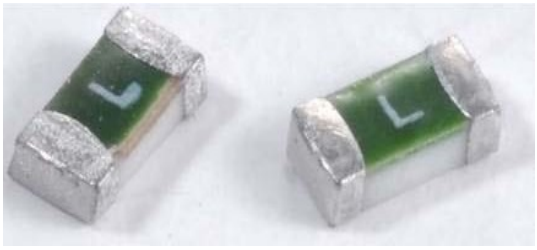
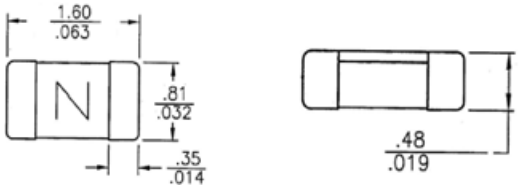
# Type 06T

## 0603 Time Delay SMD Fuses

E485357






## 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

## Applications

Power supplies
Battery Chargers
Consumer Electronicsii
Industrial Controllers

## Agency Approvals.

| Safety Agency | Agency File Number | Ampere Range Volt@I.R.ABILITY |
|---|---|---|
| c UL us | E485357 | 250mA-8A 32Vdc @50A |

## 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) 1 | Typical Cold. Resistance (mOhms) 2 | Typical Voltage Drop (mV) | Typical Pre-Arcing I2t (A2Sec) 3 | Alpha Mark |
|---|---|---|---|---|---|---|---|
| 06T1100 | 32V | 1 | 50A | 300 | 345 | 0.011 | B |
| 06T1150 | | 1.5 | 50A | 150 | 270 | 0.045 | H |
| 06T1200 | | 2 | 50A | 72 | 160 | 0.115 | K |
| 06T1250 | | 2.5 | 50A | 52 | 145 | 0.14 | L |
| 06T1300 | | 3 | 50A | 35 | 130 | 0.21 | O |
| 06T1350 | | 3.5 | 50A | 23.8 | 130 | 0.5 | R |
| 06T1400 | | 4 | 50A | 21 | 120 | 0.56 | S |
| 06T1500 | | 5 | 50A | 14 | 110 | 1.2 | T |
| 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** |

* 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 25degrees
* Typical Pre-arching $I^2t$ are measured at 10In Current

Choice fuse for surge application (USB charger etc.), make sure the $I^2t$ of fuse is 4 times than surge.

**Different with other ratings, the color of glass cover of 6A, 7A and 8A is BLUE color


Revised:AUG2016

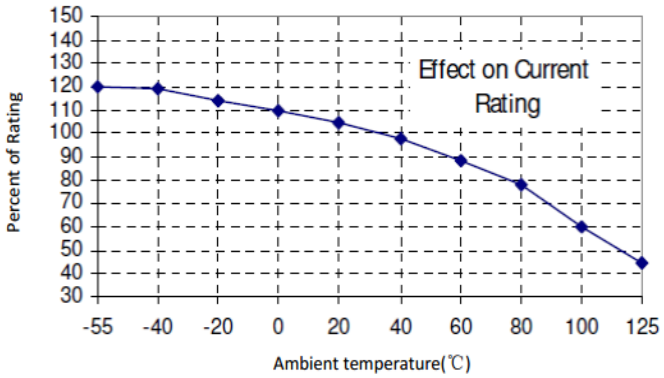
# Type 06T

# 0603 Time Delay SMD Fuses

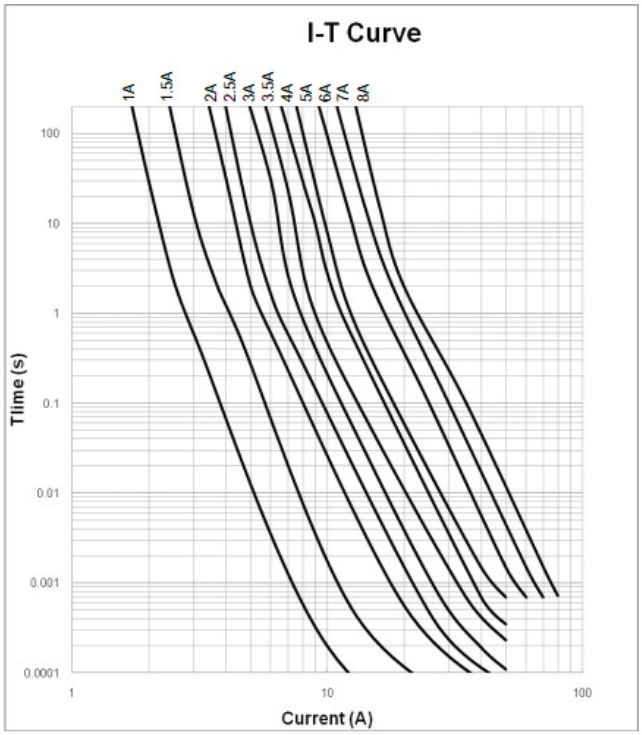
E485357

## Temperature Re-rating Curve

* Normal ambient temperature: 23±3℃
Operating temperature: -55 ~+125℃, with proper correction factor applied




## Average Time Current Curves

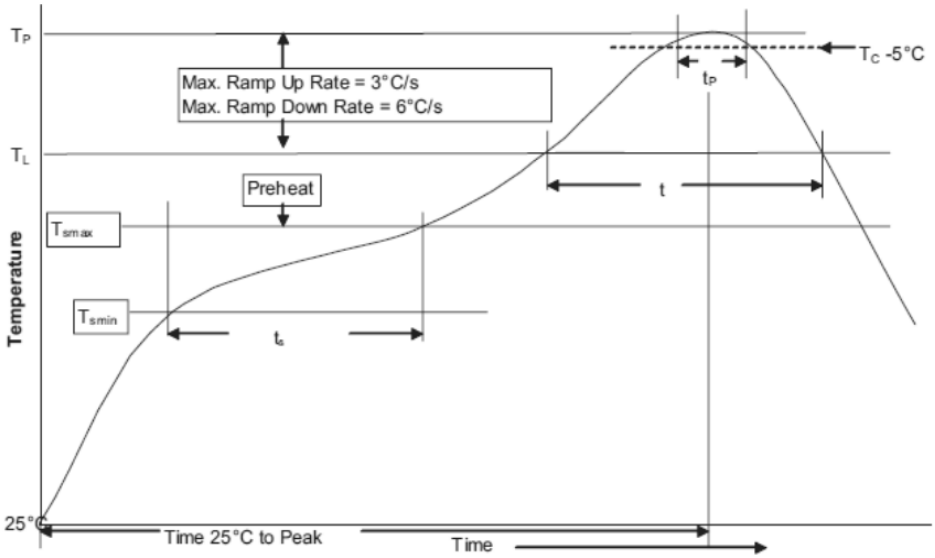



## Soldering Method

■Wave solder
Reservoir temperature:260℃
Time in reservoir:10 seconds maximum

■Infrared reflow
Temperature:260℃
Time: 30 seconds maximum

## Solder Reflow Profile





Revised:AUG2016

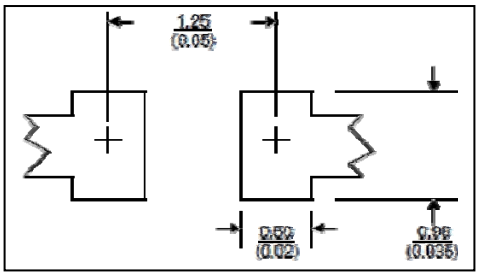
# Type 06T

## 0603 Time Delay SMD Fuses

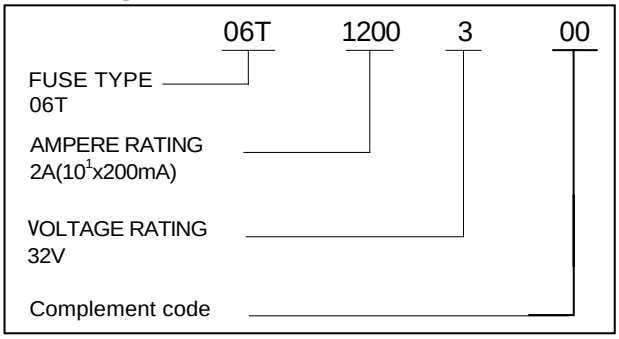
E485357

| Profile Feature | | Lead(Pb)free solder |
|---|---|---|
| Preheat and soak | Temperature min.($T_{smin}$) | 150℃ |
| | Temperature max.($T_{smax}$) | 200℃ |
| | Time($T_{smin}$ to $T_{smax}$)(ts) | 60 - 120 Seconds |
| Average ramp up rate $T_{smax}$ to $T_p$ | | 3℃ / Second Max. |
| Liquidous temperature($T_L$)<br>Time at liquidous($t_L$) | | 217℃<br>60 – 150 Seconds |
| Peak package body temperature($T_p$) | | 260℃ |
| Time($T_p$)within 5℃ of the specified classification temperature($T_c$) | | 30 Seconds |
| Average ramp-down rate($T_p$ to $T_{smax}$) | | 6℃ / Second Max. |
| Time(25℃ to Peak Temperature) | | 8 Minutes Max. |

## Mechanical Dimensions(Unit:mm)




## Ordering Information




## Packaging

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


Revised:AUG2016