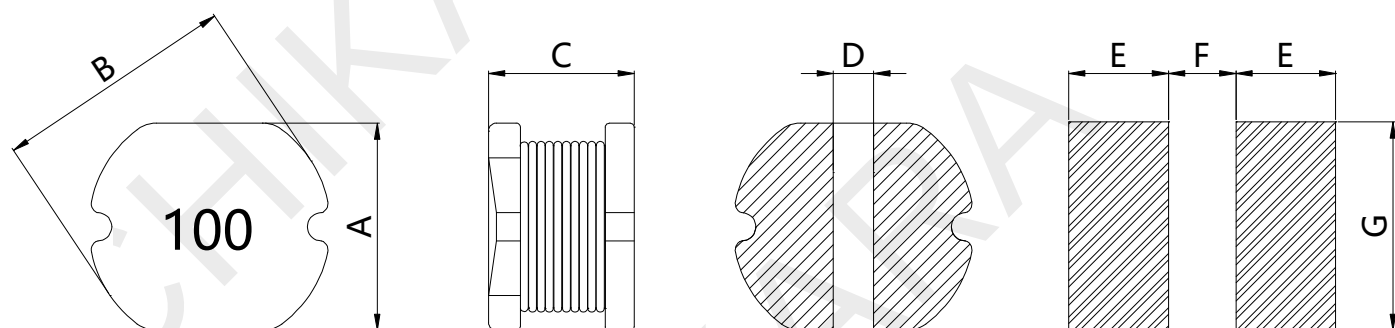


Features

- 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:1000pcs. Per 13-inch reel
- RoHs&Halogen-free compliant



Mechanical Dimension(Unit:mm)



Recommended Layout

A	B	C	D	E	F	G
7.0±0.3	Ø7.8±0.3	5.0±0.5	2.8Typ.	3.0	2.0	7.5

Part Number Description

SP03 - 0805 A 100 M
① ② ③ ④ ⑤

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

Electrical Schematic

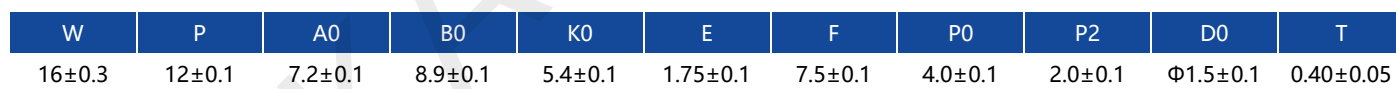


Electrical Characteristic

Part Number	Inductance L0(uH)	DCR (Ω)Typ.	DCR (Ω)Max.	SRF (MHz)Typ.	Isat (A)Typ.	Irms (A)Max.
SP03-0805A100M	10±20%	0.042	0.070	28.0	2.95	2.80
SP03-0805A120M	12±20%	0.048	0.080	26.0	2.45	2.78
SP03-0805A150K	15±10%	0.056	0.090	20.0	2.23	2.67
SP03-0805A180K	18±10%	0.063	0.100	19.0	2.14	2.45
SP03-0805A220K	22±10%	0.070	0.110	17.5	1.81	2.32
SP03-0805A270K	27±10%	0.082	0.120	15.5	1.66	2.16
SP03-0805A330K	33±10%	0.097	0.130	14.5	1.51	2.07
SP03-0805A390K	39±10%	0.117	0.160	12.5	1.39	1.80
SP03-0805A470K	47±10%	0.127	0.180	12.0	1.26	1.71
SP03-0805A560K	56±10%	0.173	0.240	10.5	1.22	1.52
SP03-0805A680K	68±10%	0.207	0.280	9.70	1.06	1.29
SP03-0805A820K	82±10%	0.268	0.370	8.60	0.95	1.18
SP03-0805A101K	100±10%	0.320	0.430	8.00	0.90	1.14
SP03-0805A121K	120±10%	0.337	0.470	7.00	0.87	1.02
SP03-0805A151K	150±10%	0.480	0.640	6.20	0.73	0.87
SP03-0805A181K	180±10%	0.550	0.710	5.80	0.63	0.81
SP03-0805A221K	220±10%	0.710	0.960	5.40	0.61	0.70
SP03-0805A271K	270±10%	0.810	1.110	4.70	0.54	0.64
SP03-0805A331K	330±10%	0.930	1.260	4.20	0.51	0.63
SP03-0805A391K	390±10%	1.220	1.770	3.90	0.47	0.54
SP03-0805A471K	470±10%	1.370	1.960	3.40	0.43	0.52
SP03-0805A102K	1000±10%	2.780	3.300	2.40	0.30	0.30

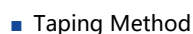
- Test frequency and voltage:10KHz,0.1Vrms.
- All test data referenced to 25°C ambient.
- Saturation current(Isat) will cause L0 to drop approximately 10%.
- Heat rated current(Irms) will cause the coil temperature rise approximately Δt of 40°C.

- Carrier Tape (Unit:mm)

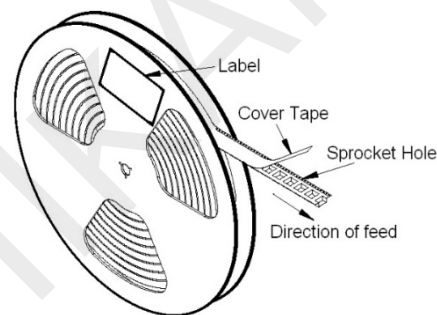


- Reel (Unit:mm)

A	B	C	D
Φ330±1.0	22.1Max.	Φ100±1.0	16.5±0.5



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.

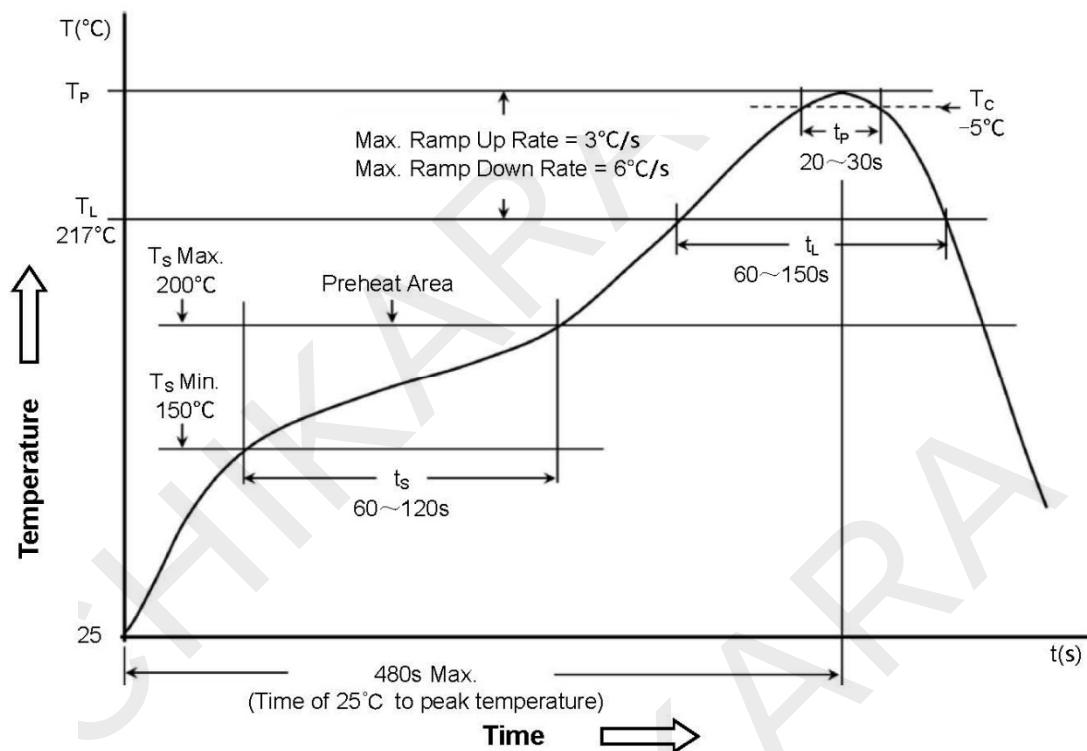
- Package Quantity

Parts per reel

1000Pcs

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.