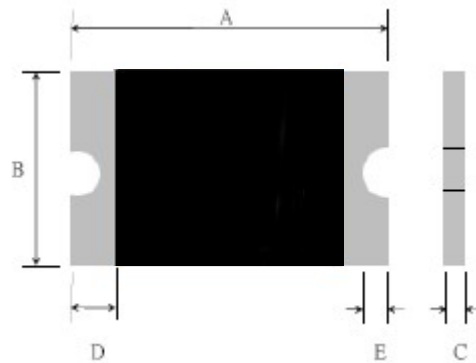


TERMINAL PAD SOLDERABILITY:

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
mSMD1812-020	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 _{ityp} (Ω)	R _{imax} (Ω)
mSMD1812-020	30.0	100	0.20	0.40	0.8	8.0	0.02	0.350	0.800	5.000

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.

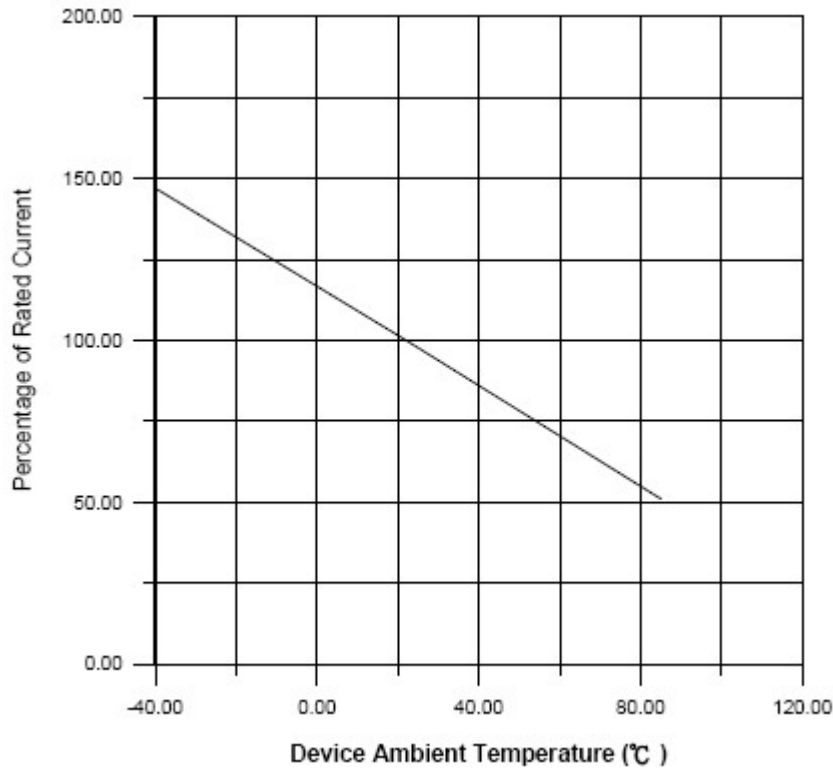
R_{imin}=Minimum resistance of device in initial (un-soldered) state.

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

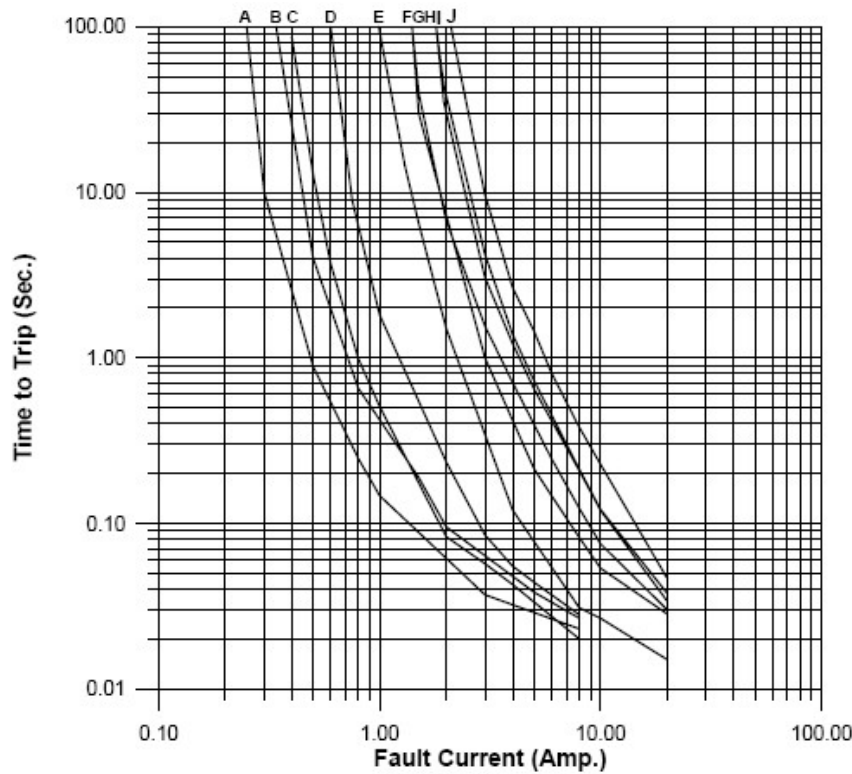
**THERMAL DERATING CHART FOR SMD1812 SERIES-IHOLD(Amps)
RECOMMENDED DATA**

Model	Ambient Operation Temperature								
	-40°C	-20°C	0°C	23°C	40°C	50°C	60°C	70°C	85°C
mSMD1812-020	0.29	0.26	0.23	0.20	0.17	0.15	0.14	0.12	0.10

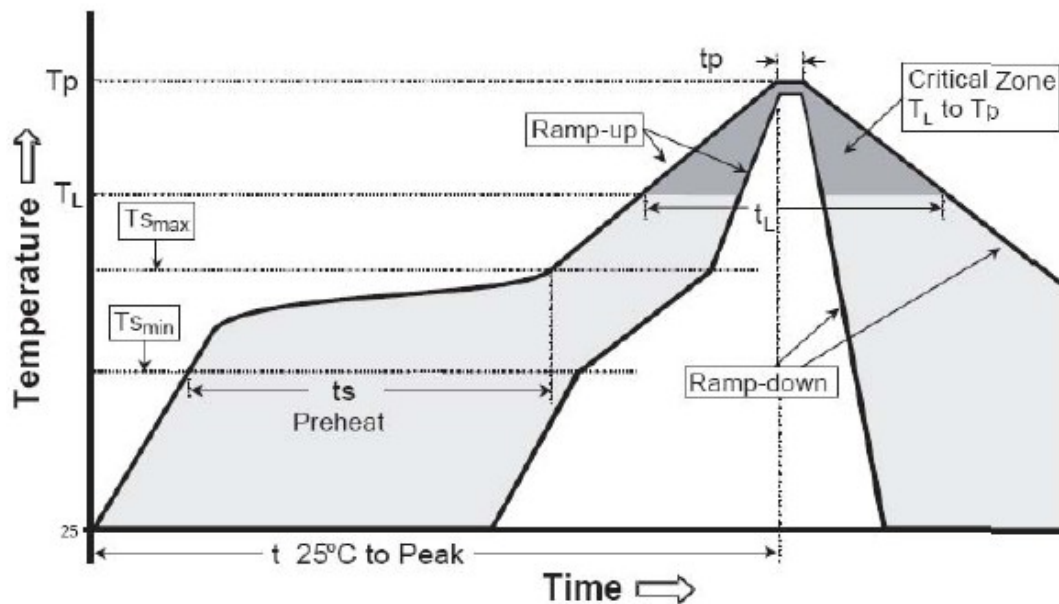
THERMAL DERATING CURVE FOR SMD1812 SERIES



AVERAGE TIME-CURRENT CURVE FOR SMD1812 SERIES



- A-SMD1812-010R
- B-SMD1812-014R
- C-SMD1812-020R
- D-SMD1812-035R
- E-SMD1812-050R
- F-SMD1812-075R
- G-SMD1812-075R
- H-SMD1812-110R
- I-SMD1812-110R
- J-SMD1812-150R

SOLDER REFLOW

RECOMMENDED CONCITIONS

Profile Feature	Pd-Free Assembly
Average Ramp-Up Rate(T_{smax} to T_p)	3°C/second max
Preheat —Temperature Min(T_{smin}) —Temperature Max(T_{smax}) —Time(T_{smin} to T_{smax})	150°C 200°C 60-180seconds
Time maintained above: —Temperature(T_L) —Time(t_L)	217°C 60-150seconds
Peak Temperature(T_p)	260°C
Time within 5°C of actual Peak Temperature(t_p)	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
mSMD1812-020	1812	1500

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