

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

Appications

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



Electrical Characteristics

Rated Current	1.0ln	2.5ln	3.0ln	3.5ln	10.0ln
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 Interrupting Rating Rating	Typical Cold Resistance (Ohms)	Typical Melting l ² t (A ² Sec)	Typical Voltage Drop (V)	Marking Code
1206TD-4.5AS	4.50	— 72Vdc @ 50A ———	0.027	2.65	0.164	Χ
1206TD-5AS	5.00	— 63Vdc @ 50A ———	0.022	4	0.145	T
1206TD-6AS	6.00	— 32Vdc @ 50A ———	0.0145	12	0.140	F
1206TD-7AS	7.00	32VUC @ 30A	0.0105	14	0.130	7
1206TD-8AS	8.00	<u> </u>	0.0070	16	0.123	V
1206TD-10AS	10.0	<u> </u>	0.0050	22	0.110	U
1206TD-12AS	12.0	48Vdc @ 200A	0.0043	40	0.080	W
1206TD-15AS	15.0	36Vdc @ 200A	0.0035	45	0.085	Υ
1206TD-20AS	20.0	32Vdc @ 200A	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	0.0005	240	0.095	
		36Vdc @ 200A	0.00085			XL

 $^{^{\}circ}$ DC Interrupting Rating (Measured at rated voltage, time constant of less than 50 microseconds, battery source)

 $^{^{\}circ}$ DC Cold Resistance are measured at <10% of rated current in ambient temperature of 25°C $_{\circ}$ Typical Pre-arcing I²t are measured at 10ln 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.



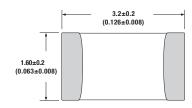
Time Delay | 0.126x0.064 inch

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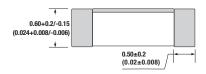
1206TD AS

Dimension

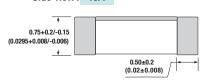
Unit: mm/inch



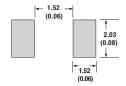
Side view: 4.5A-30A



Side view: 40A



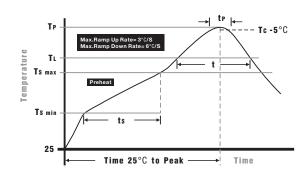
Pad layout



Packaging

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

Soldering Parameters

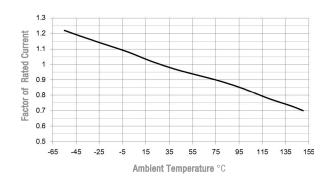


Wave Soldering: 260°C , 10 seconds max. Infrared Reflow: 260°C, 30 seconds max.

IR Reflow Profile

Preheat Heat Temperature min (Tsmin) Temperature max(Tsmax) Time (Tsmin to Tsmax) (ts)	150°C 200°C 60 -120 seconds		
Average ramp-up rate (Tsmax to Tp)	3°C/second max.		
Liquidous temperature (TL) Time at liquidous (tL)	217°C 60 - 150 seconds		
Peak temperature(Tp)	260+0/-5°C		
Time within 5°C of actual peak Temperature (tp)	10 – 30 seconds		
Average ramp-down rate (Tp to Tsmax)	6°C/second max.		
Time 25 °C to peak temperature	8 minutes max.		

Temperature Derating Curve



- \circ Normal ambient temperature: 23+/-3 $^{\circ}$ C \circ Operating temperature: -55 \sim 150 $^{\circ}$, with proper

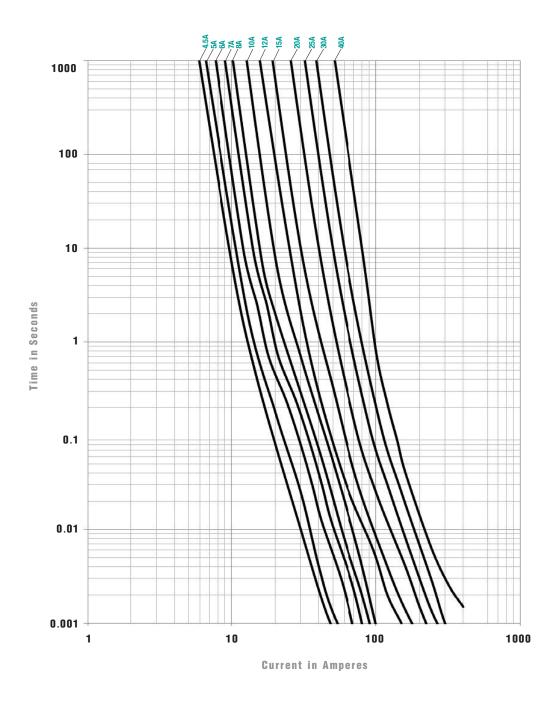
correction factor applied

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Average Time Current Curves



Specifications and features are subject to change without notice. www.prosemitech.com

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