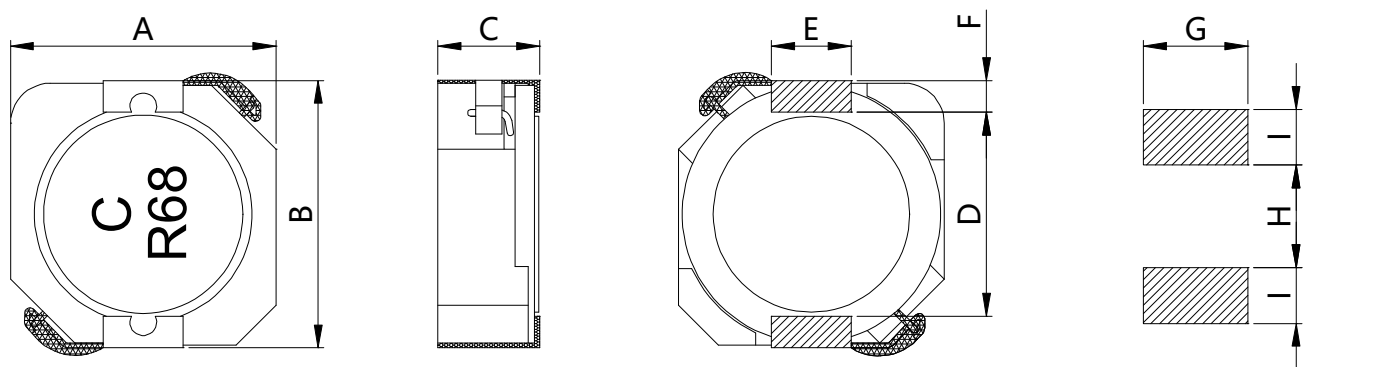


Features

- 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:700pcs. Per 13-inch reel
- RoHs&Halogen-free compliant



Mechanical Dimension(Unit:mm)



Recommended Layout

A	B	C	D	E	F	G	H	I
10.3Max.	10.5Max.	5.0Max.	7.9±0.3	3.0±0.1	1.2±0.2	3.6	7.3	1.7

Part Number Description

SP01 - 1005 R68 N
① ② ③ ④

①	Type
②	Dimensions
③	Inductance value
④	Tolerance code

Electrical Schematic

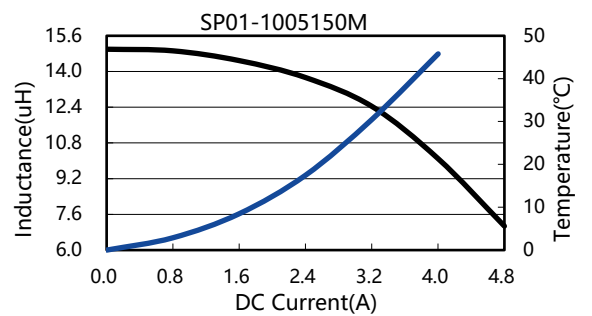
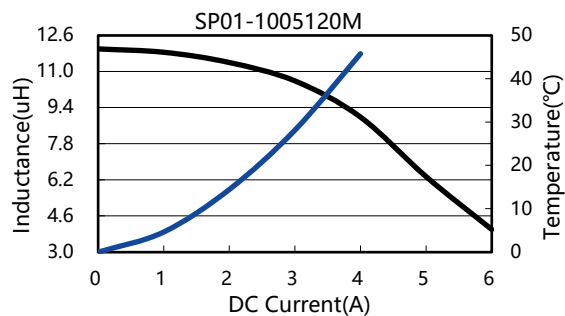
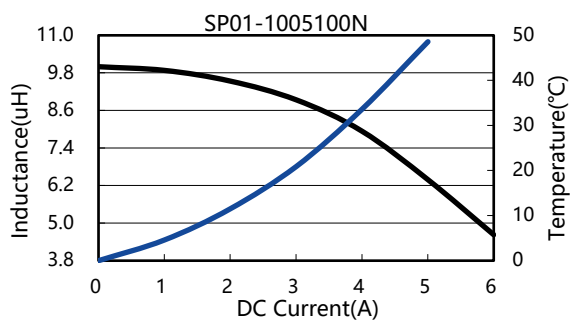
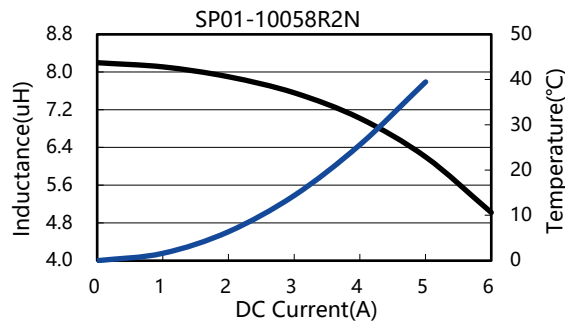
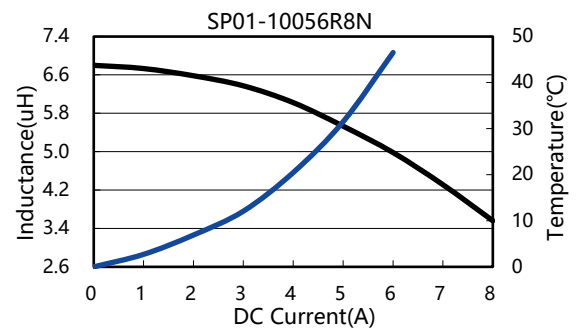
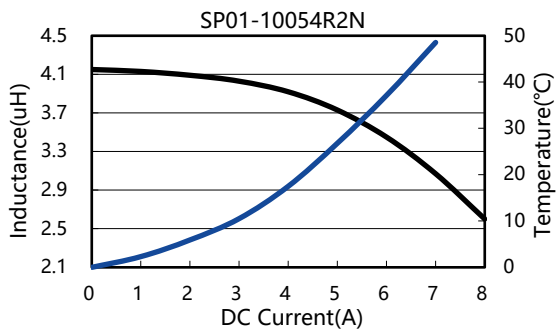
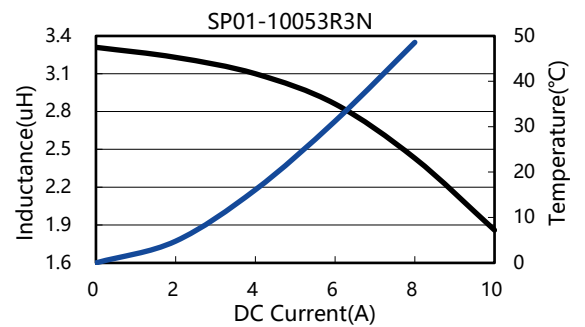
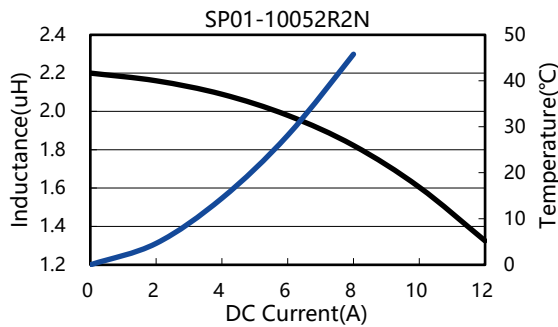
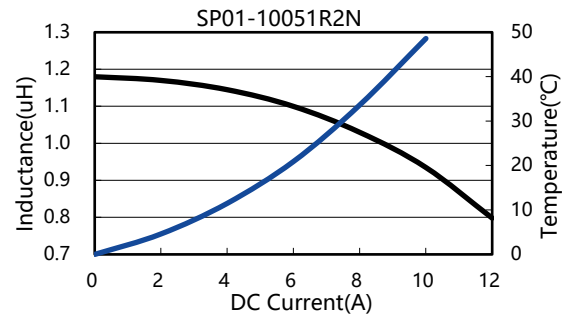
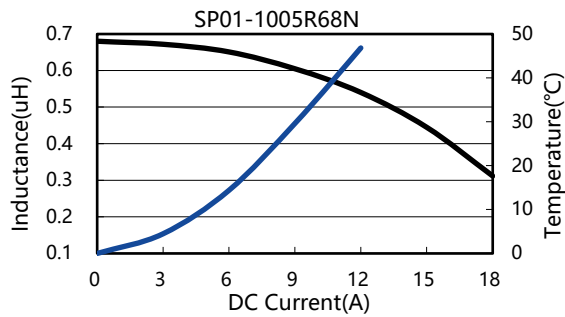


Electrical Characteristic

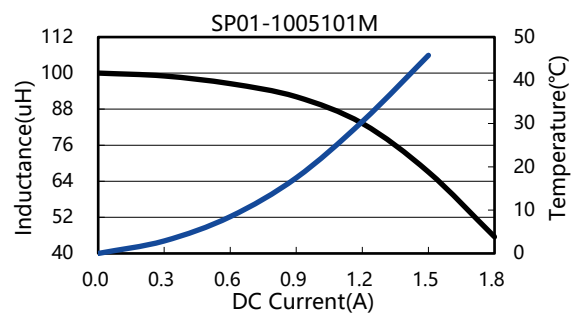
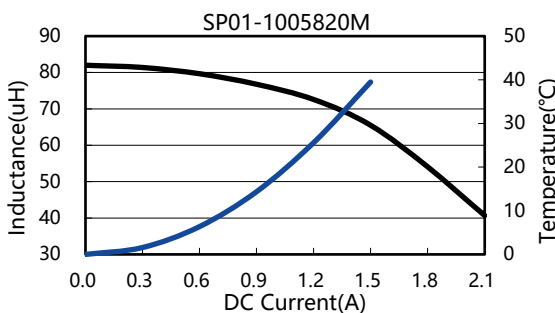
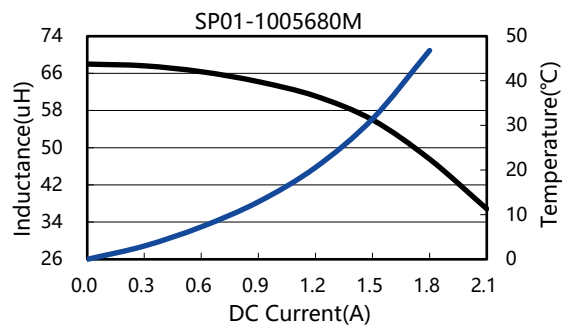
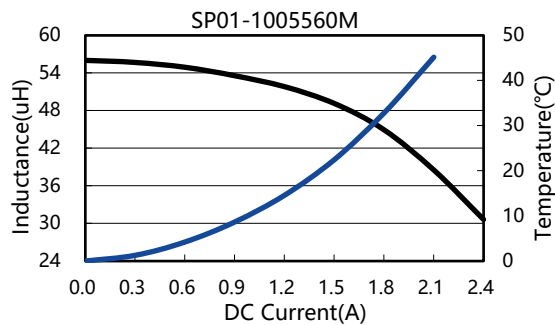
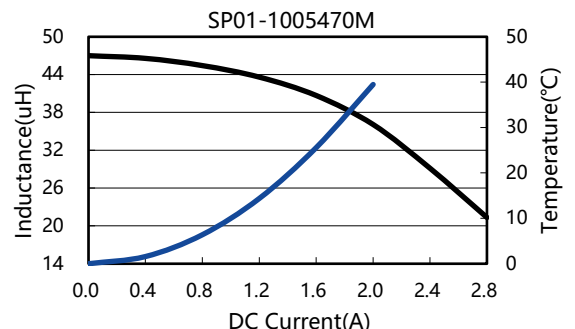
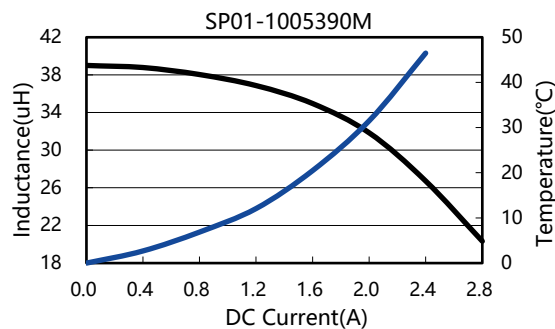
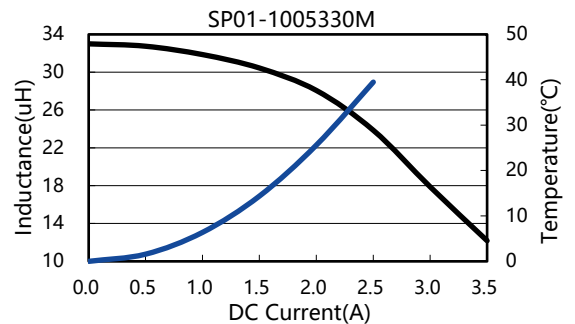
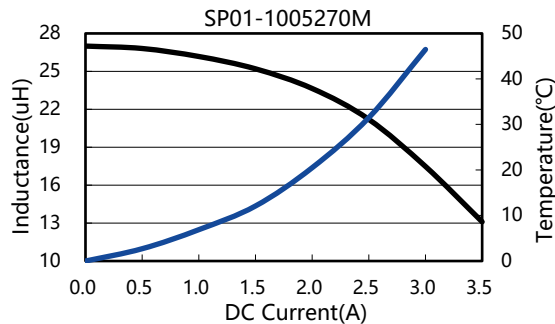
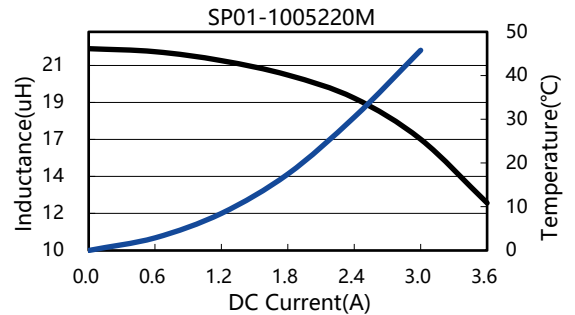
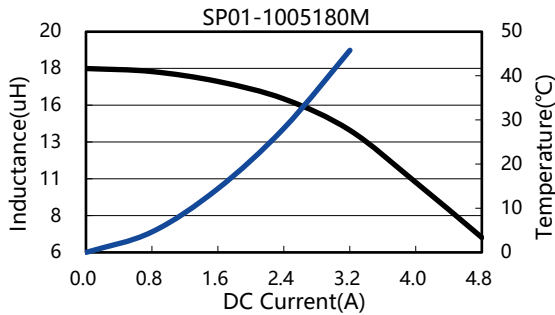
Part Number	Inductance L0(μH)	DCR		Isat (A)Typ.	Irms (A)Typ.	SRF (MHz)Typ.
		(mΩ)Typ.	(mΩ)Max.			
SP01-1005R68N	0.68±30%	4.5	5.5	13.5	9.50	110
SP01-10051R2N	1.2±30%	5.8	7.0	10.5	8.30	85.0
SP01-10052R2N	2.2±30%	7.1	9.0	8.20	7.20	53.0
SP01-10053R3N	3.3±30%	8.6	11	7.80	6.50	40.0
SP01-10054R2N	4.2±30%	10.4	14	6.40	6.10	29.0
SP01-10056R8N	6.8±30%	15.1	19	5.40	5.40	27.0
SP01-10058R2N	8.2±30%	18.1	22	4.85	5.00	21.0
SP01-1005100N	10±30%	23	31	4.45	4.50	16.5
SP01-1005120M	12±20%	26	35	4.00	3.80	15.0
SP01-1005150M	15±20%	35	47	3.60	3.40	14.0
SP01-1005180M	18±20%	38	51	3.20	3.10	11.0
SP01-1005220M	22±20%	46	62	2.95	2.90	10.5
SP01-1005270M	27±20%	57	77	2.70	2.60	10.0
SP01-1005330M	33±20%	69	93	2.40	2.50	9.0
SP01-1005390M	39±20%	79	106	2.30	2.25	6.8
SP01-1005470M	47±20%	94	127	2.00	2.00	5.9
SP01-1005560M	56±20%	124	160	1.90	1.90	5.5
SP01-1005680M	68±20%	138	208	1.65	1.60	5.0
SP01-1005820M	82±20%	150	230	1.50	1.45	4.5
SP01-1005101M	100±20%	179	255	1.35	1.35	4.2
SP01-1005121K	120±10%	213	305	1.28	1.18	3.8
SP01-1005151K	150±10%	253	370	1.12	1.10	3.6
SP01-1005181K	180±10%	307	420	1.04	1.00	3.4
SP01-1005221K	220±10%	373	500	0.94	0.94	3.0
SP01-1005271K	270±10%	491	675	0.84	0.80	2.4
SP01-1005331K	330±10%	613	815	0.75	0.73	2.0
SP01-1005471K	470±10%	990	1200	0.70	0.60	1.8

- 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.

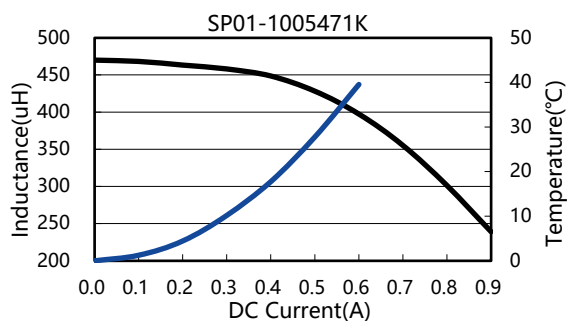
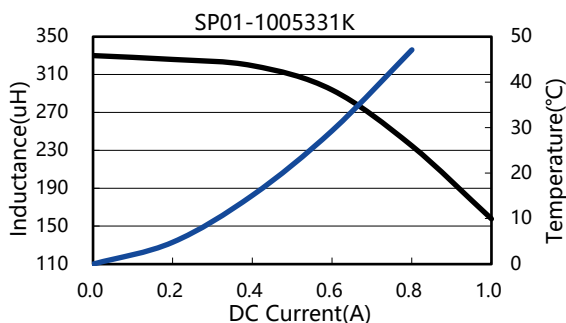
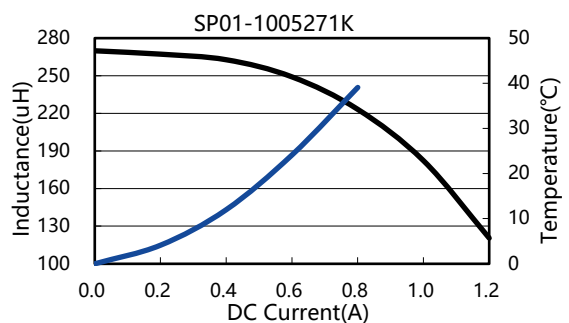
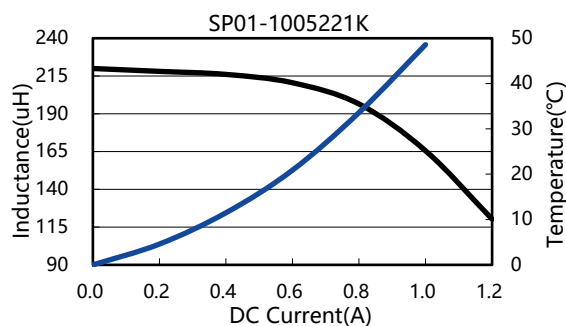
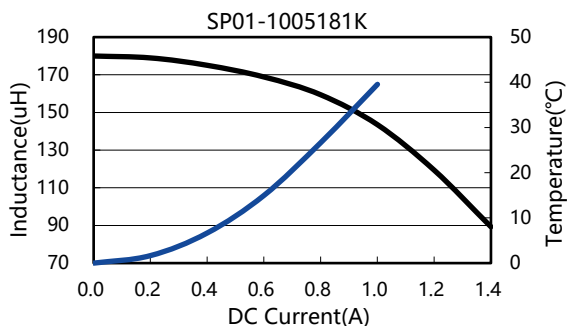
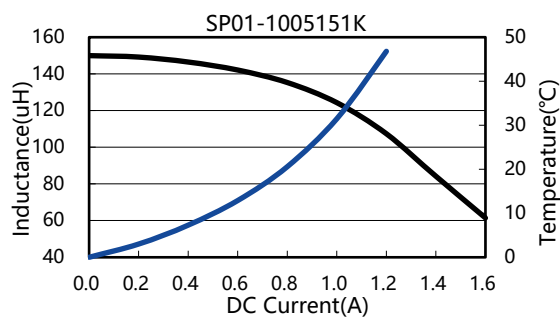
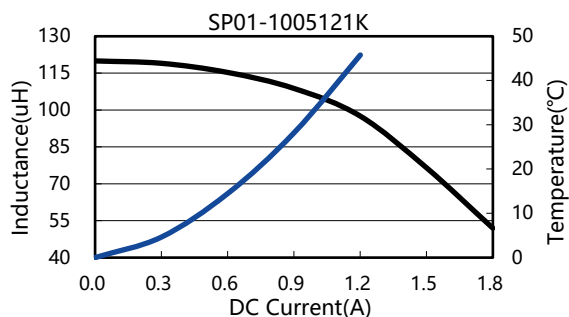
Characteristic Curve (Typical value)



Characteristic Curve (Typical value)

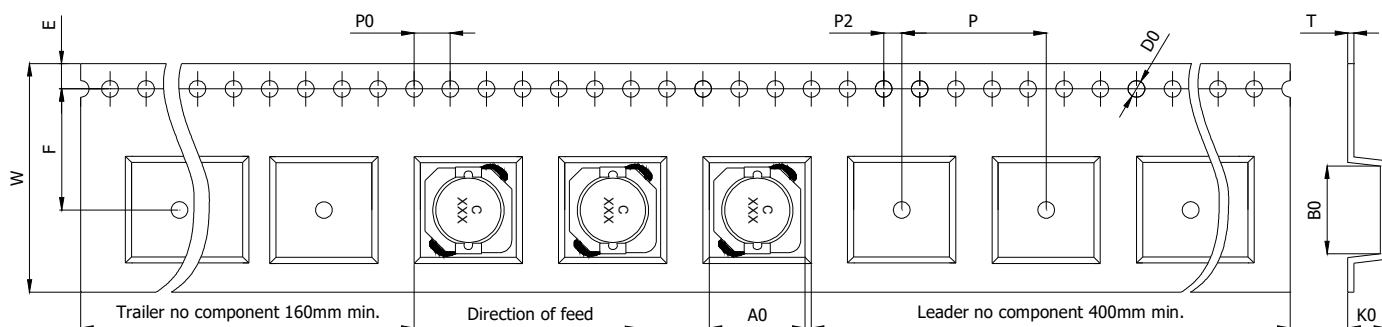


Characteristic Curve (Typical value)



Packaging Specification

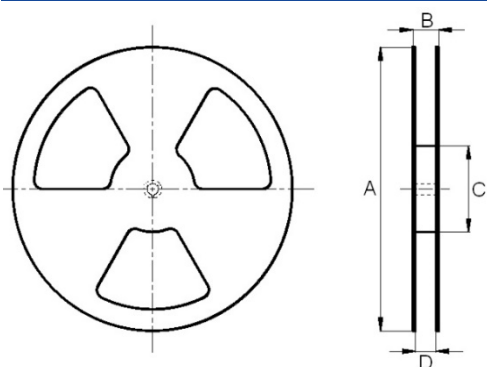
■ Carrier Tape (Unit:mm)



W	P	A0	B0	K0	E	F	P0	P2	D0	T
24.0±0.3	16.0±0.1	10.6±0.1	10.6±0.1	5.2±0.1	1.75±0.1	11.5±0.1	4.0±0.1	2.0±0.1	Φ1.5±0.1	0.4±0.05

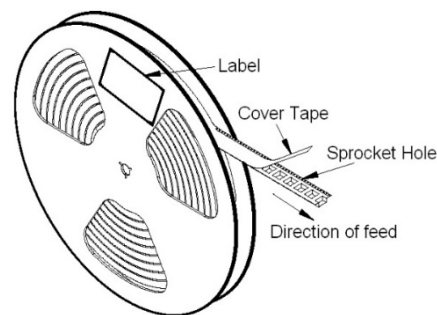
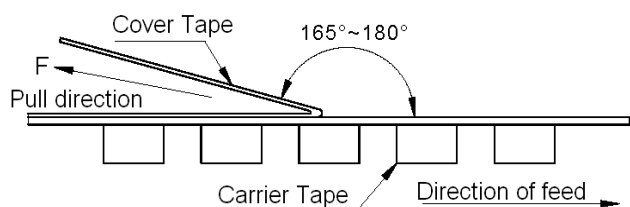
■ Reel (Unit:mm)

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.



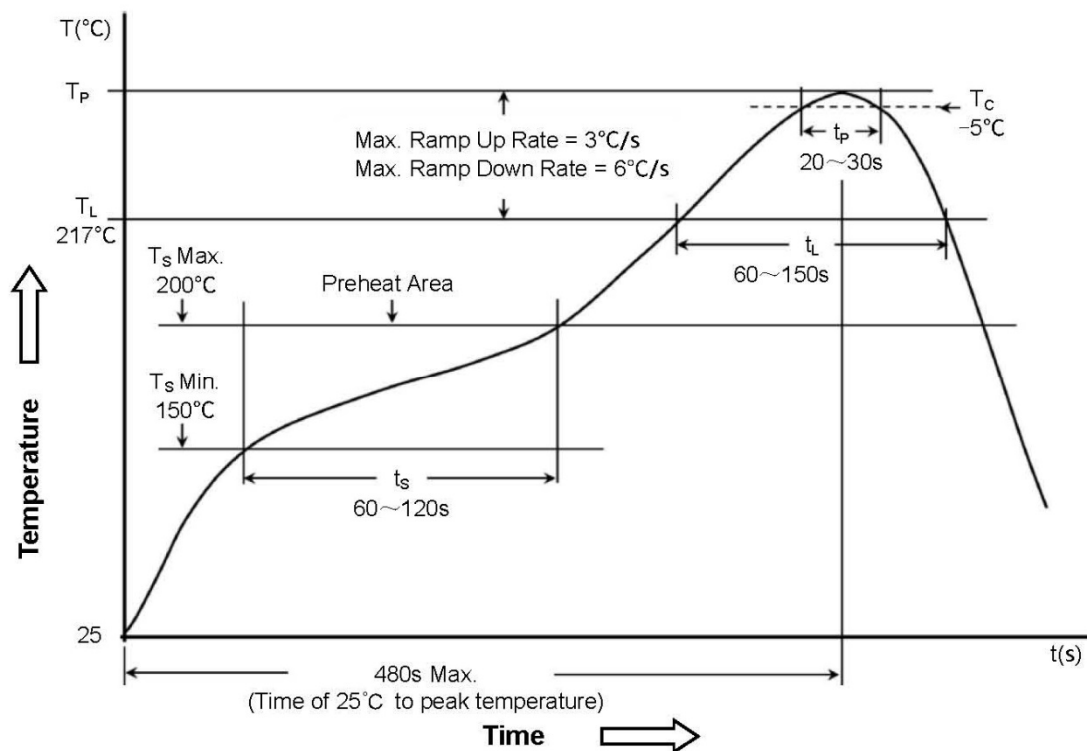
※ Packing is referred to the international standard IEC 60286-3.

■ Package Quantity

Parts per reel
700Pcs

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.