1812 Series

1. Summary

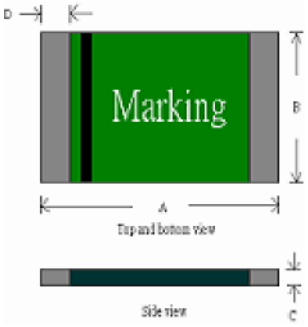
(a) **RoHS Compliant (Lead Free) Product**
(b) **Applications: All high-density boards**
(c) **Product Features: Small surface mountable, Solid state, Faster time to trip than standard SMD devices, Lower resistance than standard SMD devices**
(d) **Operation Current: 140mA~3.0A**
(e) **Maximum Voltage: 6V~60V**
(f) **Temperature Range : - 4 0 ℃ t o 85℃**

2. Electrical Characteristics (2 3 ℃)

Part Number	Hold Current	Trip Current	Rated Voltage	Max Current	Typical Power	Max Time to Trip		Resistance Tolerance	
						Current	Time	R_{MIN}	$R1_{MAX}$
	I_H, A	I_T, A	V_{MAX},	I_{MAX}, A	Pd, W	Amp	Sec	Ω	Ω
SMD014	0.14	0.30	60	10	0.8	8.0	0.008	1.20	6.50
SMD020	0.20	0.40	30	10	0.8	8.0	0.02	0.80	5.00
SMD035	0.35	0.70	16	40	0.8	8.0	0.10	0.32	1.50
SMD050	0.50	1.00	16	40	0.8	8.0	0.15	0.15	1.00
SMD075	0.75	1.50	16	40	0.8	8.0	0.20	0.11	0.45
SMD110	1.10	2.20	6	40	0.8	8.0	0.30	0.04	0.21
SMD110-16	1.10	1.95	16	40	0.8	8.0	0.50	0.04	0.18
SMD125	1.25	2.50	6	40	0.8	8.0	0.40	0.05	0.14
SMD150	1.50	3.00	6	40	0.8	8.0	0.50	0.04	0.11
SMD160	1.60	3.20	6	40	0.8	8.0	0.50	0.03	0.10
SMD200	2.00	3.50	8	40	0.8	8.0	2.00	0.02	0.07
SMD260R	2.60	5.00	6	100	1.0	8.0	2.50	0.015	0.047
SMD300	3.00	5.00	6	100	1.0	8.0	4.00	0.012	0.040

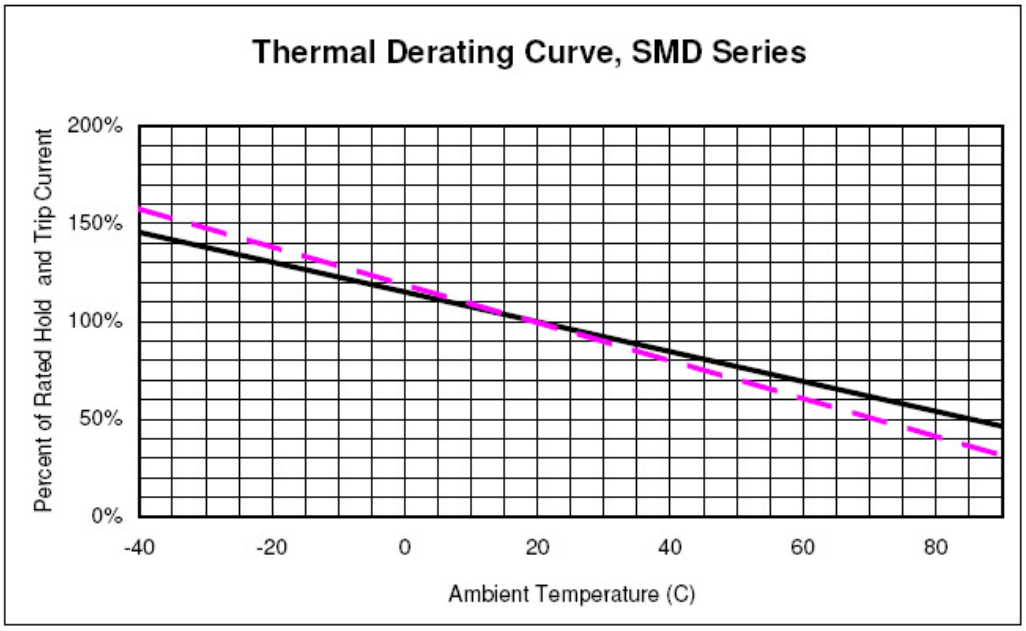
I_H=Hold current-maximum current at which the device will not trip at 2 3 ℃ still air.
I_T=Trip current-minimum current at which the device will always trip at 2 3 ℃ still air.
V_{MAX}=Maximum voltage device can withstand without damage at it rated current.(I_{MAX})
I_{MAX}= Maximum fault current device can withstand without damage at rated voltage (V_{MAX}).
Pd=Typical power dissipated-type amount of power dissipated by the device when in the tripped state in 2 3 ℃ still air environment.
R_{MIN}=Minimum device resistance at 2 3 ℃ prior to tripping.
$R1_{MAX}$=Maximum device resistance at 2 3 ℃ measured 1 hour post trip.
Termination pad characteristics
Termination pad materials: Tin Plated Copper

3. SMD Product Dimensions (Millimeters)



Part Number	A		B		C	D
	Min	Max	Min	Max	Min	Max	Min
SMD014	4.37	4.73	3.07	3.41	0.60	0.90	0.30
SMD020	4.37	4.73	3.07	3.41	0.60	0.90	0.30
SMD035	4.37	4.73	3.07	3.41	0.40	0.70	0.30
SMD050	4.37	4.73	3.07	3.41	0.35	0.65	0.30
SMD075	4.37	4.73	3.07	3.41	0.35	0.65	0.30
SMD110	4.37	4.73	3.07	3.41	0.25	0.55	0.30
SMD110-16	4.37	4.73	3.07	3.41	0.25	0.90	0.30
SMD125	4.37	4.73	3.07	3.41	0.25	0.55	0.30
SMD150	4.37	4.73	3.07	3.41	0.25	0.55	0.30
SMD160	4.37	4.73	3.07	3.41	0.25	0.90	0.30
SMD200	4.37	4.73	3.07	3.41	0.50	0.90	0.30

4. Thermal Derating Curve



A= SMD 075, 110, 110-16, 125,150, 160 & 200

B= SMD 014, 020, 035, 050