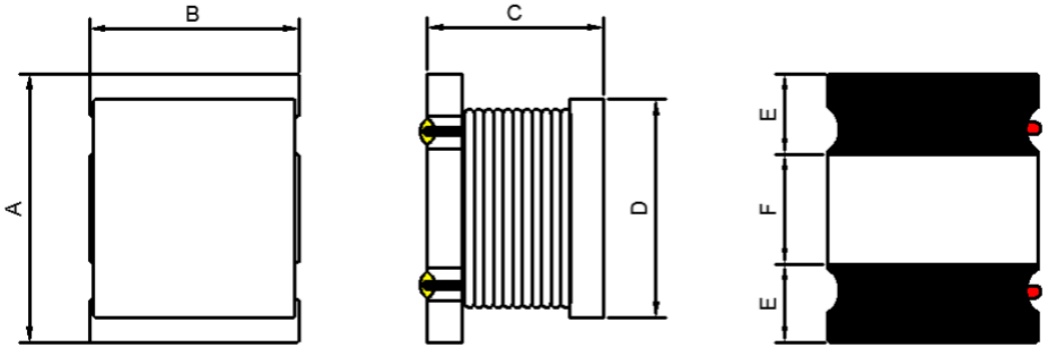
SMD Power Inductors

◆ Dimensions(Unit:mm):



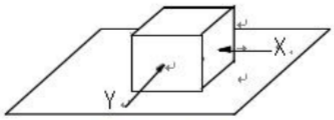
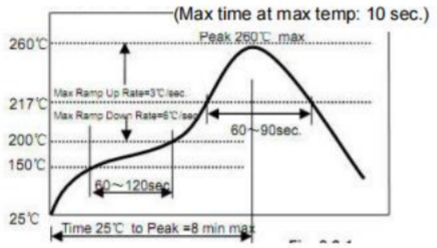
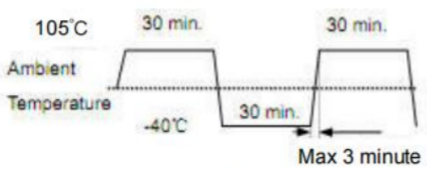
A	3.20±0.3
B	2.50±0.2
C	2.00±0.2
D	2.50±0.3
E	1.10±0.3
F	1.00±0.3

◆ Electrical Chapacteristics:

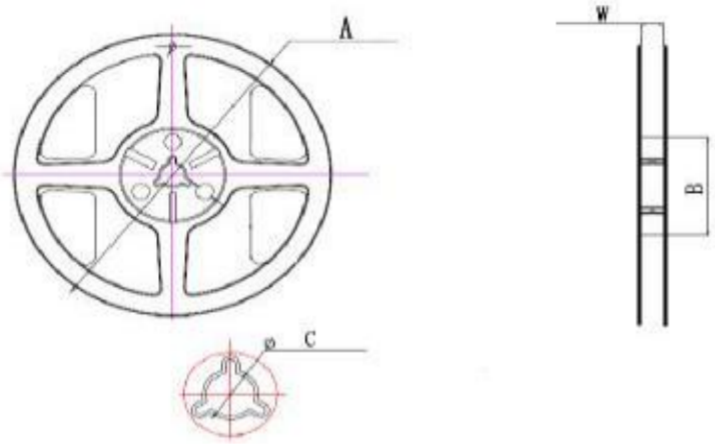
Part No	Inductance (uH)	Tolerance (±%)	Test Condition	RDC (Ω)	Idc (A)	S.R.F (MHz)
				Max	MAX	Min
SCN322520NR27MST	1.0	20	1MHz/1.0V	0.045	1.25	250
SCN322520N1R0MST	2.2	20	1MHz/1.0V	0.078	1.00	100
SCN322520N2R2MST	3.3	20	1MHz/1.0V	0.126	0.79	64
SCN322520N4R7MST	4.7	20	1MHz/1.0V	0.195	0.65	43
SCN322520N100KST	6.8	10	1MHz/1.0V	0.390	0.45	26
SCN322520N220KST	10.0	10	1MHz/1.0V	0.923	0.25	17
SCN322520N101KST	22.0	10	1MHz/1.0V	4.55	0.10	10
SCN322520N221KST	33.0	10	1MHz/1.0V	10.92	0.07	6.8

※：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 ΔT=20℃.(Ta=25℃)

◆Rellability Test

Items	Requirements	Test Method/Condition
Terminal Strength	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 Fing.7.1-1) using eutectic solder. Then apply a force in the direction of the arrow. 2.10N force 3.Keep time: 5±2s
High Temperature	1.No visible mechanical damage 2.Inductance change: Within ±10%.	1.Storage Temperature :125±5℃ 2.Duration : 96 ±4 Hours 3.Recovery : then measured at room ambient temperature after placing 24 hours.
Low Temperature	1.No visible mechanical damage 2.Inductance change: Within ±10%	1.Temperature and time: -40±5℃ 2.Duration: 96 ±4 hours 3.Recovery : then measured at room ambient temperature after placing 24 hours
Vibration test	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
High Temperature Storage Tested	1.No visible mechanical damage. 2.Inductance change: Within ±10%	1.Storage Temperature :60±2℃ 2.Relative Humidity :90-95% RH 3.Duration : 96 ±4 Hours 4.Recovery : then measured at room ambient temperature after placing 24 hours
Resistance to Soldering Heat	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
Thermal Shock	1.No visible mechanical damage. 2.Inductance change: Within ±10%  Fig.7.7-1	1.Temperature and time: -40±3℃ for 30±3 min→ 105℃ 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