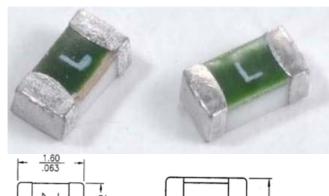
## 0603 Time Delay SMD Fuses











### **Description**

06T 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

### **Agency Approvals.**

Safety Agency	Agency File Number	Ampere Range Volt@I.R.ABILITY		
c <b>%</b> us	E485357	250mA~8A 50A@32Vdc		

#### **Electrical Characteristics for Series**

% of Ampere Rating	Opening Time
100%	4 Hour, Min
200%	1~ 60Sec.,Max
250%	5Sec. Max.

**Electrical Characteristic Specifications by Item** 

Part No	Rated Voltage DC	Rated Current (A)	Breaking Capacity (A)	Typical Cold. Resistance (mOhms) 2	Typical Voltage Drop (mV)	Typical Pre- Arcing I2t (A <sup>2</sup> Sec) 3	Alpha Mark
06T1100		1	50A	300	345	0.011	В
06T1150		1.5	50A	150	270	0.045	Н
06T1200		2	50A	72	160	0.115	K
06T1250		2.5	50A	52	145	0.14	L
06T1300		3	50A	35	130	0.21	0
06T1350	32V	3.5	50A	23.8	130	0.5	R
06T1400		4	50A	21	120	0.56	S
06T1500		5	50A	14	110	1.2	Т
06T1600		6	50A	8.5	110	1.7	V**
06T1700		7	50A	7.3	80	2.3	X**
06T1800		8	50A	5.1	75	3.0	Z**

<sup>\*</sup> DC Interrupting Rating (Measured at rated voltage, time constant of less than 50 microseconds, battery source)

Choice fuse for surge application (USB charger etc.), make sure the I<sup>2</sup>t of fuse is 4 times than surge.

<sup>\*</sup> DC Cold Resistance are measured at <10% of rated current in ambient temperature of 25degrees

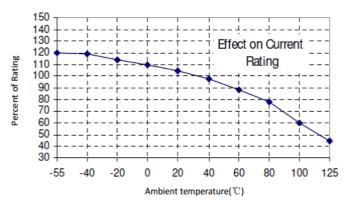
<sup>\*</sup> Typical Pre-arching 1<sup>2</sup>t are measured at 10In Current

<sup>\*\*</sup>Different with other ratings, the color of glass cover of 6A, 7A and 8A is BLUE color

## 0603 Time Delay SMD Fuses

### **Temperature Re-rating Curve**

\* Normal ambient temperature:  $23\pm3^{\circ}$ C Operating temperature: -55 ~+125 $^{\circ}$ C, with proper correction factor applied

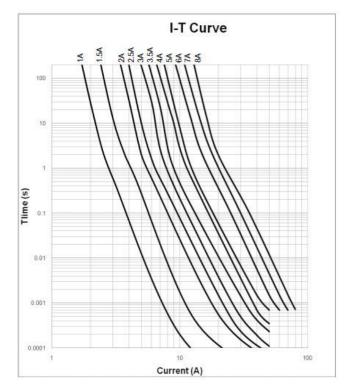








### **Average Time Current Curves**



## **Soldering Method**

■Wave solder

Reservoir temperature:260 °C

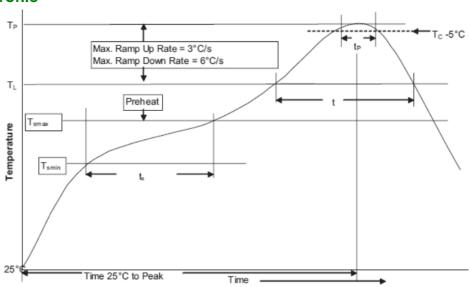
Time in reservoir:10 seconds maximum

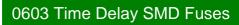
■Infrared reflow

Temperature:260°C

Time: 30 seconds maximum

#### **Solder Reflow Profile**







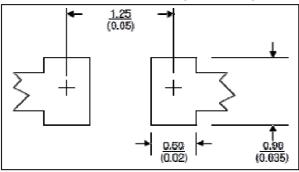




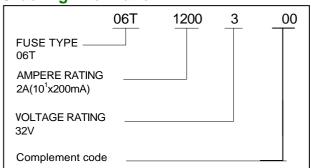


Profile Feature		Lead(Pb)free solder
	Temperature min.(T <sub>smin</sub> )	150℃
Preheat and soak	Temperature max.(T <sub>smax</sub> )	<b>200</b> ℃
	Time(T <sub>smin</sub> to T <sub>smax</sub> )(ts)	60 - 120 Seconds
Average ramp up rate T <sub>smax</sub> to T <sub>p</sub>		3℃ / Second Max.
Liquidous temperature(T <sub>L</sub> )		217℃
Time at liquidous(t <sub>L</sub> )		60 - 150 Seconds
Peak package body temperature(Tp)		260℃
Time(Tp)within $5^{\circ}$ C of the specified classification temperature(Tc)		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.

## **Mechanical Dimensions(Unit:mm)**



# **Ordering Information**



**Packaging** 

Packaging Option	Packaging	Quantity
06T	Tape-and-reel	5000