

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

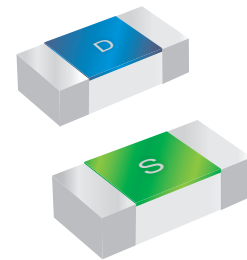
0603FA HF



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
0.25~5A	100%	4 Hours Min.
0.25~5A	250%	5 Seconds Max.

Specification

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-R250HF	0.250	63	63V@50A	3.250	0.0004	0.893	D
0603FA-R375HF	0.375	63	63V@50A	1.800	0.0009	0.587	E
0603FA-R500HF	0.500	63	63V@50A	1.070	0.001	0.582	F
0603FA-R750HF	0.750	63	63V@50A	0.470	0.009	0.427	G
0603FA-1HF	1.00	63	63V@50A	0.250	0.010	0.335	H
0603FA-1.5HF	1.50	63	63V@50A	0.150	0.040	0.270	K
0603FA-2HF	2.00	63	63V@50A	0.075	0.115	0.160	N
0603FA-2.5HF	2.50	63	63V@50A	0.047	0.140	0.145	O
0603FA-3HF	3.00	63	63V@50A	0.035	0.280	0.130	P
0603FA-3.5HF	3.50	63	63V@50A	0.027	0.500	0.130	R
0603FA-4HF	4.00	63	63V@50A	0.018	0.600	0.120	S
0603FA-5HF	5.00	63	63V@50A	0.012	1.900	0.110	T

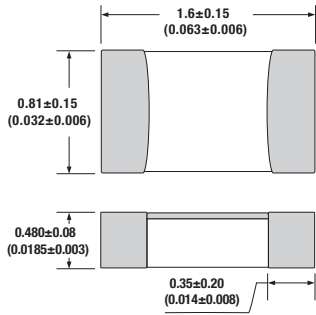
- DC Interrupting Rating (Measured at rated voltage, time constant of less than 50 microseconds, battery source)
 - DC Cold Resistance are measured at <10% of rated current in ambient temperature of 25 degrees
 - Typical Pre-arcing I²t are measured at 10In Current
- Specifications are subject to change without notice. Application testing is strongly recommended.

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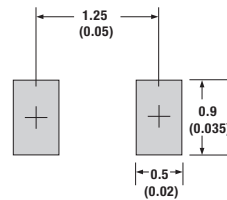
Thick Film Chip Fuses 0603FA HF

Dimension

Unit: mm/inch



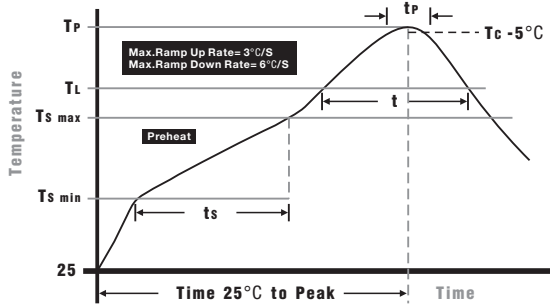
Pad layout



Packaging

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

Soldering Parameters

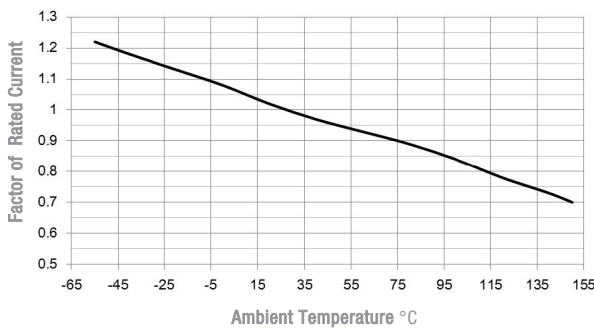


Wave Soldering: 260°C, 10 seconds max.
Infrared Reflow: 260°C, 30 seconds max.

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



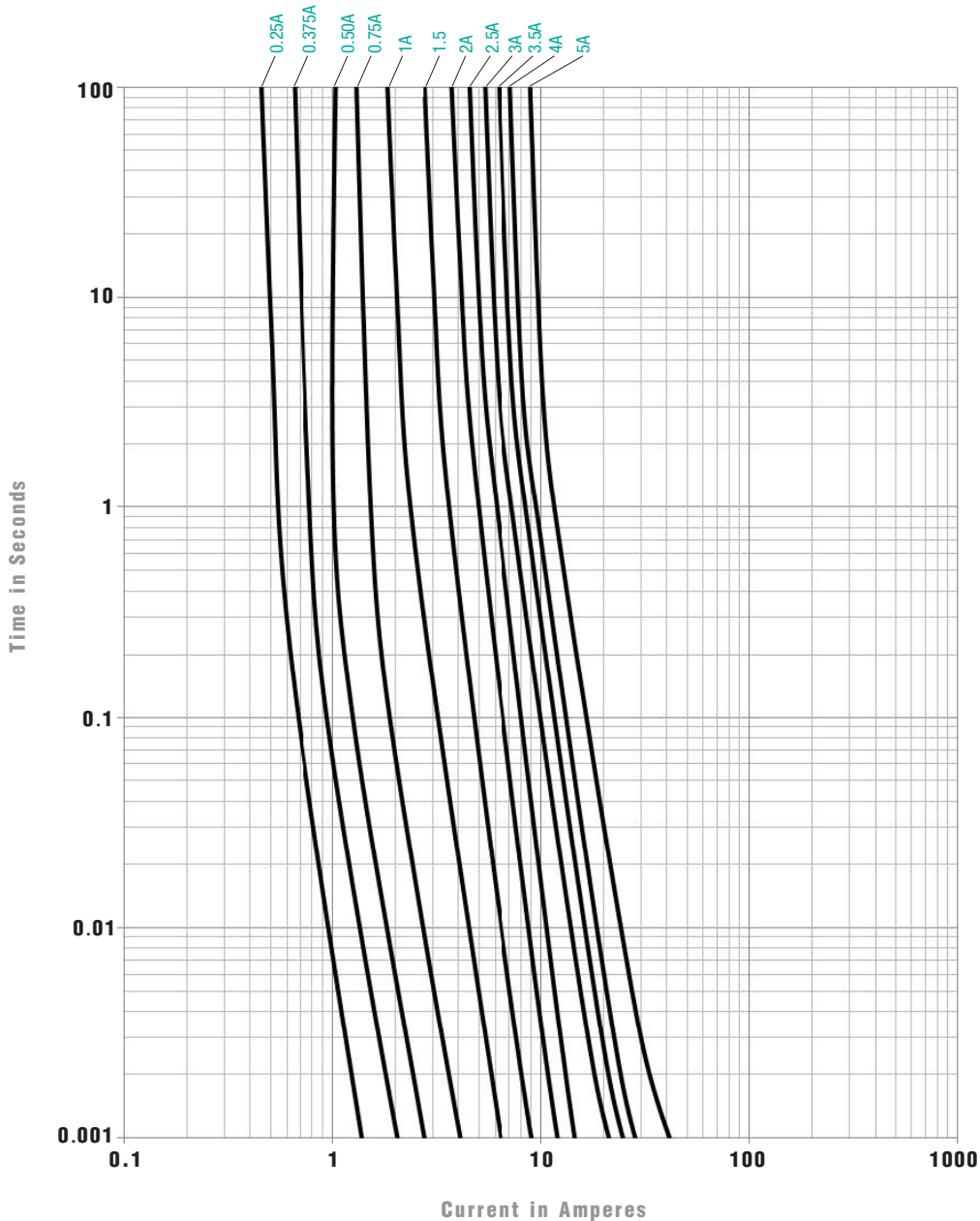
- Normal ambient temperature: 23+/-3 C
- Operating temperature: -55 ~ 150 C, with proper correction factor applied

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Average Time Current Curves



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