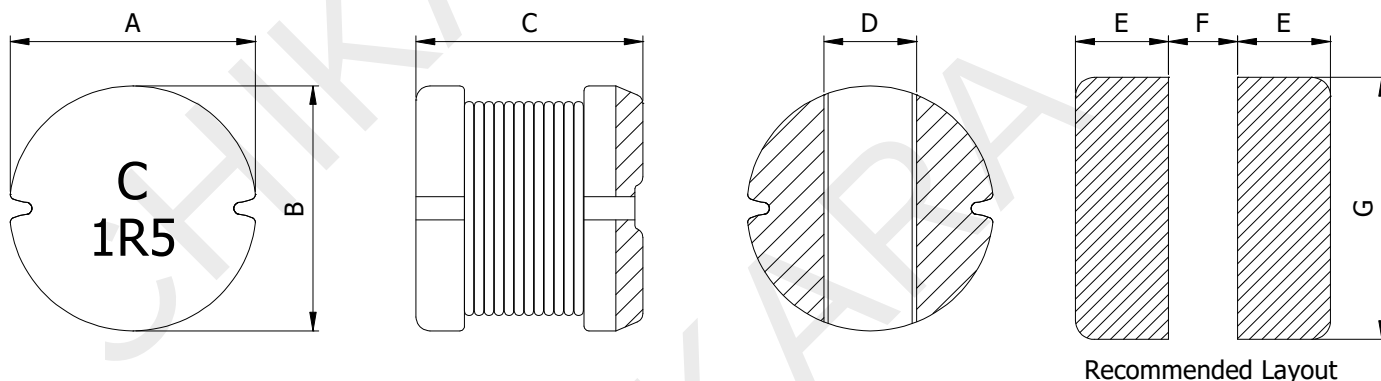


Features

- 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:800pcs. Per 13-inch reel
- RoHs&Halogen-free compliant



Mechanical Dimension(Unit:mm)



A	B	C	D	E	F	G
Ø9.8Max.	Ø9.8Max.	5.8Max.	2.9Typ.	3.6	2.8	10

Part Number Description

SP03 -1006 1R5 M

① ② ③ ④

①	Type
②	Dimensions
③	Inductance value
④	Tolerance code

Electrical Schematic



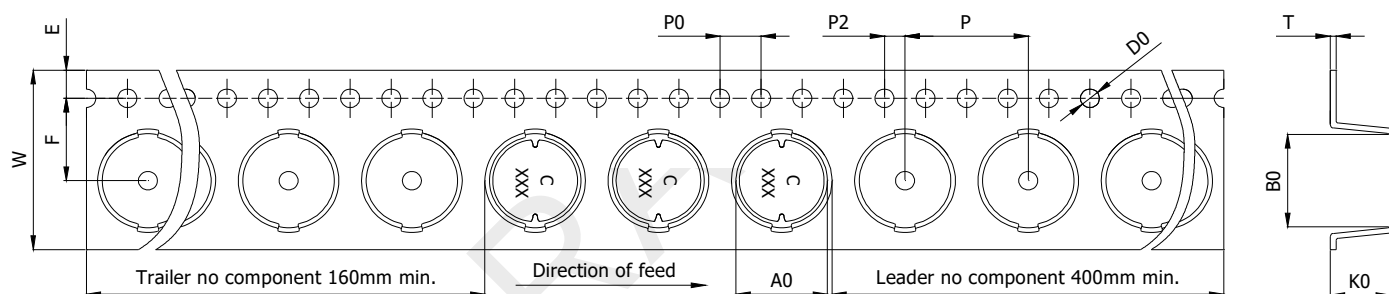
Electrical Characteristic

Part Number	Inductance L0(μH)	Q Typ.	Q Freq.(MHz)	SRF (MHz)Typ.	DCR (Ω)Max.	Isat (A)Typ.	Irms (A)Max.
SP03-10061R5M	1.5±20%	35	7.96	105	0.018	13.0	6.40
SP03-10062R2M	2.2±20%	35	7.96	68	0.021	11.0	6.00
SP03-10063R3M	3.3±20%	34	7.96	55	0.024	9.80	5.50
SP03-10063R9M	3.9±20%	34	7.96	48	0.027	8.60	4.90
SP03-10064R7M	4.7±20%	33	7.96	40	0.036	7.80	4.20
SP03-10065R6M	5.6±20%	33	7.96	35	0.040	7.00	4.00
SP03-10066R8M	6.8±20%	33	7.96	32	0.044	6.20	3.70
SP03-10068R2M	8.2±20%	31	7.96	24	0.048	6.00	3.50
SP03-1006100M	10±20%	30	2.52	21	0.060	5.40	3.20
SP03-1006120M	12±20%	30	2.52	20	0.070	4.70	3.00
SP03-1006150M	15±20%	30	2.52	16	0.080	4.40	2.70
SP03-1006180M	18±20%	30	2.52	15	0.090	4.10	2.60
SP03-1006220M	22±20%	25	2.52	13	0.10	3.60	2.50
SP03-1006270K	27±10%	25	2.52	11	0.11	3.30	2.44
SP03-1006330K	33±10%	25	2.52	10	0.12	3.00	2.30
SP03-1006390K	39±10%	20	2.52	9.0	0.14	2.70	2.20
SP03-1006470K	47±10%	20	2.52	8.0	0.17	2.50	2.00
SP03-1006560K	56±10%	20	2.52	7.5	0.19	2.30	1.90
SP03-1006680K	68±10%	15	2.52	7.0	0.22	2.10	1.80
SP03-1006820K	82±10%	15	2.52	6.0	0.25	2.00	1.70
SP03-1006101K	100±10%	15	0.796	5.2	0.35	1.70	1.40
SP03-1006121K	120±10%	15	0.796	5.0	0.40	1.60	1.30
SP03-1006151K	150±10%	15	0.796	4.5	0.47	1.40	1.20
SP03-1006181K	180±10%	12	0.796	4.0	0.63	1.30	1.10
SP03-1006221K	220±10%	12	0.796	3.8	0.73	1.20	1.00
SP03-1006271K	270±10%	12	0.796	3.5	0.97	1.10	0.90
SP03-1006331K	330±10%	12	0.796	3.2	1.15	0.95	0.80
SP03-1006391K	390±10%	12	0.796	3.0	1.30	0.85	0.75
SP03-1006471K	470±10%	12	0.796	2.5	1.48	0.80	0.70
SP03-1006561K	560±10%	12	0.796	2.3	1.90	0.75	0.65
SP03-1006681K	680±10%	12	0.796	2.1	2.25	0.70	0.60
SP03-1006821K	820±10%	10	0.796	2.0	2.55	0.62	0.50
SP03-1006102K	1000±10%	30	0.252	1.9	3.10	0.60	0.40
SP03-1006122K	1200±10%	31	0.252	1.8	4.20	0.54	0.35
SP03-1006152K	1500±10%	31	0.252	1.7	5.00	0.46	0.32
SP03-1006182K	1800±10%	31	0.252	1.6	6.80	0.40	0.28
SP03-1006222K	2200±10%	31	0.252	1.5	7.60	0.38	0.25
SP03-1006332K	3300±10%	32	0.252	1.3	13.5	0.30	0.20
SP03-1006472K	4700±10%	32	0.252	0.8	18.0	0.26	0.16

- 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.

Packaging Specification

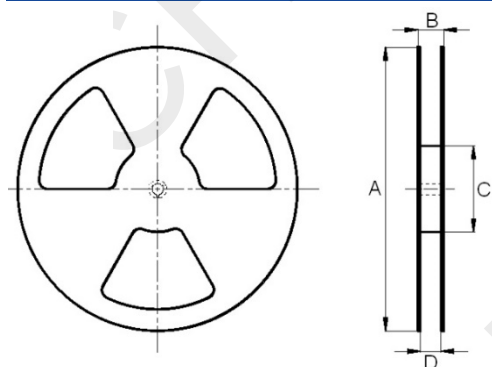
■ Carrier Tape (Unit:mm)



W	P	A0	B0	K0	E	F	P0	P2	D0	T
24±0.3	12±0.1	Ø10.1±0.1	11.6±0.1	6.2±0.1	1.75±0.1	11.5±0.1	4.0±0.1	2.0±0.1	Φ1.5±0.1	0.4±0.05

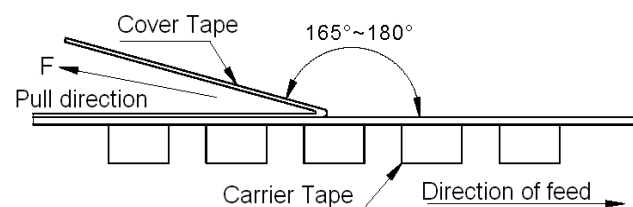
■ Reel (Unit:mm)

A	B	C	D
Φ330±1.0	28.9Max.	Φ100±1.0	24.5±0.5



■ Taping Method

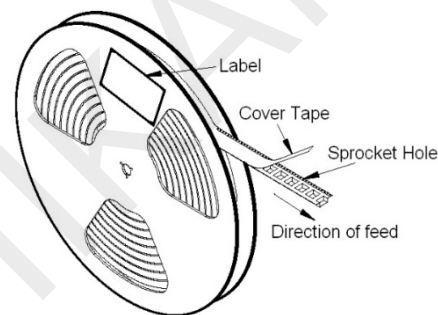
Peel-off strength	Peel-off angle	Peel-off speed
F=0.1N~1.3N	165°~180°	300mm/min.



※ Packing is referred to the international standard IEC 60286-3.

■ Package Quantity

Parts per reel
800Pcs



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.