

### 1206 Slow Blow SMD Fuses

DOC.No. ISS:F12T 0.63

# INDIVIDUAL SPECIFICATION SHEET

Product Name: 1206 Slow Blow SMD Fuses

Part Number: :F12T0.63

**Revision:** A



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

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| PREPEARED BY | APPROVED BY |
|--------------|-------------|
| 杨婵           | A Bas       |



ndustry 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              | 1.0ln       | 2.5In      | 3.0ln         | 3.5In | 10.0ln       |  |
| 0.63A                      | 4 hour min. | 5 sec max. | 0.1sec – 3sec | -     | 0.2ms – 20ms |  |

#### **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.      | Ra  | ated  | Rated<br>Current | Breaking                  | Typical Cold.<br>Resistance<br>(mOhms) <sup>2</sup> | Typical<br>Voltage<br>Drop (mV) | Typical Pre-<br>Arcing I <sup>2</sup> t<br>(A <sup>2</sup> Sec) <sup>3</sup> | Alpha<br>Mark |
|               | Vo  | ltage | (A)              | Capacity (A) <sup>1</sup> |   |                                 |  |               |
|               | DC  |       |                  |                           |   |                                 |  |               |
| F12T0.63      | 72V | 63V   | 0.63             | 50A                       | 1080  | 950                             | 0.009  | В             |

- 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 25°C
- 3. Typical Pre-arcing I<sup>2</sup>t are measured at 10In Current

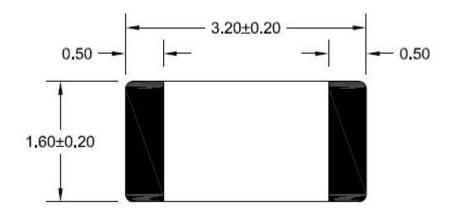
Choice fuse for surge application (USB charger etc.), make sure the I<sup>2</sup>t of fuse is 4 times than surge. Specifications are subject to change without notice. Application testing is strongly recommended.



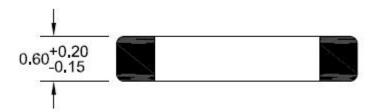
### **Dimension**

Drawing not to scale (Unit: mm)

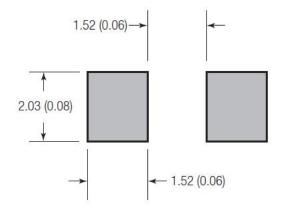
### Top view



Side view

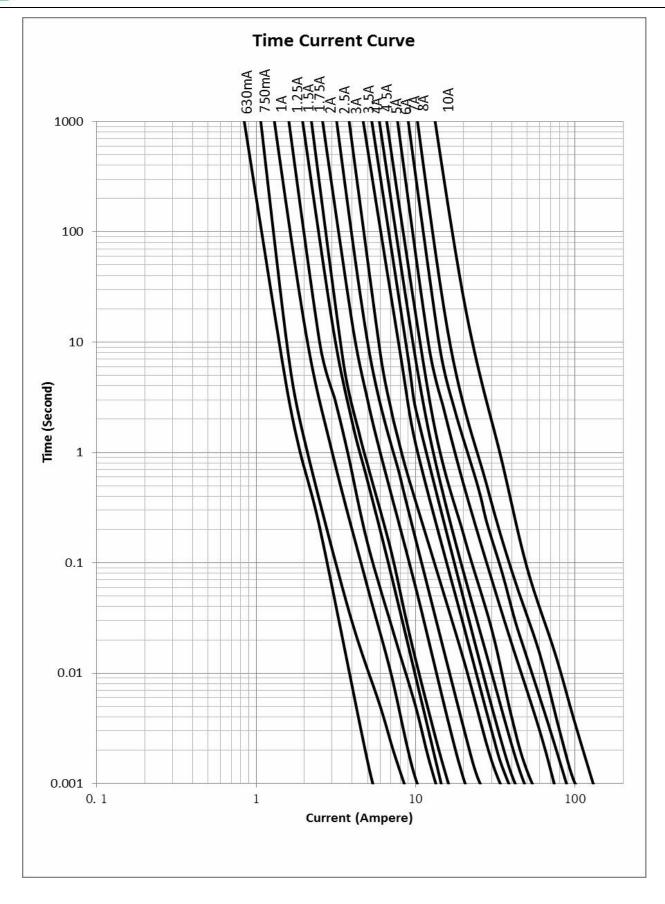


### **Recommended land pattern**



Unit: mm(inch)







#### **Soldering method**

Wave solder

■ Reservoir temperature: 260°C

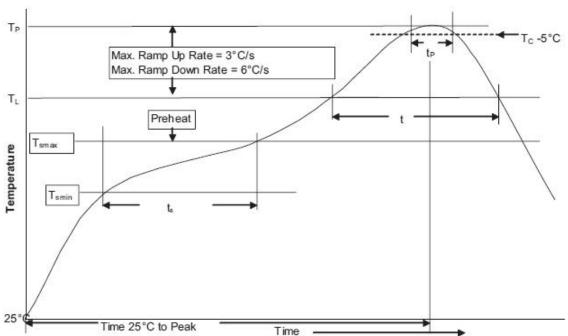
■ Time in reservoir: 10 seconds maximum

> Infrared reflow

■ Temperature: 260°C

■ Time: 30 seconds maximum

### Solder reflow profile



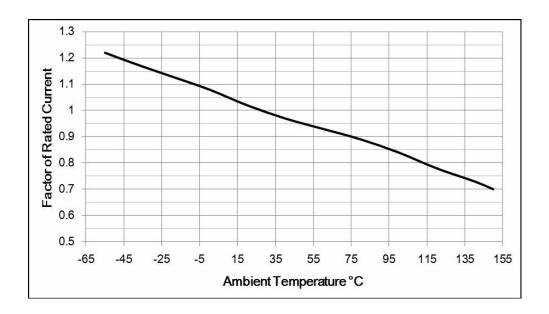
| The state of the s |  |                  |  |  |  |
|--|--|------------------|--|--|--|
| Profile Feature  | Lead(Pb) free solder   |                  |  |  |  |
| Preheat and soak   | Temperature min.(T <sub>smin</sub> )                               | 150°C            |  |  |  |
|  | • Temperature max. (T <sub>smax</sub> )                            | 200℃             |  |  |  |
|  | • Time (T <sub>smin</sub> to T <sub>smax</sub> ) (t <sub>S</sub> ) | 60 - 120 Seconds |  |  |  |
| Average ramp up rate T <sub>smax</sub> to T <sub>p</sub>   | 3°C / Second Max.  |                  |  |  |  |
| Liquidous temperature (T <sub>L</sub> )  | 217°C  |                  |  |  |  |
| Time at liquidous (t <sub>L</sub> )  | 60 - 150 Seconds   |                  |  |  |  |
| Peak package body temperature  | 260°C  |                  |  |  |  |
| Time (t <sub>P</sub> ) within 5°C of the specifi   | 30 Seconds   |                  |  |  |  |
| Average ramp-down rate (TP to T  | 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**

3000 fuses on 8mm tape-and-reel on a 7 inch (178mm) reel per EIA Standard 481.

--- End of Document ---

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