

Fast Acting | 0.063x0.032 inch Thick Film Chip Fuses

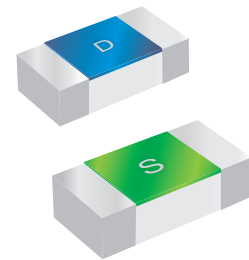
0603FA Series



0603FA 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

- AEC-Q200 Automotive Grade Certified
- Compatible with reflow and wave solder
- Excellent environmental integrity
- One time positive disconnect
- Lead Free and Halogen free material



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
0.25~8A	100%	4 Hours Min.
0.25~8A	200%	60 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
0603FA-R250	0.250	32	32V@50A	3.250	0.00042	0.893	D
0603FA-R375	0.375	32	32V@50A	1.800	0.00093	0.587	E
0603FA-R500	0.500	32	32V@50A	1.070	0.001	0.582	F
0603FA-R750	0.750	32	32V@50A	0.470	0.009	0.427	G
0603FA-1A	1.00	32	32V@50A	0.250	0.011	0.335	B
0603FA-1.5A	1.50	32	32V@50A	0.150	0.045	0.270	H
0603FA-2A	2.00	32	32V@50A	0.078	0.115	0.160	K
0603FA-2.5A	2.50	32	32V@50A	0.049	0.140	0.145	L
0603FA-3A	3.00	32	32V@50A	0.035	0.210	0.130	O
0603FA-3.5A	3.50	32	32V@50A	0.028	0.500	0.130	R
0603FA-4A	4.00	32	32V@50A	0.018	0.560	0.120	S
0603FA-5A	5.00	32	32V@50A	0.014	1.200	0.110	T
0603FA-6A	6.00	32	32V@50A	0.011	1.700	0.110	V**
0603FA-7A	7.00	32	32V@50A	0.0095	2.300	0.080	X**
0603FA-8A	8.00	32	32V@50A	0.007	3.000	0.075	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

** For 1A-5A, the color of glass coating is Green; for others, it's Blue.

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

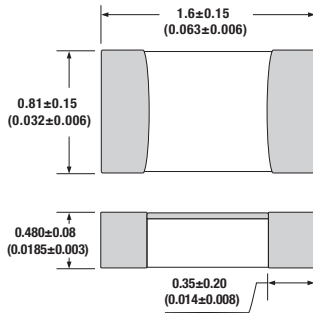
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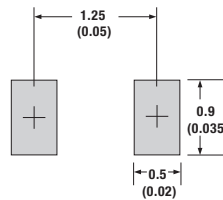
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Dimension

Unit: mm/inch



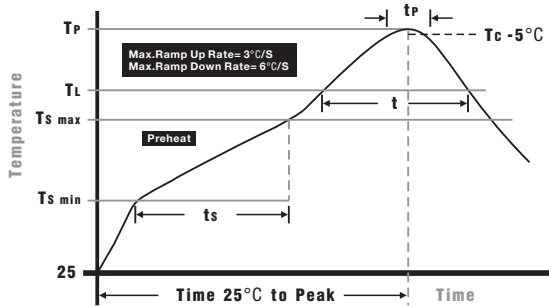
Pad layout



Packaging

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

Soldering Parameters

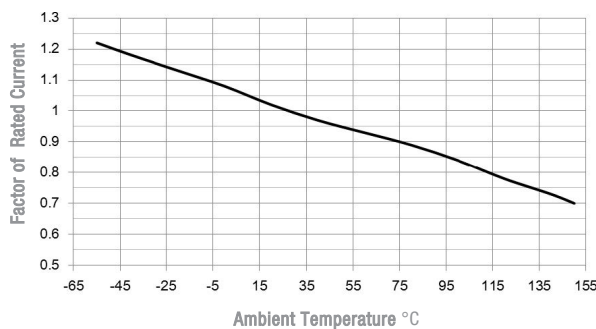


Wave Soldering: 260°C, 10 seconds max.
Infrared Reflow: 260°C, 30 seconds max.

IR Reflow Profile

Preheat Heat	
Temperature min (T _{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)	217°C
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_{max})	6°C/second max.
Time 25 °C to peak temperature	8 minutes max.

Temperature Derating Curve



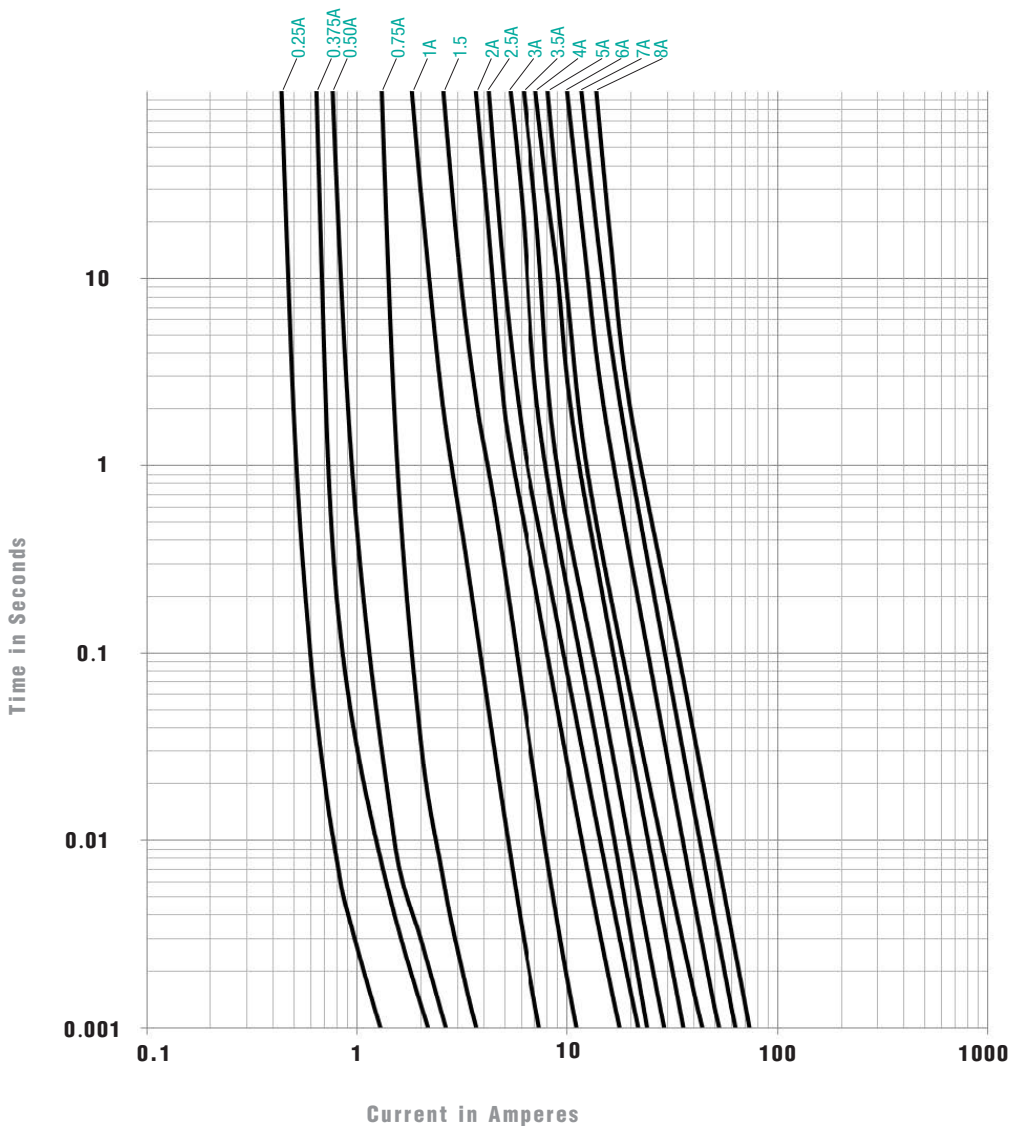
- Normal ambient temperature: 23+/-3 C
- Operating temperature: -55 ~ 150 C, with proper correction factor applied

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Average Time Current Curves



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