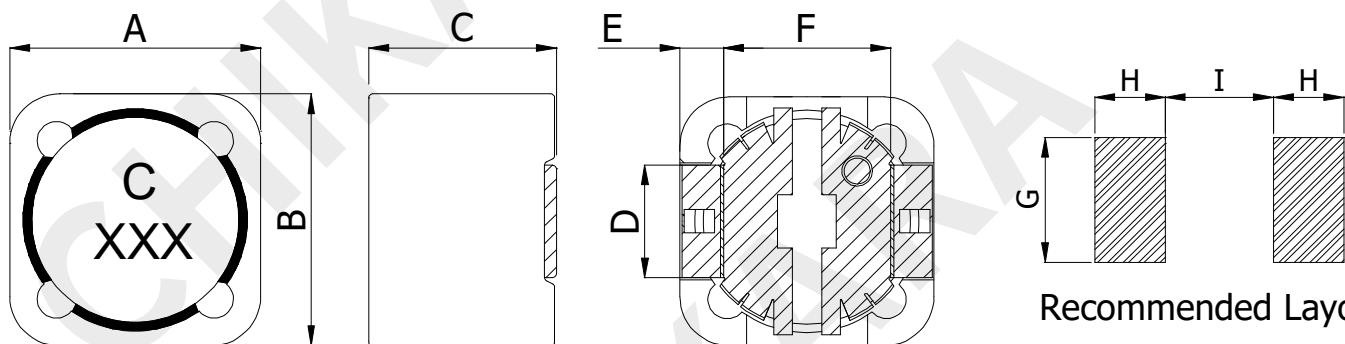


Features

- Magnetically shielded construction
- 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	H	I
12.3±0.3	12.3±0.3	10.0Max.	4.9±0.2	2.0±0.2	7.9±0.3	5.5	3.85	6.1

Part Number Description

SP05 - 1210 1R0 M
① ② ③ ④

①	Type
②	Dimensions
③	Inductance value
④	Tolerance code

Electrical Schematic

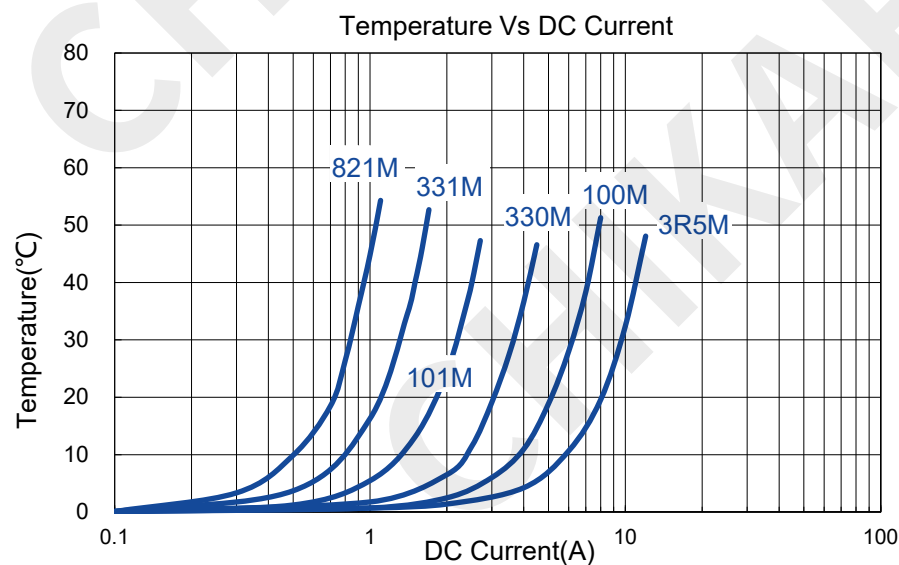
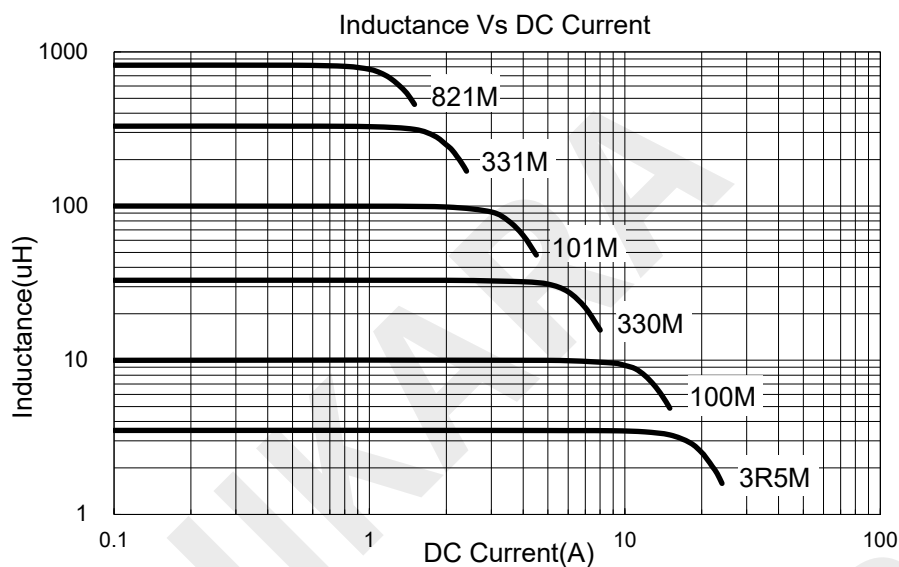


Electrical Characteristic

Part Number	Inductance L0(μH)	DCR		Isat (A)Typ.	Irms (A)Typ.	SRF (MHz)Typ.
		(mΩ)Typ.	(mΩ)Max.			
SP05-12101R0M	1.0±20%	4.0	6.0	30.0	13.0	120
SP05-12102R2M	2.2±20%	5.0	6.5	24.0	11.5	65
SP05-12103R5M	3.5±20%	6.0	9.0	19.5	11.0	45
SP05-12104R7M	4.7±20%	7.0	11.0	16.0	9.30	38
SP05-12106R8M	6.8±20%	9.0	14.0	15.0	8.40	23
SP05-1210100M	10±20%	13.0	21.0	13.0	7.10	21
SP05-1210150M	15±20%	21.0	26.0	9.50	6.50	17
SP05-1210220M	22±20%	23.0	28.0	8.00	5.30	10
SP05-1210270M	27±20%	30.0	40.0	7.10	4.60	8.0
SP05-1210330M	33±20%	37.0	45.0	6.50	4.20	8.5
SP05-1210390M	39±20%	44.0	56.0	6.20	4.10	6.0
SP05-1210470M	47±20%	46.0	60.0	5.50	3.80	6.5
SP05-1210680M	68±20%	69.0	89.0	4.40	3.20	5.5
SP05-1210820M	82±20%	91.0	105	4.00	2.80	4.5
SP05-1210101M	100±20%	100	110	3.80	2.50	4.3
SP05-1210151M	150±20%	151	200	3.30	2.10	3.5
SP05-1210221M	220±20%	193	300	2.70	1.80	2.7
SP05-1210271M	270±20%	248	330	2.60	1.60	2.5
SP05-1210331M	330±20%	363	430	2.10	1.50	2.0
SP05-1210471M	470±20%	437	560	1.85	1.40	1.8
SP05-1210681M	680±20%	660	825	1.60	1.10	1.5
SP05-1210821M	820±20%	815	1000	1.35	0.95	1.2
SP05-1210102K	1000±10%	930	1200	1.25	0.90	1.0
SP05-1210152K	1500±10%	1800	2300	1.00	0.80	0.9
SP05-1210222K	2200±10%	3250	3750	0.92	0.53	0.66

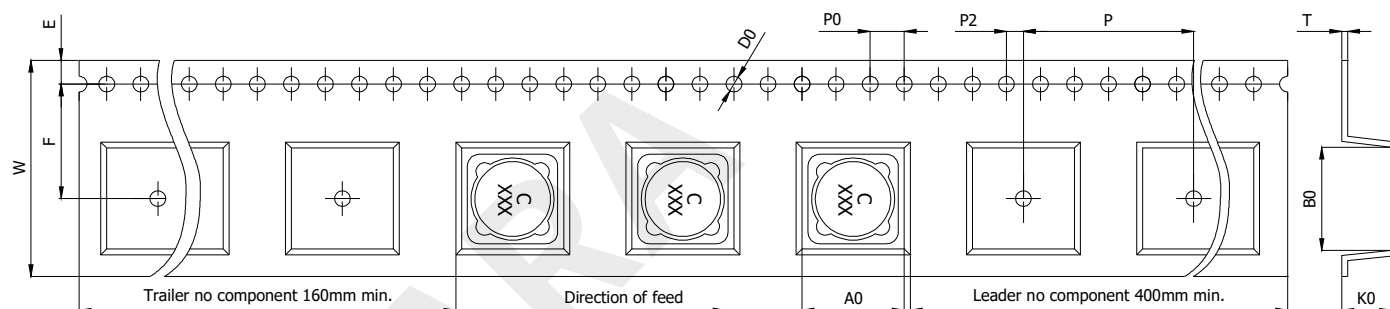
- Test frequency and voltage:1KHz,0.1Vrms.
- All test data referenced to 25°C ambient.
- Saturation current(Isat) will cause L0 to drop approximately 30%.
- Heat rated current(Irms) will cause the coil temperature rise approximately Δt of 40°C.

Characteristic Curve (Typical value)



Packaging Specification

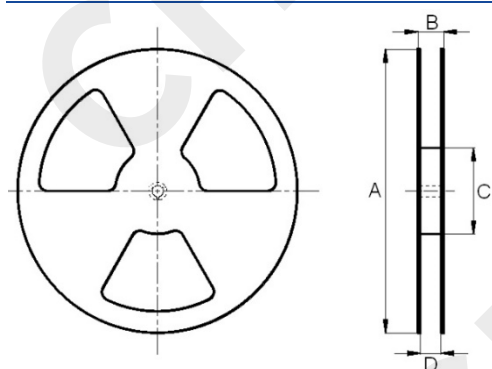
■ Carrier Tape (Unit:mm)



W	P	A0	B0	K0	E	F	P0	P2	D0	T
24.0±0.3	20.0±0.1	12.6±0.1	12.6±0.1	10.3±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

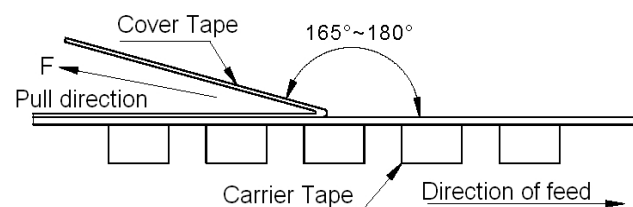
■ Reel (Unit:mm)

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



■ Taping Method

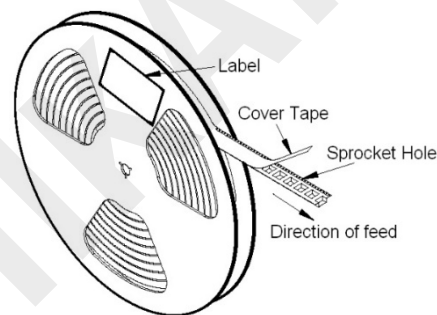
Peel-off strength	Peel-off angle	Peel-off speed
F=0.1N~1.0N	165°~180°	300mm/min.



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

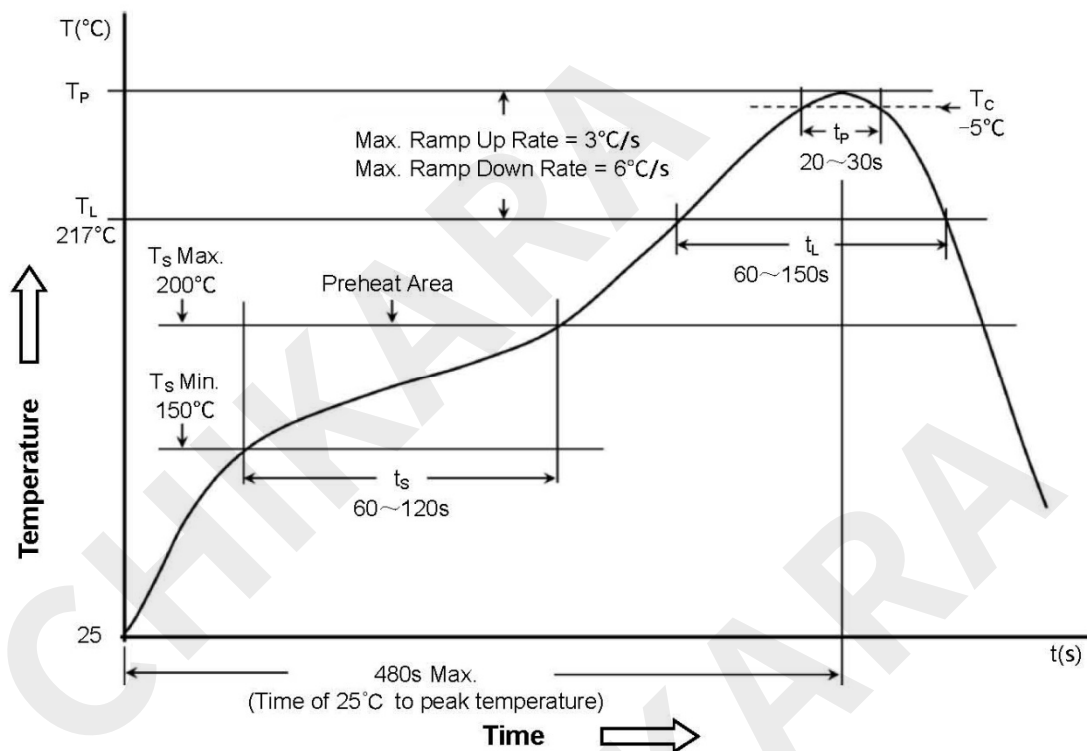
■ Package Quantity

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.