Performance Specification

Model	Marking	V max (Vdc)	Imax (A)	I hold @25°C (A)	I trip @25°C (A)	Pd Typ. (W)	Maximum Time To Trip		Resistance	
							Current (A)	Time (Sec)	R i min (Ω)	R1max (Ω)
SMD0805P050TF/12	5	12.0	30	0.50	1.00	0.5	8.0	0.10	0.100	0.850

V max = Maximum operating voltage device can withstand without damage at rated current (Imax).

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.

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

Ri min/max = Minimum/Maximum device resistance prior to tripping at 25°C.

R1max = 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.	±5% typical
Humidity aging	+85°C, 85% R.H. , 168 hours	±5% typical
Thermal shock	+85°C to -40°C, 20 times	±33% typical
Resistance to solvent	MIL-STD-202,Method 215	No change
Vibration	MIL-STD-202,Method 201	No change
Ambient operating conditions : - 40 °C to +85 °C		
Maximum surface temperature of the device in the tripped state is 125 °C		

Agency Approval and Environmental Complianc

Agency	File Number
UL	E486890
TUV	pending

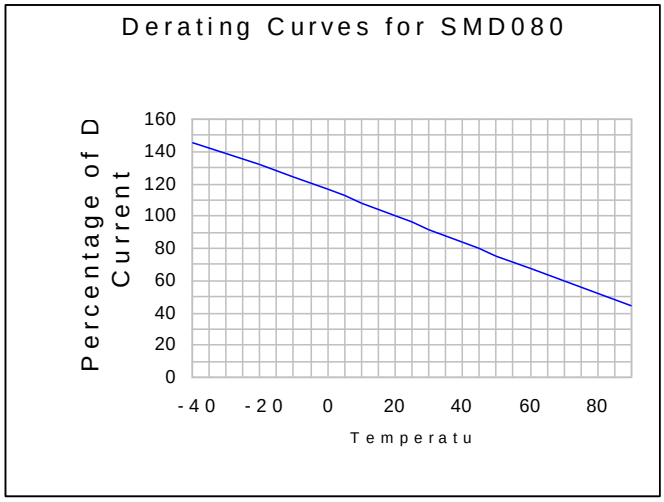
Regulation	Standard
Pb RoHS	2011/65/EU
HF	EN14582

Thermal Derading Chart

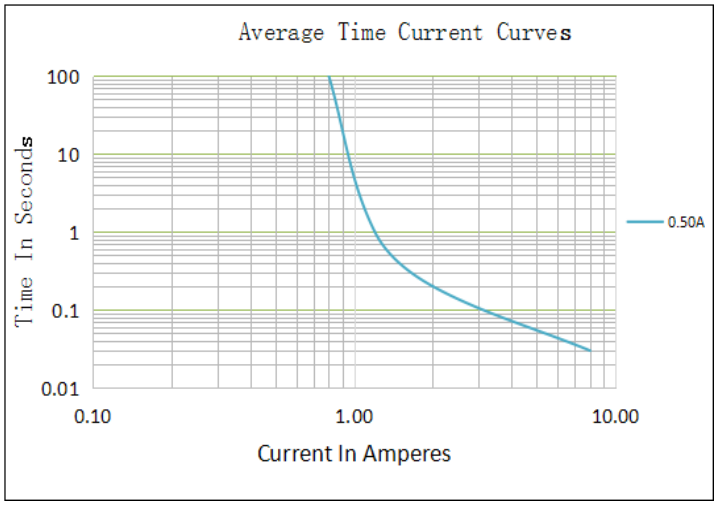
Recommended Hold Current(A) at Ambient Temperature(°C)

Model	Ambient Operation Temperature								
	-40°C	-20°C	0°C	25°C	40°C	50°C	60°C	70°C	85°C
SMD0805P050TF/12	0.68	0.62	0.55	0.50	0.40	0.37	0.33	0.29	0.23

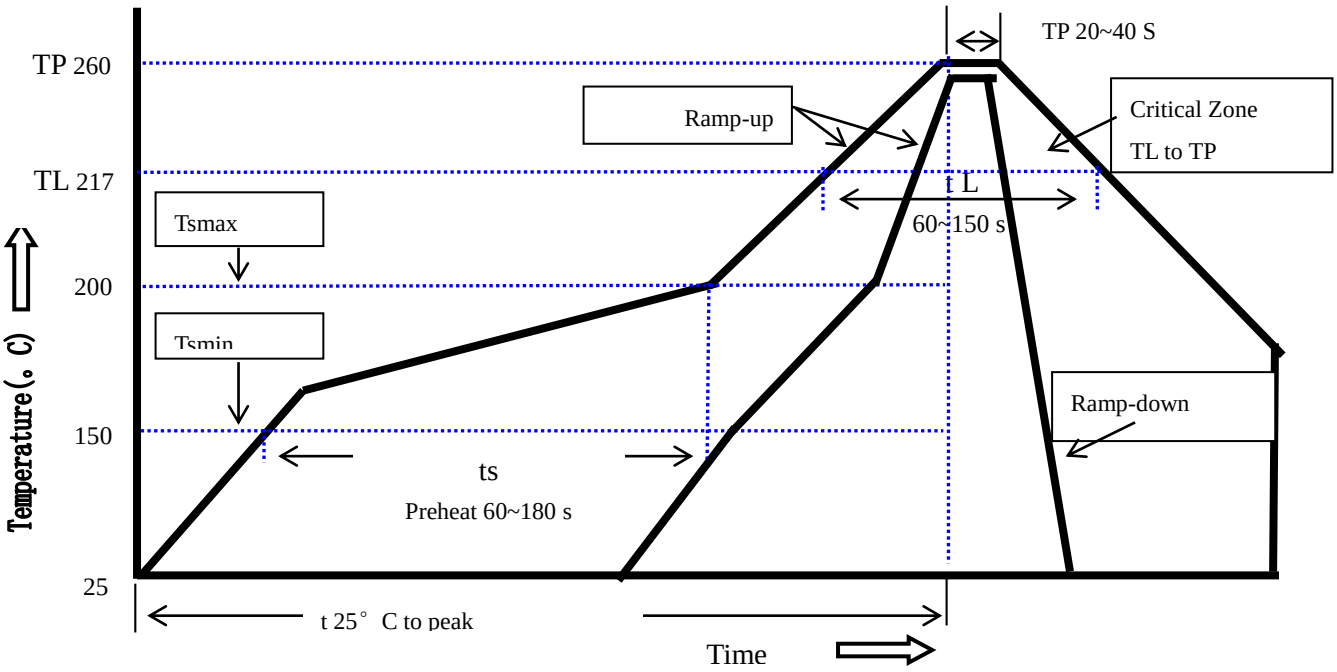
Thermal Derating Curve



Average Time-Current Curve



Soldering Parameters



Profile Feature	Pb-Free Assembly
Average Ramp-Up Rate(Ts max to T p)	3℃/second mac.
Preheat	
-Temperature Min(Ts min)	150℃
-Temperature Max(Ts max)	200℃

Time(Ts min to Ts max)	60~180 seconds
Time maintained above:	
-Temperature(TL)	217℃
-Time(tL)	60~150 seconds
Peak Temperature(Tp)	260℃
Ramp-Down Rate	6℃/second max.
Time 25℃ to Peak Temperature	8 minutes max
Storage Condition	0℃~35℃,30%-60%RH

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

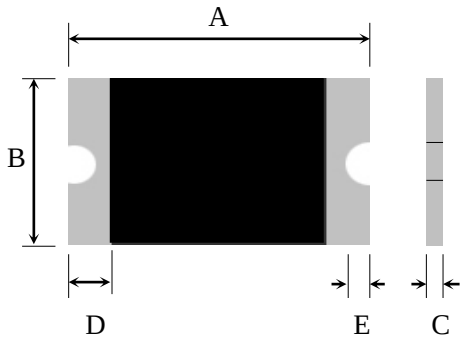
Recommended maximum paste thickness is 0.25mm

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.)



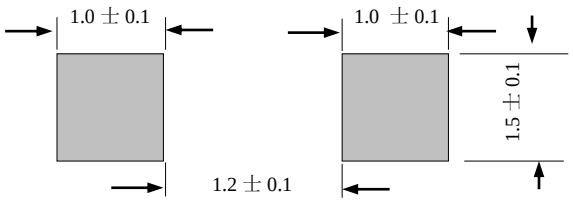
型號	A		B		C		D	E
	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Min.
SMD0805P050TF/12	2.00	2.20	1.20	1.50	0.50	1.10	0.20	0.10

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



Packaging Quantity

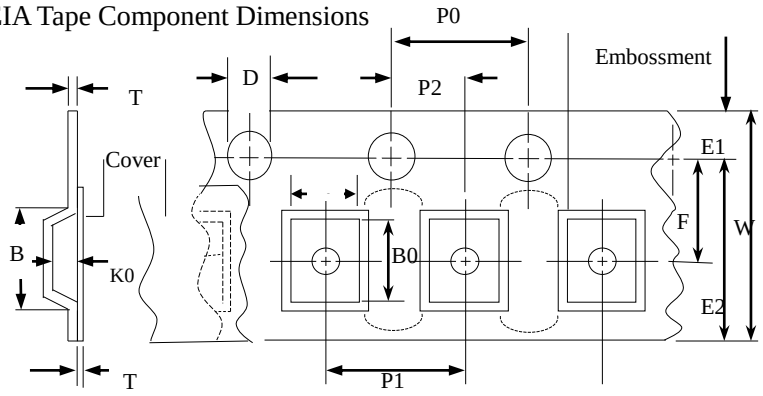
Part Number	Quantity
SMD0805P050TF/12	4,000 pcs/reel

Tape & reel packaging per EIA481-1

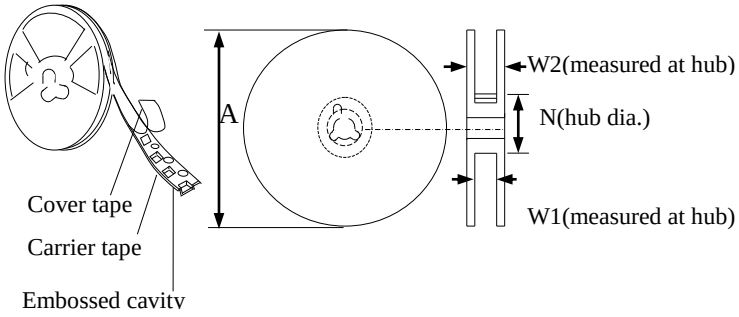
Tape And Reel Specifications (mm)

Governing Specifications	EIA 481-1
W	8.0 ± 0.3
P0	4.0 ± 0.10
P1	4.0 ± 0.10
P2	2.0 ± 0.05
A0	1.45 ± 0.10
B0	2.30 ± 0.10
B1max.	4.35
D0	1.55 + 0.1, -0
F	3.5 ± 0.05
E1	1.75 ± 0.10
E2min.	6.25
T	0.25
T1max.	0.1
K0	0.74 ± 0.1
Leader min.	390
Trailer min.	160
Reel Dimensions	
A max.	178
N min.	60
W1	9.0 ± 0.5
W2	12.0 ± 0.05

EIA Tape Component Dimensions



EIA Reel Dimensions



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