

Performance Specification

Model	Marking	V_{max}	I_{max}	I_{hold} @25°C	I_{trip} @25°C	P_d Typ.	Maximum Time To Trip		Resistance	
		(V dc)	(A)	(A)	(A)	(W)	Current (A)	Time (Sec)	$R_{i min}$ (Ω)	R_{1max} (Ω)
K1812L350DR	R350	6.0	35	3.50	6.00	2.0	10.0	4.00	0.008	0.030

V_{max} = Maximum operating 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}).

I_{hold} = Hold Current. Maximum current device will not trip in 25°C still air.

I_{trip} = Trip Current. Minimum current at which the device will always trip in 25°C still air.

P_d = Power dissipation when device is in the tripped state in 25°C still air environment at rated voltage.

$R_{i min}/max$ = Minimum/Maximum device resistance prior to tripping at 25°C.

R_{1max} = 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

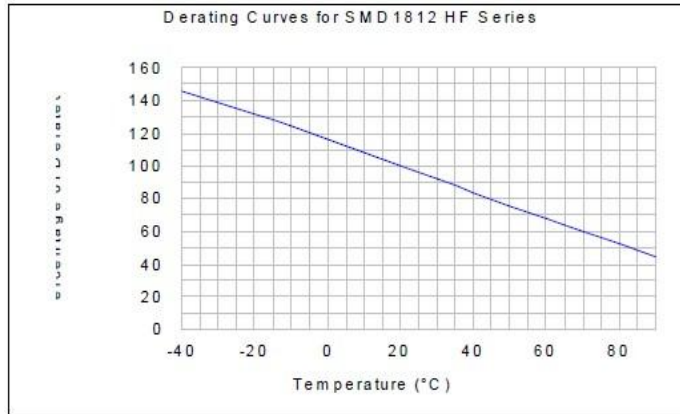
Test	Conditions	Resistance change
Passive aging	+85°C, 1000 hrs.	I HOLD/I TRIP PASS
Humidity aging	+85°C, 85% R.H. , 168 hours	I HOLD/I TRIP PASS
Thermal shock	+85°C to -40°C, 20 times	I HOLD/I TRIP PASS
Resistance to solvent	MIL-STD-202,Method 215	电阻不變化
Vibration	MIL-STD-202,Method 201	电阻不變化
Ambient operating conditions : - 40 °C to +85 °C		
Maximum surface temperature of the device in the tripped state is 125 °C		

Thermal Derating Chart

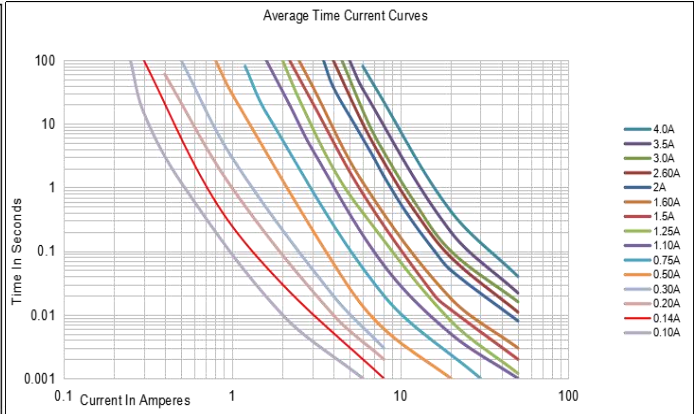
Recommended Hold Current(A) at Ambient Temperature(°C)

Model	Ambient Operation Temperature								
	-40°C	-20°C	0°C	25°C	40°C	50°C	60°C	70°C	85°C
K1812L350DR	4.84	4.39	4.04	3.50	2.98	2.66	2.35	1.88	1.55

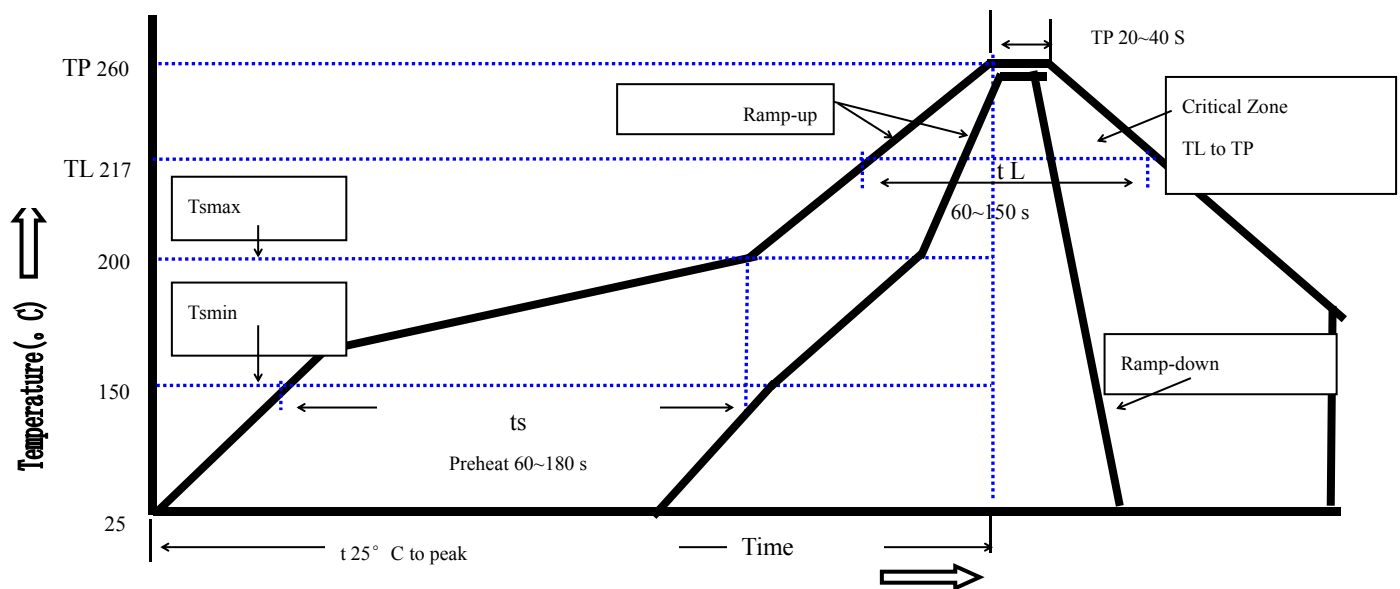
Thermal Derating Curve



Average Time-Current Curve



Soldering Parameters



Profile Feature	Pb-Free Assembly
Average Ramp-Up Rate(Ts max to T p)	3°C/second mac.
Preheat	
-Temperature Min(Ts min)	150°C
-Temperature Max(Ts max)	200°C
-Time(Ts min to Ts max)	60~180 seconds
Time maintained above:	
-Temperature(TL)	217°C
-Time(tL)	60~150 seconds
Peak Temperature(Tp)	260°C

Ramp-Down Rate	6°C/second max.
Time 25°C to Peak Temperature	8 minutes max
Storage Condition	遮光密封

Recommended reflow methods: IR, vapor phase oven, hot air oven, N2 environment for lead-free

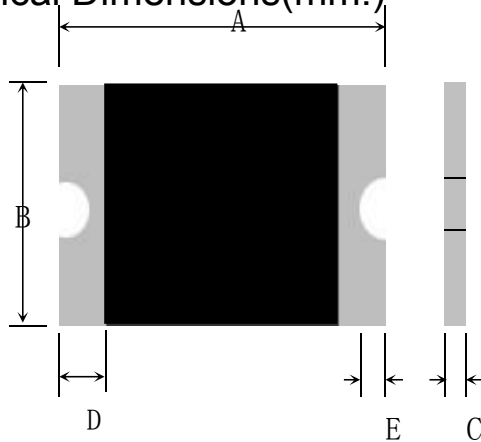
Recommended maximum paste thickness is 0.25mm

Devices can be cleaned using standard industry methods and solvents.

Note 1: All temperature refer to topside of the package, measured on the package body surface.

Note 2: If reflow temperatures exceed the recommended profile, devices may not meet the performance requirements.

Physical Dimensions(mm.)



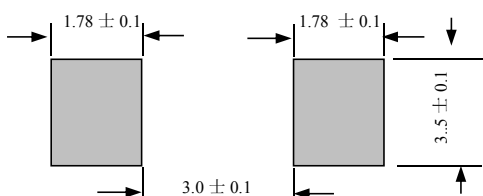
Model	A		B		C		D	E
	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Min.
K1812L350DR	4.37	4.73	3.07	3.41	0.80	1.50	0.30	0.25

Termination Pad Characteristics

Terminal pad materials: Tin-plated Nickel-Copper

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

Recommended Pad Layout (mm.)



注：在此印锡面积条件下，推荐钢网厚度为 $\geq 0.12\text{MM}$ (钢网厚度不够要增大刷锡面积)

Packaging Quantity

Part Number	Quantity
K1812L350DR	1,500 pcs/reel

Tape & reel packaging per EIA481-1