

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

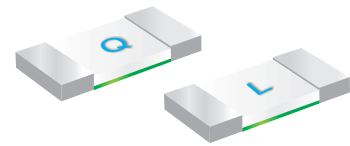
1206TD AS

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

- 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
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		0.2ms~10ms

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		0.022	3.7	0.17	X
1206TD-5AS	5.00			0.019	5	0.142	T
1206TD-6AS	6.00			0.015	12.2	0.138	F
1206TD-7AS	7.00			0.010	15	0.12	7
1206TD-8AS	8.00			0.007	17	0.097	V
1206TD-10AS	10.0	48Vdc @ 150A		0.0065	23	0.099	U
1206TD-12AS	12.0			0.005	41	0.087	W
1206TD-15AS	15.0			0.0033	44	0.075	Y
1206TD-20AS	20.0	32Vdc @ 150A		0.0027	52	0.089	Q
1206TD-25AS	25.0			0.0022	60	0.091	L
1206TD-30AS	30.0			0.0019	100	0.090	Z
1206TD-40AS	40.0			0.0009	163	0.096	XL
		26Vdc @ 300A					

- 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.

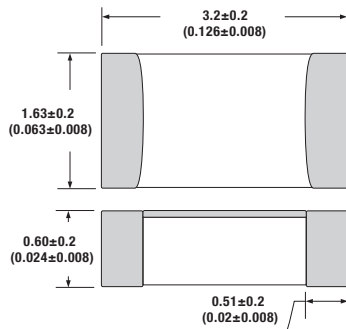
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Thick Film Chip Fuses

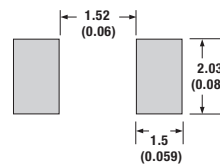
1206TD S

Dimension

Unit: mm/inch



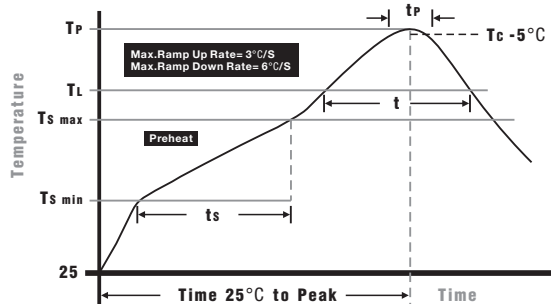
Pad layout



Packaging

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

Soldering Parameters

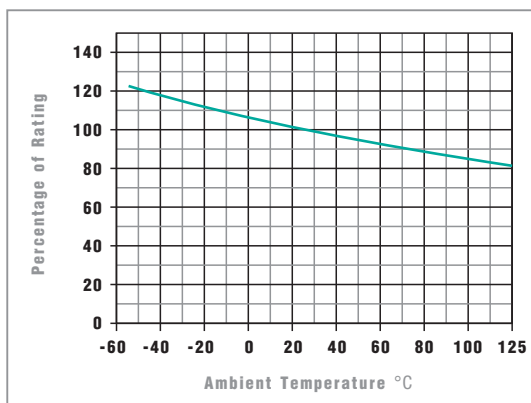


Wave Soldering: 260°C, 10 seconds max.
Infrared Reflow: 260°C, 30 seconds max.

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 T _p)	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:

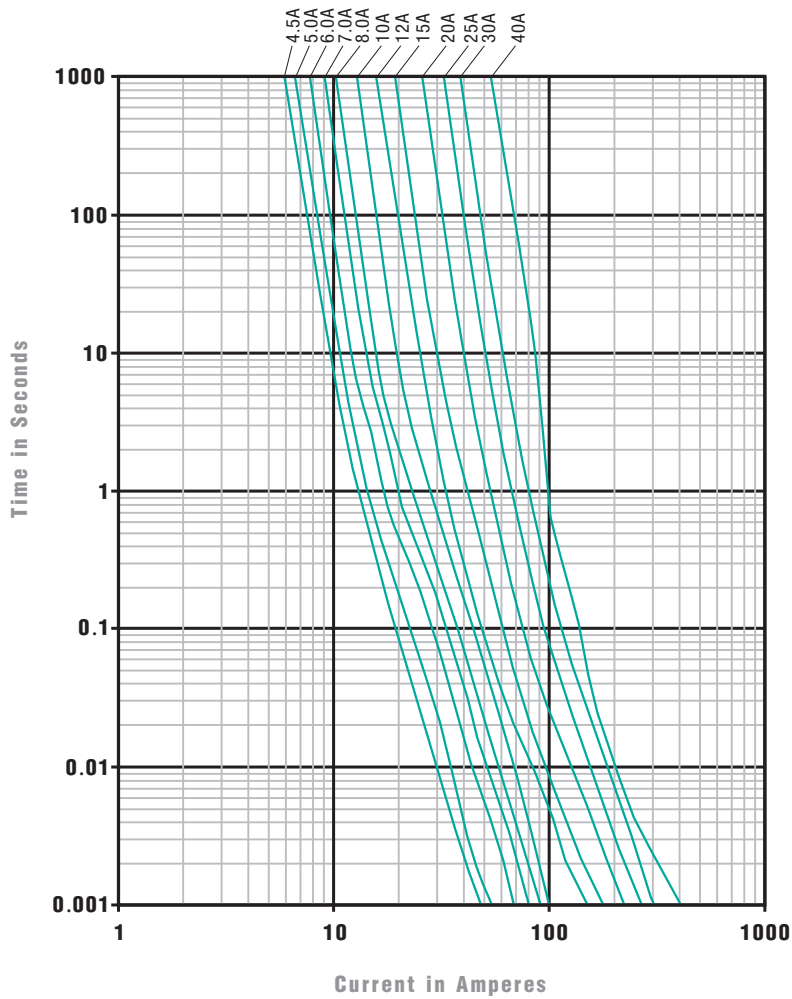
$$I_n = \frac{I_{\text{input max.}}}{0.70 \times K_{\text{temp}}}$$

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Average Time Current Curves



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