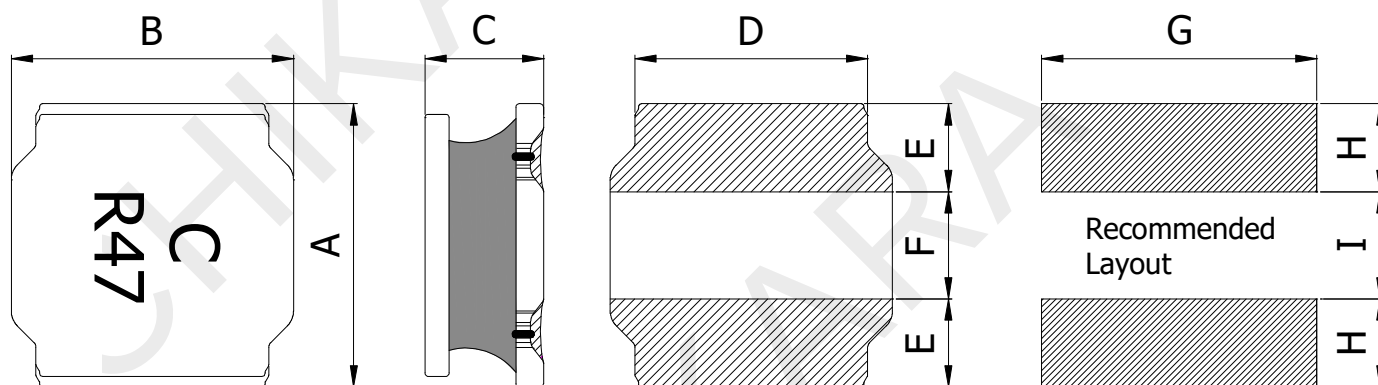


Features

- Magnetic-resin shielded construction
- Storage temperature range:-40°C to +125°C
- Operating temperature range:-40°C to +125°C
(including coil's self-temperature rise)
- Moisture sensitivity level:1
- Packaging:1500pcs. Per 13-inch reel
- RoHs&Halogen-free compliant



Mechanical Dimension(Unit:mm)



A	B	C	D	E	F	G	H	I
6.0±0.3	6.0±0.3	4.5Max.	4.9±0.3	1.55±0.3	2.9±0.3	5.7	1.7	2.8

Part Number Description

SP06 - 060045 R47 N
① ② ③ ④

①	Type
②	Dimensions
③	Inductance value
④	Tolerance code

Electrical Schematic

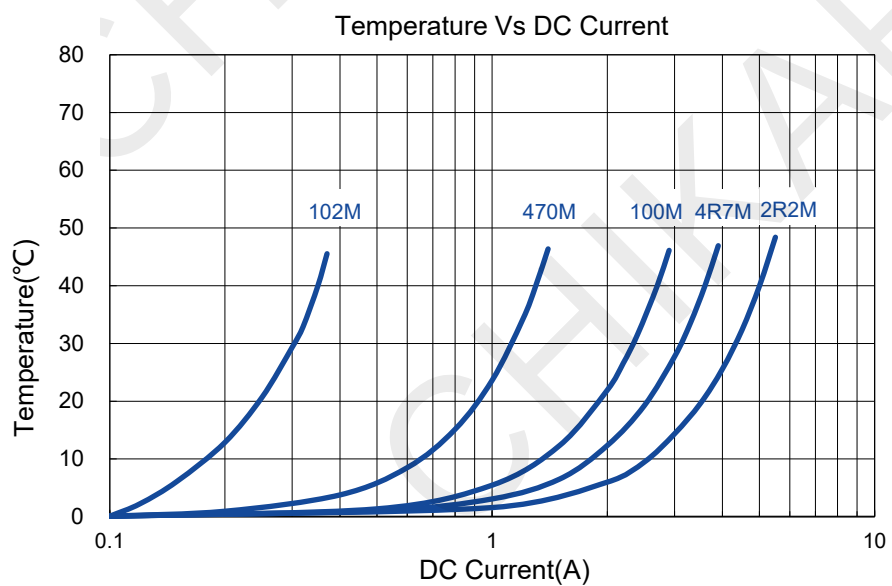
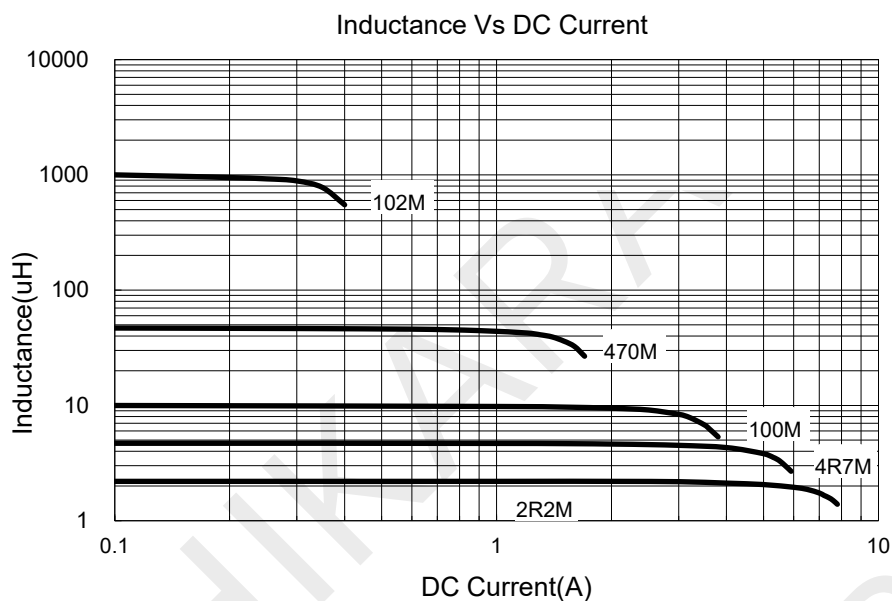


Electrical Characteristic

Part Number	Inductance L0(μH)	DCR (Ω)±30%	Isat		Irms		SRF (MHz)Min.
			(A)Max.	(A)Typ.	(A)Max.	(A)Typ.	
SP06-060045R47N	0.47±30%	0.006	15.0	16.5	6.50	6.60	155
SP06-060045R68N	0.68±30%	0.006	11.0	12.0	5.70	6.50	99
SP06-0600451R0N	1.0±30%	0.011	9.85	10.0	5.14	5.60	100
SP06-0600451R2N	1.2±30%	0.010	8.35	9.10	5.40	5.90	100
SP06-0600451R5N	1.5±30%	0.012	8.80	9.70	4.95	5.40	65
SP06-0600451R8N	1.8±30%	0.012	7.60	8.40	4.95	5.40	74
SP06-0600452R2M	2.2±20%	0.014	6.75	7.40	4.60	5.00	52
SP06-0600452R7M	2.7±20%	0.015	5.75	6.30	4.30	4.70	38
SP06-0600453R3M	3.3±20%	0.021	5.90	5.20	3.70	4.00	32
SP06-0600453R6M	3.6±20%	0.021	5.25	5.70	3.70	4.00	28
SP06-0600454R7M	4.7±20%	0.026	4.97	5.50	3.30	3.60	24
SP06-0600455R6M	5.6±20%	0.029	4.15	4.60	3.15	3.40	23
SP06-0600456R8M	6.8±20%	0.031	3.90	4.30	3.00	3.30	20
SP06-0600458R2M	8.2±20%	0.043	3.90	4.30	2.60	2.80	21
SP06-060045100M	10±20%	0.048	3.20	3.50	2.45	2.70	15
SP06-060045120M	12±20%	0.058	2.80	3.00	2.20	2.40	13
SP06-060045150M	15±20%	0.068	2.50	2.70	2.05	2.20	12
SP06-060045180M	18±20%	0.081	2.20	2.40	1.85	2.00	10
SP06-060045220M	22±20%	0.089	2.05	2.20	1.80	2.00	10
SP06-060045270M	27±20%	0.102	1.90	2.10	1.65	1.80	9.2
SP06-060045330M	33±20%	0.137	1.65	1.80	1.45	1.60	7.8
SP06-060045360M	36±20%	0.173	1.62	1.80	1.40	1.50	7.8
SP06-060045390M	39±20%	0.180	1.50	1.60	1.25	1.40	7.8
SP06-060045470M	47±20%	0.200	1.40	1.50	1.20	1.30	6.4
SP06-060045560M	56±20%	0.221	1.30	1.40	1.10	1.20	6.4
SP06-060045680M	68±20%	0.289	1.20	1.30	1.00	1.10	6.4
SP06-060045750M	75±20%	0.305	1.15	1.20	0.95	1.00	5.0
SP06-060045820M	82±20%	0.341	1.05	1.10	0.90	0.99	4.9
SP06-060045101M	100±20%	0.433	0.95	1.00	0.80	0.88	4.2
SP06-060045121M	120±20%	0.484	0.85	0.94	0.77	0.85	4.2
SP06-060045151M	150±20%	0.580	0.80	0.88	0.70	0.77	4.2
SP06-060045221M	220±20%	0.834	0.70	0.77	0.59	0.65	3.5
SP06-060045331M	330±20%	1.27	0.57	0.63	0.57	0.63	2.8
SP06-060045471M	470±20%	1.80	0.50	0.56	0.42	0.48	2.0
SP06-060045681M	680±20%	2.50	0.42	0.46	0.33	0.38	1.7
SP06-060045102M	1000±20%	4.50	0.30	0.35	0.30	0.35	0.5
SP06-060045152M	1500±20%	6.50	0.24	0.27	0.21	0.24	0.8

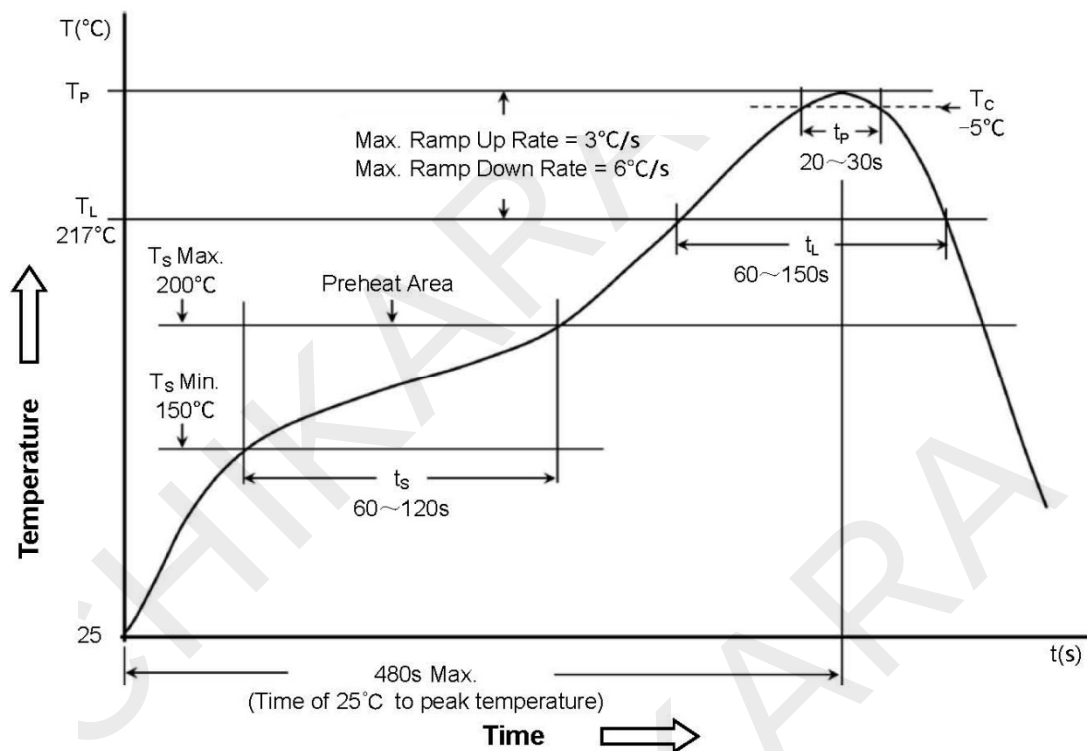
- Test frequency and voltage:100KHz,1Vrms.
- All test data referenced to 25°C ambient.
- Saturation current(Isat) will cause L0 to drop approximately 30%.
- Heat rated current(Irms) will cause the coil temperature rise approximately Δt of 40°C.

Characteristic Curve (Typical value)



Soldering Specification

- Reflow profile for SMT components



- Classification of peak package body temperature (Tp)

	Package Thickness	Package Volume		
		<350mm ³	350~2000mm ³	>2000mm ³
PB-Free Assembly	<1.6mm	260°C	260°C	260°C
	1.6~2.5mm	260°C	250°C	245°C
	≥2.5mm	250°C	245°C	245°C

※ Reflow is referred to standard IPC/JEDEC J-STD-020D.