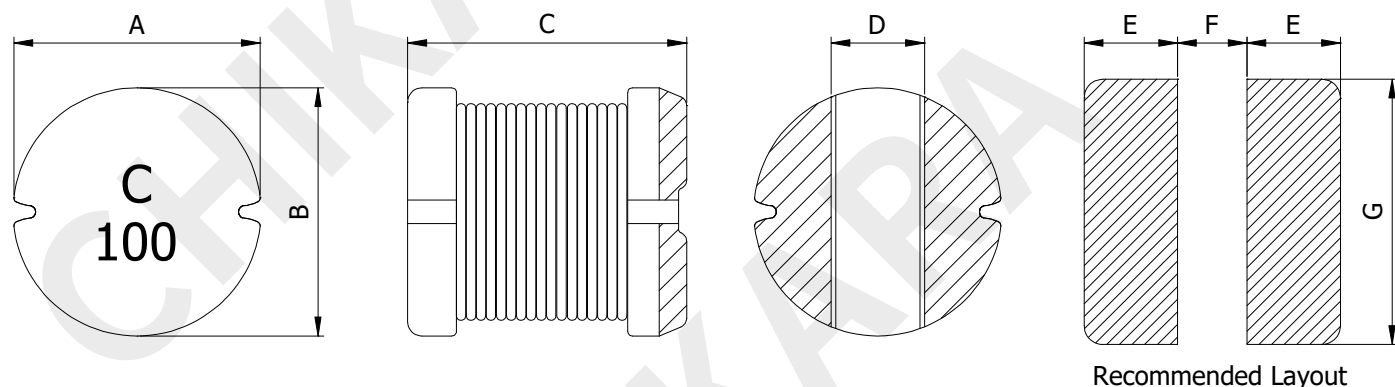


Features

- 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:250pcs. Per 13-inch reel
- RoHs&Halogen-free compliant



Mechanical Dimension(Unit:mm)



A	B	C	D	E	F	G
Ø9.8Max.	Ø9.8Max.	11.5±0.5	2.9Typ.	4.0	2.2	10.1

Part Number Description

SP03 -1012 100 M

① ② ③ ④

①	Type
②	Dimensions
③	Inductance value
④	Tolerance code

Electrical Schematic

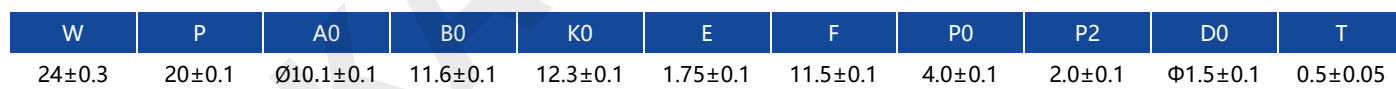


Electrical Characteristic

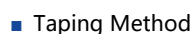
Part Number	Inductance L0(μH)	SRF (MHz)Typ.	DCR (mΩ)Max.	Isat (A)Typ.	Irms ¹ (A)Typ.	Irms ² (A)Max.
SP03-1012100M	10±20%	18.0	35	8.00	3.50	5.00
SP03-1012150M	15±20%	13.0	45	7.00	3.00	4.00
SP03-1012220M	22±20%	12.0	65	5.50	2.50	3.20
SP03-1012330K	33±10%	9.5	80	4.00	2.00	2.60
SP03-1012470K	47±10%	7.0	110	3.80	1.70	2.20
SP03-1012680K	68±10%	5.8	150	3.00	1.50	2.00
SP03-1012101K	100±10%	4.8	200	2.50	1.30	1.80
SP03-1012151K	150±10%	3.8	320	2.00	1.00	1.50
SP03-1012221K	220±10%	3.1	420	1.70	0.90	1.20
SP03-1012331K	330±10%	2.5	700	1.30	0.70	0.90
SP03-1012471K	470±10%	2.1	900	1.10	0.50	0.75
SP03-1012681K	680±10%	1.7	1250	1.00	0.40	0.60
SP03-1012102K	1000±10%	1.4	1900	0.80	0.30	0.50

- Test frequency and voltage:100KHz,1Vrms.
- All test data referenced to 25°C ambient.
- Saturation current(Isat) will cause L0 to drop approximately 10%.
- Heat rated current(Irms¹) will cause the coil temperature rise approximately Δt of 20°C.
- Heat rated current(Irms²) will cause the coil temperature rise approximately Δt of 40°C.

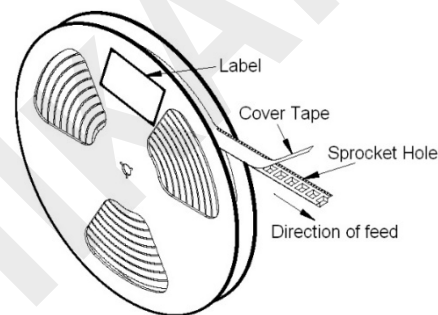
- Carrier Tape (Unit:mm)



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



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

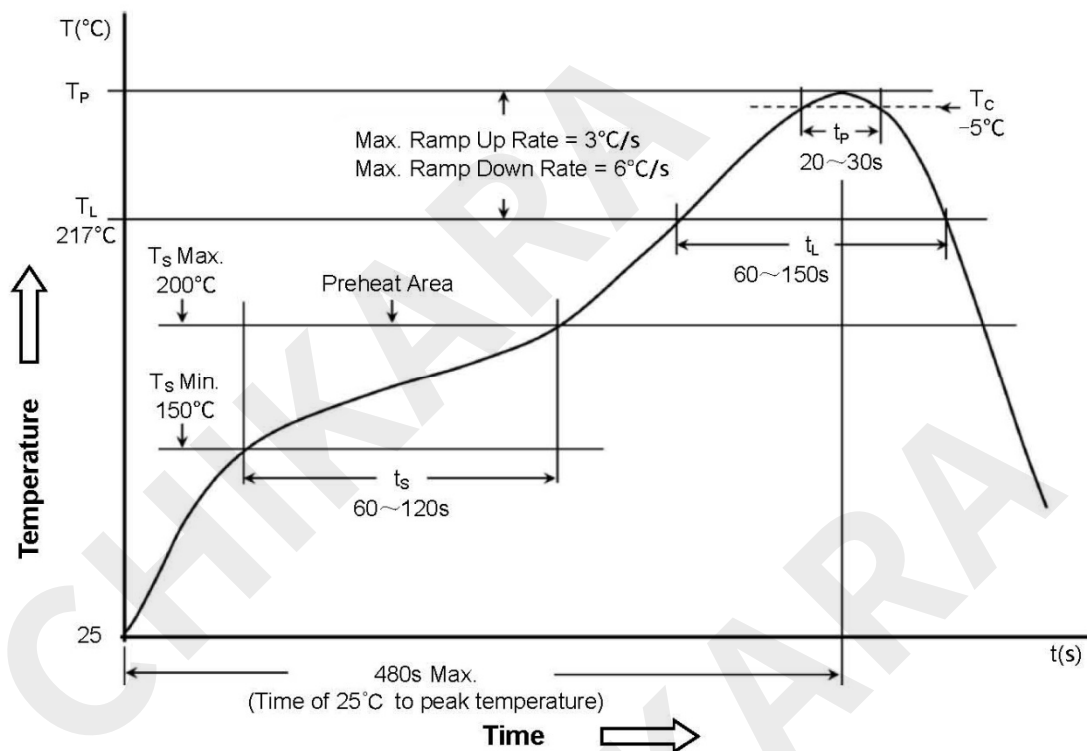


Parts per reel

250Pcs

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.