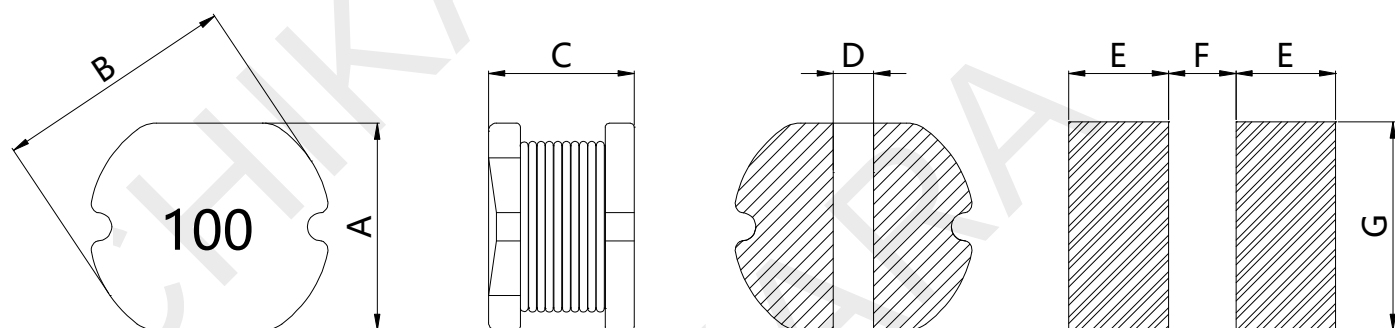


Features

- 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:900pcs. Per 13-inch reel
- RoHs&Halogen-free compliant



Mechanical Dimension(Unit:mm)



Recommended Layout

A	B	C	D	E	F	G
9.0±0.4	Ø10.0±0.4	5.4±0.5	3.5±0.5	3.75	2.5	9.5

Part Number Description

SP03 - 1006 A 100 M
① ② ③ ④ ⑤

①	Type
②	Dimensions
③	Shape code
④	Inductance value
⑤	Tolerance code

Electrical Schematic



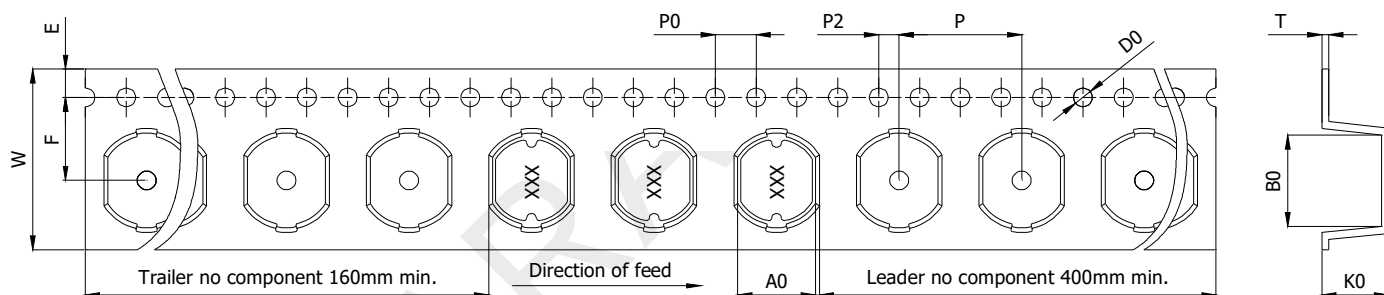
Electrical Characteristic

Part Number	Inductance L0(uH)	DCR (Ω)Typ.	DCR (Ω)Max.	SRF (MHz)Typ.	Isat (A)Typ.	Irms (A)Max.
SP03-1006A100M	10±20%	0.028	0.060	24.0	3.30	3.00
SP03-1006A120M	12±20%	0.033	0.070	23.0	3.15	2.75
SP03-1006A150K	15±10%	0.040	0.080	20.0	2.90	2.50
SP03-1006A180K	18±10%	0.043	0.090	19.0	2.43	2.36
SP03-1006A220K	22±10%	0.051	0.100	16.0	2.10	2.04
SP03-1006A270K	27±10%	0.063	0.110	15.0	2.00	1.95
SP03-1006A330K	33±10%	0.083	0.120	13.0	1.90	1.80
SP03-1006A390K	39±10%	0.098	0.140	12.0	1.80	1.62
SP03-1006A470K	47±10%	0.105	0.170	11.0	1.62	1.45
SP03-1006A560K	56±10%	0.112	0.190	10.0	1.55	1.36
SP03-1006A680K	68±10%	0.138	0.220	9.0	1.50	1.20
SP03-1006A820K	82±10%	0.150	0.250	8.0	1.17	1.11
SP03-1006A101K	100±10%	0.200	0.350	7.5	1.10	1.02
SP03-1006A121K	120±10%	0.243	0.400	6.5	0.99	0.95
SP03-1006A151K	150±10%	0.300	0.470	6.0	0.90	0.81
SP03-1006A181K	180±10%	0.320	0.630	5.4	0.80	0.76
SP03-1006A221K	220±10%	0.451	0.730	5.0	0.77	0.68
SP03-1006A271K	270±10%	0.500	0.970	4.3	0.68	0.62
SP03-1006A331K	330±10%	0.750	1.150	4.1	0.60	0.52
SP03-1006A391K	390±10%	0.794	1.300	3.9	0.54	0.49
SP03-1006A471K	470±10%	0.969	1.480	3.4	0.50	0.44
SP03-1006A561K	560±10%	1.047	1.900	3.0	0.47	0.39
SP03-1006A681K	680±10%	1.245	2.250	2.7	0.43	0.37
SP03-1006A821K	820±10%	1.420	2.500	2.5	0.41	0.34
SP03-1006A102K	1000±10%	2.200	2.600	2.3	0.38	0.32
SP03-1006A122K	1200±10%	2.480	3.000	2.1	0.38	0.30
SP03-1006A222K	2200±10%	4.400	5.300	1.4	0.26	0.18

- Test frequency and voltage:10KHz,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

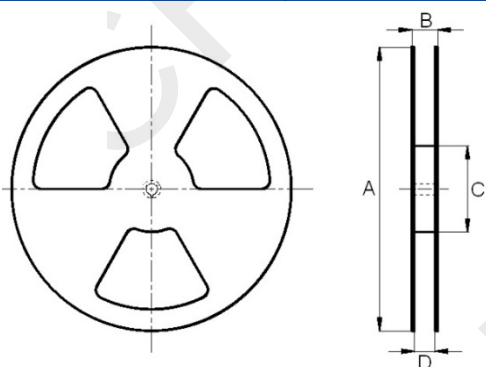
■ Carrier Tape (Unit:mm)



W	P	A0	B0	K0	E	F	P0	P2	D0	T
24±0.3	12±0.1	9.3±0.1	11.3±0.1	5.7±0.1	1.75±0.1	11.5±0.1	4.0±0.1	2.0±0.1	Φ1.5±0.1	0.40±0.05

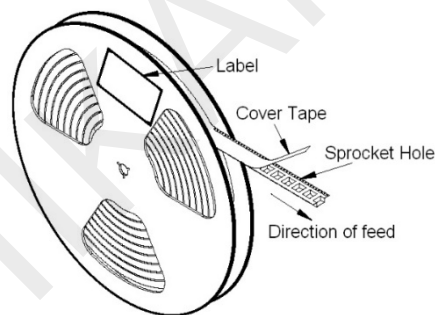
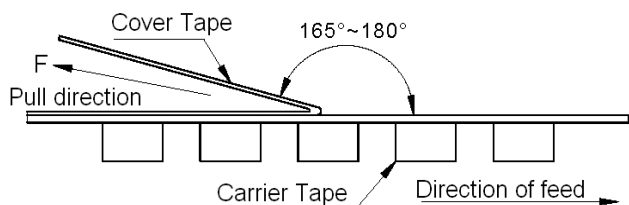
■ Reel (Unit:mm)

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.



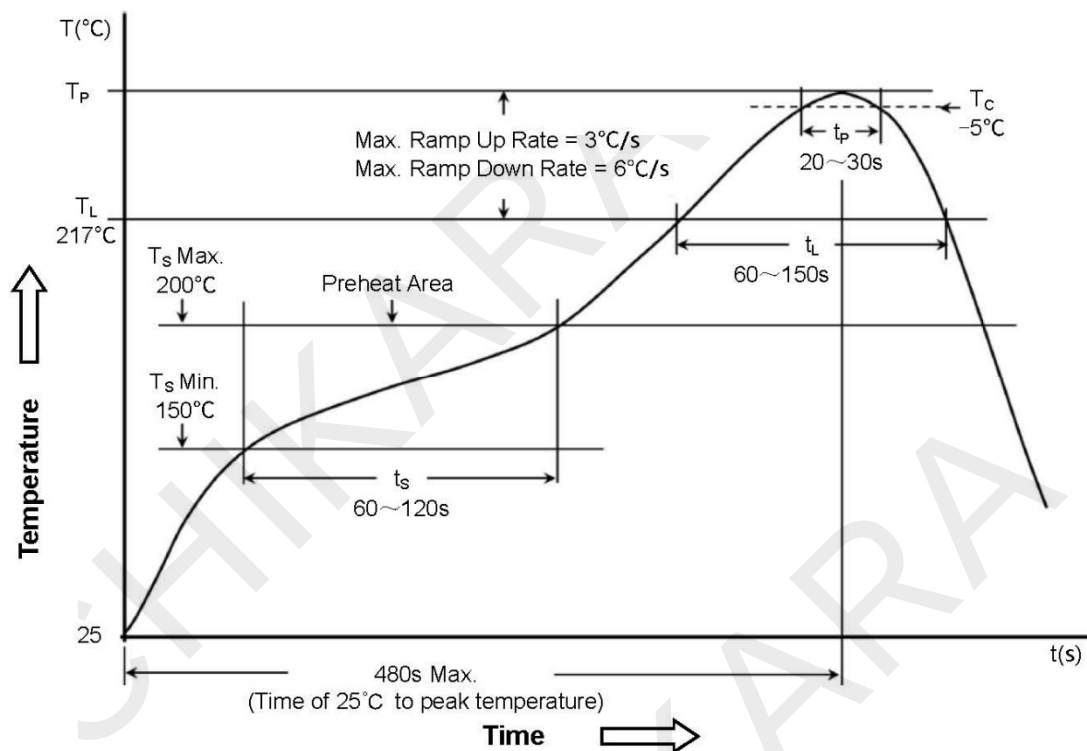
※ Packing is referred to the international standard IEC 60286-3.

■ Package Quantity

Parts per reel
900Pcs

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.