

# SMD0805

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

#### **Standard**

UL 1434 1st Edition

CSA C22.2 No. 0 CSA TIL No. CA-3A



cULus Recognition ΤÜV

#### 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.

## **Specifications**

### **Packaging**

Blistertape 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

**Solderability** 

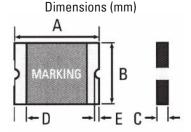
Meets EIA Specification RS186-9E, ANSI/J-STD-002, Category 3 Reflow only

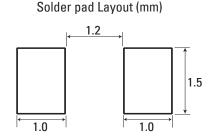
**Solvent Resistance** 

MIL-STD-202, Method 215, no change

Marking

"P", Part Code









Dimensions (mm)										
Model	Α		I	В		С	D	Е		packaging quantity
	Min	Max	Min	Max	Min	Max	Min	Min	Max	tape
SMD0805P010TS/ <i>TF</i>	2.00	2.20	1.20	1.50	0.55	1.00	0.10	0.20	0.45	4,000
SMD0805P020TS/ <i>TF</i>	2.00	2.20	1.20	1.50	0.55	1.00	0.10	0.20	0.45	4,000
SMD0805P035TS/ <i>TF</i>	2.00	2.20	1.20	1.50	0.45	0.75	0.10	0.20	0.45	4,000
SMD0805P050TS/ <i>TF</i>	2.00	2.20	1.20	1.50	0.75	1.25	0.10	0.20	0.45	3,000
SMD0805P075TS/ <i>TF</i>	2.00	2.20	1.20	1.50	0.75	1.25	0.20	0.15	0.45	3,000
SMD0805P100TS/ <i>TF</i>	2.00	2.20	1.20	1.50	0.80	1.80	0.20	0.15	0.45	2,000

Model	l <sub>hold</sub>	l <sub>Trip</sub>	V <sub>max. dc</sub>	l <sub>max</sub> .	max. time to trip	$P_{dmax}$	Re	sistance		Approvals
	(A)	(A)	(V)	(A)	(sec. @ A)	(W)	$R_{min.}(\Omega)$	$R_{typ.}(\Omega)$	$R_{I \text{ max.}}(\Omega)$	cURus TÜV
SMD0805P010TS/ <i>TF</i>	0.10	0.30	15	40	1.50 @ 0.50	0.5	1.000	3.500	6.000	
SMD0805P020TS/ <i>TF</i>	0.20	0.50	9	40	0.02 @ 8.00	0.5	0.650	2.000	3.500	• •
SMD0805P035TS/ <i>TF</i>	0.35	0.75	6	40	0.10 @ 8.00	0.5	0.250	0.750	1.200	
SMD0805P050TS/ <i>TF</i>	0.50	1.00	6	40	0.10 @ 8.00	0.5	0.150	0.500	0.850	• •
SMD0805P075TS/ <i>TF</i>	0.75	1.50	6	40	0.20 @ 8.00	0.6	0.090	0.260	0.350	рр
SMD0805P100TS/ <i>TF</i>	1.00	1.95	6	40	0.30 @ 8.00	0.6	0.060	0.120	0.210	рр

Please choose TS for SnPb and TF for Sn plating

NOTE:

Hold current; maximum current device will pass without tripping in 20 °C still air.

Trip current: minimum current at which the device will trip in 20 °C still air. Maximum voltage device can withstand without damage at rated current (I, Maximum fault current device can withstand without damage at rated voltage (V<sub>max</sub>) Power dissipated from device when in the tripped state at 20 °C still air.

Minimum resistance of device in initial (un-soldered) state.

Maximum resistance of device at 20 °C measured one hour after tripping for 20 s.

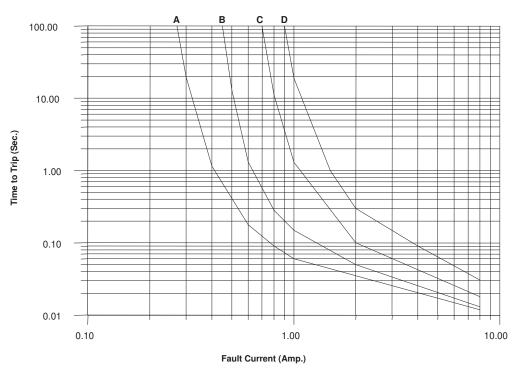
Caution: Operation beyond the specified rating may result in damage and possible arcing and flame. Specifications are subject to change without notice

Order Information

Ωty.	Order-	Model	Packaging
	Number		







- 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/ <i>TF</i>	0.14	0.12	0.11	0.10	0.08	0.07	0.06	0.05	0.03
SMD0805P020TS/ <i>TF</i>	0.28	0.25	0.23	0.20	0.17	0.14	0.12	0.10	0.07
SMD0805P035TS/ <i>TF</i>	0.47	0.44	0.39	0.35	0.30	0.27	0.24	0.20	0.14
SMD0805P050TS/ <i>TF</i>	0.68	0.62	0.55	0.50	0.40	0.37	0.33	0.29	0.23
SMD0805P075TS/ <i>TF</i>	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/ <i>TF</i>	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.