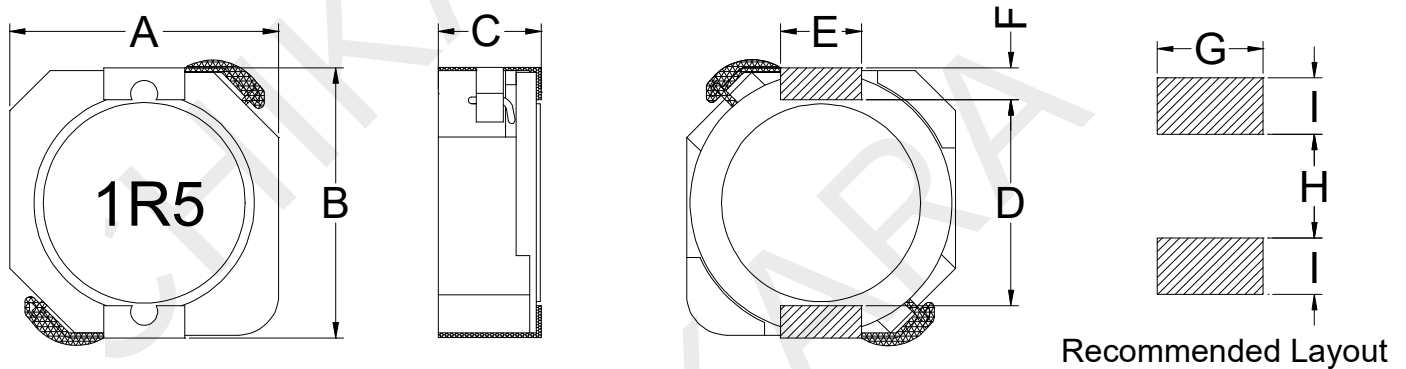


Features

- High saturation current, High efficiency
- 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)



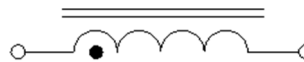
A	B	C	D	E	F	G	H	I
10±0.3	10±0.5	3.0Max.	8.0±0.3	3.0±0.1	1.2±0.2	3.5	7.0	2.0

Part Number Description

SP21 - 1003 1R5 N
① ② ③ ④

①	Type
②	Dimensions
③	Inductance value
④	Tolerance code

Electrical Schematic

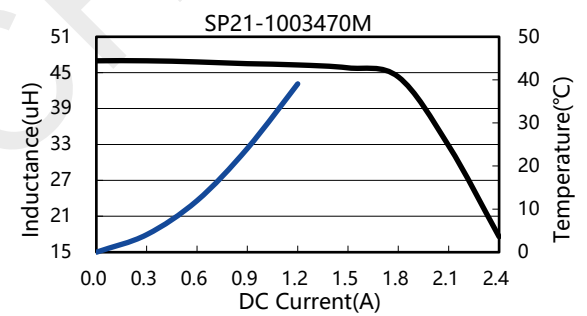
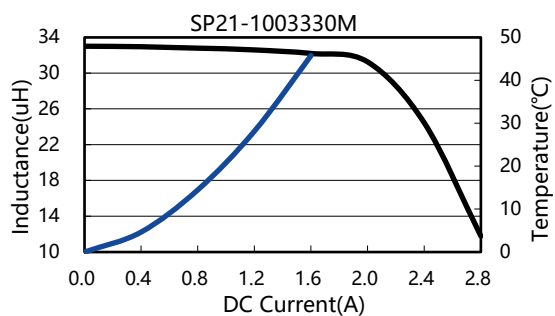
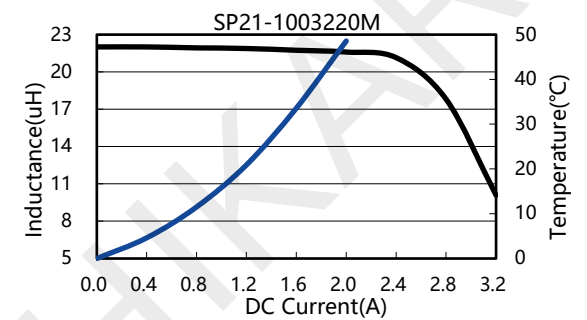
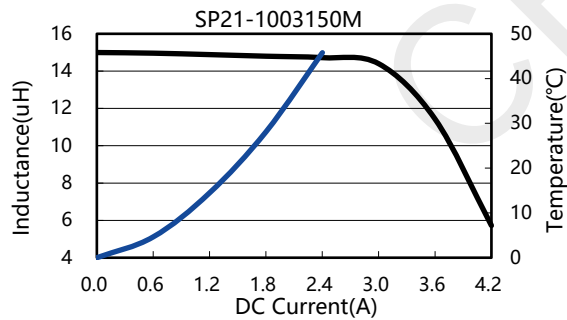
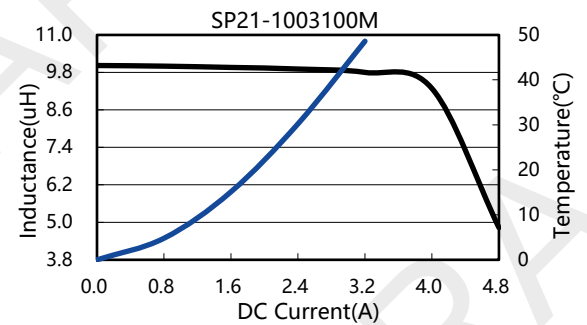
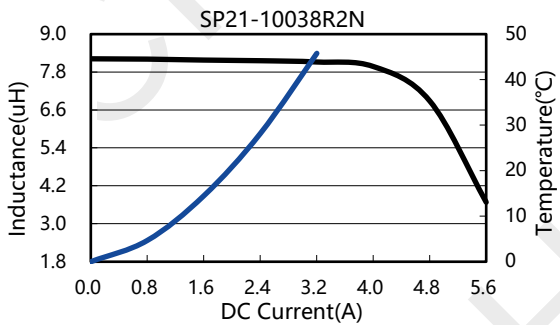
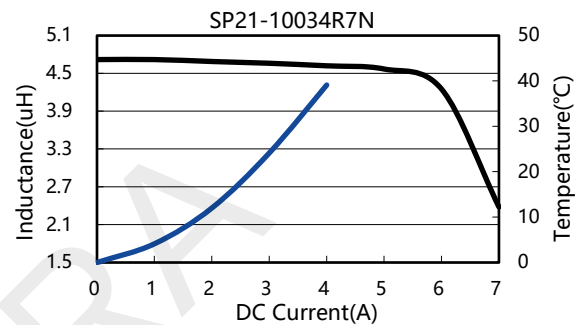
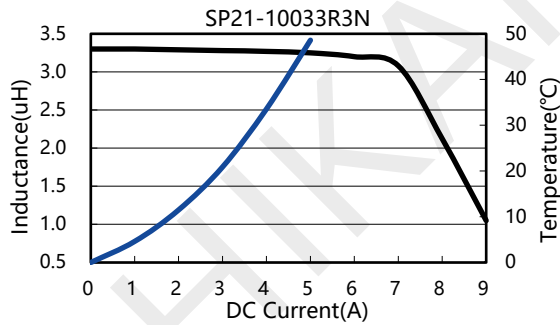
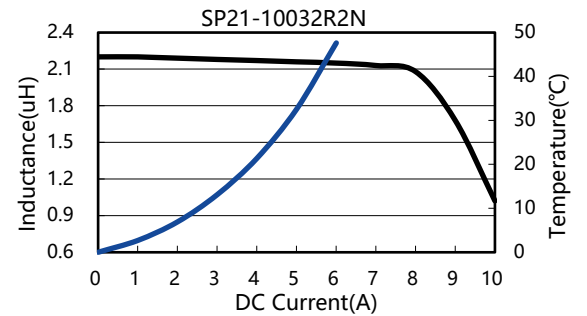
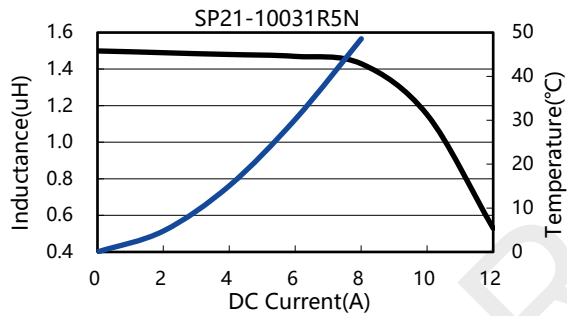


Electrical Characteristic

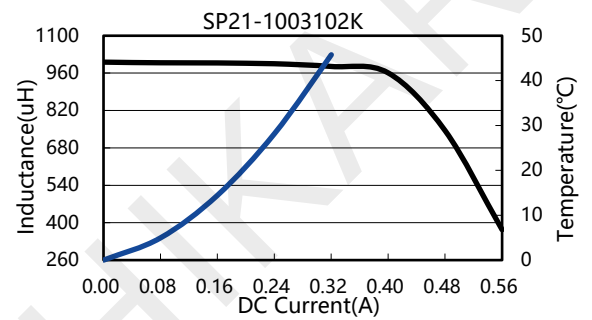
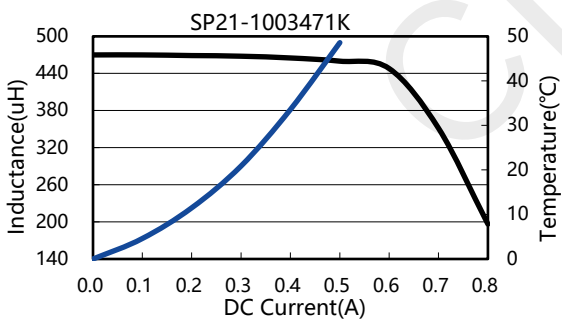
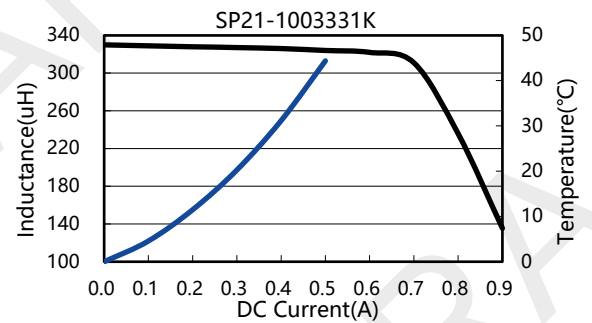
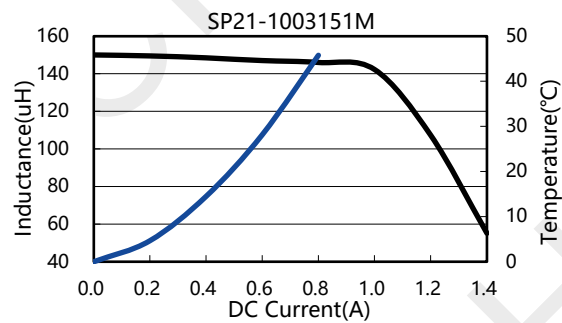
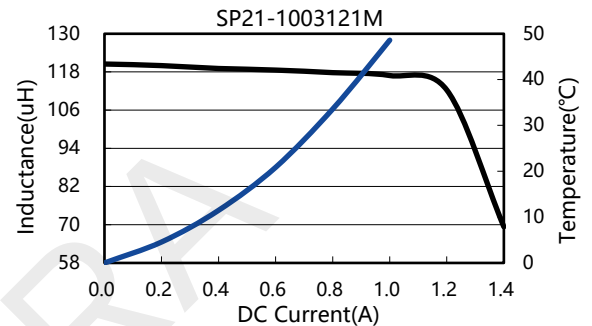
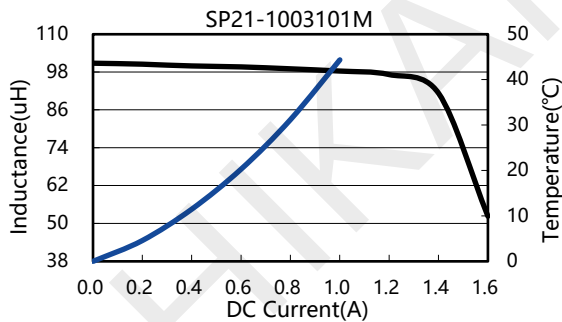
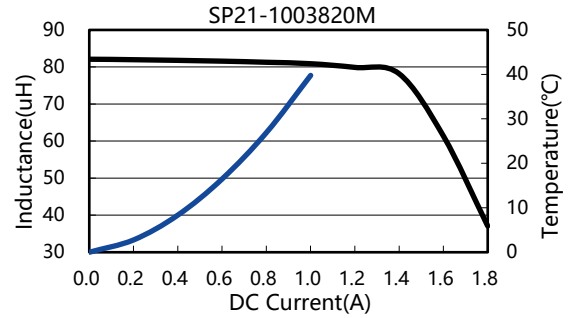
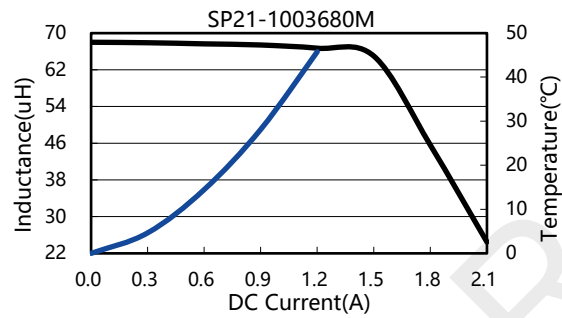
Part Number	Inductance L0(μH)	DCR		Isat (A)Typ.	Irms (A)Typ.	SRF (MHz)Typ.
		(mΩ)Typ.	(mΩ)Max.			
SP21-10031R5N	1.5±30%	13.7	16.0	9.5	6.2	75
SP21-10032R2N	2.2±30%	16.8	20.0	8.5	5.1	71
SP21-10033R3N	3.3±30%	20.4	24.0	7.2	4.6	50
SP21-10034R7N	4.7±30%	26.0	31.0	6.0	4.0	42
SP21-10038R2N	8.2±30%	41.0	49.0	4.7	3.0	30
SP21-1003100M	10±20%	52.0	62.0	4.1	2.6	25
SP21-1003150M	15±20%	74.0	89.0	3.4	2.2	20
SP21-1003220M	22±20%	110	133	2.7	1.7	18
SP21-1003330M	33±20%	170	204	2.2	1.4	13
SP21-1003470M	47±20%	205	248	1.9	1.2	11.5
SP21-1003680M	68±20%	275	330	1.6	1.1	9.4
SP21-1003820M	82±20%	349	419	1.5	1.0	8.8
SP21-1003101M	100±20%	398	478	1.4	0.9	7.7
SP21-1003121M	120±20%	498	598	1.25	0.85	7.0
SP21-1003151M	150±20%	570	684	1.10	0.70	6.1
SP21-1003331K	330±10%	1230	1500	0.73	0.48	4.3
SP21-1003471K	470±10%	1850	2200	0.65	0.42	3.4
SP21-1003102K	1000±10%	4000	4600	0.45	0.30	2.3

- 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.

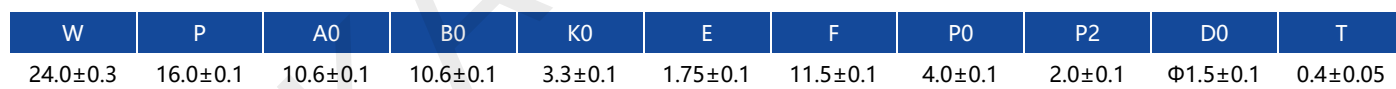
Characteristic Curve (Typical value)



Characteristic Curve (Typical value)

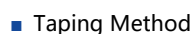


- Carrier Tape (Unit:mm)

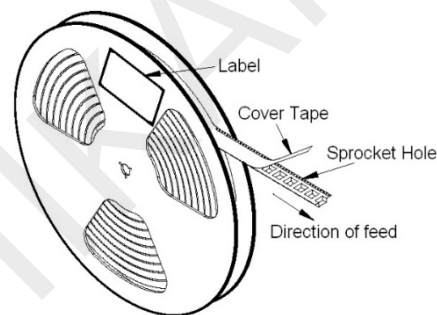


- Reel (Unit:mm)

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~1.0N	165°~180°	300mm/min.



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

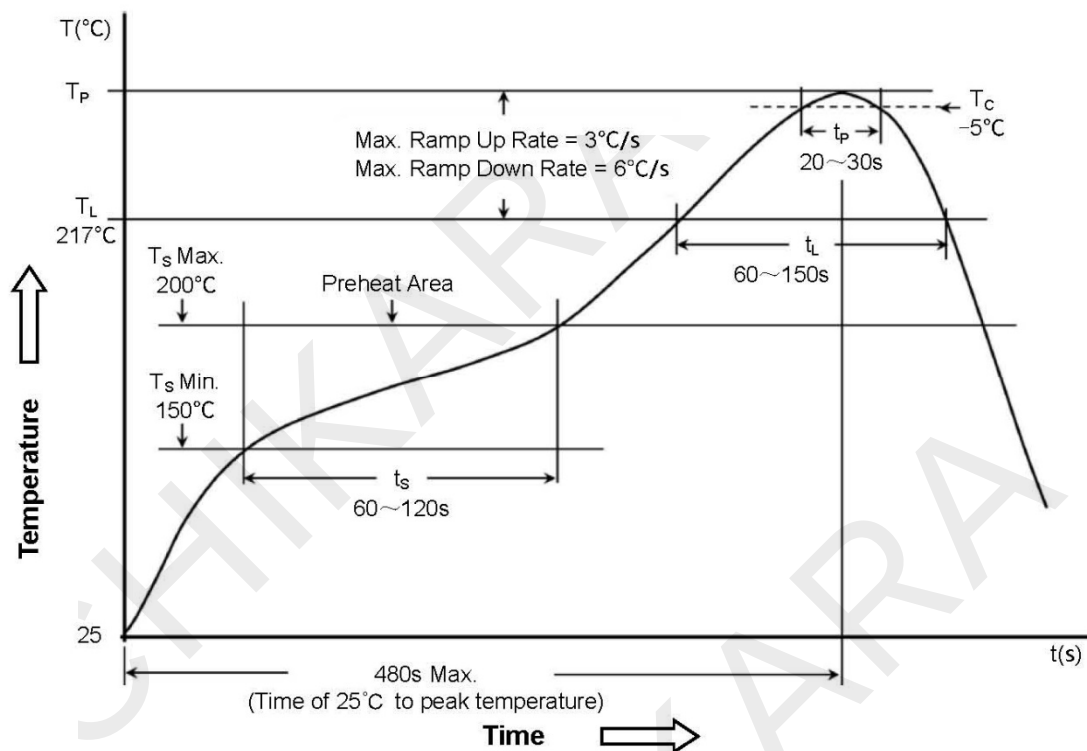
- Package Quantity

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.