

1. Features of SLNR5341 Series :

- Miniature SMD Shielded Power Inductor in a 5.3*5.3mm foot print.
- Low profile : 4.1mm max. height.
- Inductance Range: 1.0uH to 680.0 uH , custom values are welcomed.
- Ideal for DC to DC power converter application.
- Operating Temperature Range: -55°C to + 130°C.
- T & R Qty: 1500 pcs , 13" Reel with plastic tape 12mm wide and 8mm pocket spacing.
- RoHs & HF Compliant.

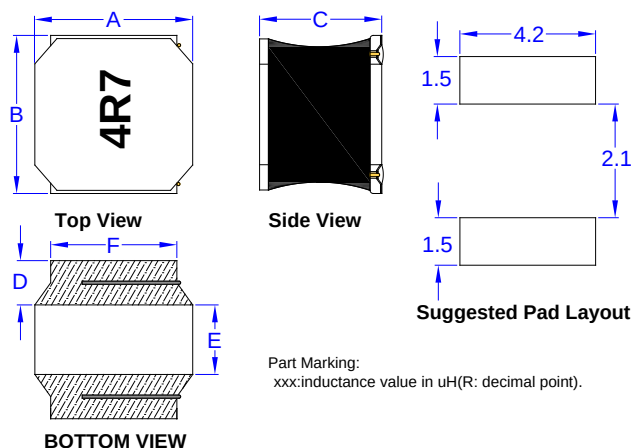


2. Electrical Characteristics of SLNR5341 Series:

ITG Part Number	OCL ¹ (uH) ±20% or 30%	DCR (mΩ) ±30%	Isat ² (Amp.) @25°C	Irms ³ (Amp.) @25°C	SRF (MHz) Min.	Marking
SLNR5341-1R0NHF	1.00 , 30%	14.00	7.50	5.00	90.00	1R0
SLNR5341-1R5NHF	1.50 , 30%	20.00	6.00	3.60	60.00	1R5
SLNR5341-2R2NHF	2.20 , 30%	22.00	4.60	3.50	42.00	2R2
SLNR5341-3R3NHF	3.30 , 30%	27.00	3.80	3.30	32.00	3R3
SLNR5341-4R7NHF	4.70 , 30%	29.00	3.30	3.10	28.00	4R7
SLNR5341-6R8MHF	6.80 , 20%	49.00	2.60	2.30	21.00	6R8
SLNR5341-100MHF	10.00 , 20%	56.00	2.30	2.10	18.00	100
SLNR5341-150MHF	15.00 , 20%	80.00	2.00	1.80	13.00	150
SLNR5341-220MHF	22.00 , 20%	126.00	1.60	1.40	9.00	220
SLNR5341-330MHF	33.00 , 20%	180.00	1.30	1.20	7.00	330
SLNR5341-470MHF	47.00 , 20%	310.00	1.10	0.90	6.00	470
SLNR5341-681MHF	680.00 , 20%	3846.00	0.30	0.25	3.00	681

3. Mechanical Dimension of SLNR5341 Series (Unit:mm):

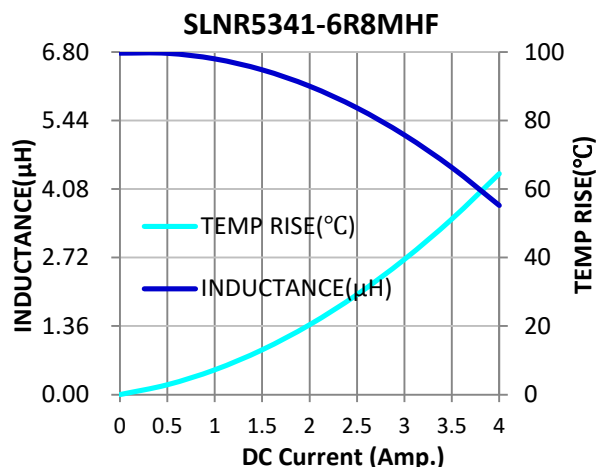
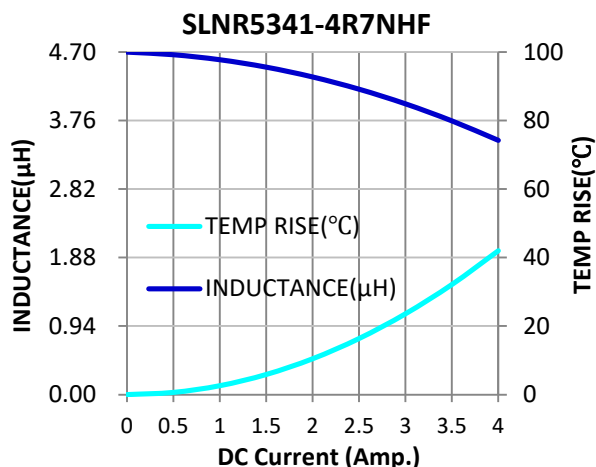
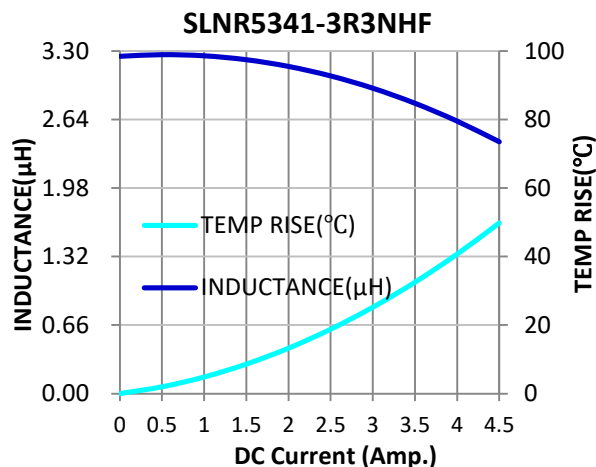
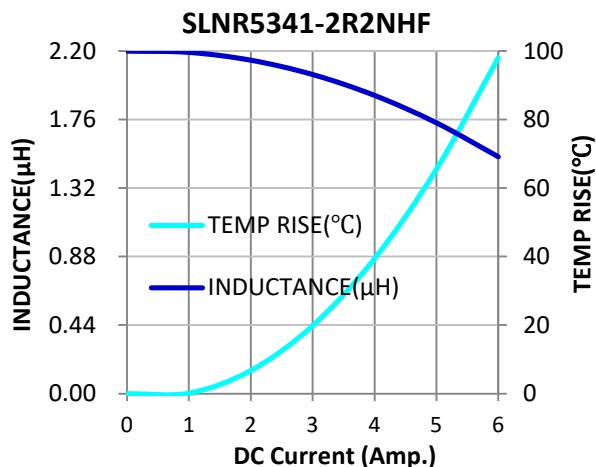
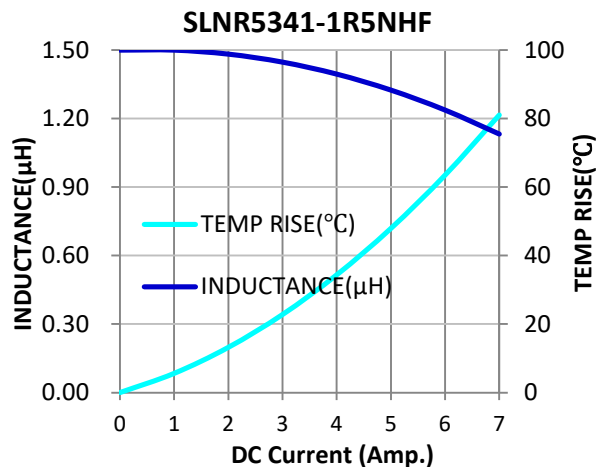
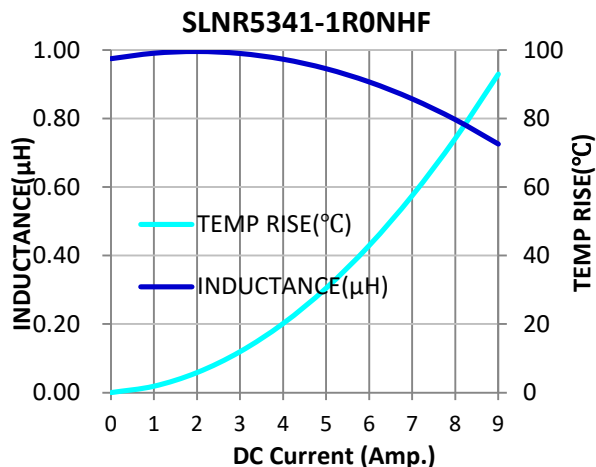
A	B	C	D	E	F
±0.30	±0.30	(Max.)	±0.30	±0.20	±0.30
5.00	5.00	4.10	1.25	2.50	4.00



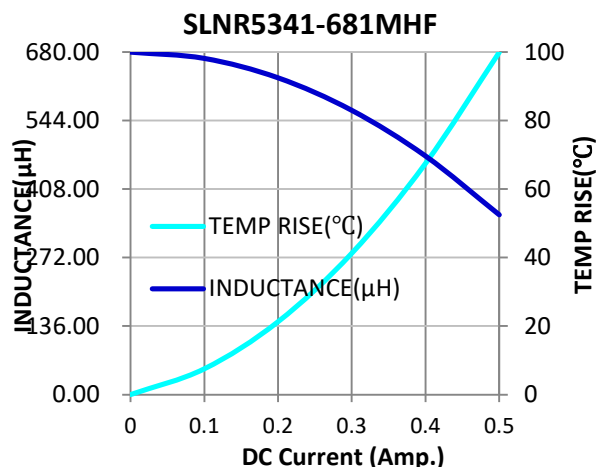
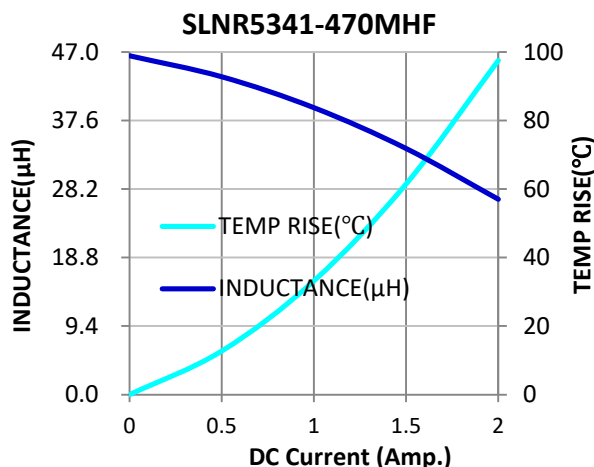
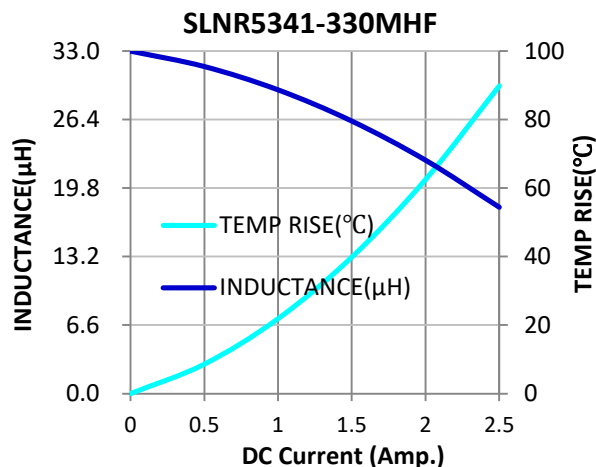
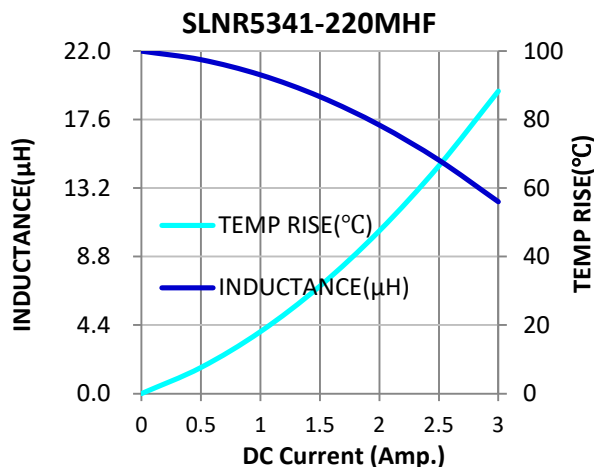
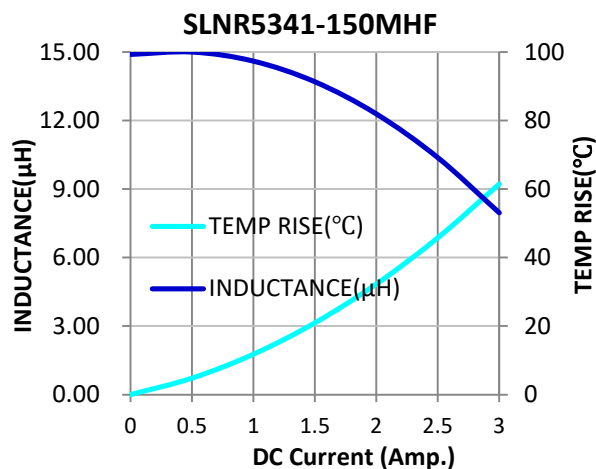
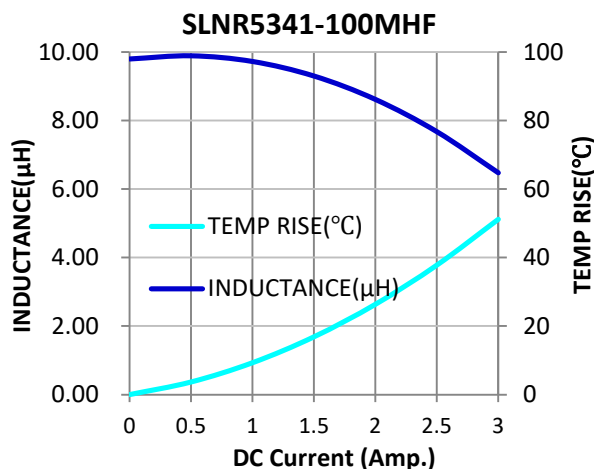
Notes:

- 1>. Open Circuit Inductance (OCL) and L@Isat test condition: 100KHz, 1.0V (Ta=25°C).
- 2>. Isat: DC current that will cause inductance to drops approximately by 30% from OCL(Ta=25°C).
- 3>. Irms: DC current that will cause an approximate temperature rise (ΔT) of 40°C (Ta=25°C).

4. Inductance vs. Temperature Rise Characteristics of SLNR5341 Series:

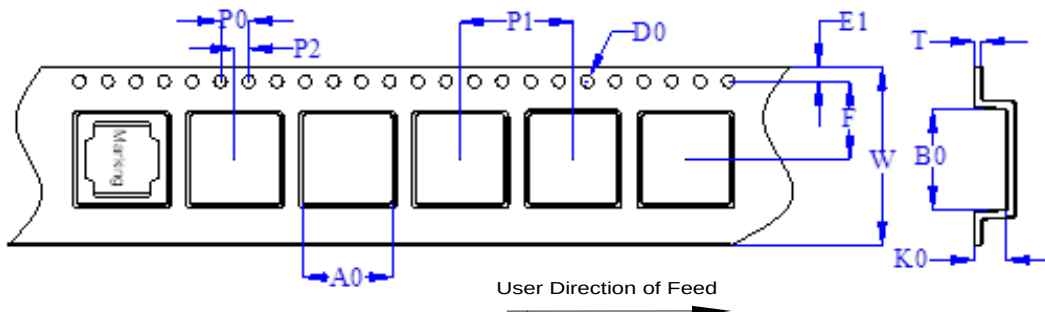


4. Inductance vs. Temperature Rise Characteristics of SLNR5341 Series:



5. PACKAGE SPECIFICATION.(UNIT:mm):

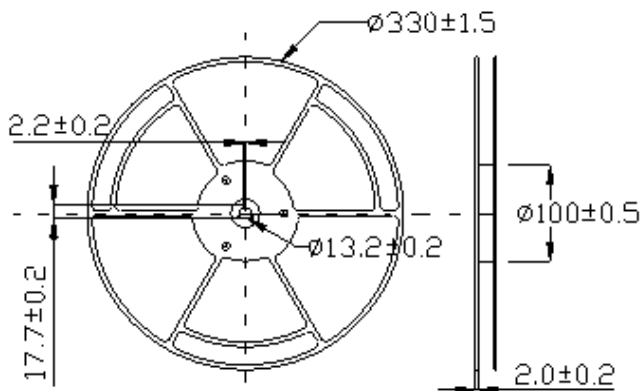
(1).ENCAPSULATION MODE:



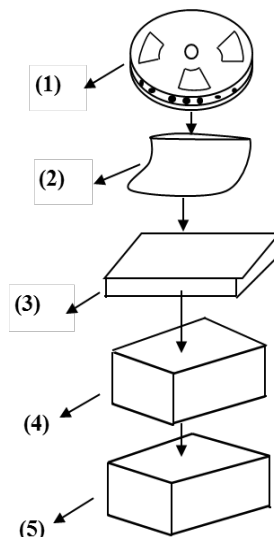
(2).DIMENSION(mm):

W	A0	B0	K0	P1	P0	P2	D0	F	E1	T
12.0±0.30	5.3±0.10	5.3±0.10	4.3±0.10	8.0±0.10	4.0±0.10	2.0±0.10	1.5±0.10	5.5±0.10	1.75±0.10	0.40±0.05

(3).REEL SIZE:



(4).PACKAGE MODE:



(5).PACKAGING LIST:

No.	Packing Part	Dimension (mm)	Material	Quantity
1	Reel	330	Plastic	1500PCS / Reel
2	Bag	450 X 360 X 0.075	Plastic	1Reel / Bag
3	Pizza Box	340 X 335 X 45	Paper	2Bag / Pizza Box
4	Outer Box	356 X 350 X 226	Paper	4Pizza Box / Outer Box

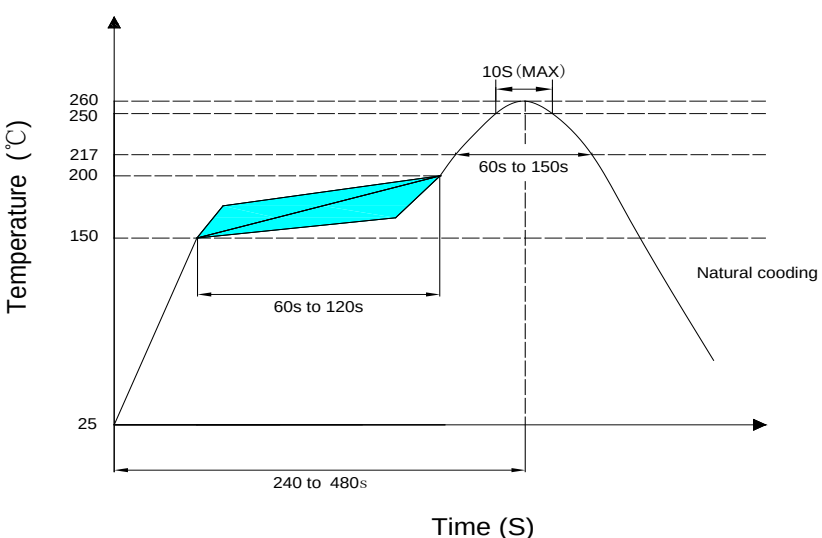
(6).WEIGHT: N.W: 0.37 g/pcs (APPROX), TOTAL 4.44 Kg(APPROX),G.W:TOTAL 9.44Kg (APPROX).

(7).Storage conditions: 20°C~35°C ,75%RH (Max.).

6.RELIABILITY TEST:

TEST ITEMS	SPECIFICATIONS	TEST METHOD AND REMARKS
Solderability	The electrodes shall be at least 95% covered with new solder coating	According to J-STD-002 Method D category 3 1. Soldering temperature: 260±5℃ 2. Solder: 99.3%Sn/0.7%Cu 3. Flux:Rosin 4. Immersion time: 5 ± 1Sec
Resistance to Soldering Heat	1. Appearance : No damage 2. Inductance change: within ±10% of initial value	According to MIL-STD-202 Method 210F 1. Preheat temperature:150℃ 2. Preheat time:1min 3. Solder temperature:260±5℃ 4. Dipping time:10±1Sec 5. Measured at room temperature after placing for 24hours
Humidity resistance	1. Appearance: No damage 2. All Electrical and mechanical parameters within tolerance	According to IEC68-2-3 Method Ca 1. Temp. : 40±2℃ 2. Humidity: 93+2/-3 % RH 3. Test time: 500 ± 2H 4. The component should be stabilized at normal condition for 24 Hours before test
High temperature resistance	1. Appearance: No damage 2. All Electrical and mechanical parameters within tolerance	According to IEC68-2-2 Method B(Bd) or MIL-STD-202 Method 108A 1. Temperature: 125 ± 3℃ 2. Test time: 500 +24H / -0H 3. The component should be stabilized at normal condition for 24hours before test
Low Temperature resistance	1. Appearance: No damage 2. All Electrical and mechanical parameters within tolerance	According to IEC68-2-1 Method A(Ad) or JESD22-A119A 1. Temperature: -40 ± 3℃ 2. Test time: 500 +24H / -0H 3. The component should be stabilized at normal condition for 24hours before test
Temperature cycles	1. Appearance: No damage 2. All Electrical and mechanical parameters within tolerance	According to IEC68-2-14 Method N(Nb) or JESD22-A104C 1. Low-temp: -40±3℃ duration 30min 2. room -temp: 25±2℃ duration 3H 3. High-temp: 125±3℃ duration 30min 4. room-temp: 25±2℃ duration 3H 5. Number of cycle: 10 cycles 6. The component should be stabilized at normal condition for 24hours before test

Soldering Reflow Chart

Stage	Precaution	Recommended temperature profile
Reflow soldering	Temperature profile can be referenced after confirming of adhesion , temperature of resistance to soldering heat , component size , soldering etc. sufficient . Note: Please refer to the latest IPC/JEDEC J-STD-020: "Moisture/Reflow Sensitivity Classification for Nonhermetic Solid State Surface Mount Devices"	 The graph illustrates the recommended temperature profile for reflow soldering. The y-axis represents Temperature in degrees Celsius (°C), ranging from 25 to 260. The x-axis represents Time in seconds (S), ranging from 0 to 480. The profile starts at 25°C, ramps up to 150°C (60s to 120s), then to 200°C (60s to 150s), peaks at 260°C (10s MAX), and finally cools down (Natural cooling). Key temperature points marked are 25, 150, 200, 217, 250, and 260.