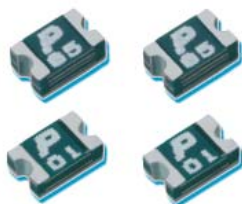


## SMD0603



## SMD Type, 6 V / 9 V / 15 V

**Standard**

UL 1434 1<sup>st</sup> Edition  
CSA C22.2 No. 0 CSA TIL No. CA-3A

**Approvals**

TÜV pending  
cURus pending

**Features****lead free**

This product line is the smallest available SMD resettable fuse. These devices offer wide range in hold currents. The SMD0603 product line is suitable for high density circuit board applications in computers, handheld equipment and general electronics.  
Suitable for reflow soldering.

## Specifications

**Packaging**

A Blister tape and reel Ø 178 mm

**Materials**

Terminals: Solder-plated copper

**Max. Device Surface Temperature in Tripped State**  
125 °C

**Operating / Storage Temperature**

-40 °C to +85 °C (consider derating)

**Humidity Ageing**

+85 °C, 85 % R.H., 1000 hours, ± 5 % typical resistance change

**Vibration**

MIL-STD-883C, Method 2007.1, Condition A, no change

**Thermal Shock**

MIL-STD-202F, Method 107G  
+85 °C to -40 °C 20 times, -30 % typical resistance change

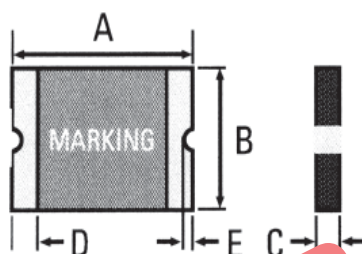
**Lead Solderability**

Meets EIA Specification RS186-9E,  
ANSI/J-STD-002, Category 3  
Reflow only

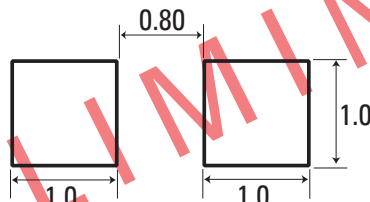
**Solvent Resistance**

MIL-STD-202, Method 215, no change

Dimensions (mm)



Pad Layout (mm)



Dimensions (mm)

| Model         | A    |      | B    |      | C    |      | D    | E    |      | packaging quantity<br>tape |
|---------------|------|------|------|------|------|------|------|------|------|----------------------------|
|               | Min  | Max  | Min  | Max  | Min  | Max  |      | Min  | Max  |                            |
| SMD0603P010TF | 1.40 | 1.80 | 0.60 | 1.00 | 0.40 | 0.75 | 0.15 | 0.10 | 0.40 | t.b.d.                     |
| SMD0603P020TF | 1.40 | 1.80 | 0.60 | 1.00 | 0.40 | 0.75 | 0.15 | 0.10 | 0.40 |                            |
| SMD0603P025TF | 1.40 | 1.75 | 0.70 | 1.00 | 0.40 | 0.75 | 0.15 | 0.10 | 0.40 |                            |
| SMD0603P035TF | 1.40 | 1.75 | 0.70 | 1.00 | 0.75 | 1.55 | 0.15 | 0.10 | 0.40 |                            |
| SMD0603P050TF | 1.40 | 1.80 | 0.60 | 1.00 | 0.75 | 1.55 | 0.15 | 0.10 | 0.40 |                            |

Permissible continuous operating current is ≤ 100 % at ambient temperature of 20 °C (68 °F).

| Model         | I <sub>hold</sub><br>(A) | I <sub>trip</sub><br>(A) | V <sub>max. dc</sub><br>(V) | I <sub>max.</sub><br>(A) | max. time to trip<br>(s @ A) | P <sub>d max.</sub><br>(W) | Resistance            |                         | Approvals |
|---------------|--------------------------|--------------------------|-----------------------------|--------------------------|------------------------------|----------------------------|-----------------------|-------------------------|-----------|
|               |                          |                          |                             |                          |                              |                            | R <sub>min.</sub> (Ω) | R <sub>I max.</sub> (Ω) |           |
| SMD0603P010TF | 0.10                     | 0.30                     | 15                          | 40                       | 1.00@0.50                    | 0.5                        | 0.900                 | 6.000                   | p         |
| SMD0603P020TF | 0.20                     | 0.50                     | 9                           | 40                       | 0.60@1.00                    | 0.5                        | 0.550                 | 3.500                   | p         |
| SMD0603P025TF | 0.25                     | 0.55                     | 9                           | 40                       | 0.08@8.00                    | 0.5                        | 0.500                 | 3.000                   | p         |
| SMD0603P035TF | 0.35                     | 0.70                     | 6                           | 40                       | 0.10@8.00                    | 0.5                        | 0.200                 | 1.000                   | p         |
| SMD0603P050TF | 0.50                     | 1.00                     | 6                           | 40                       | 1.00@8.00                    | 0.5                        | 0.100                 | 0.680                   | p         |

**NOTE:**

I<sub>hold</sub> = Hold current: maximum current device will pass without tripping in 20°C still air.  
I<sub>trip</sub> = Trip current: minimum current at which the device will trip in 20°C still air.  
V<sub>max</sub> = Maximum voltage device can withstand without damage at rated current (I<sub>max</sub>)  
I<sub>max</sub> = Maximum fault current device can withstand without damage at rated voltage (V<sub>max</sub>)

P<sub>d</sub> = Power dissipated from device when in the tripped state at 20 °C still air.  
R<sub>min</sub> = Minimum resistance of device in initial (un-soldered) state.

R<sub>I max</sub> = Maximum resistance of device at 20 °C measured one hour after tripping for 20 s.

**Caution: Operation beyond the specified rating may result in damage and possible arcing and flame.**  
Specifications are subject to change without notice

Order  
Information

| Qty. | Order-<br>Number | Model | Packaging |
|------|------------------|-------|-----------|
|      |                  |       |           |