

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

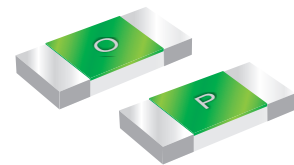
1206TD Series

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

- Compatible with reflow and wave solder
- Ceramic and glass construction
- Halogen free, lead free and RoHS compliant
- Excellent environmental integrity
- One time positive disconnect
- AEC-Q200 Automotive Grade Certified



Applications

- 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	Opening Time
0.75~30A	100%	4 Hours Min.
0.75~3A	200%	1sec~60sec
0.75~5A	250%	5 Seconds Max.
0.75~5A	300%	0.1sec~3sec
6~30A	350%	5 Seconds Max.
0.75~30A	1000%	0.2ms~20ms

Specification

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-R750	0.75	72Vdc @ 50A 32Vdc @ 150A 24Vdc @ 300A		0.83	0.02	1.11	0.75		
1206TD-1A	1.00			0.46	0.13	0.5	H		
1206TD-1.5A	1.50			0.25	0.18	0.356	K		
1206TD-2A	2.00			0.13	0.43	0.309	N		
1206TD-2.5A	2.50			0.077	0.69	0.24	O		
1206TD-3A	3.00			0.048	1.7	0.189	P		
1206TD-3.5A	3.50			0.036	2.3	0.187	R		
1206TD-4A	4.00			0.033	3.1	0.175	S		
1206TD-4.5A	4.50			45Vdc @ 50A 32Vdc @ 150A 24Vdc @ 300A		0.022	3.9	0.17	X
1206TD-5A	5.00					0.019	5	0.142	T
1206TD-6A	6.00	0.015	12.2			0.138	F		
1206TD-7A	7.00	0.010	15			0.12	7		
1206TD-8A	8.00	0.007	17			0.097	M		
1206TD-10A	10.0	0.0065	25			0.099	U		
1206TD-12A	12.0	32Vdc @ 150A 24Vdc @ 300A				0.005	13	0.087	12
1206TD-15A	15.0					0.0033	41	0.075	15
1206TD-20A	20.0					0.0027	52	0.089	Q
1206TD-25A	25.0					0.0022	60	0.091	L
1206TD-30A	30.0			0.0019	100	0.090	Z		

- DC Interrupting Rating - Measured at designated voltage, time constant < 50 microseconds.
- DC Cold Resistance are measured at <10% of rated current in ambient temperature of 25°C.
- Typical Melting I²t measured at 10In Current.
- Typical Voltage Drop measured at rated current after temperature has stabilized.

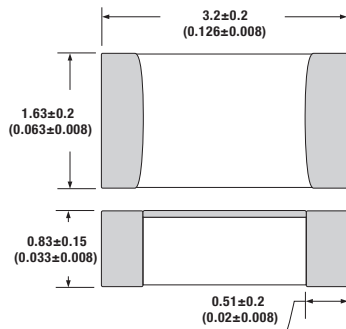
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Thick Film Chip Fuses

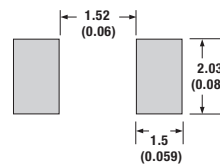
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Dimension

Unit: mm/inch



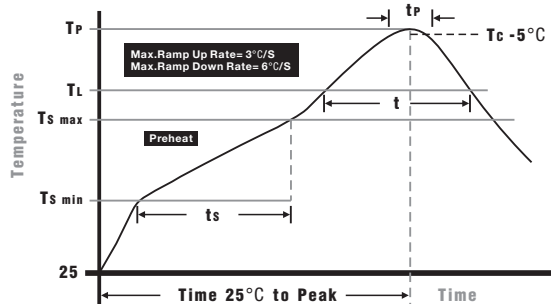
Pad layout



Packaging

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

Soldering Parameters

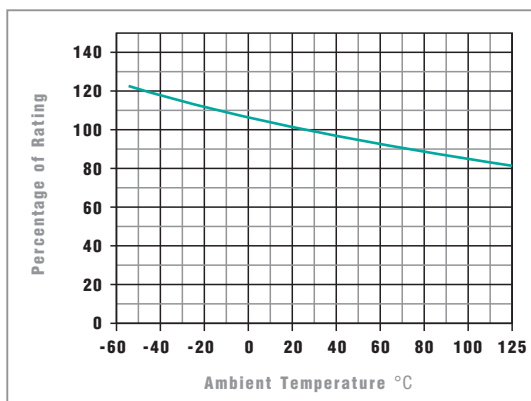


Wave Soldering: 260°C, 10 seconds max.
Infrared Reflow: 260°C, 30 seconds max.

IR Reflow Profile

Preheat Heat	
Temperature min (T _{min})	150°C
Temperature max (T _{max})	200°C
Time (T _{min} to T _{max}) (ts)	60 -120 seconds
Average ramp-up rate (T _{max} to Tp)	3°C/second max.
Liquidous temperature (T_L)	
Time at liquidous (t _L)	60 - 150 seconds
Peak temperature (T_p)	
Peak temperature (T _p)	260+0/-5°C
Time within 5°C of actual 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})	
Average ramp-down rate (T _p to T _{max})	6°C/second max.
Time 25 °C to peak temperature	
Time 25 °C to peak temperature	8 minutes max.

Temperature Derating Curve



- Normal Operating Temperature: 23°C ± 2
- Operating Temperature: -55 to 125°C
- The fuse rating is determined by the equation below:

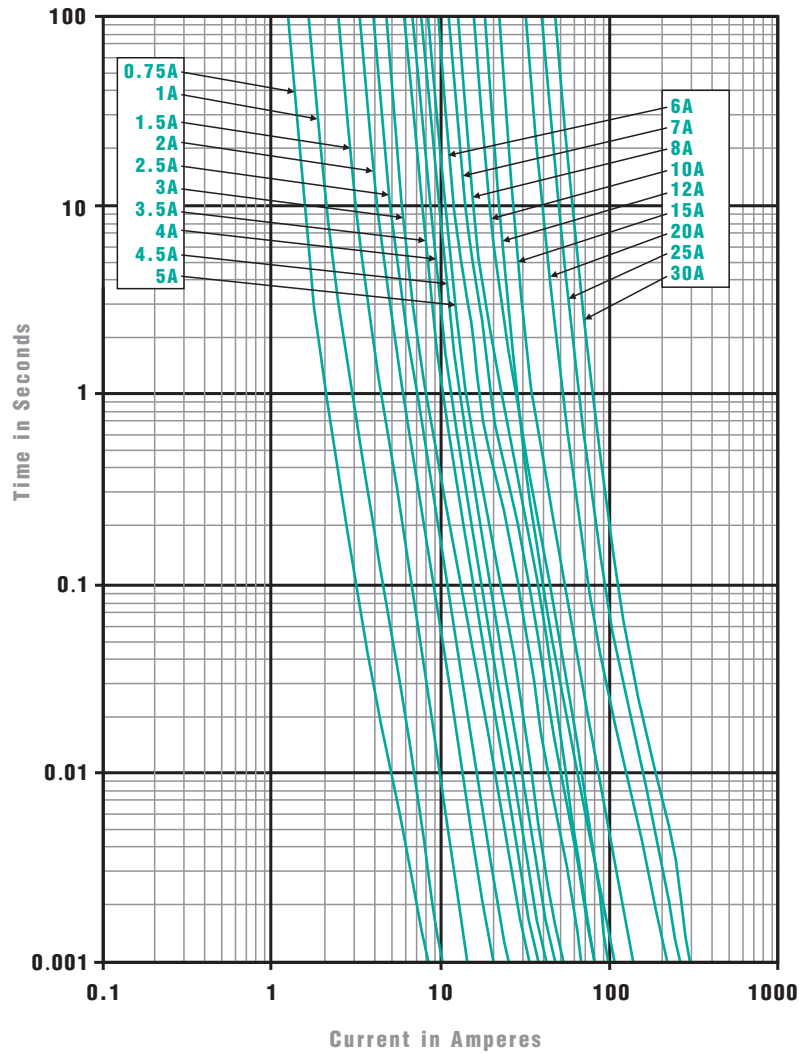
$$I_n = \frac{I_{\text{input max.}}}{0.70 \times K_{\text{temp}}}$$

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Average Time Current Curves



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