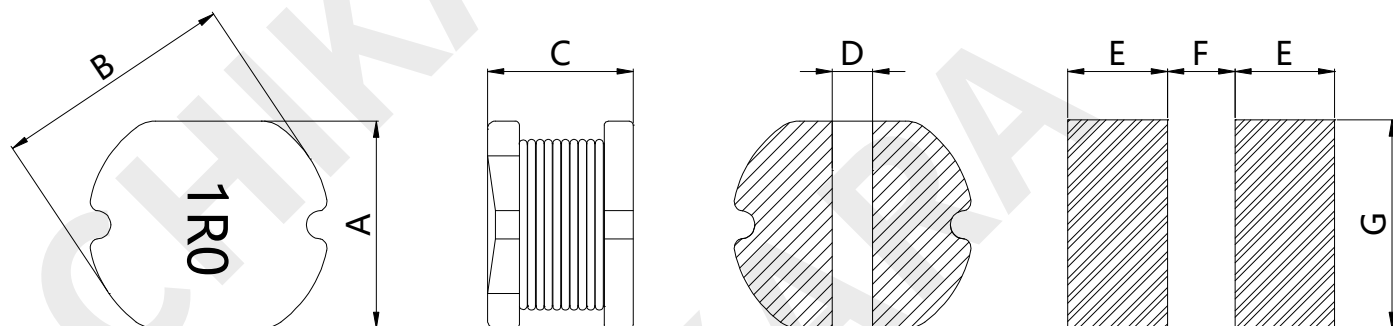


Features

- 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:3000pcs. Per 13-inch reel
- RoHs&Halogen-free compliant



Mechanical Dimension(Unit:mm)



Recommended Layout

A	B	C	D	E	F	G
3.0±0.3	Ø3.5±0.3	2.1±0.3	0.9Typ.	1.6	0.8	3.5

Part Number Description

SP03 - 0302 A 100 M
① ② ③ ④ ⑤

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

Electrical Schematic

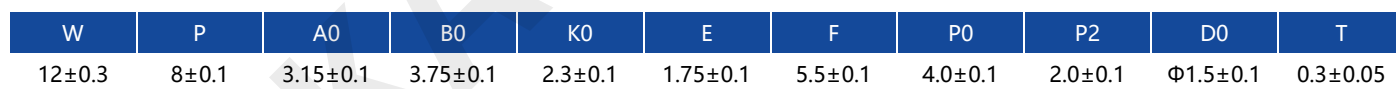


Electrical Characteristic

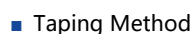
Part Number	Inductance L0(uH)	DCR (Ω)Typ.	DCR (Ω)Max.	SRF (MHz)Typ.	Isat (A)Typ.	Irms (A)Max.
SP03-0302A1R0M	1.0±20%	0.039	0.050	160	3.70	2.55
SP03-0302A1R5M	1.5±20%	0.054	0.070	130	3.05	2.10
SP03-0302A2R2M	2.2±20%	0.070	0.090	100	2.54	1.71
SP03-0302A3R3M	3.3±20%	0.091	0.120	80	2.09	1.40
SP03-0302A4R7M	4.7±20%	0.125	0.160	70	1.80	1.16
SP03-0302A6R8M	6.8±20%	0.170	0.210	55	1.50	0.96
SP03-0302A100M	10±20%	0.240	0.300	45	1.25	0.80
SP03-0302A150K	15±10%	0.350	0.430	36	1.05	0.65
SP03-0302A220K	22±10%	0.565	0.700	28	0.84	0.53
SP03-0302A330K	33±10%	0.780	0.970	24	0.70	0.45
SP03-0302A470K	47±10%	1.110	1.330	20	0.60	0.36
SP03-0302A680K	68±10%	1.600	1.800	16	0.50	0.30
SP03-0302A101K	100±10%	2.420	2.800	12	0.41	0.25

- 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.

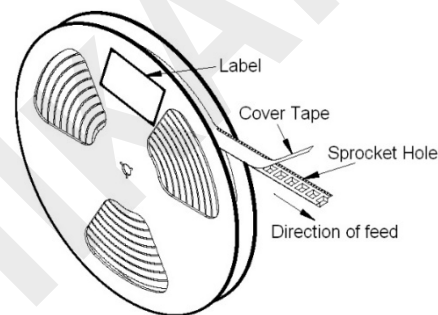
- Carrier Tape (Unit:mm)



A	B	C	D
Φ330±1.0	18.4Max.	Φ100±1.0	13.0±0.5



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



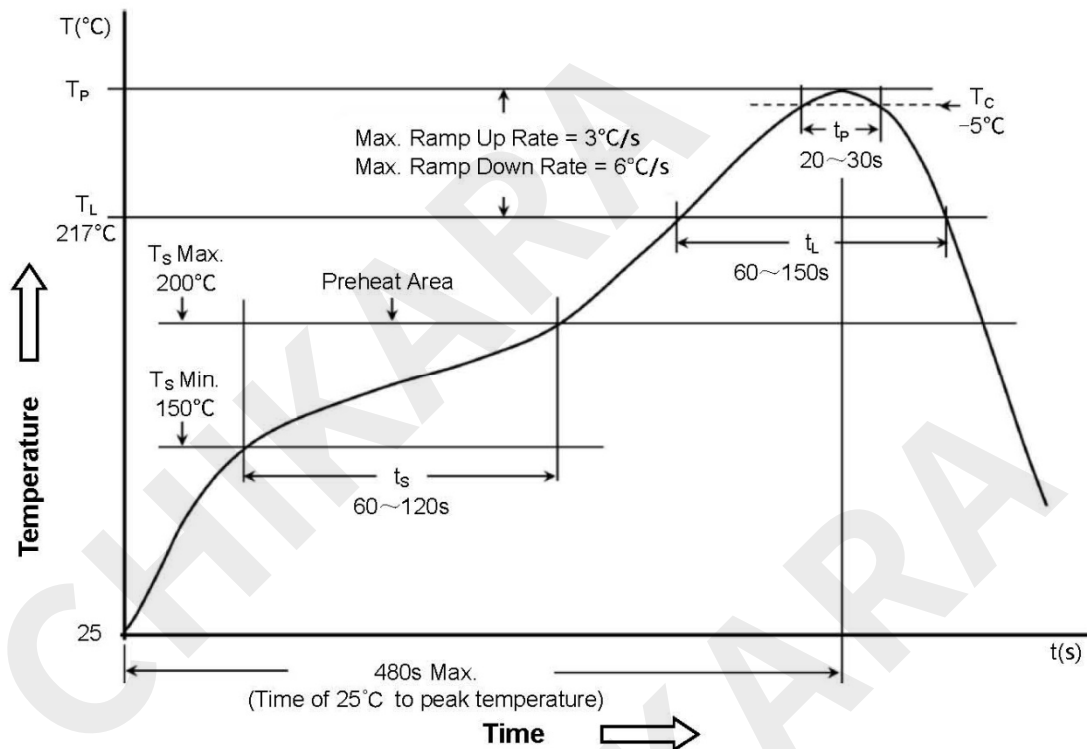
✖ Packing is referred to the international standard IEC 60286-3.

Parts per reel

3000Pcs

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.