

TERMINAL PAD SOLDERABILITY:
 Meets EIA Specification RS186-9E
 And ANSI/J-STD-002 Category 3.

TERMINAL PAD MATERIALS:

Tin-Plated Nickel-Copper
 Lead-Free, ROHS Compliant

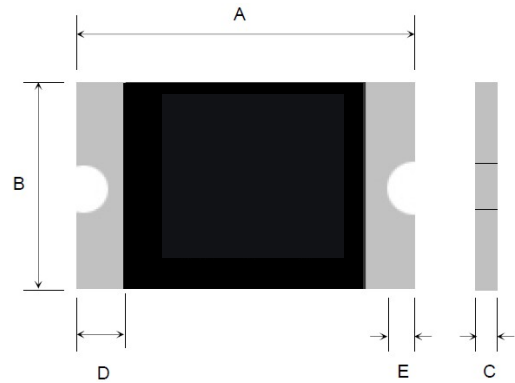


TABLE I. DIMENSIONS:

Unit: mm

Model	A		B		C		D	E
	Min	Max	Min	Max	Min	Max	Min	Min
1812-010/30V	4.37	4.73	3.07	3.41	0.50	1.00	0.30	0.25

TABLE II. PERFORMANCE RATINGS:

Model	Vmax	I _{max}	I _{hold@25°C}	I _{trip@25°C}	P _d Typ.	Maximum Time TO Trip		Resistance	
	(Vdc)	(A)	(A)	(A)	(W)	Current (A)	Time (Sec)	R _{imin} (Ω)	R _{imax} (Ω)
1812-010 /30V	30.0	100	0.10	0.30	0.8	0.5	1.50	0.750	15.000

Note:

I_{hold}=Hold current: maximum current device will pass without tripping in 23°C still air.

I_{trip}=Trip current: minimum current at which the device will trip in 23°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 23°C still air.

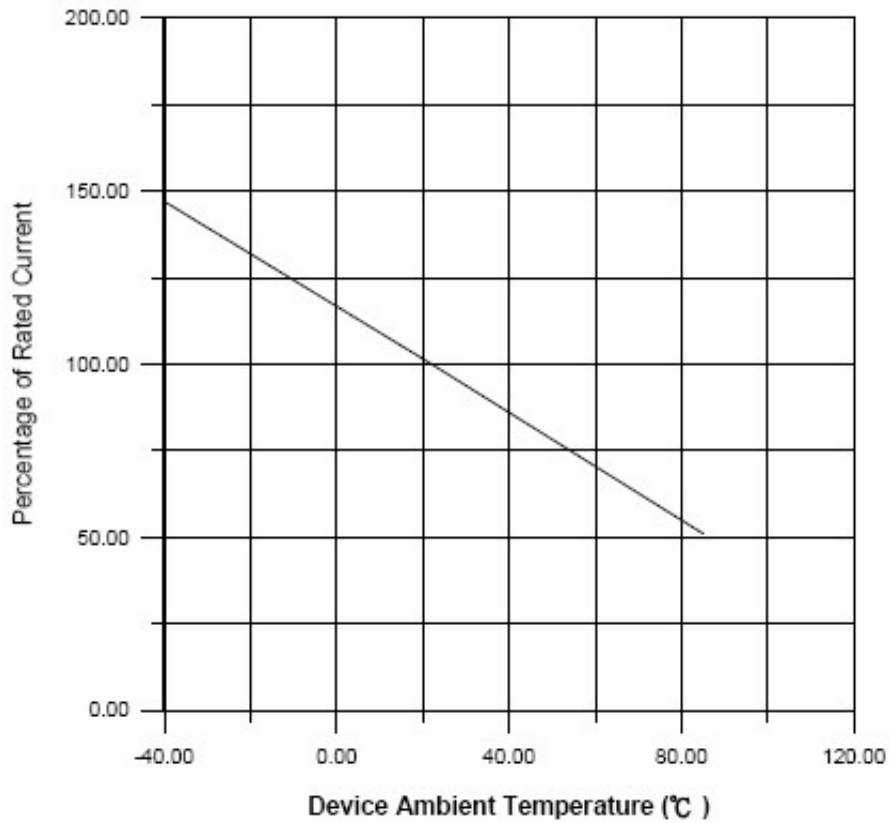
R_{min}=Minimum resistance of device in initial (un-soldered) state.

R_{1max}=Maximum resistance of device at 23°C measured one hour after tripping or reflow soldering of 260°C for 20sec.

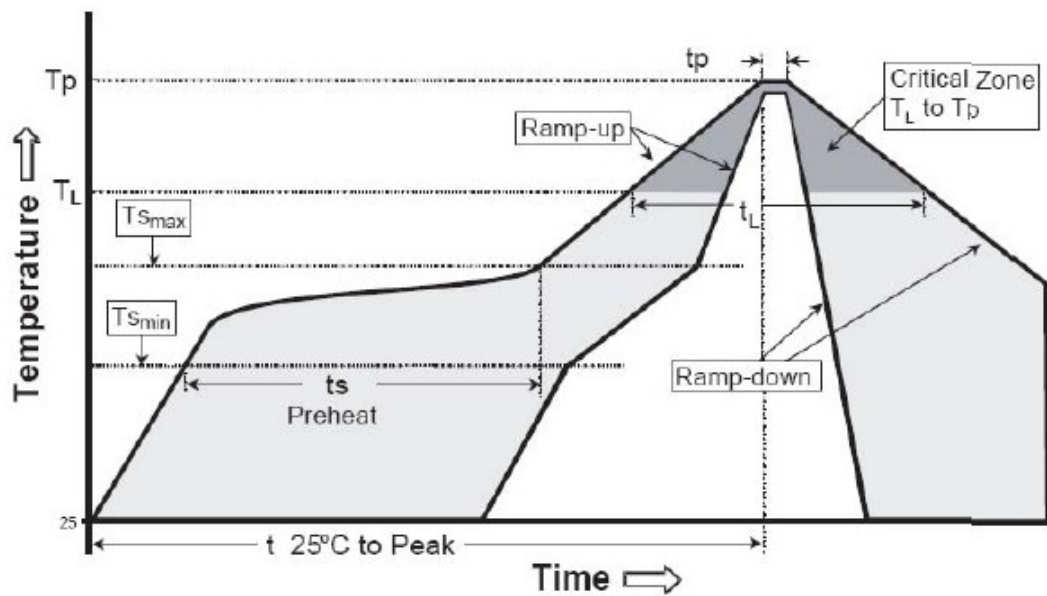
**THERMAL DERATING CHART FOR SMD1812 SERIES-IHOLD(Amps)
 RECOMMENDED DATA**

Model	Ambient Operation Temperature								
	-40°C	-20°C	0°C	23°C	40°C	50°C	60°C	70°C	85°C
1812-010/30V	0.16	0.14	0.12	0.10	0.08	0.07	0.06	0.05	0.03

THERMAL DERATING CURVE FOR SMD1812 SERIES



SOLDER REFLOW



RECOMMENDED CONCITIONS

Profile Feature	Pd-Free Assembly
Average Ramp-Up Rate(Tsmax to Tp)	3°C/second max
Preheat —Temperature Min(Tsmin) —Temperature Max(Tsmax) —Time(Tsmin to Tsmax)	150°C 200°C 60-180seconds
Time maintained above: —Temperature(TL) —Time(tL)	217°C 60-150seconds
Peak Temperature(Tp)	260°C
Time within 5°C of actual Peak Temperature(tp)	20-40seconds
Ramp-Down Rate	6°C/second max.
Time 25°C to Peak Temperature	8minutes max.
Storage Condition	0°C~35°C, ≤70%RH

Note: 1.All temperature refer to topside of the package, measured on the package body surface.
2.If reflow temperature exceed the recommended profile, devices

PACKAGING

Part Number	Component Package	Quantity
1812-010 /30V	1812	1500