Features
- Surface Mount Devices
- Lead free device
- Surface Mount packaging for automated assembly
- Agency recognition: UL

Applications
Almost anywhere there is a low voltage power supply, up to 16V and a load to be protected, including:
- Computer mother board, Modem. USB hub
- PDAs & Charger, Analog & digital line card
- Digital cameras, Disk drivers, CD-ROMs,

SMD0805 Series

Sea & Land

Performance Specification

Model	Marking	V_{max} (Vdc)	I_{max} (A)	I_{hold} @25℃ (A)	I_{trip} @25℃ (A)	P_d Max. (W)	Maximum Time To Trip		Resistance	
							Current (A)	Time (Sec)	Ri_{min} (Ω)	R1max (Ω)
SMD0805-010	1	15.0	100	0.10	0.30	0.5	0.5	1.50	1.000	6.000
SMD0805-020	2	9.0	100	0.20	0.50	0.5	8.0	0.02	0.650	3.500
SMD0805-035	3	6.0	100	0.35	0.75	0.5	8.0	0.10	0.250	1.200
SMD0805-050	5	6.0	100	0.50	1.00	0.5	8.0	0.10	0.150	0.850
SMD0805-075	7	6.0	40	0.75	1.50	0.6	8.0	0.20	0.090	0.385
SMD0805-100	0	6.0	100	1.00	1.95	0.6	8.0	0.30	0.060	0.230

I_{hold} = Hold Current. Maximum current device will not trip in 25℃ still air.
Itrip = Trip Current. Minimum current at which the device will always trip in 25℃ still air.
V_{max} = Maximum operating voltage device can withstand without damage at rated current (Imax).
I_{max} = Maximum fault current device can withstand without damage at rated voltage (Vmax).
Pd = Maximum power dissipation when device is in the tripped state in 25℃ still air environment at rated voltage.
Rimin/max = Minimum/Maximum device resistance prior to tripping at 25℃.
$R1_{max}$ = Maximum device resistance is measured one hour post reflow.
CAUTION : Operation beyond the specified ratings may result in damage and possible arcing and flame.

Environmental Specifications

Test	Conditions	Resistance change
Passive aging	+85℃, 1000 hrs.	±5% typical
Humidity aging	+85℃, 85% R.H. , 168 hours	±5% typical
Thermal shock	+85℃ to -40℃, 20 times	±33% typical
Resistance to solvent	MIL-STD-202,Method 215	No change
Vibration	MIL-STD-202,Method 201	No change
Ambient operating conditions : - 40 ℃ to 85 ℃		
Maximum surface temperature of the device in the tripped state is 125 ℃		

AGENCY APPROVALS : U.L approved RoHS

AGENCY FILE NUMBERS : U.L. FILE NO. : E201504

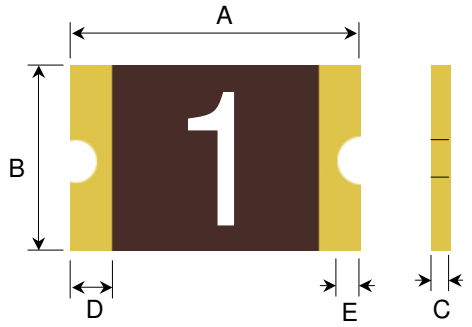
I_{hold} versus temperature

Model	Maximum ambient operating temperature (Tmao) vs. hold current (Ihold)								
	-40℃	-20℃	0℃	25℃	40℃	50℃	60℃	70℃	85℃
SMD0805-010	0.14	0.12	0.11	0.1	0.8	0.7	0.6	0.5	0.3
SMD0805-020	0.28	0.25	0.23	0.20	0.17	0.14	0.12	0.10	0.07
SMD0805-035	0.47	0.44	0.39	0.35	0.30	0.27	0.24	0.20	0.14
SMD0805-050	0.68	0.62	0.55	0.50	0.40	0.37	0.33	0.29	0.23
SMD0805-075	1.00	0.90	0.79	0.75	0.63	0.57	0.53	0.41	0.34
SMD0805-100	1.35	1.25	1.15	1.00	0.82	0.74	0.65	0.55	0.42

Construction and Dimension (Unit:mm)

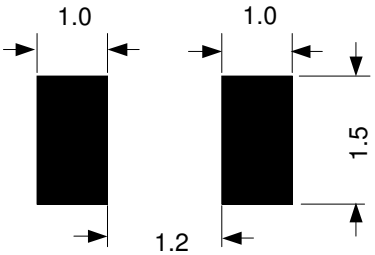
Model	A		B		C		D	E
	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Min.
SMD0805-010	2.00	2.20	1.20	1.50	0.50	1.00	0.20	0.10
SMD0805-020	2.00	2.20	1.20	1.50	0.45	1.00	0.20	0.10
SMD0805-035	2.00	2.20	1.20	1.50	0.45	1.00	0.20	0.10
SMD0805-050	2.00	2.20	1.20	1.50	0.30	0.60	0.20	0.10
SMD0805-075	2.00	2.20	1.20	1.50	0.65	1.25	0.20	0.10
SMD0805-100	2.00	2.20	1.20	1.50	0.80	1.80	0.20	0.10

Dimensions & Marking



1 = Part identification

Recommended pad layout (mm)



Termination pad characteristics

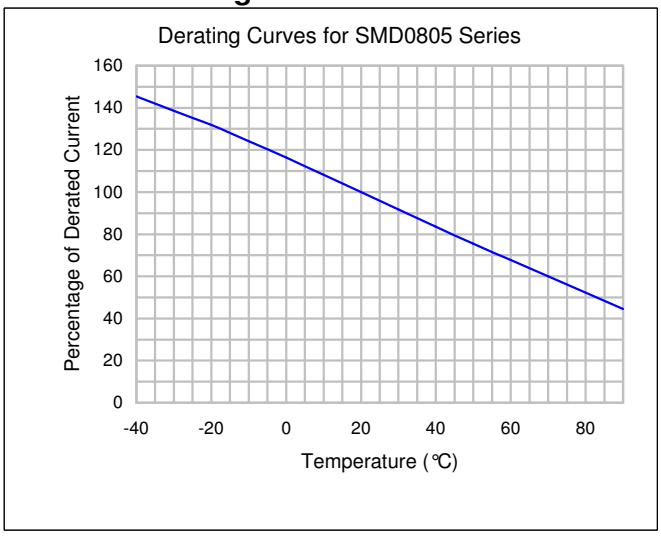
Terminal pad materials： Tin-Plated Nickle-Copper or Gold-Plated Nickle-Copper

Terminal pad solderability： Meets EIA specification RS186-9E and ANSI/J-STD-002 Category 3.

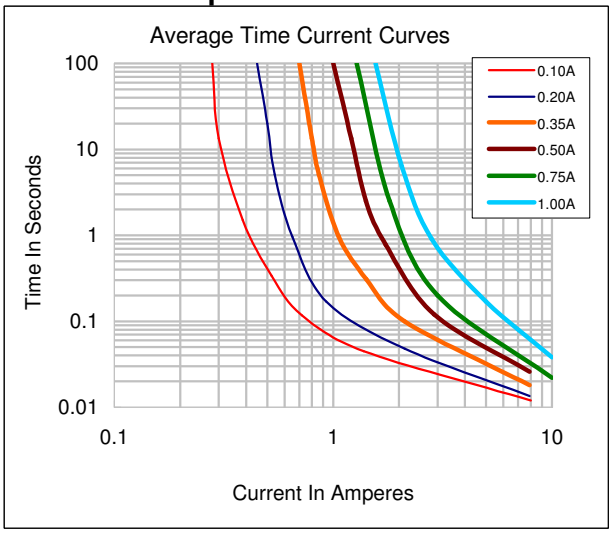
Rework

Use standard industry practices, the removal device must be replaced with a fresh one.

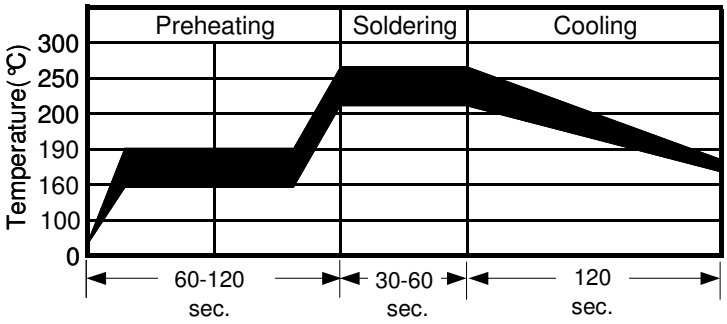
Thermal derating curve



Typical time-to-trip at 25℃



Recommended solder reflow conditions



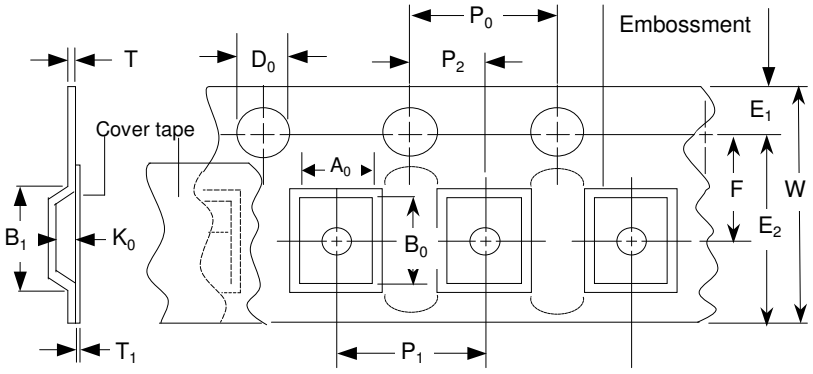
- Recommended reflow methods ： IR, vapor phase oven, hot air oven.
- Devices are not designed to be wave soldered to the bottom side of the board.
- Recommended maximum paste thickness is 0.25 mm (0.010 inch).
- Devices can be cleaned using standard method and solvents.

Note ： If reflow temperatures exceed the recommended profile, devices may not meet the performance requirements.

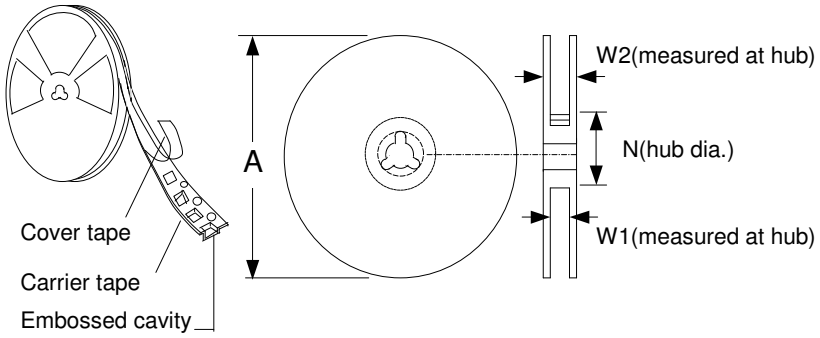
Tape and reel specifications (mm)

Governing Specifications	EIA 481-1
W	8.0 ± 0.3
P_0	4.0 ± 0.10
P_1	4.0 ± 0.10
P_2	2.0 ± 0.05
A_0	1.45 ± 0.10
B_0	2.30 ± 0.10
B_1max.	4.35
D_0	1.55 + 0.1, -0
F	3.5 ± 0.05
E_1	1.75 ± 0.10
E_2min.	6.25
T	0.25
T_1max.	0.1
K_0	0.74 ± 0.1
Leader min.	390
Trailer min.	160
Reel Dimensions	
A max.	178
N min.	60
W_1	9.0 ± 0.5
W_2	12.0 ± 0.05

EIA Tape Component Dimentions



EIA Reel Dimentions



Storage and handling

- Storage conditions：40℃ max, 70% R.H.
- Devices may not meet specified performance if storage conditions are exceeded.

Order information

SMD0805	010
Product name	Hold Current
SMD：surface mount device	0.10A

Packaging

Tape & Reel Quantity
5,000 pcs/reel

Tape & reel packaging per EIA481-1