

Time Delay | 0.063x0.032 inch Thick Film Chip Fuses

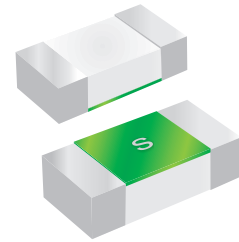
0603TD Series



0603TD 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
- Ceramic and glass construction
- Halogen free, lead free and RoHS compliant
- Ultra high I²t values
- 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

Electrical Characteristics

Amp Rating	% of Amp Rating	Opening Time
1~8A	100%	4 Hours Min.
1~8A	200%	1~60 Seconds Max.
1~8A	250%	5 Seconds Max.

Specifications

Part Number	Ampere Rating (A)	Voltage Rating (V)	Interrupting Rating	Typical Cold Resistance (Ohms)	Typical Melting I ² t (A ² Sec)	Typical Voltage Drop (V)	Marking Code
0603TD-1A	1.00	32	32V@50A	0.250	0.011	0.335	B
0603TD-1.5A	1.50	32	32V@50A	0.150	0.045	0.270	H
0603TD-2A	2.00	32	32V@50A	0.078	0.115	0.160	K
0603TD-2.5A	2.50	32	32V@50A	0.049	0.140	0.145	L
0603TD-3A	3.00	32	32V@50A	0.035	0.280	0.130	O
0603TD-3.5A	3.50	32	32V@50A	0.028	0.500	0.130	R
0603TD-4A	4.00	32	32V@50A	0.018	0.600	0.120	S
0603TD-5A	5.00	32	32V@50A	0.014	1.900	0.110	T
0603TD-6A	6.00	32	32V@50A	0.011	2.300	0.110	V**
0603TD-7A	7.00	32	32V@50A	0.0095	3.000	0.090	X**
0603TD-8A	8.00	32	32V@50A	0.0070	4.500	0.080	Z**

- 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 25degrees
- 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.

**Different with other ratings, the color of glass cover of 6A, 7A and 8A is BLUE color

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

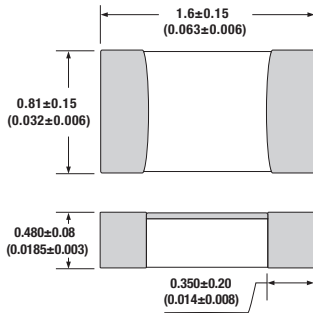
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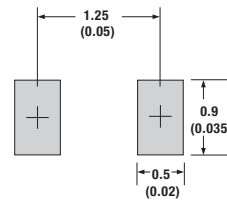
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Dimension

Unit: mm/inch



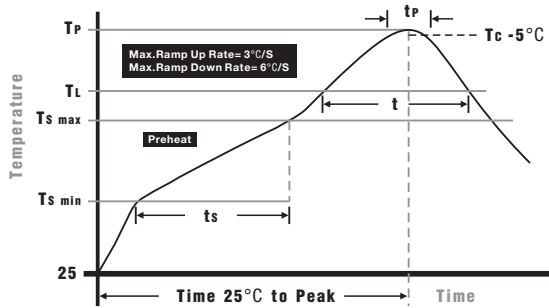
Pad layout



Packaging

- Quantity: 5,000pcs
- 8mm wide tape on 178mm(7 inch) diameter reel - specification EIA Standard 481.

Soldering Parameters

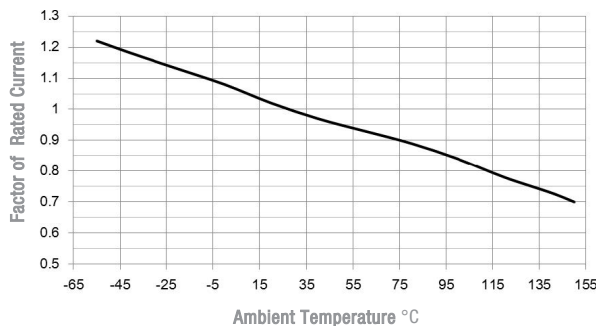


Wave Soldering: 260°C, 10 seconds max.
Infrared Reflow: 260°C, 30 seconds max.

IR Reflow Profile

Preheat Heat	
Temperature min (T _{smin})	150°C
Temperature max (T _{smax})	200°C
Time (T _{smin} to T _{smax}) (t _s)	60 - 120 seconds
Average ramp-up rate (T_{smax} to T_p)	
	3°C/second max.
Liquidous temperature (T_l)	
Time at liquidous (t _l)	60 - 150 seconds
Peak temperature (T_p)	
	260+0/-5°C
Time within 5°C of actual peak Temperature (t_p)	
	10 - 30 seconds
Average ramp-down rate (T_p to T_{smax})	
	6°C/second max.
Time 25 °C to peak temperature	
	8 minutes max.

Temperature Derating Curve

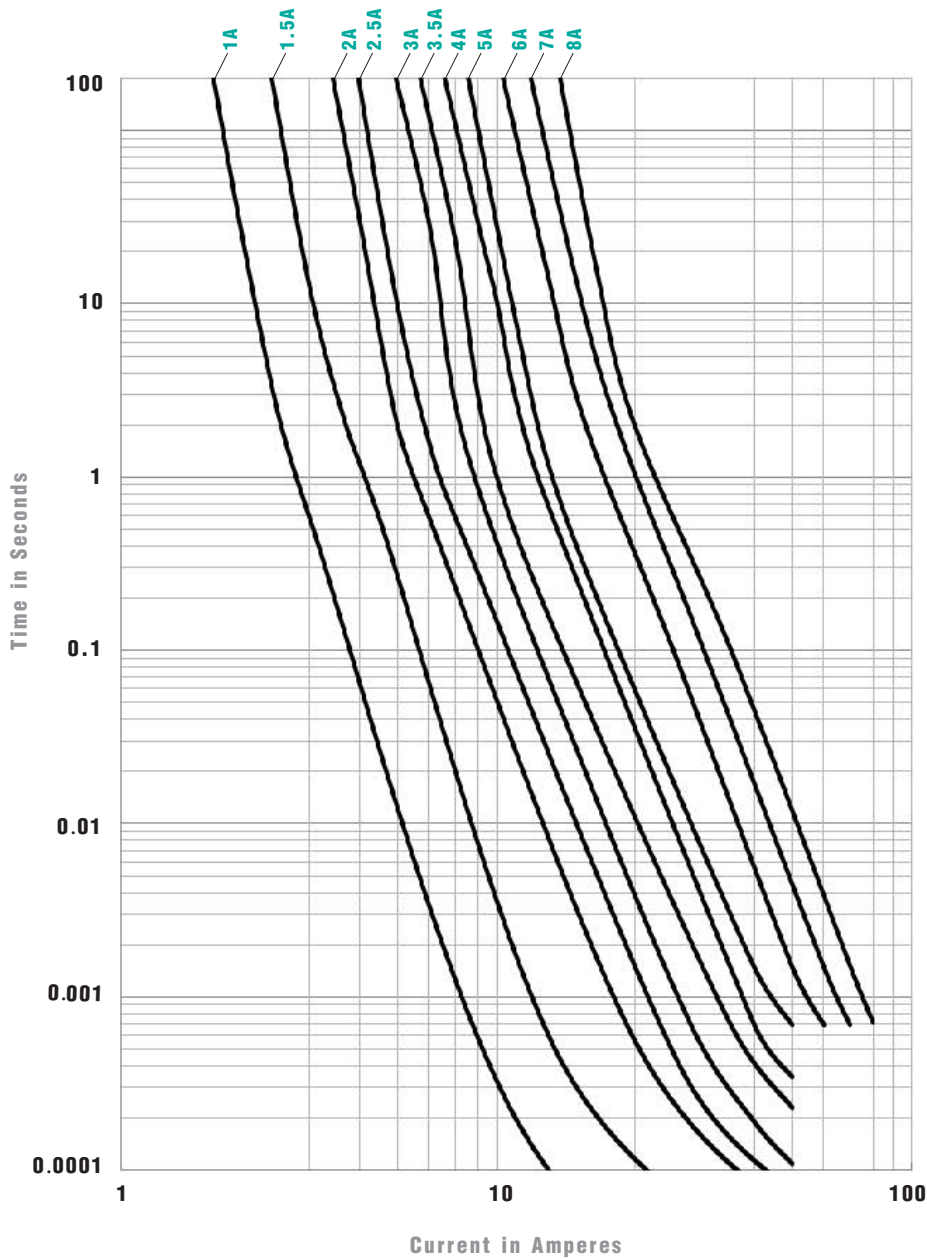


- Normal ambient temperature: 23+/-3°C
- Operating temperature: -55 ~ 150°C, with proper correction factor applied

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Thick Film Chip Fuses 0603TD Series

Average Time Current Curves



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