DOC.NO.: ISS-F06T2.5

# **INDIVIDUAL SPECIFICATION SHEET**

Product Name: 0603 Time Delay SMD Fuse

Part Number: F06T2.5

**Revision: B** 











#### 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	1.0ln	2.5In
2.5A	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

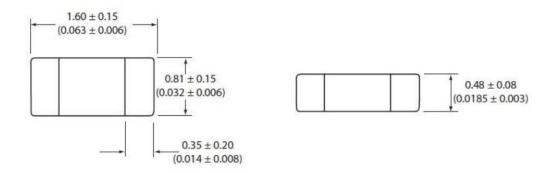
#### **Specifications**

Specification							
Part No.	Rated Voltage DC	Rated Current (A)	Breaking Capacity (A)	Typical Cold. Resistance (mOhms) <sup>2</sup>	Typical Voltage Drop (mV)	Typical Pre- Arcing I <sup>2</sup> t (A <sup>2</sup> Sec) <sup>3</sup>	Alpha Mark
F06T2.5	32V	2.5	50A	52	145	0.14	L

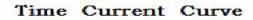
- 1. DC Interrupting Rating (Measured at rated voltage, time constant of less than 50 microseconds, battery source)
- 2. DC Cold Resistance are measured at <10% of rated current in ambient temperature of 25degrees
- 3. Typical Pre-arcing I<sup>2</sup>t are measured at 10In Current.

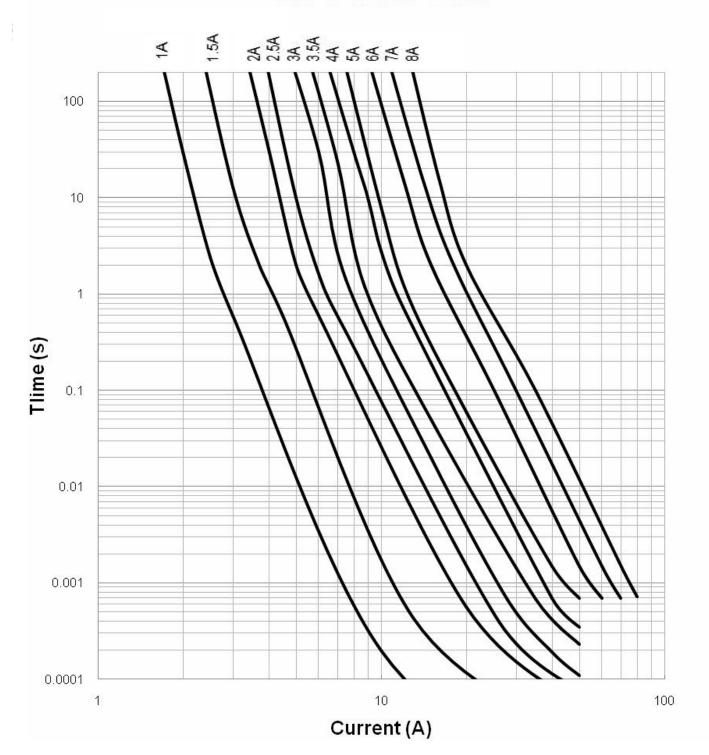
Specifications are subject to change without notice. Application testing is strongly recommended.

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



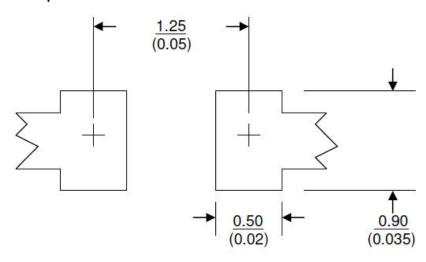








## **Recommended land pattern**



Unit: mm/inches

### **Soldering method**

Wave solder

■ Reservoir temperature: 260°C

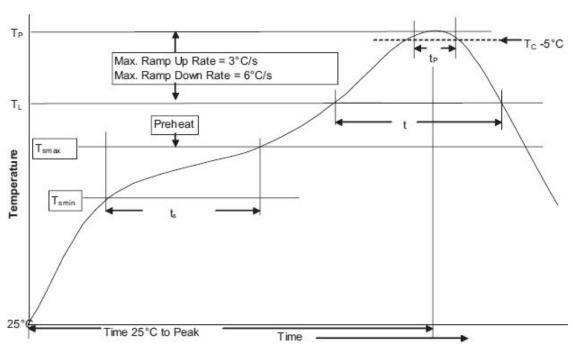
■ Time in reservoir: 10 seconds maximum

> Infrared reflow

■ Temperature: 260°C

■ Time: 30 seconds maximum

### Solder reflow profile



Profile Feature		Lead(Pb) free solder
Preheat and soak	Temperature min.(T <sub>smin</sub> )	150°C
	Temperature max. (T <sub>smax</sub> )	200°C

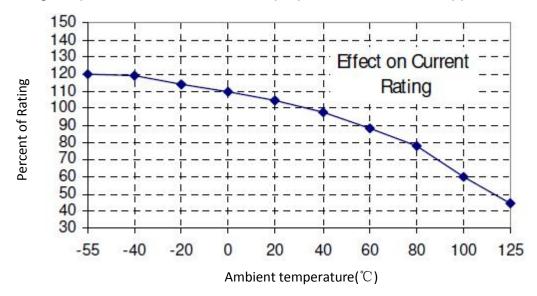


Time (T <sub>smin</sub> to T <sub>smax</sub> ) (t <sub>S</sub> )	60 - 120 Seconds
Average ramp up rate $T_{smax}$ to $T_p$	3°C / Second Max.
Liquidous temperature (T <sub>L</sub> )	217℃
Time at liquidous (t∟)	60 - 150 Seconds
Peak package body temperature (T <sub>P</sub> )	260°C
Time (t <sub>P</sub> ) within 5°C of the specified classification temperature (T <sub>C</sub> )	30 Seconds
Average ramp-down rate (T <sub>P</sub> to T <sub>smax</sub> )	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.