

INDIVIDUAL SPECIFICATION SHEET

Product Name: 0603 Fast Acting SMD Fuses

Part Number: F06F6

Revision: B



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Rev.	Effective Date	Changed Contents
A	2020-9-27	New Release
B	2021-4-7	Update Spedfications

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Description

F06F 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.

Electrical Characteristics		
Rated Current	1.0In	2.5In
6A	4 hour minimum	5 sec maximum

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

Specifications

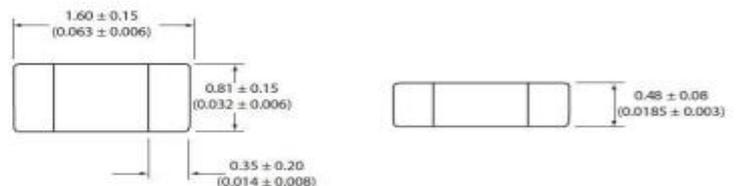
Specification							
Part No.	Rated Voltage	Rated Current (A)	Breaking Capacity (A) ¹	Typical Cold Resistance (mOhms) ²	Typical Voltage Drop (mV)	Typical Pre-Arcing I ² t (A ² Sec) ³	Alpha Mark
	DC						
F06F6	32V	6	50A	11	110	1.7	V**

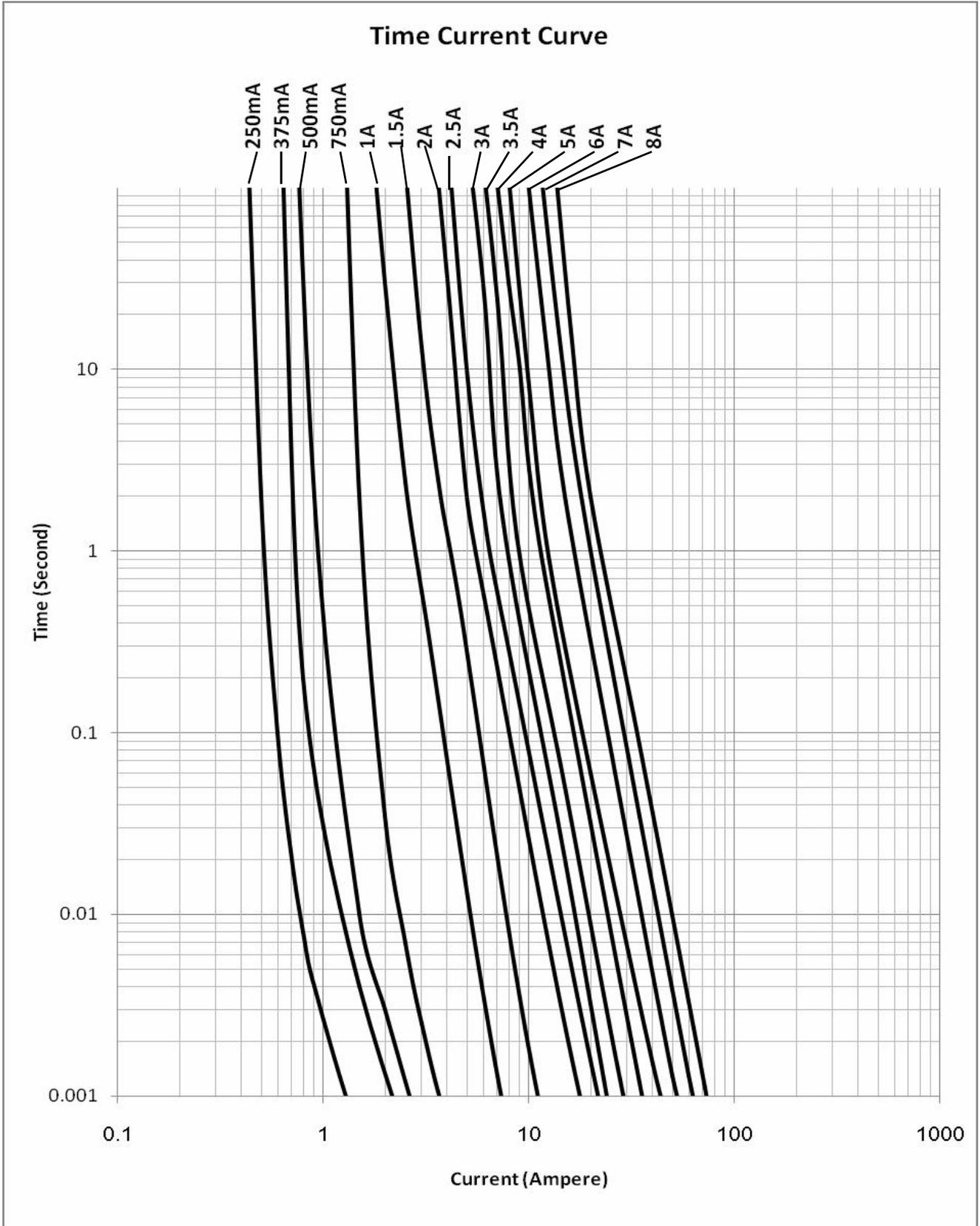
1. DC Interrupting Rating (Measured at rated voltage, time constant of less than 50 microseconds, battery source)
2. DC Cold Resistance are measured at <10% of rated current in ambient temperature of 25degrees
3. Typical Pre-arcing I²t are measured at 10In Current

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

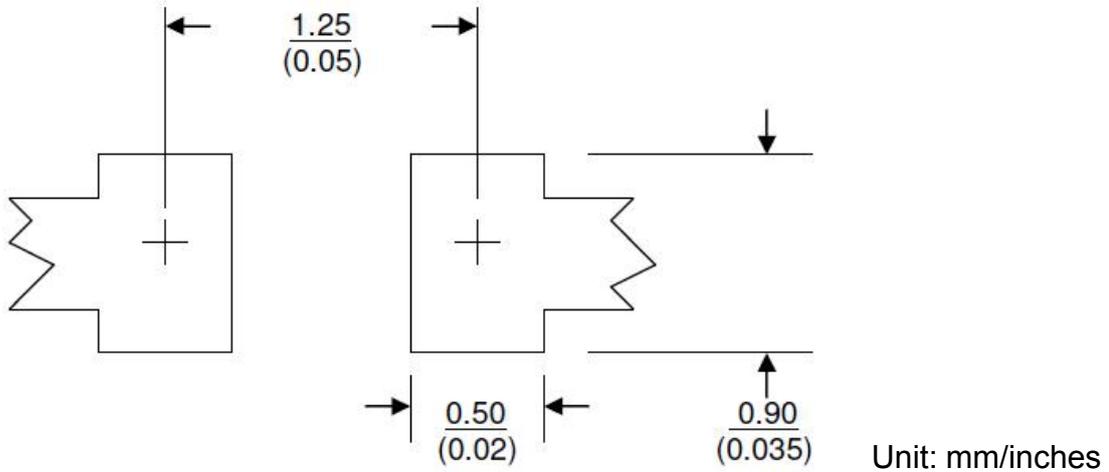
Specifications are subject to change without notice. Application testing is strongly recommended.

Dimension Drawing not to scale (UNIT: mm/INCH)





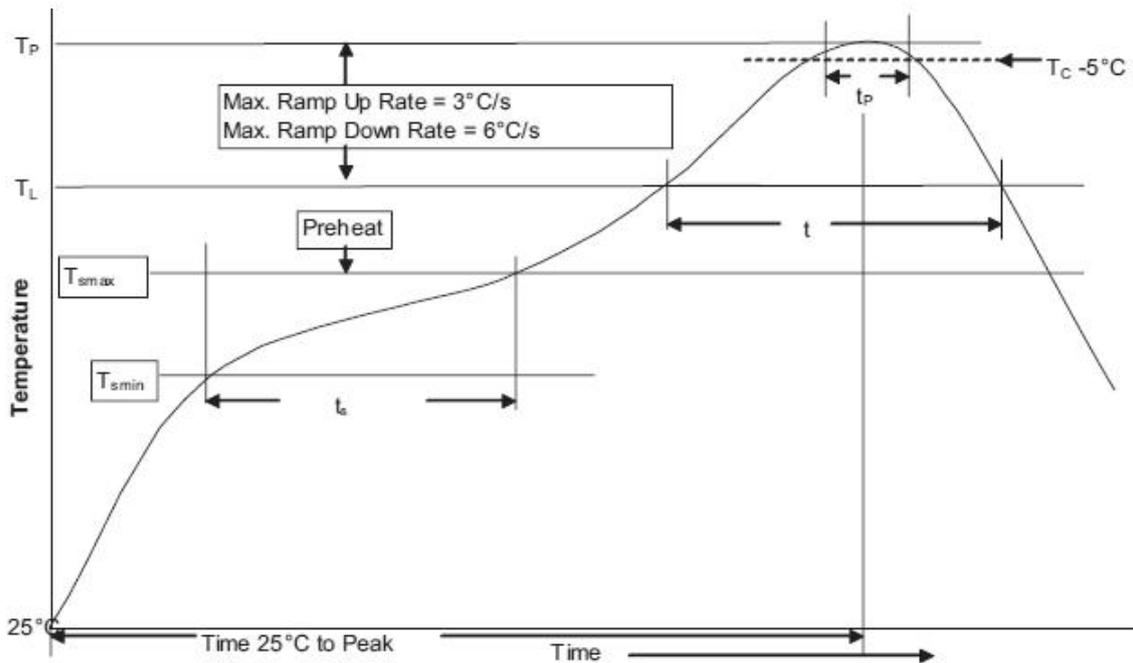
Recommended land pattern



Soldering method

- Wave solder
 - Reservoir temperature: 260°C
 - Time in reservoir: 10 seconds maximum
- Infrared reflow
 - Temperature: 260°C
 - Time: 30 seconds maximum

Solder reflow profile

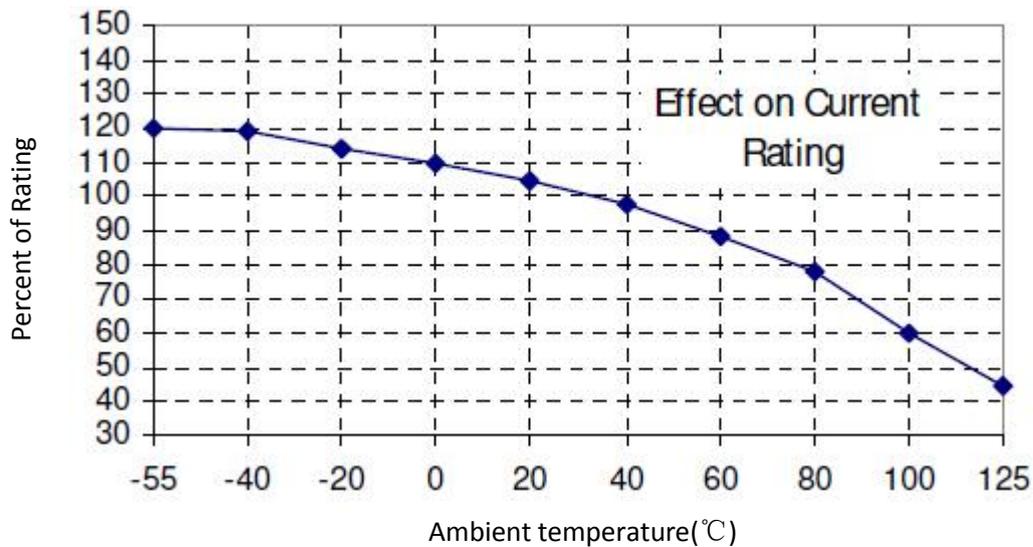


Profile Feature		Lead(Pb) free solder
Preheat and soak	• Temperature min.(T_{smin})	150°C
	• Temperature max. (T_{smax})	200°C
• Time (T_{smin} to T_{smax}) (ts)		60 - 120 Seconds
Average ramp up rate T_{smax} to T_p		3°C / Second Max.
Liquidous temperature (T_L)		217°C
Time at liquidous (t_L)		60 - 150 Seconds
Peak package body temperature (T_P)		260°C
Time (t_P) within 5°C of the specified classification temperature (T_C)		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 ~ 125°C, with proper correction factor applied



Package

5000 fuses on 8mm tape-and-reel on a 7 inch (178mm) reel per EIA Standard 481.

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