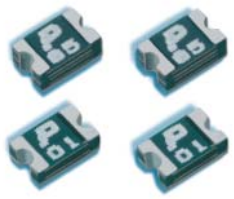
SMD0805



SMD Type, 6 V / 9 V / 15V

Standard
UL 1434 1st 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.

Specifications

Packaging
A 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

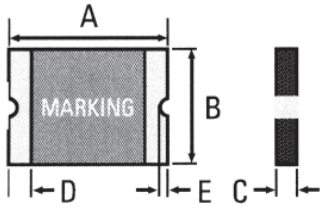
Thermal Shock
MIL-STD-202F, Method 107G
+85 °C to -40 °C 20 times, -30 % typical resistance change

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

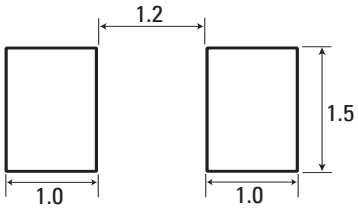
Solvent Resistance
MIL-STD-202, Method 215, no change

Marking
"P", Part Code

Dimensions (mm)



Solder pad Layout (mm)



Dimensions (mm)										
Model	A		B		C		D	E		packaging quantity
	Min	Max	Min	Max	Min	Max	Min	Min	Max	tape
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_{hold} (A)	I_{Trip} (A)	$V_{max.\,dc}$ (V)	$I_{max.}$ (A)	max. time to trip (sec. @ A)	$P_{d\,max.}$ (W)	Resistance $R_{min.}$(Ω)	$R_{typ.}$(Ω)	$R_{I\,max.}$(Ω)	Approvals cURus	TÜV
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_{hold} = Hold current: maximum current device will pass without tripping in 20 °C still air.
I_{trip} = Trip current: minimum current at which the device will trip in 20 °C still air.
V_{max} = Maximum voltage device can withstand without damage at rated current (I_{max})
I_{max} = Maximum fault current device can withstand without damage at rated voltage (V_{max})

P_d = Power dissipated from device when in the tripped state at 20 °C still air.
R_{min} = Minimum resistance of device in initial (un-soldered) state.
R_{1max} = 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

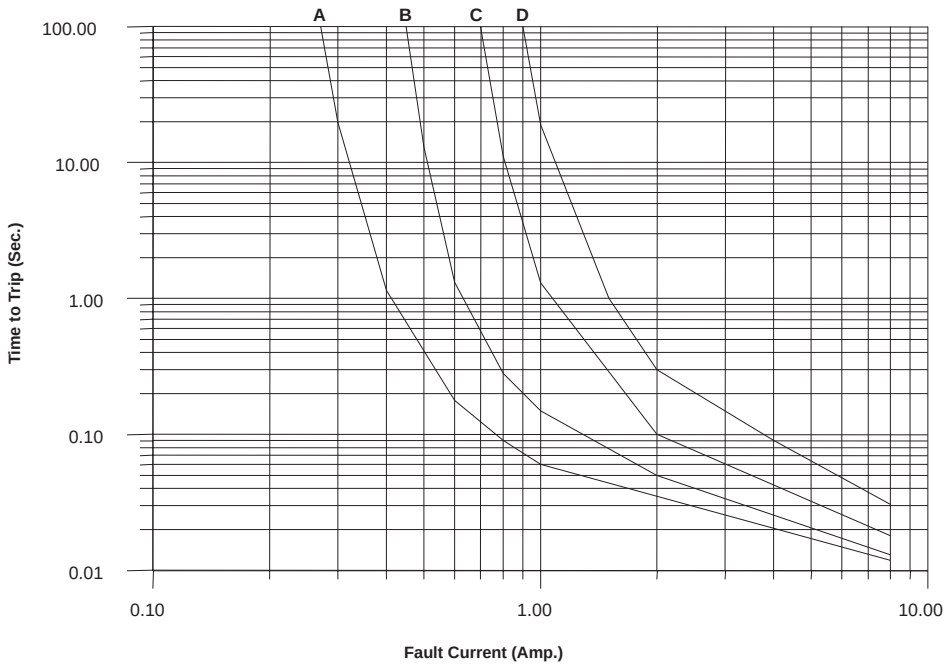
Order Information

Qty.	Order-Number	Model	Packaging

WICKMANN

In our continuing strategy to deliver unparalleled circuit protection solutions, technical expertise and application leadership, we proudly introduce the WICKMANN Group and its products to the Littelfuse portfolio.

SMD0805



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

Thermal Derating Chart

Model	Ambient Operation Temperature - I_{hold} (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.