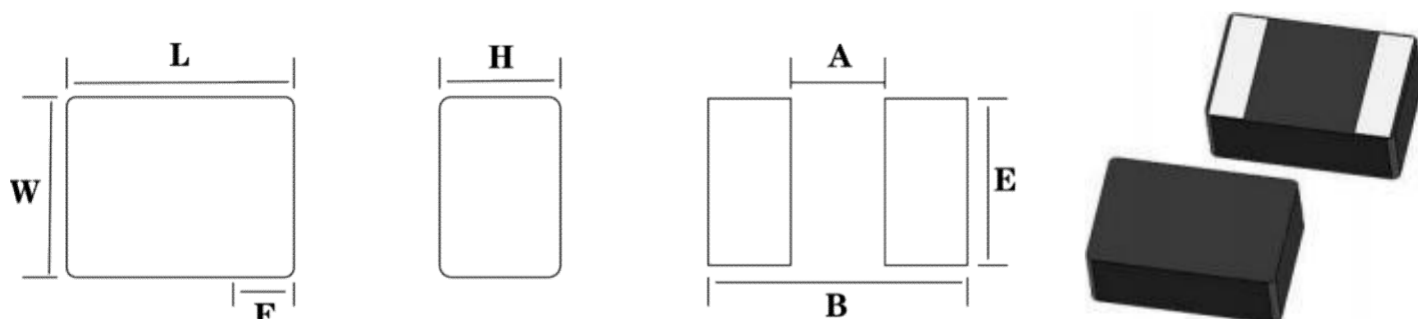
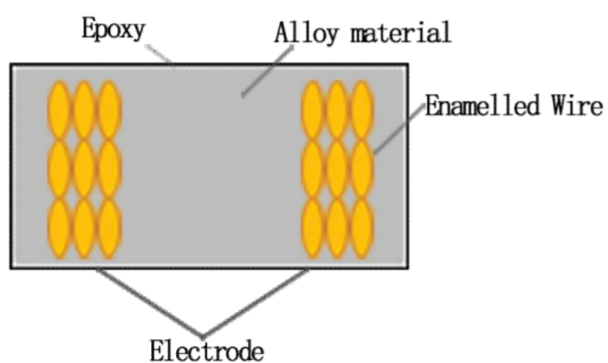


SMD Molding Power Inductor
◆ Dimensions(Unit:mm):


Series	L	W	H	F	Recommend Land Patterns		
					A	B	E
SLO252012T	2.5±0.2	2.0±0.2	1.2 Max	0.90 Typ	0.70 Typ	2.6Typ	2.1Ttp

◆ Structural drawing


NO	Component	Material
1	Body	Alloy material
2	Winding	Enamelled Wire
3	Shield	Epoxy
4	Electric	Base Plating-Cu
		Base Plating-Ni
		Base Plating-Sn

◆ Package Quantity: 3000PCS/Reel

◆ Specification

Part No	Inductance Ls(uH)	Direct Current Resistance DCR(mΩ)		Temperature Rise Current Irms(A)	Saturation Current Isat(A)
SLO252012TR24MTT	0.24±20%	10.4 Typ	12.5 Max	6.4 Max	9.0 Max
SLO252012TR33MTT	0.33±20%	13.5 Typ	17.0Max	6.1 Max	8.0 Max
SLO252012TR47MTT	0.47±20%	14.0 Typ	18.0Max	6.0 Max	6.8 Max
SLO252012TR68MTT	0.68±20%	19.0 Typ	23.0 Max	5.0 Max	6.0 Max
SLO252012T1R0MTT	1.0±20%	33.0 Typ	39.6 Max	4.0 Max	4.5 Max
SLO252012T1R5MTT	1.5±20%	48.0Typ	56.0 Max	3.2 Max	3.8 Max
SLO252012T2R2MTT	2.2±20%	64.0Typ	79.0 Max	2.8 Max	3.3 Max
SLO252012T3R3MTT	3.3±20%	103 Typ	125 Max	1.8 Max	2.5 Max
SLO252012T4R7MTT	4.7±20%	145 Typ	180 Max	1.5 Max	2.1 Max
SLO252012T6R8MTT	6.8±20%	225 Typ	265 Max	1.3 Max	1.9 Max
SLO252012T100MTT	10.0±20%	330 Typ	400 Max	1.05 Max	1.45 Max

◆ Test condition & equipment:

Item	Test condition	Test equipment
Ls	1MHz/1V	HP4263BIM3532-50 or equivalent
DCR	direct-current	HP4263BRM3545 or equivalent
Isat	1MHz/1V	Microtest 6379 &6220 or equivalent
Irms	ambient temperature 20℃	Microtest 6379 &6220 or equivalent

Isat: The DC current at which the inductance drops approximate 30%from its value without current,
Load current time withinLs.

Irms: The DC current is inductor surface temperature to rise by 40℃

Operating Temperature Range:-40℃ ~ +125℃,Including self-heating

Storage Conditions:

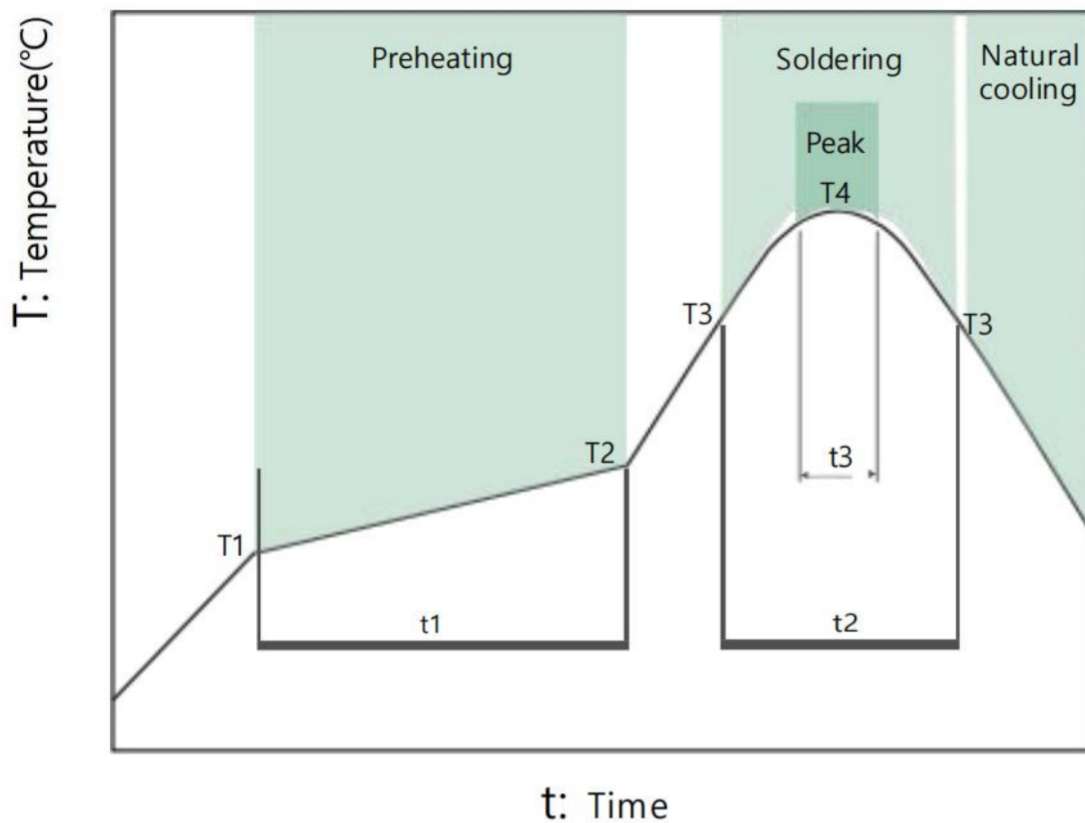
Store products in a warehouse in compliance with the following condition:

Temperature: Inductors (product with taping) -10 to +40℃

Inductors body:-40 to +85℃

Humidit :30~70%RH

◆ Recommended Reflow Profile



Preheating			Soldering		Peak	
Temp		Time	Temp	Time	Temp	Time
T1	T2	t1	T3	t2	T4	t3
150°C	180°C	60 to 120s	230°C	30 to 50s	250 to 260°C	10s Max

◆ Reliability Mechanical

No	Items	Requirements	Test Methods and Remarks
1	Insulation Resistance	$\geq 100\text{M}\Omega$	100V DC between inductor coil and The middle of the top surface of the body for 60 seconds
2	Solderability	90% or more of electrode area shall be coated by new solder.	Dip pads in flux and dip in solder pot (96.5Sn/3.0Ag/0.5Cu) at $(245\pm 5)^{\circ}\text{C}$ for (5 ± 1) seconds
3	Resistance to Soldering Heat	No visible mechanical damage. Inductance change: Within $\pm 10\%$	Dip pads in flux and dip in solder pot (96.5Sn/3.0Ag/0.5Cu) at $(260\pm 5)^{\circ}\text{C}$ for (10 ± 1) seconds
4	Adhesion of terminal electrode	Strong bond between the pad and the core, without come off PC board.	Inductors shall be subjected to $(260\pm 5)^{\circ}\text{C}$ for (20 ± 5) s Soldering in the base with 0.3mm solder. And then apply electrode way plus test 10 N for (10 ± 1) seconds.
5	High temperature	No visible mechanical damage. Inductance change: Within $\pm 10\%$	Temperature is $(+85\pm 2)^{\circ}\text{C}$ and keep (96 ± 2) hours.
6	Low temperature	No visible mechanical damage. Inductance change: Within $\pm 10\%$	Temperature is $(-40\pm 2)^{\circ}\text{C}$ and keep (96 ± 2) hours
7	Thermal shock	No visible mechanical damage. Inductance change: Within $\pm 10\%$	The test sample shall be placed at $(-40\pm 3)^{\circ}\text{C}$ and $(125\pm 2)^{\circ}\text{C}$ for (30 ± 3) min, different temperature conversion time is 2~3 minutes. The temperature cycle shall be repeated 32 cycles. Placed at room temperature for 2 hours, within 48 hours of testing
8	Temperature characteristic	Inductance change Pc-b, Pc-d: Within $\pm 20\%$	A: $+20^{\circ}\text{C}$ (30~45) min → b: -40°C (30~45) min → c: $+20^{\circ}\text{C}$ (30~45) min → d: $+125^{\circ}\text{C}$ (30~45) min → e: $+20^{\circ}\text{C}$ (30~45) min $P_{c-b} = \frac{L_b - L_c}{L_e} \times 100\%$; $P_{c-d} = \frac{L_d - L_c}{L_e} \times 100\%$
9	Static Humidity	No visible mechanical damage. Inductance change: Within $\pm 10\%$	Inductors shall be subjected to $(93\pm 3)\%\text{RH}$. at $(60\pm 2)^{\circ}\text{C}$ for (96 ± 2) h. Placed at room temperature for 2 hours, within 48 hours of testing.
10	Life	No visible mechanical damage. Inductance change: Within $\pm 10\%$	Inductors shall be stored at $(85\pm 2)^{\circ}\text{C}$ for (1000 ± 24) hours with Irms applied. Placed at room temperature for 2 hours, within 48 hours of testing