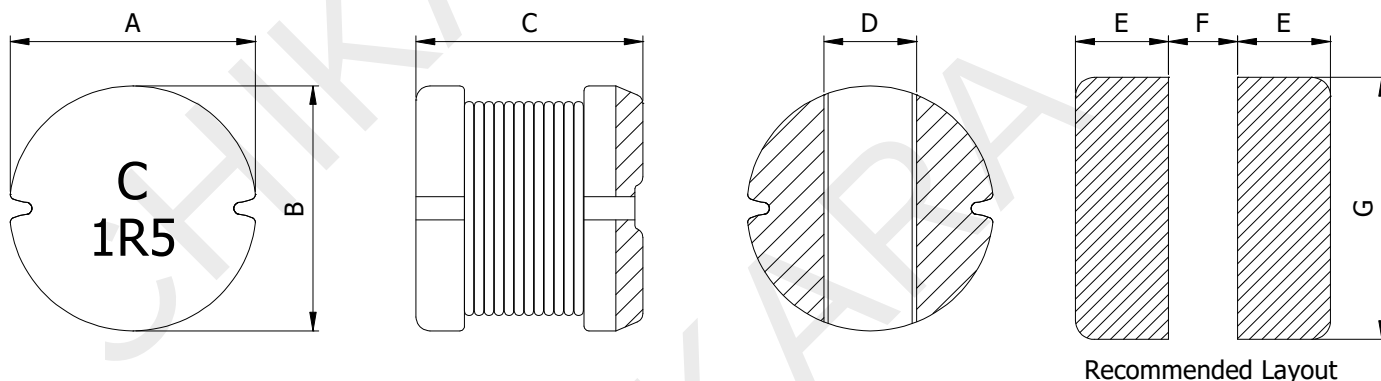


Features

- 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:500pcs. Per 13-inch reel
- RoHs&Halogen-free compliant



Mechanical Dimension(Unit:mm)



A	B	C	D	E	F	G
Ø13.5Max.	Ø13.5Max.	7.3Max.	5.0Typ.	5.2	3.8	13.6

Part Number Description

SP03 -1307 1R5 M

① ② ③ ④

①	Type
②	Dimensions
③	Inductance value
④	Tolerance code

Electrical Schematic



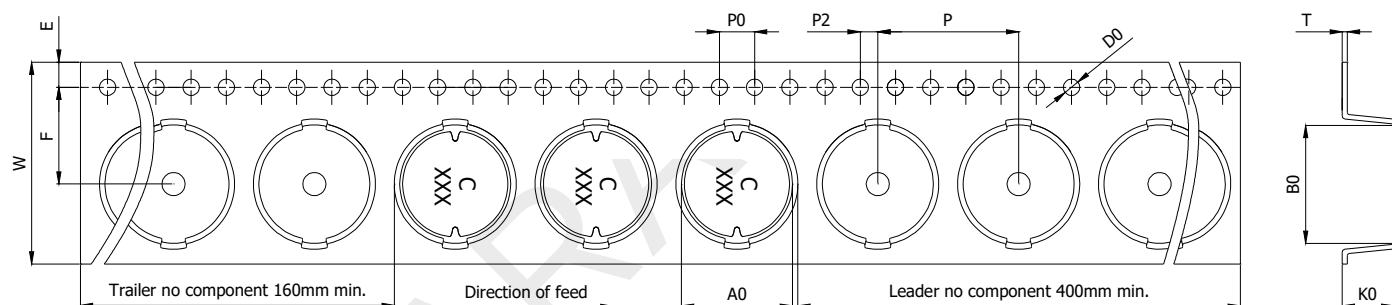
Electrical Characteristic

Part Number	Inductance L0(μH)	Q Typ.	Q Freq.(MHz)	SRF (MHz)Typ.	DCR (mΩ)Max.	Isat (A)Typ.	Irms (A)Max.
SP03-13071R5M	1.5±20%	20	7.96	65	5.0	20.0	9.50
SP03-13072R2M	2.2±20%	22	7.96	50	6.0	18.0	9.00
SP03-13072R7M	2.7±20%	24	7.96	40	8.0	16.0	8.20
SP03-13073R3M	3.3±20%	26	7.96	38	8.7	15.0	7.50
SP03-13074R7M	4.7±20%	25	7.96	36	10	13.0	7.00
SP03-13075R6M	5.6±20%	24	7.96	28	15	11.0	6.50
SP03-13076R8M	6.8±20%	24	7.96	26	17	10.5	6.00
SP03-13078R2M	8.2±20%	24	7.96	24	19	9.8	5.80
SP03-1307100M	10±20%	22	2.52	22	21	9.2	5.60
SP03-1307120M	12±20%	25	2.52	20	30	8.0	4.80
SP03-1307150M	15±20%	28	2.52	17	34	7.5	4.50
SP03-1307180M	18±20%	28	2.52	16	36	7.0	4.20
SP03-1307220M	22±20%	40	2.52	15	47	6.5	3.60
SP03-1307270M	27±20%	35	2.52	11	60	5.5	3.30
SP03-1307330K	33±10%	35	2.52	10	65	5.0	3.10
SP03-1307390K	39±10%	28	2.52	9.0	75	4.6	2.90
SP03-1307470K	47±10%	24	2.52	7.5	82	4.2	2.70
SP03-1307560K	56±10%	22	2.52	7.2	95	3.8	2.50
SP03-1307680K	68±10%	24	2.52	7.0	120	3.5	2.30
SP03-1307820K	82±10%	18	2.52	6.0	140	3.2	2.10
SP03-1307101K	100±10%	25	0.796	5.8	180	3.0	1.90
SP03-1307121K	120±10%	20	0.796	5.5	210	2.8	1.80
SP03-1307151K	150±10%	20	0.796	4.5	250	2.6	1.60
SP03-1307181K	180±10%	18	0.796	4.0	280	2.3	1.50
SP03-1307221K	220±10%	15	0.796	3.8	360	2.1	1.30
SP03-1307271K	270±10%	15	0.796	3.5	410	1.8	1.20
SP03-1307331K	330±10%	15	0.796	3.2	520	1.6	1.10
SP03-1307391K	390±10%	12	0.796	2.5	600	1.5	1.00
SP03-1307471K	470±10%	12	0.796	2.2	720	1.4	0.90
SP03-1307561K	560±10%	10	0.796	2.0	880	1.3	0.85
SP03-1307681K	680±10%	10	0.796	1.6	1000	1.2	0.80
SP03-1307821K	820±10%	10	0.796	1.5	1300	1.1	0.75
SP03-1307102K	1000±10%	10	0.252	1.4	1600	1.0	0.65

- Test frequency and voltage:100KHz,0.1Vrms.
- 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

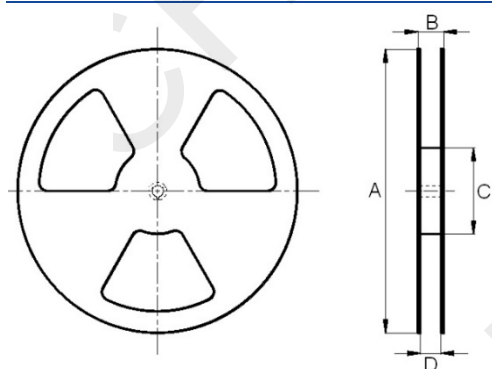
- Carrier Tape (Unit:mm)



W	P	A0	B0	K0	E	F	P0	P2	D0	T
24±0.3	16±0.1	Ø13.3±0.1	14.9±0.1	7.6±0.1	1.75±0.1	11.5±0.1	4.0±0.1	2.0±0.1	Φ1.5±0.1	0.5±0.05

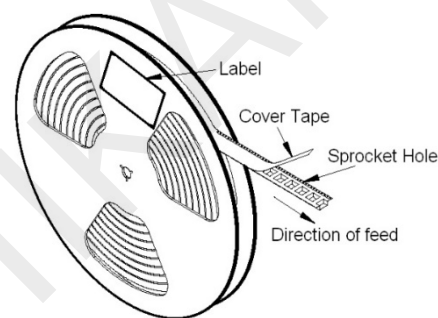
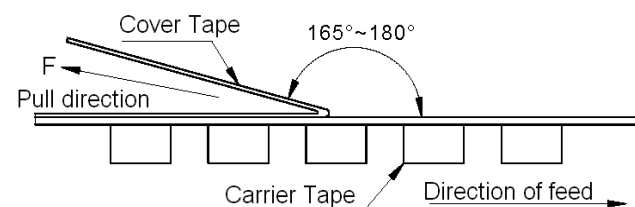
- Reel (Unit:mm)

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

500Pcs

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.