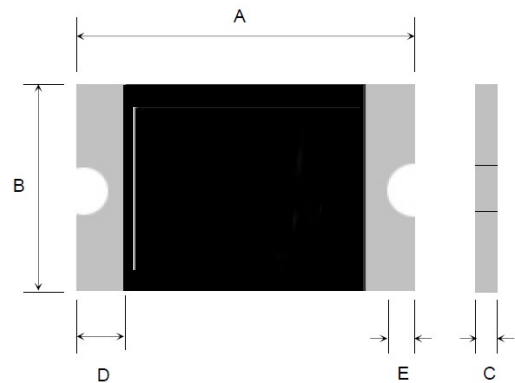


**TERMINAL PAD SOLDERABILITY:**  
 Meets EIA Specification RS186-9E  
 And ANSI/J-STD-002 Category 3.

**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
1812-200,8V	4.37	4.73	3.07	3.41	0.40	0.90	0.30	0.25

**TABLE II. PERFORMANCE RATINGS:**

Model	Vmax	I <sub>max</sub>	I <sub>hold@25°C</sub>	I <sub>trip@25°C</sub>	P <sub>d</sub> Typ.	Maximum Time TO Trip		Resistance	
	(Vdc)	(A)	(A)	(A)	(W)	Current (A)	Time (Sec)	R <sub>imin</sub> (Ω)	R <sub>imax</sub> (Ω)
1812-200,8V	8.0	100	2.00	4.00	0.8	8.0	2.00	0.020	0.100

**Note:**

I<sub>hold</sub>=Hold current: maximum current device will pass without tripping in 23°C still air.

I<sub>trip</sub>=Trip current: minimum current at which the device will trip in 23°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 23°C still air.

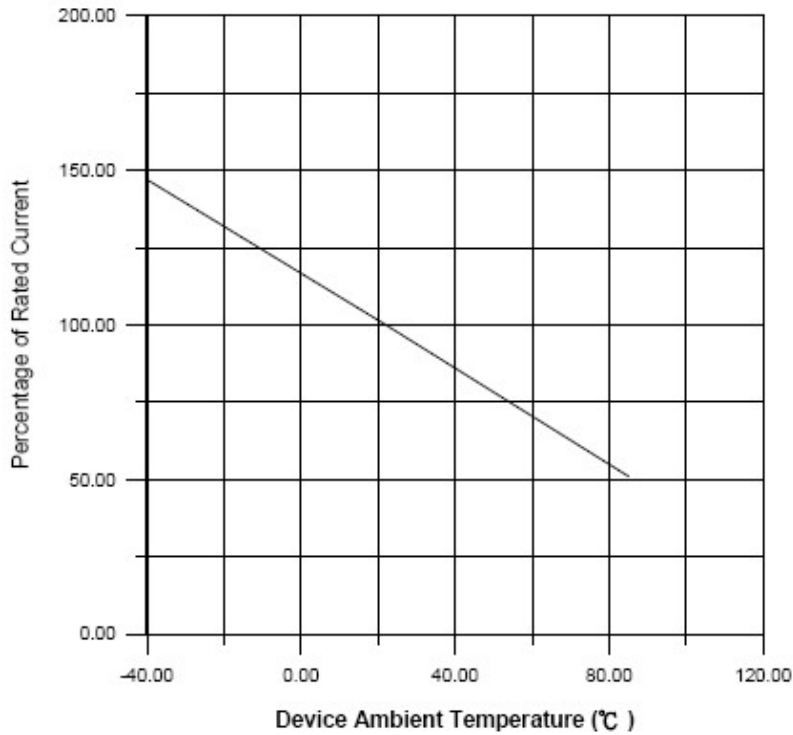
R<sub>imin</sub>=Minimum resistance of device in initial (un-soldered) state.

R<sub>imax</sub>=Maximum resistance of device at 23°C measured one hour after tripping or reflow soldering of 260°C for 20sec.

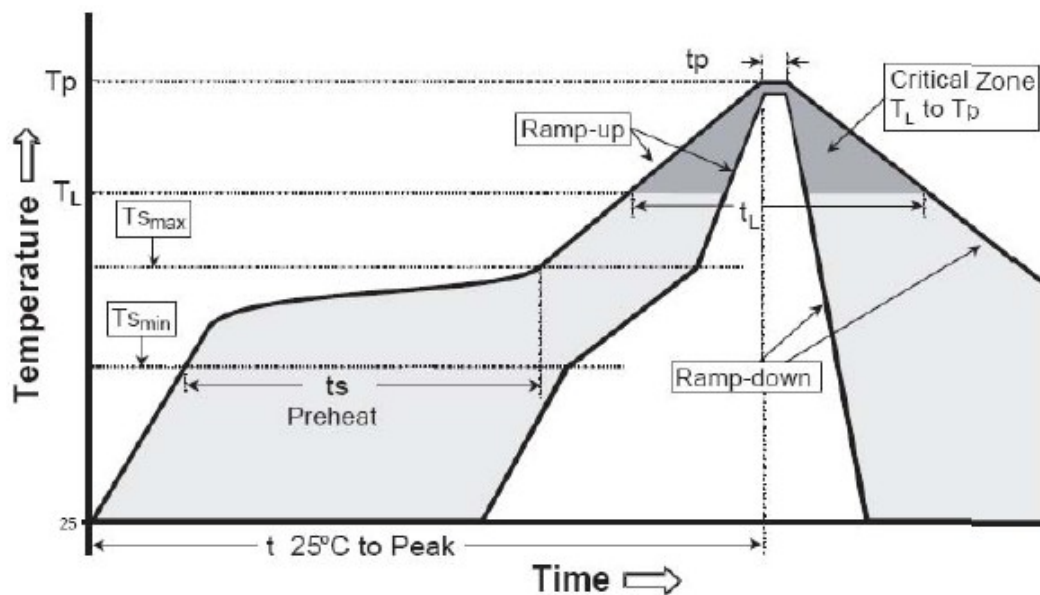
**THERMAL DERATING CHART FOR SMD1812 SERIES-IHOLD(Amps)  
RECOMMENDED DATA**

Model	Ambient Operation Temperature								
	-40°C	-20°C	0°C	23°C	40°C	50°C	60°C	70°C	85°C
1812-200,8V	2.88	2.6	2.25	2.00	1.80	1.66	1.45	1.09	0.80

**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
1812-200	1812	1500