

INDIVIDUAL SPECIFICATION SHEET

Product Name: 0603 Time Delay SMD Fuse

Part Number: F06T7

Revision: A



Dongguan TLC Electronic Technology Co., LTD

No.18,5th GaoLi Road,TangXia Town,DongGuan,GuangDong,P.R China 523710

TEL: 86-0769-3892 0511

FAX: 86-0769-8793 2077

Http: www.tlcet.com.cn

Rev.	Effective Date	Changed Contents
A	2021-11-23	New Release

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Description

F06T 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.

Rated Current	1.0In	2.5In
7A	4 hour minimum	5 sec maximum

Features

- High inrush current withstanding capability
- AEC-Q200 Automotive Grade Certified
- Compatible with reflow and wave solder
- Ceramic and glass construction
- 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						
F06T1	32V	1	50A	230	335	0.011	B/H
F06T1.5		1.5	50A	150	270	0.045	H
F06T2		2	50A	72	160	0.115	K
F06T2.5		2.5	50A	52	145	0.14	L
F06T3		3	50A	35	130	0.28	O
F06T3.5		3.5	50A	23.8	130	0.5	R
F06T4		4	50A	21	120	0.6	S
F06T5		5	50A	14	110	1.9	T
F06T6		6	50A	8.5	110	2.3	V**
F06T7	7	50A	7.3	90	3	X**	
F06T8	8	50A	5.1	80	4.5	Z**	

1. DC Interrupting Rating (Measured at rated voltage, time constant of less than 50 microseconds, battery source)

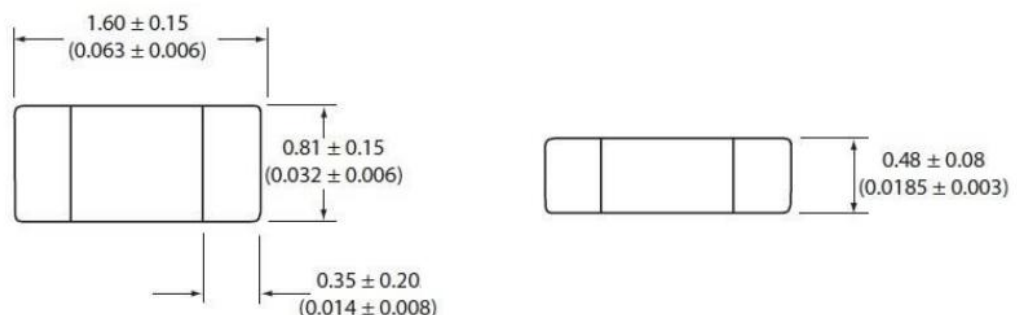
2. DC Cold Resistance are measured at <10% of rated current in ambient temperature of 25degrees

3. Typical Pre-arcing I²t are measured at 10In Current.

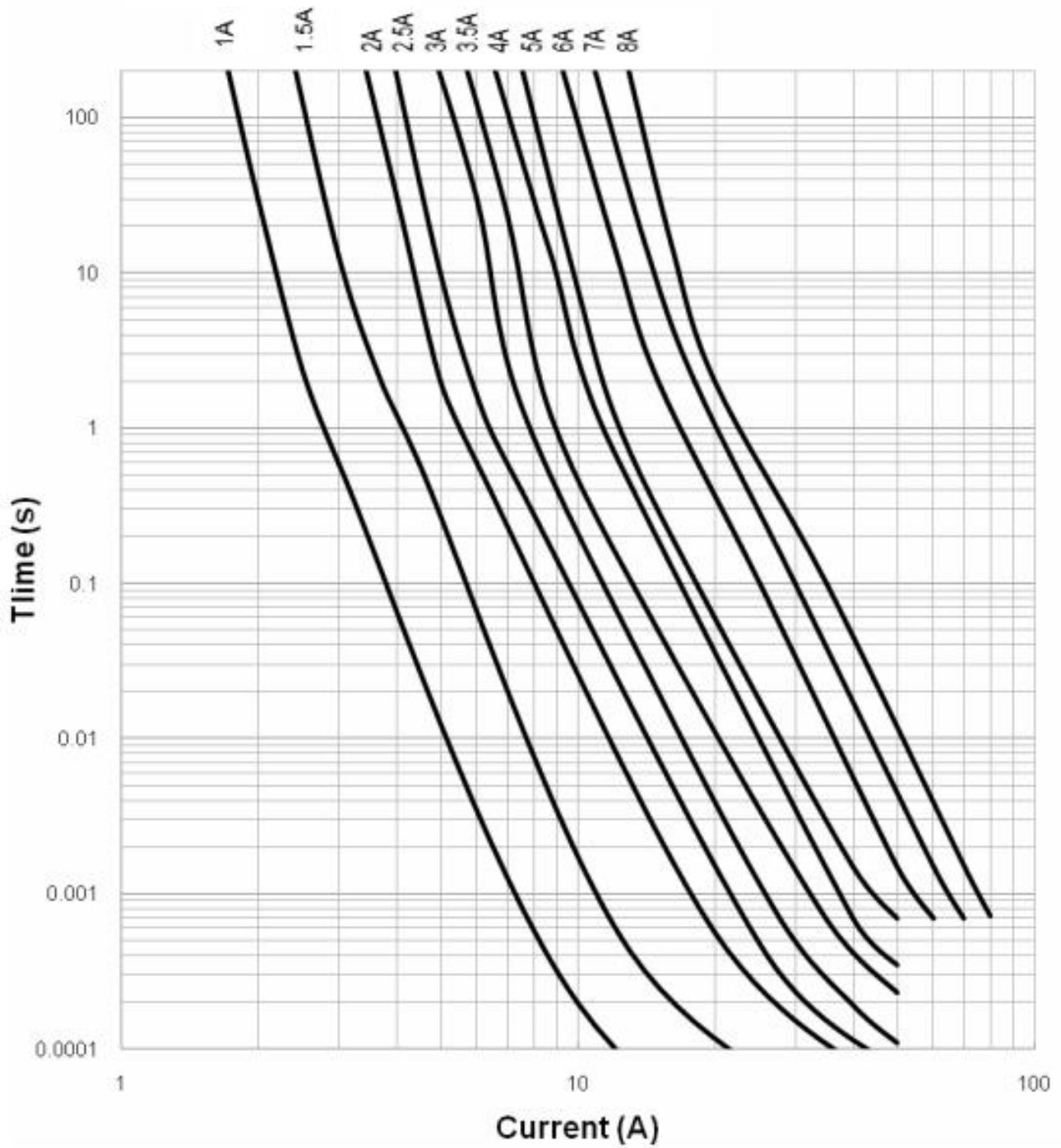
Choice fuse for surge application (USB charger etc.), make sure the I²t of fuse is 4 times than surge.

**Different with other ratings, Specifications are subject to change without notice. Application testing is strongly recommended.

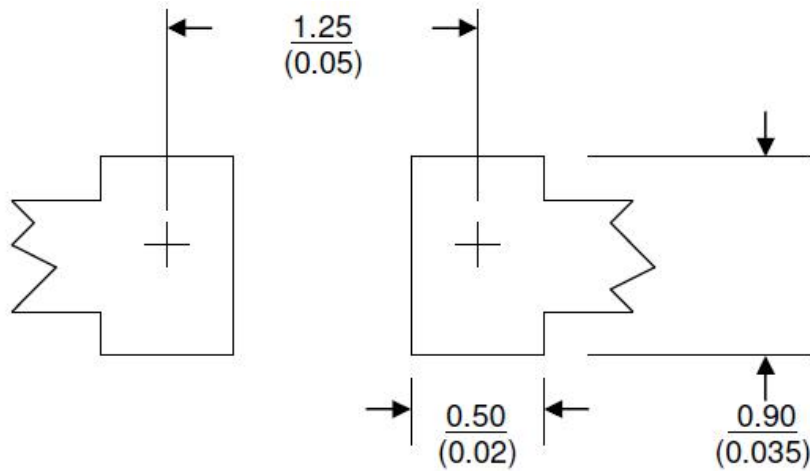
Dimension Drawing not to scale (Unit: mm/inch)



Time Current Curve



Recommended land pattern

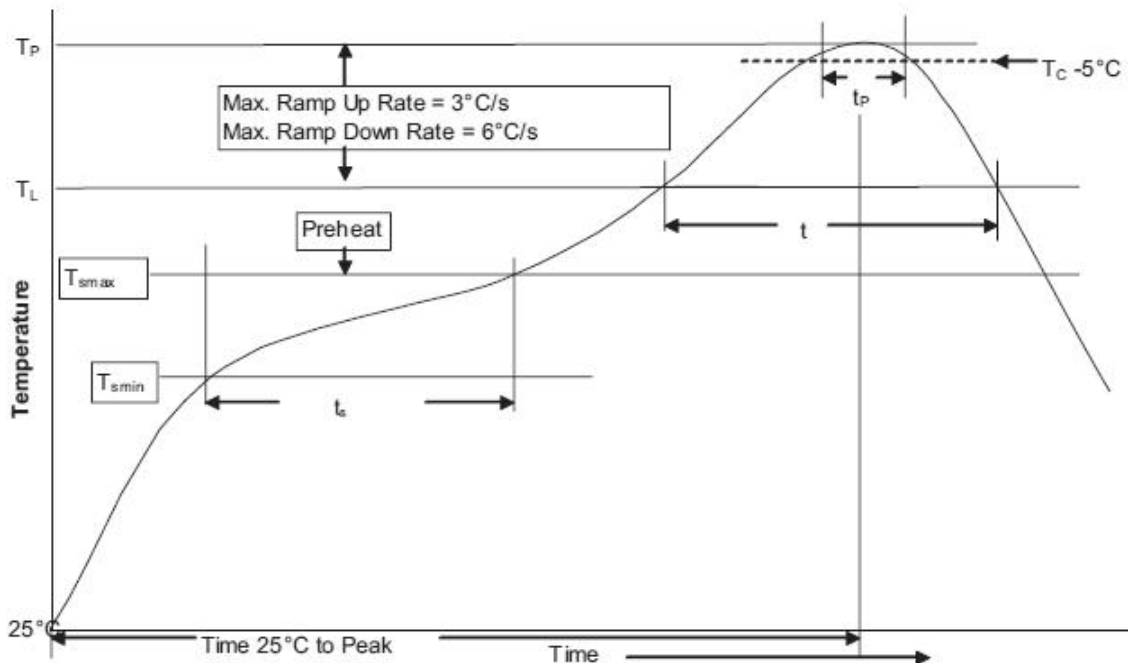


Unit: mm/inches

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



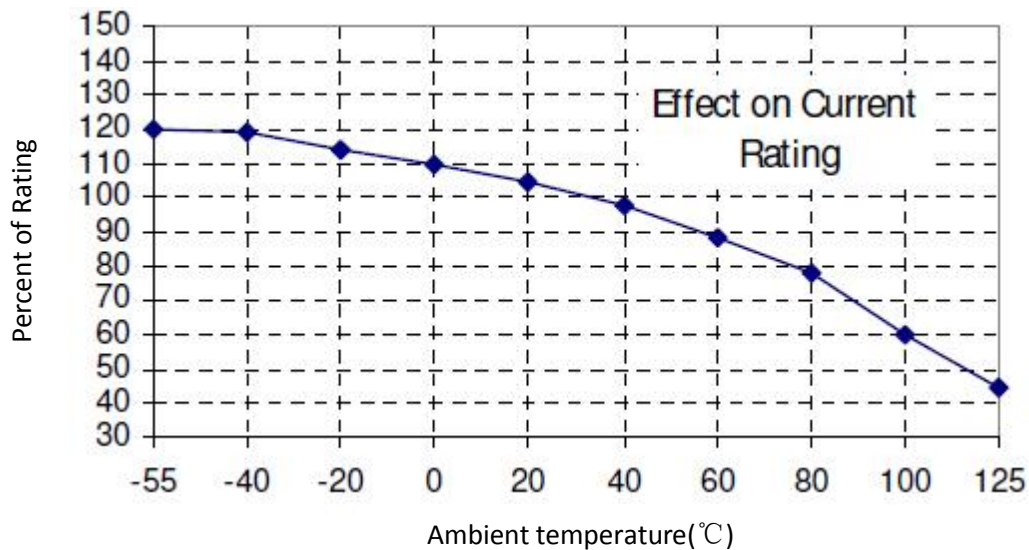
Profile Feature		Lead(Pb) free solder
Preheat and soak	• Temperature min.(T_{smin})	150°C
	• Temperature max. (T_{smax})	200°C

• Time (T_{smin} to T_{smax}) (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)	217°C 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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