

## SMD0805

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

## Standard

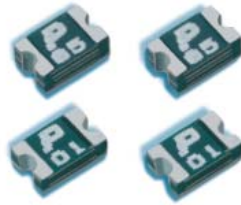
UL 1434 1<sup>st</sup> Edition  
CSA C22.2 No. 0 CSA TIL No. CA-3A

## Approvals

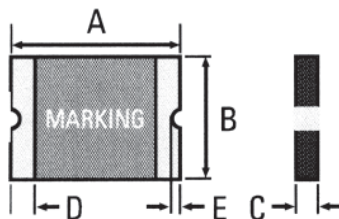
cULus Recognition  
TÜV

## Features

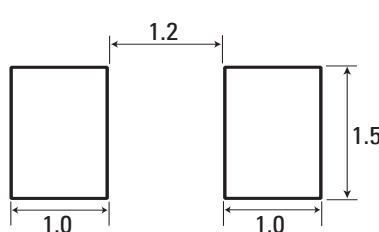
These devices offer wide range in hold currents from 0.1 A to 1.0 A and voltages from 6 V to 15 V. The SMD0805 product line is suitable for high density circuit board applications in computers, cellular phone and general electronics. Suitable for reflow soldering.



Dimensions (mm)



Solder pad Layout (mm)



## Specifications

## Packaging

A Blister tape and reel Ø 178 mm

## Materials

Terminals: Solder-plated copper  
TS: Solder Material: 63/37 SnPb  
TF: Solder Material: Sn

## 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

## Solderability

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

## Solvent Resistance

MIL-STD-202, Method 215, no change

## Marking

"P", Part Code



Dimensions (mm)

Model	A		B		C		D	E		packaging quantity tape
	Min	Max	Min	Max	Min	Max		Min	Max	
SMD0805P010TS/TF	2.00	2.20	1.20	1.50	0.55	1.00	0.10	0.20	0.45	4,000
SMD0805P020TS/TF	2.00	2.20	1.20	1.50	0.55	1.00	0.10	0.20	0.45	4,000
SMD0805P035TS/TF	2.00	2.20	1.20	1.50	0.45	0.75	0.10	0.20	0.45	4,000
SMD0805P050TS/TF	2.00	2.20	1.20	1.50	0.75	1.25	0.10	0.20	0.45	3,000
SMD0805P075TS/TF	2.00	2.20	1.20	1.50	0.75	1.25	0.20	0.15	0.45	3,000
SMD0805P100TS/TF	2.00	2.20	1.20	1.50	0.80	1.80	0.20	0.15	0.45	2,000

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

Model	I <sub>hold</sub> (A)	I <sub>trip</sub> (A)	V <sub>max. dc</sub> (V)	I <sub>max.</sub> (A)	max. time to trip (sec. @ A)	P <sub>d max.</sub> (W)	Resistance			Approvals	
							R <sub>min.</sub> (Ω)	R <sub>typ.</sub> (Ω)	R <sub>I max.</sub> (Ω)		
SMD0805P010TS/TF	0.10	0.30	15	40	1.50 @ 0.50	0.5	1.000	3.500	6.000	•	•
SMD0805P020TS/TF	0.20	0.50	9	40	0.02 @ 8.00	0.5	0.650	2.000	3.500	•	•
SMD0805P035TS/TF	0.35	0.75	6	40	0.10 @ 8.00	0.5	0.250	0.750	1.200	•	•
SMD0805P050TS/TF	0.50	1.00	6	40	0.10 @ 8.00	0.5	0.150	0.500	0.850	•	•
SMD0805P075TS/TF	0.75	1.50	6	40	0.20 @ 8.00	0.6	0.090	0.260	0.350	p	p
SMD0805P100TS/TF	1.00	1.95	6	40	0.30 @ 8.00	0.6	0.060	0.120	0.210	p	p

Please choose TS for SnPb and TF for Sn plating

## 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.

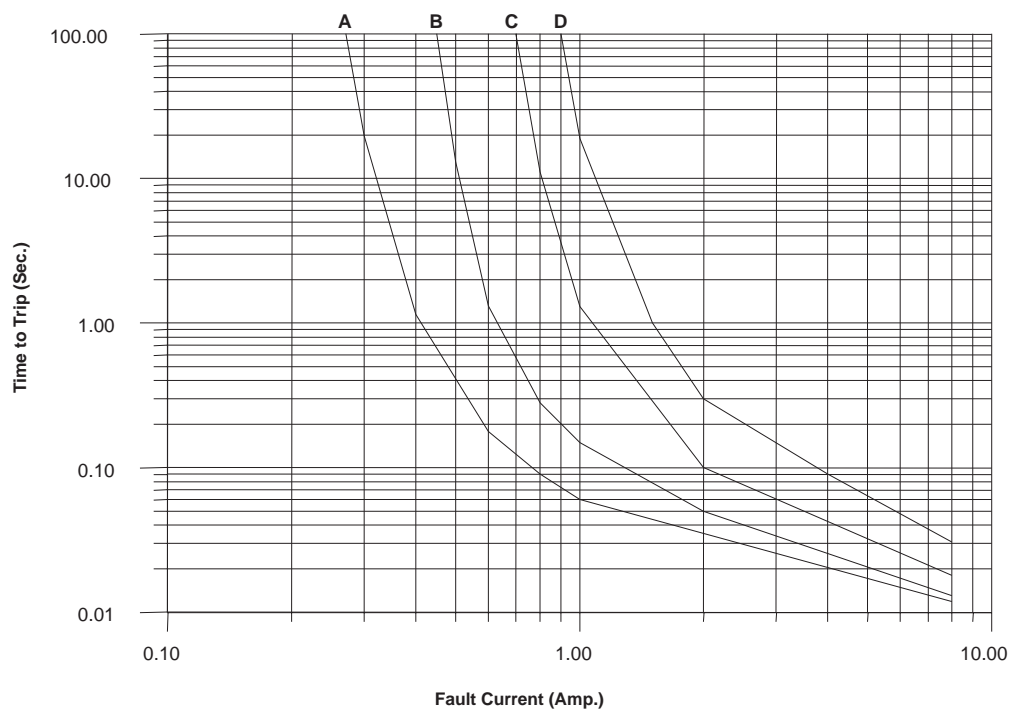
R<sub>I max</sub> = Maximum resistance of device at 20 °C measured one hour after tripping for 20 s.

**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- Number	Model	Packaging

SMD0805



A: SMD0805P010TS/TF  
B: SMD0805P020TS/TF  
C: SMD0805P035TS/TF  
D: SMD0805P050TS/TF

Thermal Derating Chart

Model	Ambient Operation Temperature - I <sub>hold</sub> (A)								
	-40 °C	-20 °C	0 °C	23 °C	40 °C	50 °C	60 °C	70 °C	85 °C
SMD0805P010TS/TF	0.14	0.12	0.11	0.10	0.08	0.07	0.06	0.05	0.03
SMD0805P020TS/TF	0.28	0.25	0.23	0.20	0.17	0.14	0.12	0.10	0.07
SMD0805P035TS/TF	0.47	0.44	0.39	0.35	0.30	0.27	0.24	0.20	0.14
SMD0805P050TS/TF	0.68	0.62	0.55	0.50	0.40	0.37	0.33	0.29	0.23
SMD0805P075TS/TF	t.b.d.	t.b.d.	t.b.d.	0.75	t.b.d.	t.b.d.	t.b.d.	t.b.d.	t.b.d.
SMD0805P100TS/TF	t.b.d.	t.b.d.	t.b.d.	1.00	t.b.d.	t.b.d.	t.b.d.	t.b.d.	t.b.d.