

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

1206TD as









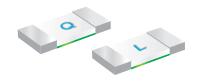
1206TD Series are the fuses set the industry standard for performance, reliability and quality. The solder-free design provides excellent on-off and temperature cycling characteristics during use and also makes our SMD fuses more heat and shock tolerant than typical subminiature fuses.

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

Amp Rating	% of Amp Rating	6 of Amp Rating Opening Time	
4.5~40A	100%	4 Hours Min.	
4.5~5A	250%	5 Seconds Max.	
4.5~5A	300%	0.1sec~3sec	
6~40A	350%	5 Seconds Max.	
4.5~5A	1000%	0.2ms~20ms	
6~40A	100070	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	Х
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		0.0070	16	0.123	V
1206TD-10AS	10.0	40//- @ 4504	0.0050	22	0.110	U
1206TD-12AS	12.0	— 48Vdc @ 150A — 32Vdc @ 150A	0.0043	40	0.080	W
1206TD-15AS	15.0	32VUC @ 150A	0.0035	45	0.085	Υ
1206TD-20AS	20.0		0.0022	50	0.080	Q
1206TD-25AS	25.0	36/4° © 300V	0.00155	58	0.090	L
1206TD-30AS	30.0	- 36Vdc @ 200A	0.00132	95	0.090	Z
1206TD-40AS	40.0	32Vdc @ 200A ——	0.00085	240	0.095	XL

o DC Interrupting Rating (Measured at rated voltage, time constant of less than 50 microseconds, battery source)

• Typical Pre-arcing I2t are measured at 10ln Current

 $^{^{\}circ}$ DC Cold Resistance are measured at <10% of rated current in ambient temperature of 25 $^{\circ}\text{C}$

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.



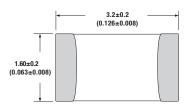
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Thick Film Chip Fuses

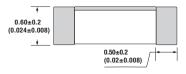
1206TD s

Dimension

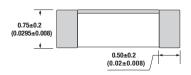
Unit: mm/inch



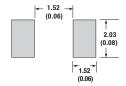
Side view: 4.5A-30A



Side view: 40A



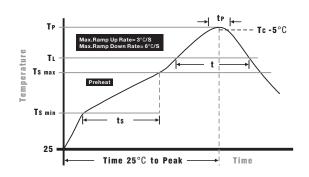
Pad layout



Packaging

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

Soldering Parameters

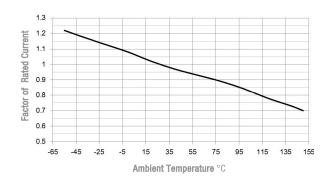


Wave Soldering: 260°C , 10 seconds max. Infrared Reflow: 260°C, 30 seconds max.

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

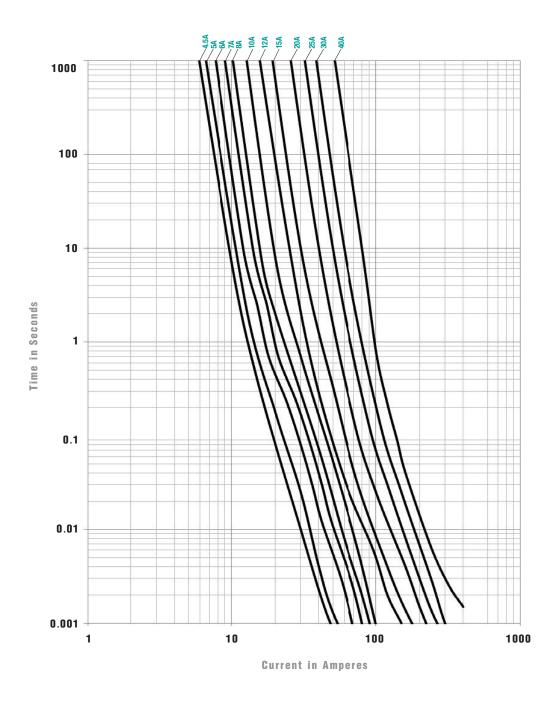
correction factor applied

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Average Time Current Curves



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