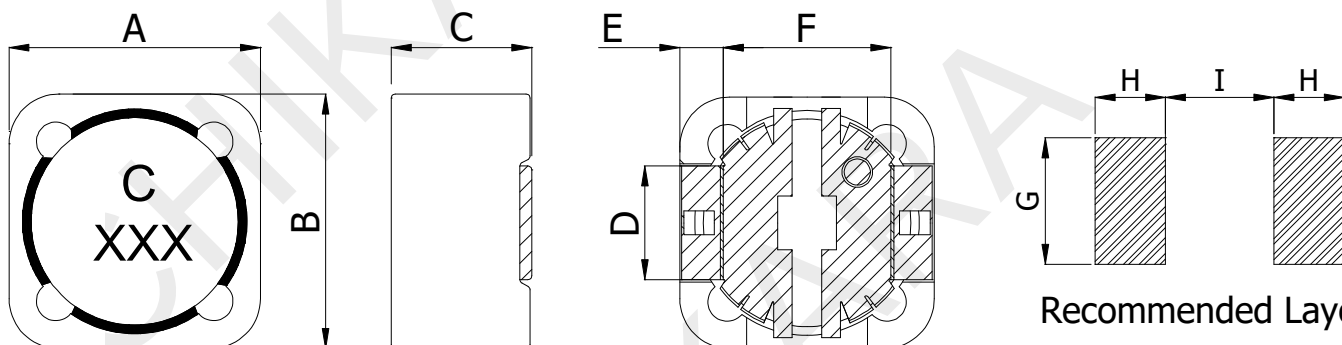


Features

- 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:500pcs. Per 13-inch reel
- RoHs&Halogen-free compliant



Mechanical Dimension(Unit:mm)



Recommended Layout

A	B	C	D	E	F	G	H	I
12.3±0.3	12.3±0.3	8.0Max.	4.9±0.2	2.0±0.2	7.9±0.3	5.5	3.85	6.1

Part Number Description

SP05 - 1208 1R0 N
① ② ③ ④

①	Type
②	Dimensions
③	Inductance value
④	Tolerance code

Electrical Schematic

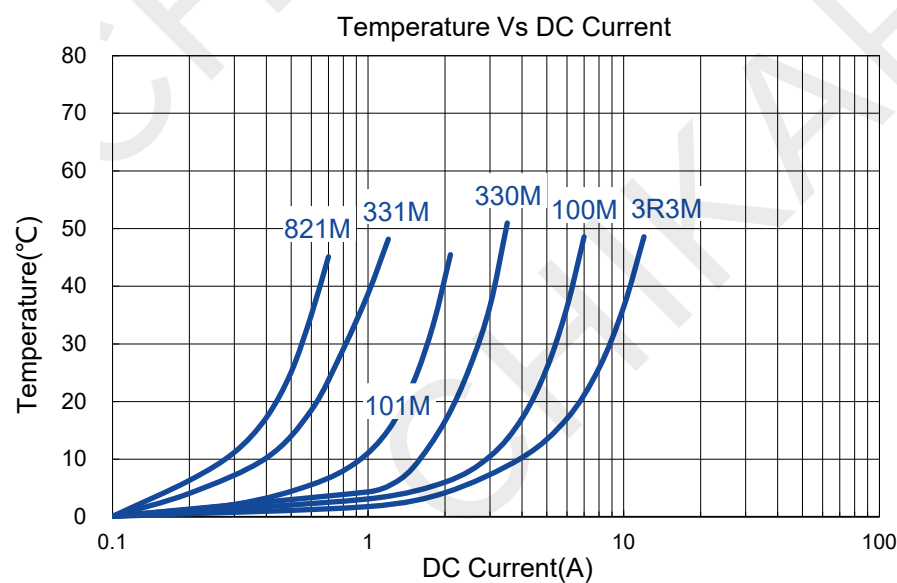
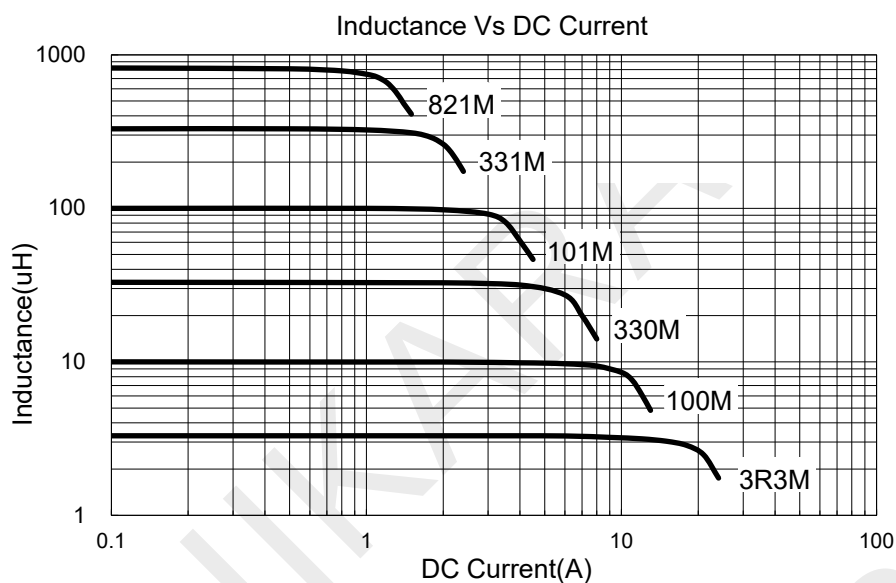


Electrical Characteristic

Part Number	Inductance L0(μH)	DCR		Isat (A)Typ.	Irms (A)Typ.	SRF (MHz)Typ.
		(mΩ)Typ.	(mΩ)Max.			
SP05-12081R0N	1.0±30%	3.13	4.07	40.0	15.5	110
SP05-12081R5N	1.5±30%	3.41	4.43	31.1	13.5	85
SP05-12082R2N	2.2±30%	4.02	5.23	25.5	12.5	58
SP05-12083R3M	3.3±20%	5.67	7.37	21.5	10.5	39
SP05-12084R7M	4.7±20%	9.17	11.92	16.5	8.25	33
SP05-12086R8M	6.8±20%	11.6	15.1	13.3	7.34	22
SP05-12088R2M	8.2±20%	15.7	20.4	12.2	6.32	20
SP05-1208100M	10±20%	17.2	22.4	11.2	6.04	17
SP05-1208150M	15±20%	24.7	32.1	9.66	5.03	13
SP05-1208220M	22±20%	39.1	50.8	7.57	4.00	11
SP05-1208330M	33±20%	60.0	78.0	6.22	3.23	9.5
SP05-1208470M	47±20%	71.9	93.5	5.28	2.95	7.6
SP05-1208680M	68±20%	105	137	4.44	2.44	6.5
SP05-1208820M	82±20%	143	186	4.06	2.09	5.0
SP05-1208101M	100±20%	163	212	3.64	1.96	4.5
SP05-1208151M	150±20%	247	321	3.01	1.59	4.0
SP05-1208221M	220±20%	376	489	2.43	1.29	3.4
SP05-1208331M	330±20%	574	746	2.01	1.04	2.9
SP05-1208471M	470±20%	861	1119	1.68	0.85	2.2
SP05-1208681M	680±20%	1080	1404	1.39	0.76	1.7
SP05-1208821M	820±20%	1470	1911	1.27	0.65	1.4
SP05-1208102K	1000±10%	1660	2158	1.14	0.61	1.2

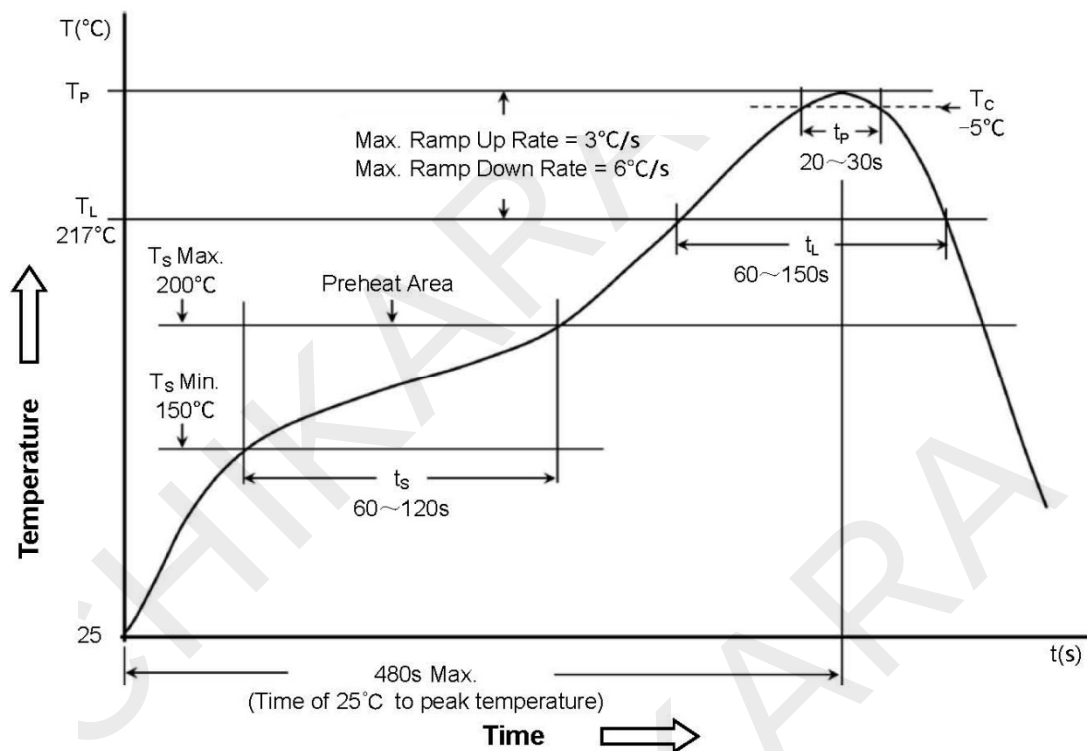
- Test frequency and voltage:100KHz,0.1Vrms.
- All test data referenced to 25°C ambient.
- Saturation current(Isat) will cause L0 to drop approximately 30%.
- Heat rated current(Irms) will cause the coil temperature rise approximately Δt of 40°C.

Characteristic Curve (Typical value)



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.