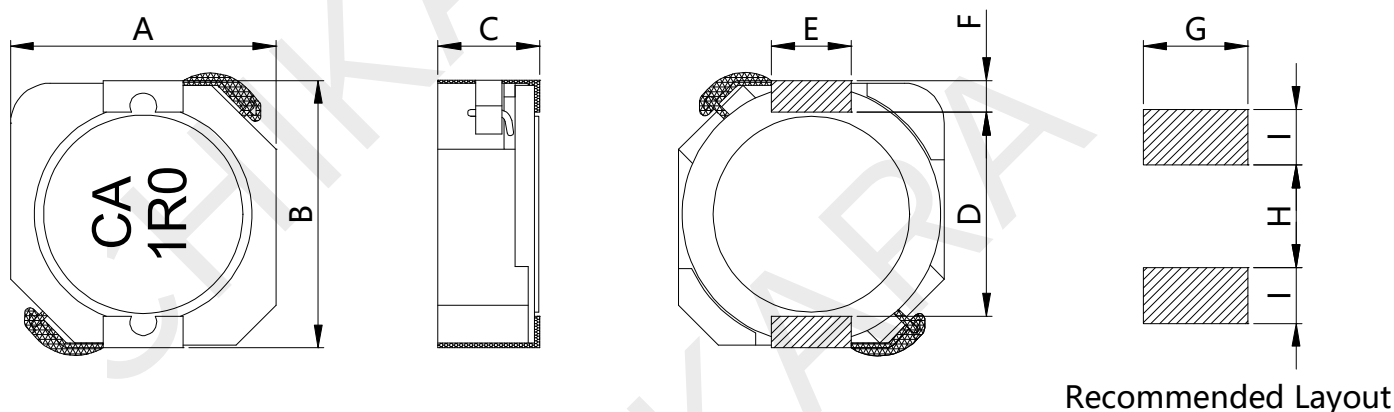


Features

- Magnetically shielded construction
- 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:1000pcs. Per 13-inch reel
- RoHs&Halogen-free compliant



Mechanical Dimension(Unit:mm)



A	B	C	D	E	F	G	H	I
10.3Max.	10.5Max.	4.0Max.	7.9±0.3	3.0±0.1	1.2±0.2	3.6	7.3	1.7

Part Number Description

SPA01 - 1004 1R0 N
① ② ③ ④

①	Type
②	Dimensions
③	Inductance value
④	Tolerance code

Electrical Schematic

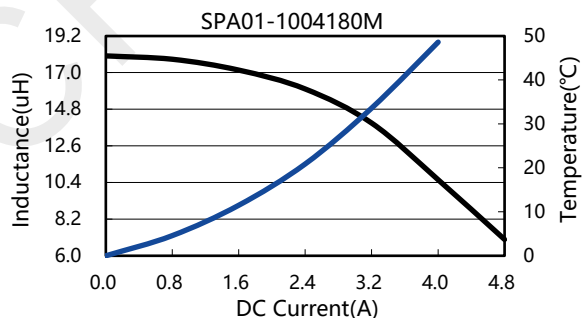
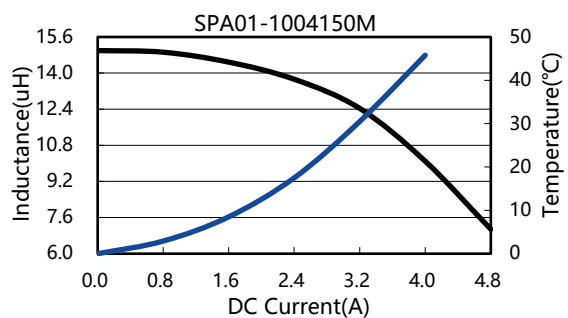
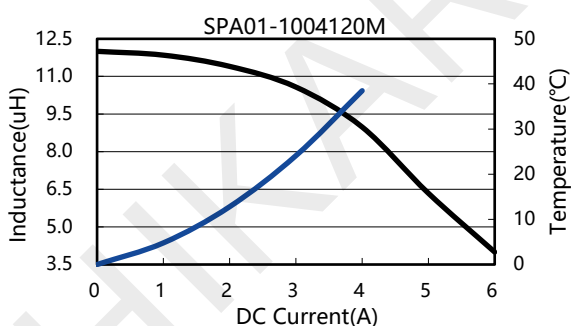
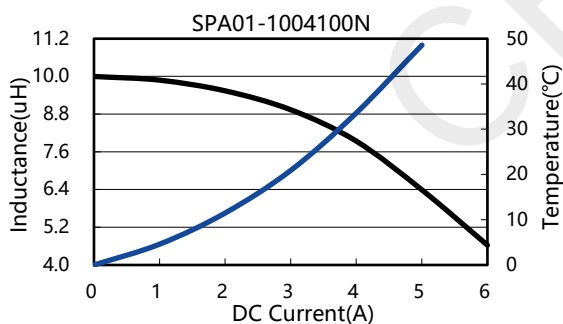
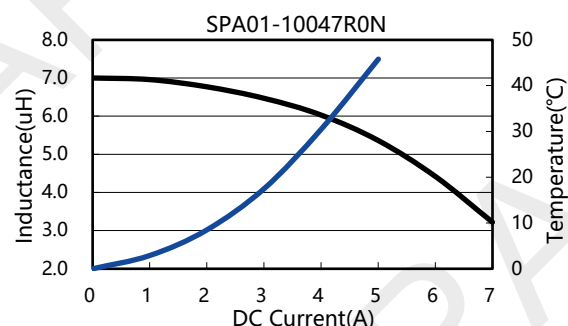
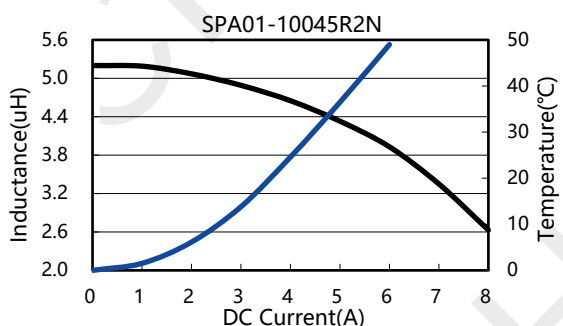
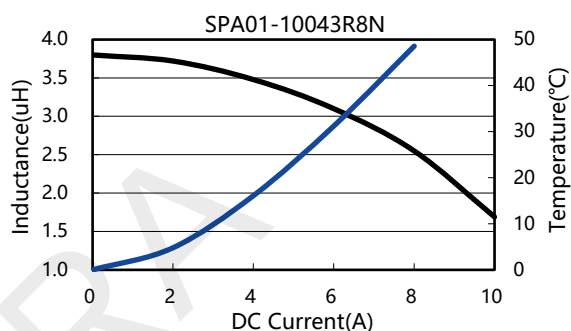
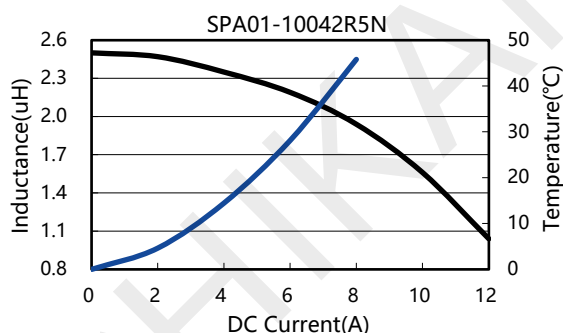
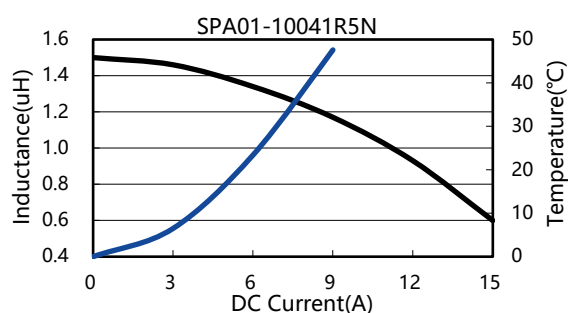
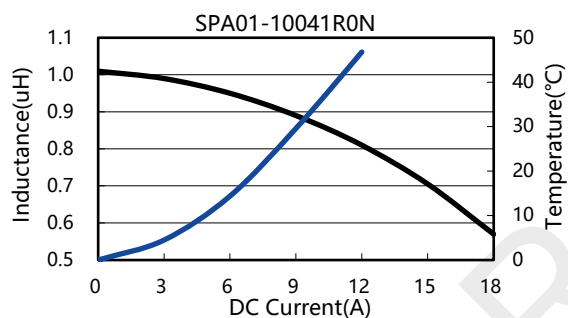


Electrical Characteristic

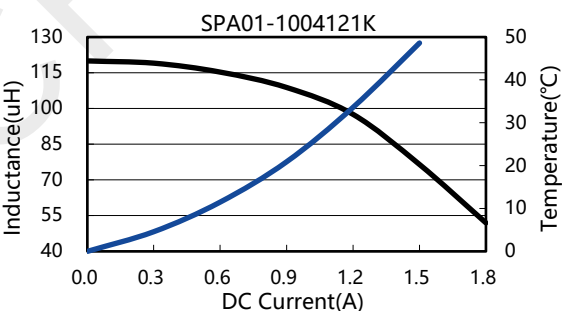
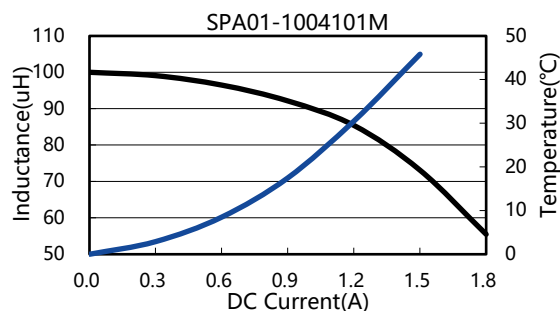
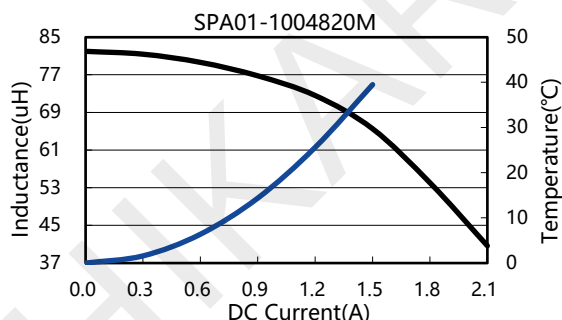
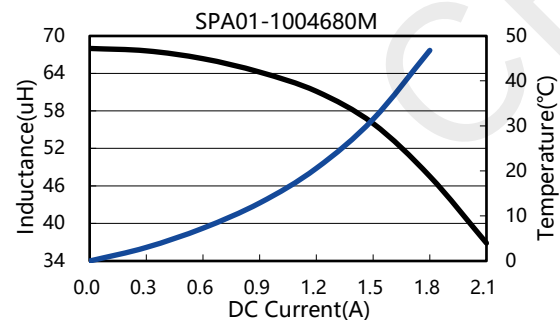
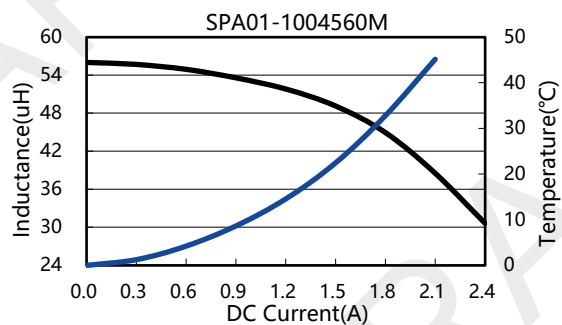
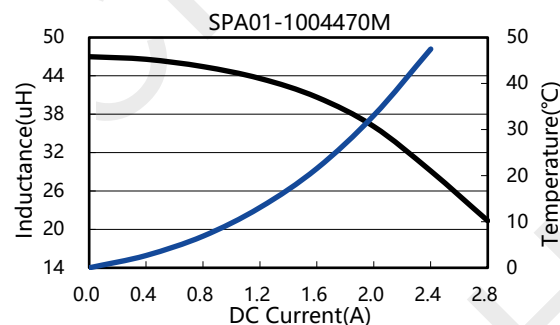
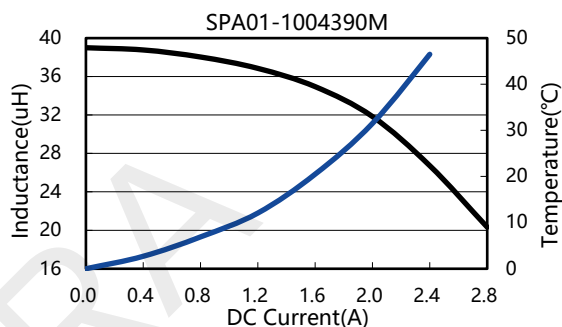
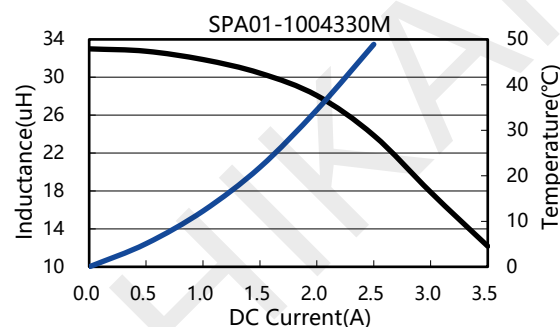
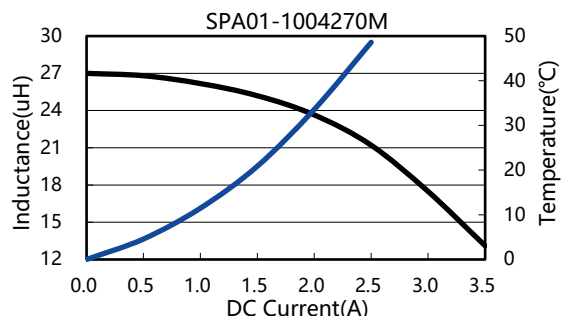
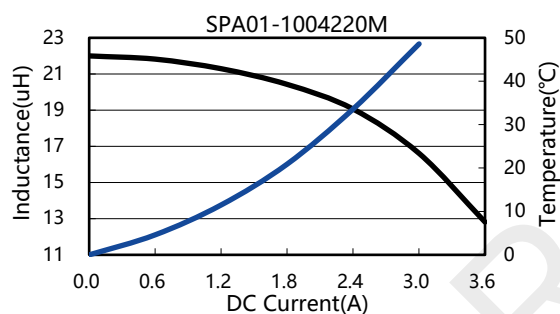
Part Number	Inductance L0(μH)	DCR		Isat (A)Typ.	Irms (A)Typ.	SRF (MHz)Typ.
		(mΩ)Typ.	(mΩ)Max.			
SPA01-10041R0N	1.0±30%	4.8	6.0	12.10	10.0	138
SPA01-10041R5N	1.5±30%	6.5	8.1	11.06	7.85	81
SPA01-10042R5N	2.5±30%	8.0	10	9.26	6.65	61
SPA01-10043R8N	3.8±30%	10	13	7.64	6.05	45
SPA01-10045R2N	5.2±30%	18	22	6.14	5.10	37
SPA01-10047R0N	7.0±30%	22	27	5.60	4.35	33
SPA01-1004100N	10±30%	28	35	4.52	4.05	29
SPA01-1004120M	12±20%	35	41	4.04	4.00	25
SPA01-1004150M	15±20%	42	50	3.86	3.80	21
SPA01-1004180M	18±20%	55	65	3.52	3.35	18
SPA01-1004220M	22±20%	62	73	3.30	2.85	15
SPA01-1004270M	27±20%	75	89	2.84	2.35	15
SPA01-1004330M	33±20%	78	93	2.62	2.30	13
SPA01-1004390M	39±20%	95	112	2.34	2.25	12
SPA01-1004470M	47±20%	108	128	2.22	2.20	11
SPA01-1004560M	56±20%	155	180	2.04	1.85	11
SPA01-1004680M	68±20%	180	213	1.82	1.75	10
SPA01-1004820M	82±20%	220	261	1.60	1.50	8
SPA01-1004101M	100±20%	260	304	1.46	1.45	6
SPA01-1004121K	120±10%	340	380	1.34	1.25	6
SPA01-1004151K	150±10%	455	506	1.22	1.20	6
SPA01-1004181K	180±10%	540	582	1.16	0.98	5
SPA01-1004221K	220±10%	680	756	0.99	0.97	5
SPA01-1004271K	270±10%	840	926	0.91	0.86	4
SPA01-1004331K	330±10%	975	1090	0.82	0.69	4
SPA01-1004391K	390±10%	1020	1141	0.74	0.65	4
SPA01-1004471K	470±10%	1110	1243	0.70	0.63	3
SPA01-1004561K	560±10%	1540	1696	0.56	0.59	3
SPA01-1004681K	680±10%	1750	1926	0.52	0.50	3
SPA01-1004821K	820±10%	2350	2596	0.49	0.47	3
SPA01-1004102K	1000±10%	2580	2853	0.46	0.45	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 30%.
- Heat rated current(Irms) will cause the coil temperature rise approximately Δt of 40°C.

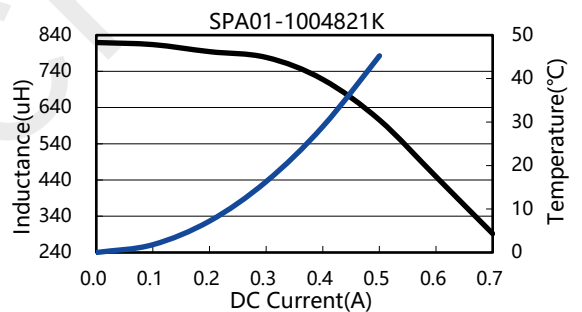
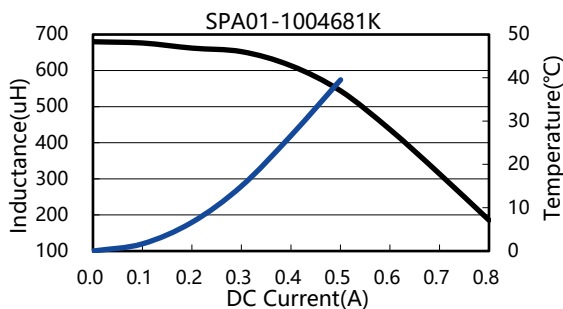
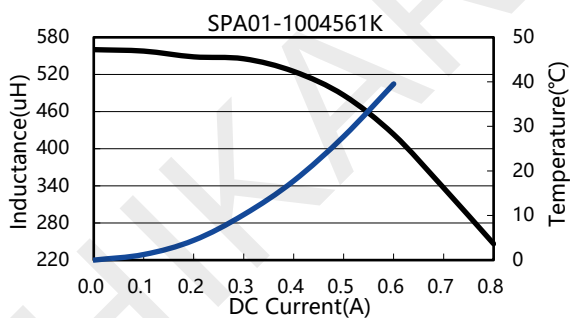
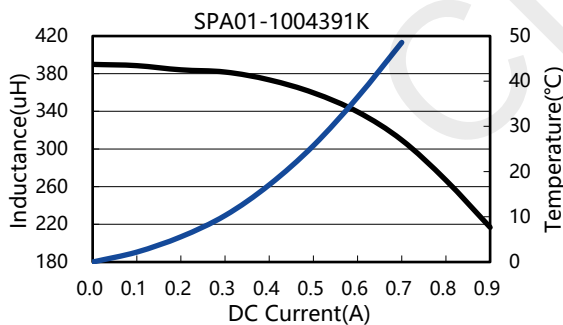
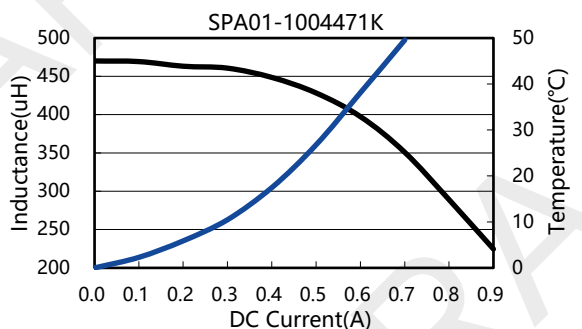
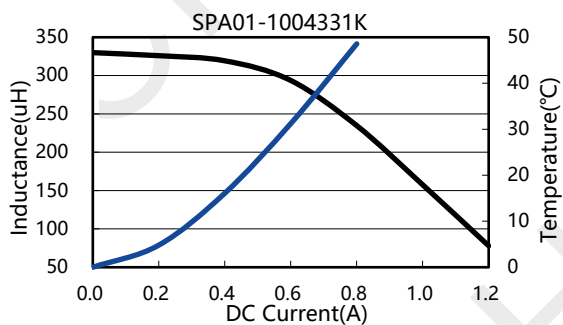
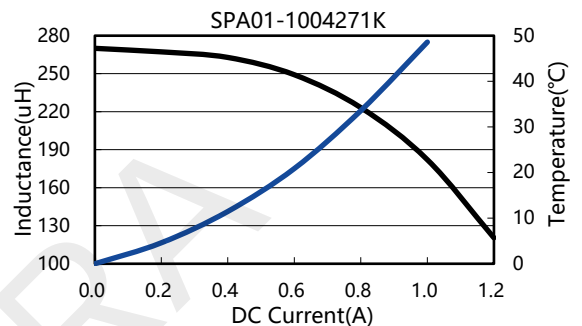
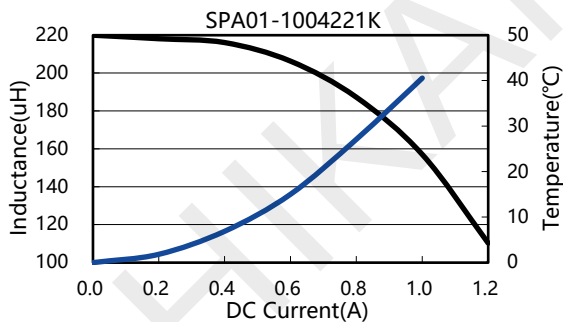
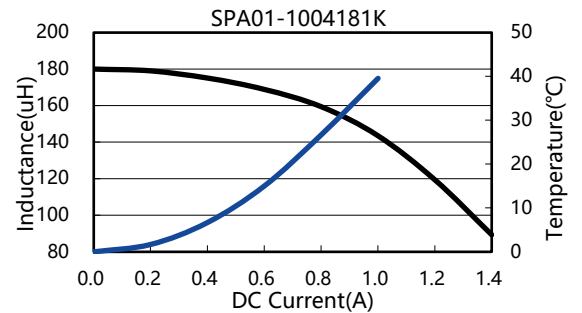
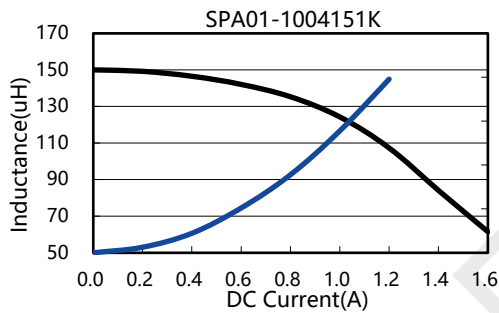
Characteristic Curve (Typical value)



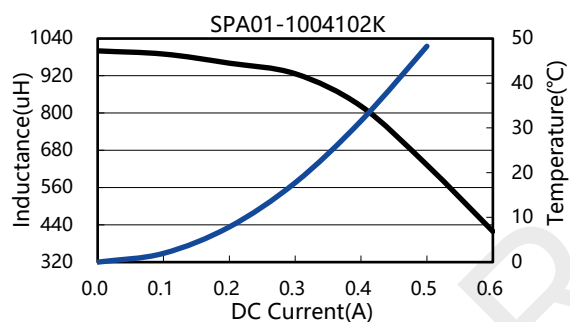
Characteristic Curve (Typical value)



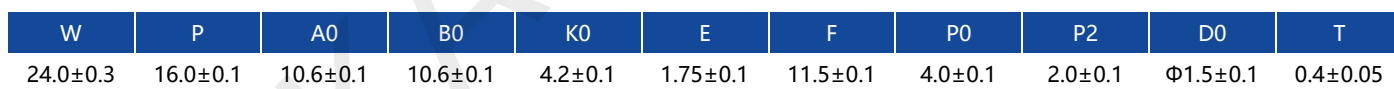
Characteristic Curve (Typical value)



Characteristic Curve (Typical value)



- Carrier Tape (Unit:mm)

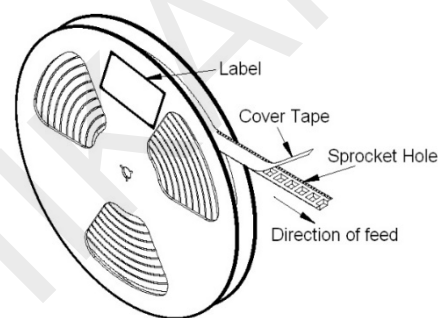


- Reel (Unit:mm)

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.



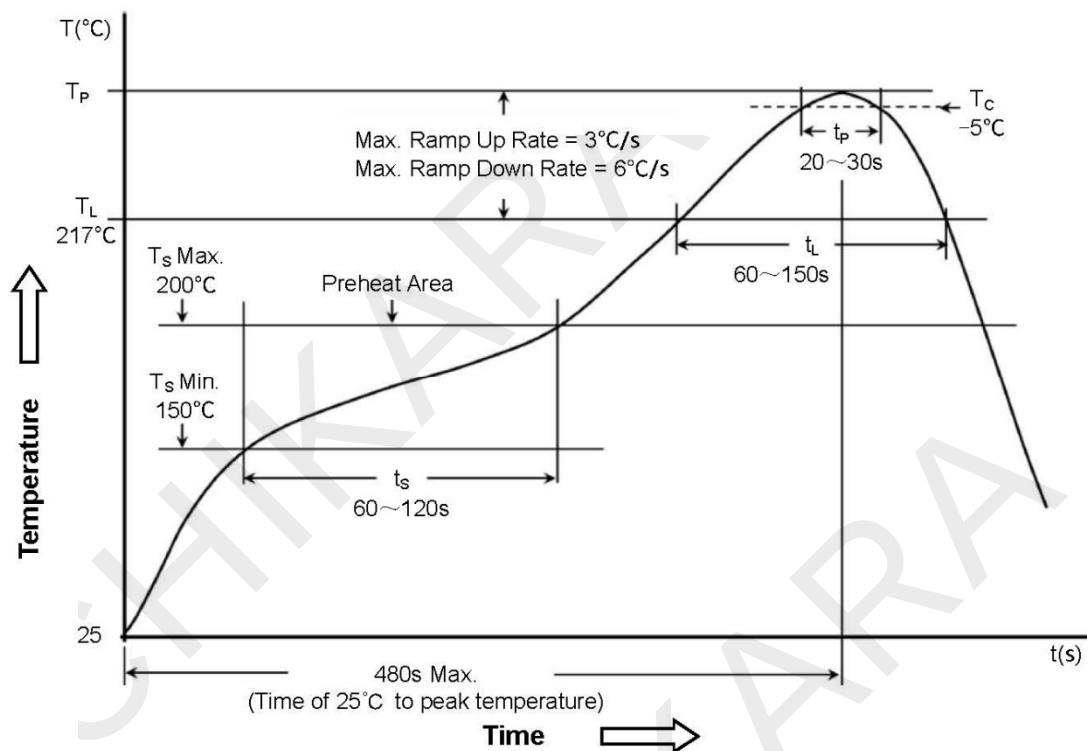
- Package Quantity

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.