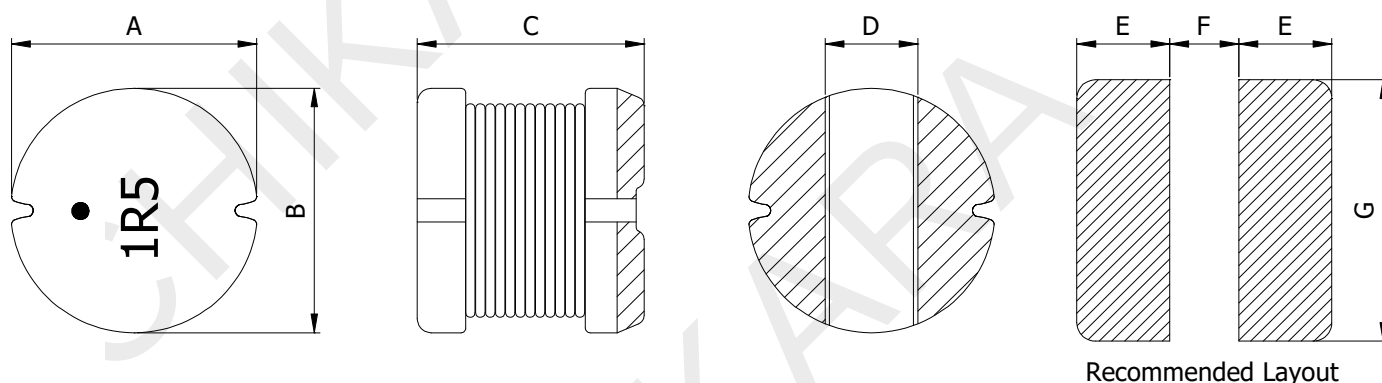


Features

- High energy storage and very low resistance
- 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:2000pcs. Per 13-inch reel
- RoHs&Halogen-free compliant



Mechanical Dimension(Unit:mm)



A	B	C	D	E	F	G
Ø5.8Max.	Ø5.8Max.	4.0Max.	2.3Typ.	2.15	1.7	5.8

Part Number Description

SP03 - 0604 1R5 M

① ② ③ ④

①	Type
②	Dimensions
③	Inductance value
④	Tolerance code

Electrical Schematic



Electrical Characteristic

Part Number	Inductance L0(uH)	Q Typ.	Q Freq.(MHz)	SRF (MHz)Typ.	DCR (Ω)Max.	Isat (A)Typ.	Irms (A)Max.
SP03-06041R5M	1.5±20%	24	7.96	85	0.04	3.50	3.00
SP03-06042R5M	2.5±20%	21	7.96	74	0.05	2.70	2.35
SP03-06043R3M	3.3±20%	21	7.96	68	0.05	2.60	2.20
SP03-06043R9M	3.9±20%	22	7.96	62	0.05	2.20	2.10
SP03-06044R7M	4.7±20%	20	7.96	56	0.07	2.20	1.80
SP03-06045R0M	5.0±20%	19	7.96	50	0.07	2.10	1.60
SP03-06046R8M	6.8±20%	19	7.96	44	0.11	1.80	1.38
SP03-06047R5M	7.5±20%	19	7.96	38	0.12	1.60	1.29
SP03-0604100M	10±20%	24	2.52	34	0.15	1.40	1.14
SP03-0604120M	12±20%	23	2.52	30	0.16	1.30	1.02
SP03-0604150K	15±10%	22	2.52	28	0.18	1.10	0.93
SP03-0604180K	18±10%	23	2.52	24	0.25	1.10	0.82
SP03-0604220K	22±10%	20	2.52	30	0.28	0.96	0.75
SP03-0604270K	27±10%	19	2.52	19	0.30	0.86	0.67
SP03-0604330K	33±10%	23	2.52	15	0.45	0.70	0.61
SP03-0604390K	39±10%	22	2.52	13	0.46	0.66	0.56
SP03-0604470K	47±10%	20	2.52	13	0.55	0.62	0.52
SP03-0604560K	56±10%	17	2.52	12	0.62	0.58	0.48
SP03-0604680K	68±10%	17	2.52	12	0.72	0.54	0.44
SP03-0604820K	82±10%	15	2.52	11	0.84	0.48	0.40
SP03-0604101K	100±10%	28	0.796	10	0.95	0.66	0.38
SP03-0604121K	120±10%	27	0.796	8	1.10	0.60	0.36
SP03-0604151K	150±10%	28	0.796	8	1.43	0.56	0.32
SP03-0604181K	180±10%	26	0.796	7	1.60	0.50	0.30
SP03-0604221K	220±10%	26	0.796	6	2.00	0.46	0.26
SP03-0604271K	270±10%	26	0.796	5	2.40	0.38	0.24
SP03-0604331K	330±10%	28	0.796	5	3.20	0.36	0.20
SP03-0604391K	390±10%	28	0.796	4	3.40	0.32	0.18
SP03-0604471K	470±10%	29	0.796	4	4.55	0.26	0.15

- Test frequency and voltage:1KHz,1Vrms.
- All test data referenced to 25°C ambient.
- Saturation current(Isat) will cause L0 to drop approximately 10%.
- Heat rated current(Irms) will cause the coil temperature rise approximately Δt of 40°C.

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.