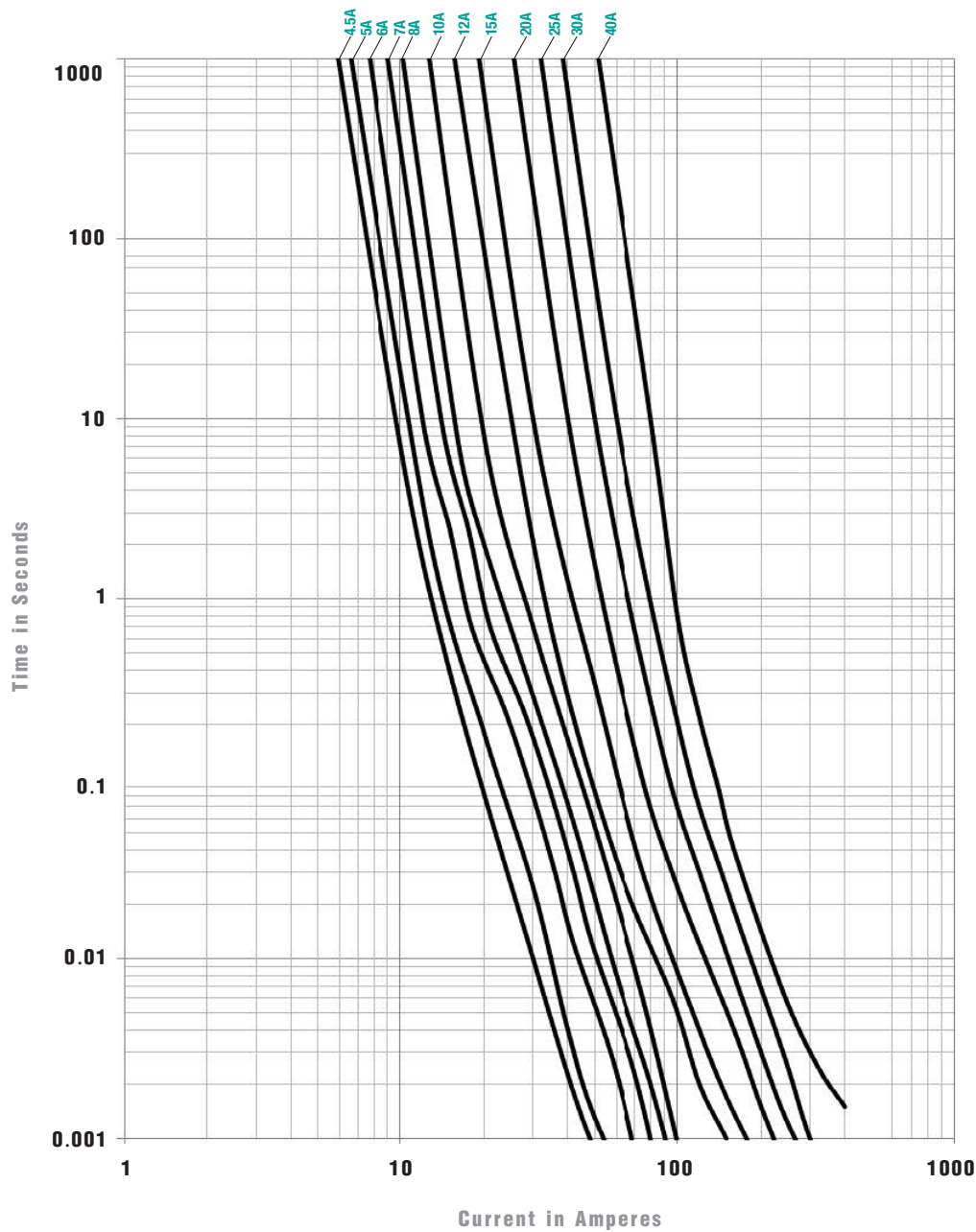
- Normal ambient temperature: 23+/-3°C
- Operating temperature: -55 ~ 150°C, with proper correction factor applied

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Average Time Current Curves



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