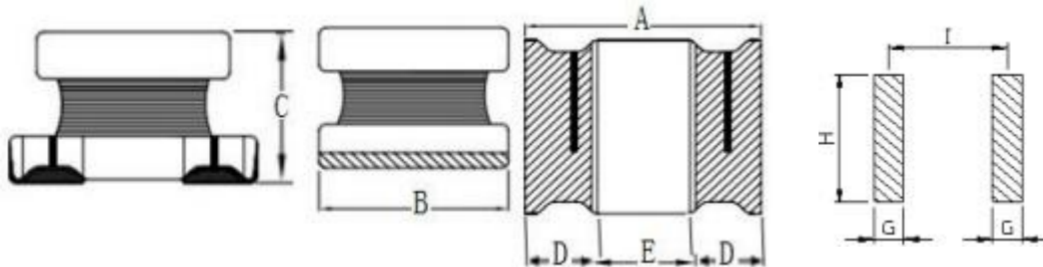


**SMD Power Inductors**
**◆ Dimensions(Unit:mm):**


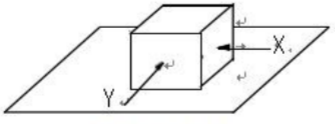
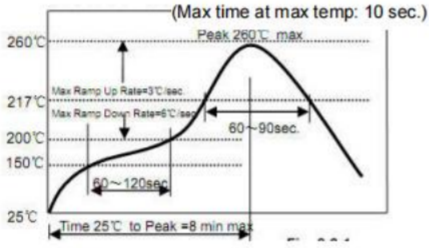
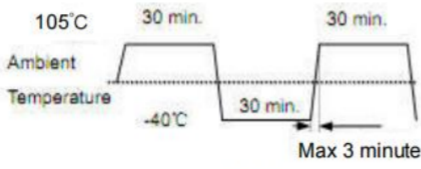
<b>A</b>	<b>3.20±0.3</b>
<b>B</b>	<b>2.50±0.2</b>
<b>C</b>	<b>2.00±0.2</b>
<b>D</b>	<b>0.90 Typ</b>
<b>E</b>	<b>1.30 Typ</b>
<b>G</b>	<b>1.20 Typ</b>
<b>H</b>	<b>2.70 Typ</b>
<b>I</b>	<b>2.20 Typ</b>

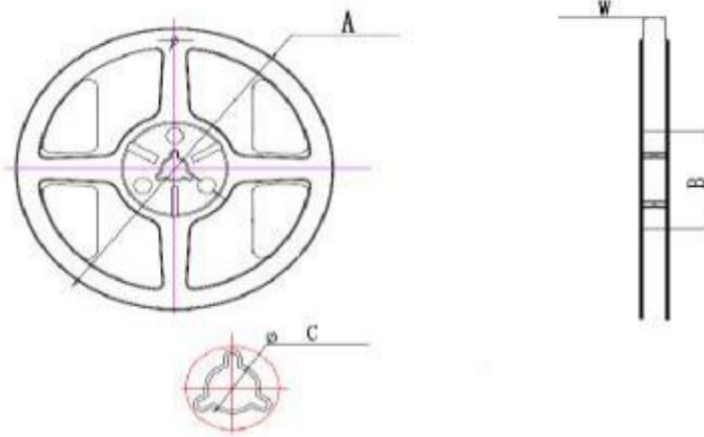
**◆ Electrical Characteristics:**

Part No	Inductance ( $\mu$ H)	Tolerance ( $\pm\%$ )	Test Condition	RDC ( $\Omega$ )	Idc (mA)	S.R.F (MHz)
				Max	MAX	Min
SCN322520N1R0MST	1.0	20	1MHz/1.0V	0.11	800	96.0
SCN322520N2R2MST	2.2	20	1MHz/1.0V	0.16	600	64.0
SCN322520N3R3MST	3.3	20	1MHz/1.0V	0.26	530	50.0
SCN322520N4R7MST	4.7	20	100MHz/1.0V	0.26	530	43.0
SCN322520N6R8KST	6.8	10	100MHz/1.0V	0.40	350	30.0
SCN322520N100KST	10.0	10	100MHz/1.0V	0.47	300	23.0
SCN322520N220KST	22.0	10	100MHz/1.0V	0.92	250	15.0
SCN322520N330KST	33.0	10	100MHz/1.0V	1.43	200	12.0
SCN322520N470KST	47.0	10	100MHz/1.0V	1.69	170	10.0
SCN322520N680KST	68.0	10	1MHz/1.0V	2.86	130	8.4
SCN322520N101KST	100.0	10	1MHz/1.0V	4.55	100	6.8
SCN322520N151KST	150.0	10	1MHz/1.0V	6.63	80	5.5
SCN322520N221KST	220.0	10	1MHz/1.0V	13.0	70	4.5
SCN322520N331KST	330.0	10	1MHz/1.0V	15.6	60	3.6
SCN322520N471KST	470.0	10	1MHz/1.0V	24.7	60	3.0
SCN322520N561KST	560.0	10	1MHz/1.0V	28.0	60	2.8

※: This indicates the value of current when the inductance is 10% lower than its initial value at D.C superposition and D.C current when temperature rise  $\Delta T=20^{\circ}\text{C}$ . ( $T_a=25^{\circ}\text{C}$ )

**◆ Reliability Test**

Items	Requirements	Test Method/Condition
<b>Terminal Strength</b>	No removal or split of the termination or other defects shall occur  Fig.7.1-1	1.Solder the inductor to the testing jig (glass epoxy board shown in Fig.7.1-1) using eutectic solder. Then apply a force in the direction of the arrow. 2.10N force 3.Keep time: 5±2s
<b>High Temperature</b>	1.No visible mechanical damage 2.Inductance change: Within ±10%.	1.Storage Temperature :125±5°C 2.Duration : 96 ±4 Hours 3.Recovery : then measured at room ambient temperature after placing 24 hours.
<b>Low Temperature</b>	1.No visible mechanical damage 2.Inductance change: Within ±10%	1.Temperature and time: -40±5°C 2.Duration: 96 ±4 hours 3.Recovery : then measured at room ambient temperature after placing 24 hours
<b>Vibration test</b>	1.No visible mechanical damage 2.Inductance change: Within ±10%	1.Frequency range:10Hz~55Hz~10Hz 2.Amplitude:1.5mm p-p 3.Direction:X,Y,Z 4.Time:1 minute/cycle,2hours per axis
<b>High Temperature Storage Tested</b>	1.No visible mechanical damage. 2.Inductance change: Within ±10%	1.Storage Temperature :60±2°C 2.Relative Humidity :90-95% RH 3.Duration : 96 ±4 Hours 4.Recovery : then measured at room ambient temperature after placing 24 hours
<b>Resistance to Soldering Heat</b>	1.No visible mechanical damage 2.Inductance change: Within ±10%  Fig.7.6-1	1.Re-flowing Profile: Please refer to Fig.7.6-1 2.Test board thickness: 1.0mm 3.Test board material: glass epoxy resin 4.The chip shall be stabilized at normal condition for 1~2 hours before measuring
<b>Thermal Shock</b>	1.No visible mechanical damage. 2.Inductance change: Within ±10%  Fig.7.7-1	1.Temperature and time: -40±3°C for 30±3 min→ 105°C for 30±3min, please refer to Fig.7.7-1 2.Transforming interval: Max,3 minute 3.Tested cycle: 100 cycles 4.The chip shall be stabilized at normal condition for 1~2 hours before measuring

**◆ Packaging**


Part NO	A	B	C	W	Quantity
SCN322520N Series	180±0.5	100±0.5	13.5±0.5	12.5±0.5	2000Pcs/R