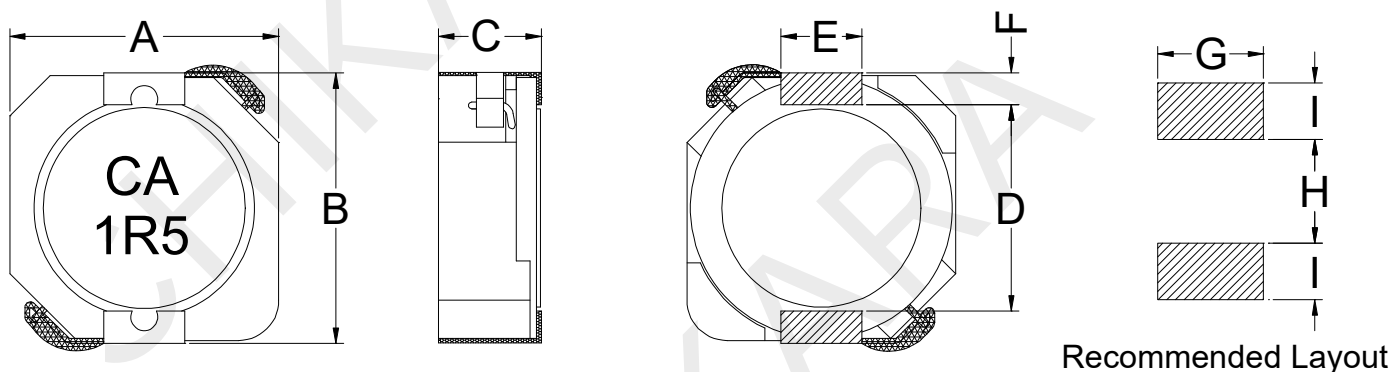


Features

- High saturation current, High efficiency
- Storage temperature range:-55°C to + 150°C
- Operating temperature range:-55°C to + 150°C
(including coil's self-temperature rise)
- Moisture sensitivity level:1
- AEC-Q200 qualified
- Packaging:700pcs. 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	5.0Max.	8.0±0.3	3.0±0.1	1.2±0.2	3.5	7.0	2.0

Part Number Description

SPA21 - 1005 1R5 N
① ② ③ ④

①	Type
②	Dimensions
③	Inductance value
④	Tolerance code

Electrical Schematic

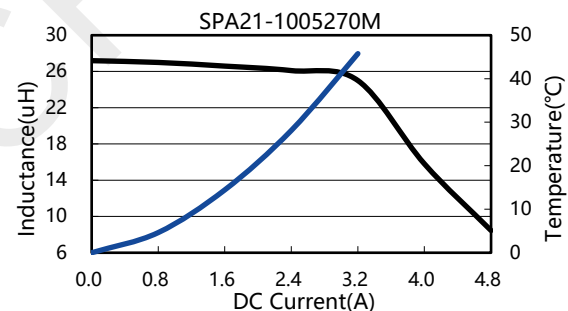
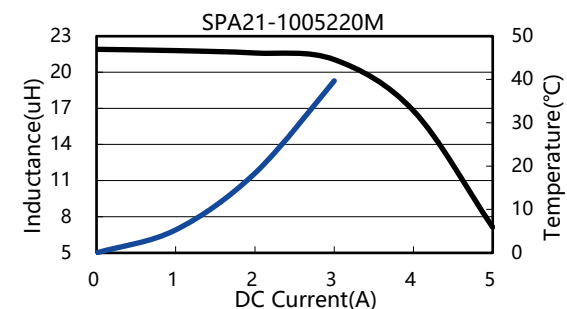
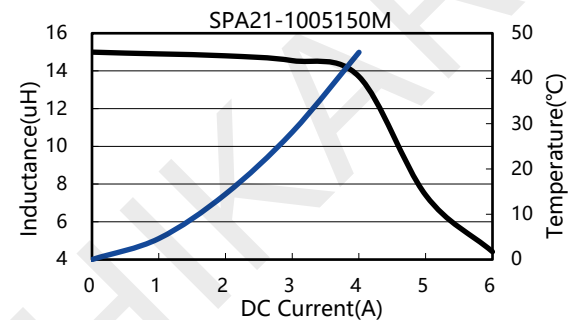
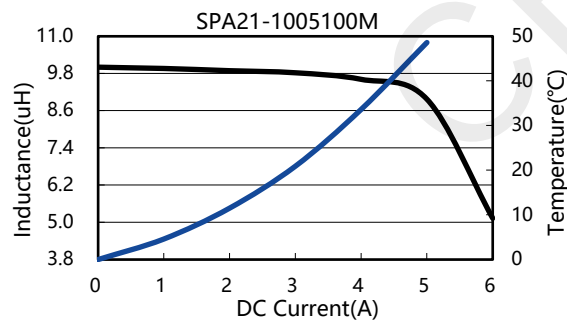
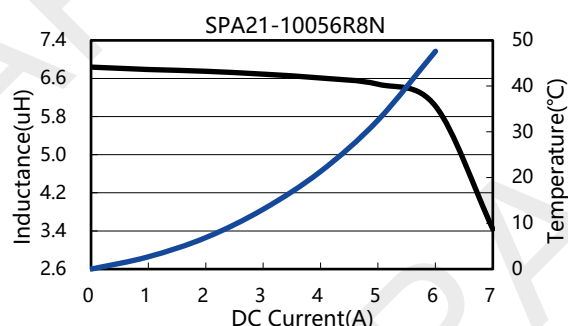
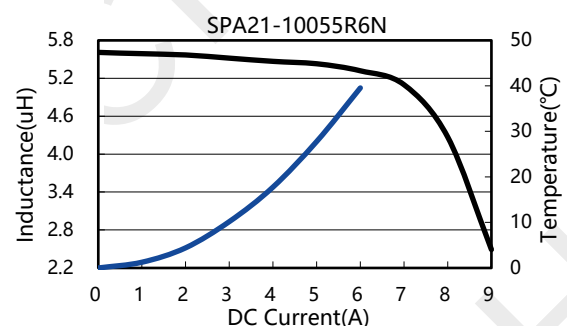
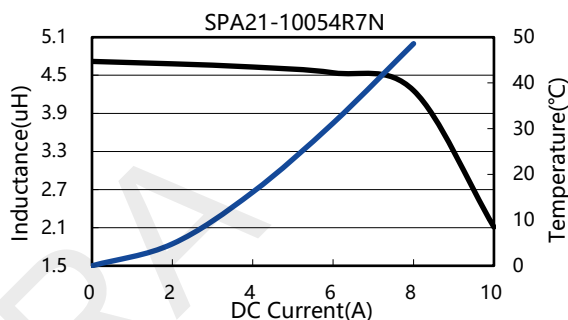
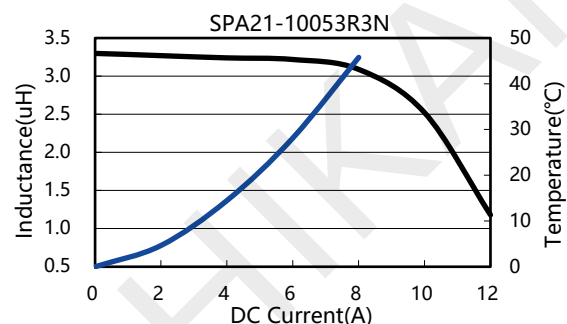
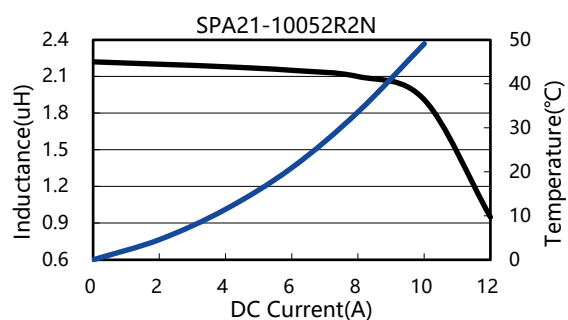
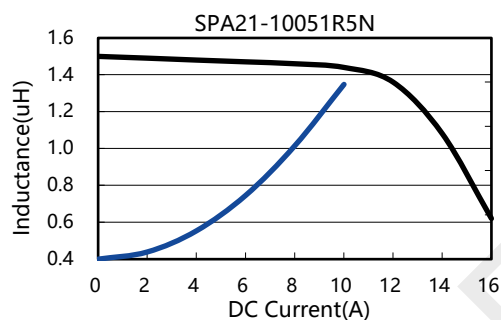


Electrical Characteristic

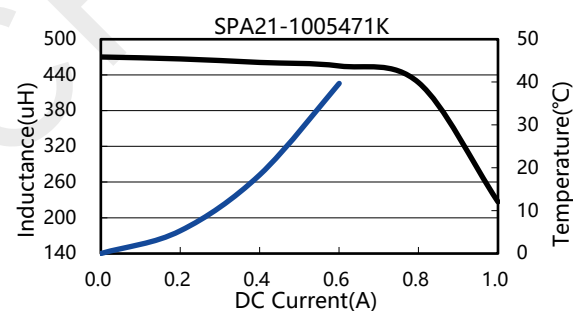
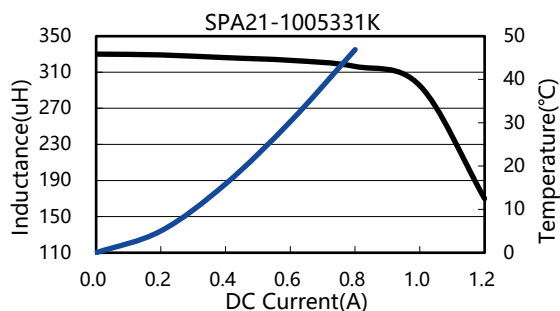
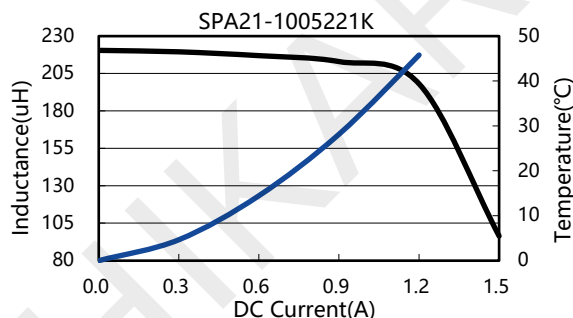
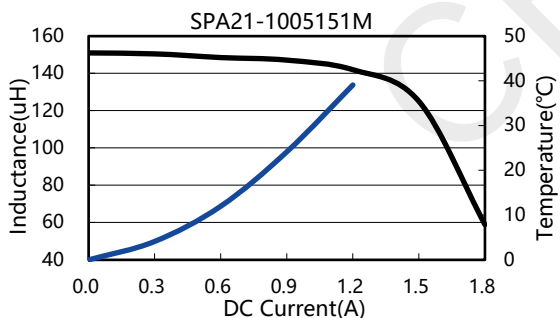
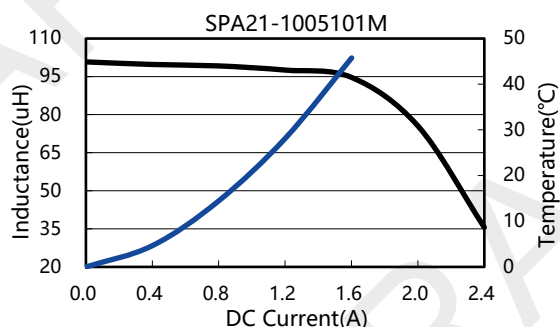
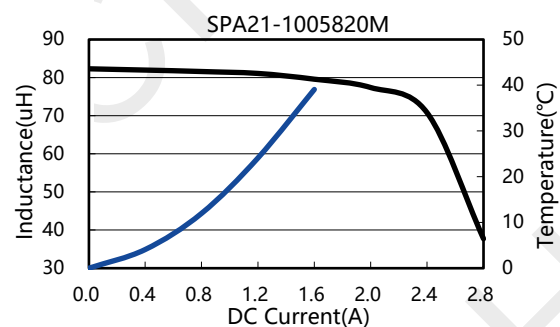
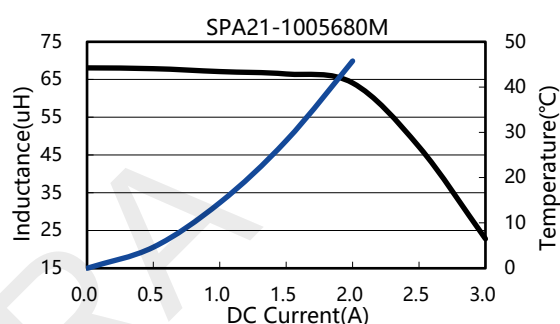
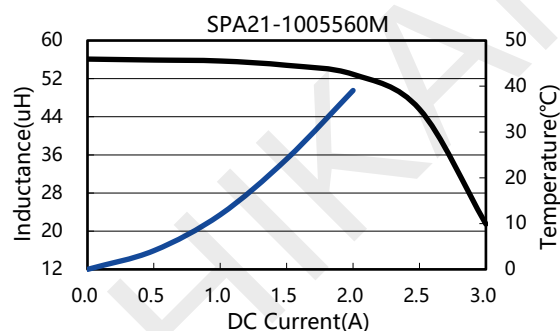
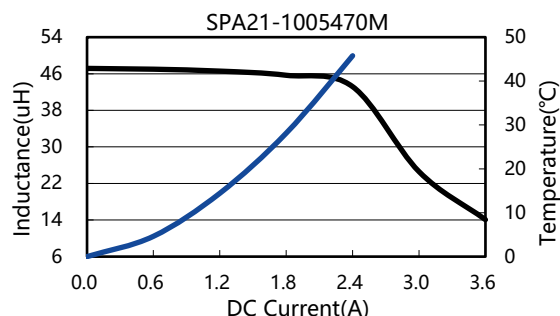
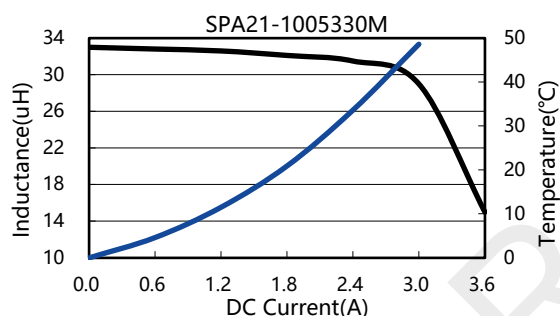
Part Number	Inductance L0(μH)	DCR		Isat (A)Typ.	Irms (A)Typ.	SRF (MHz)Typ.
		(mΩ)Typ.	(mΩ)Max.			
SPA21-10051R5N	1.5±30%	5.6	6.8	12.5	10.0	70
SPA21-10052R2N	2.2±30%	6.8	8.0	9.5	8.6	53
SPA21-10053R3N	3.3±30%	8.9	10.5	9.0	7.5	42
SPA21-10054R7N	4.7±30%	10.5	12.5	8.0	7.0	34
SPA21-10055R6N	5.6±30%	12.0	14.5	7.2	6.0	28
SPA21-10056R8N	6.8±30%	18.5	22	5.8	5.2	24
SPA21-1005100M	10±20%	23	27	5.0	4.3	20
SPA21-1005150M	15±20%	36	43	4.1	3.5	17
SPA21-1005220M	22±20%	42	50	3.6	3.0	15
SPA21-1005270M	27±20%	63	74	3.4	2.6	14
SPA21-1005330M	33±20%	66	79	2.9	2.5	11
SPA21-1005470M	47±20%	83	99	2.5	2.2	9.0
SPA21-1005560M	56±20%	101	121	2.3	2.0	8.6
SPA21-1005680M	68±20%	115	132	2.2	1.9	8.0
SPA21-1005820M	82±20%	147	176	1.9	1.6	6.6
SPA21-1005101M	100±20%	175	198	1.8	1.5	5.9
SPA21-1005151M	150±20%	251	300	1.4	1.2	4.9
SPA21-1005221K	220±10%	366	439	1.2	1.0	4.3
SPA21-1005331K	330±10%	655	750	1.0	0.71	3.2
SPA21-1005471K	470±10%	960	1100	0.82	0.60	2.5
SPA21-1005681K	680±10%	1140	1220	0.71	0.52	2.0
SPA21-1005102K	1000±10%	1860	2050	0.55	0.43	1.7

- 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.

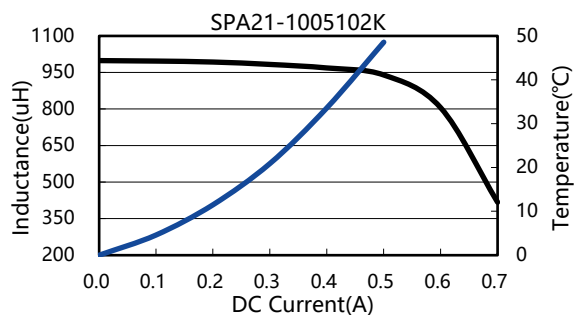
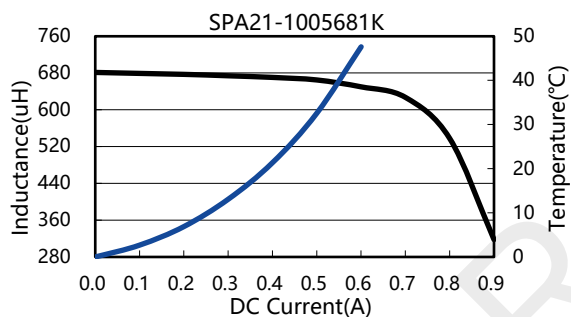
e e Characteristic Curve (Typical value)



Characteristic Curve (Typical value)

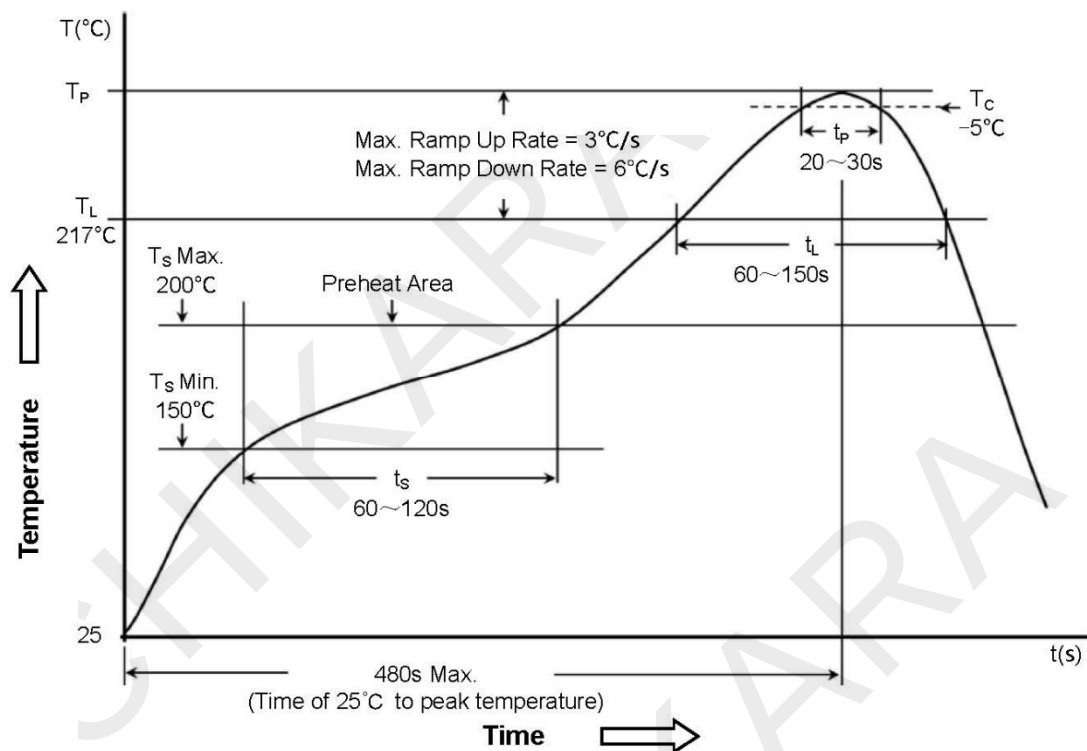


Characteristic Curve (Typical value)



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.