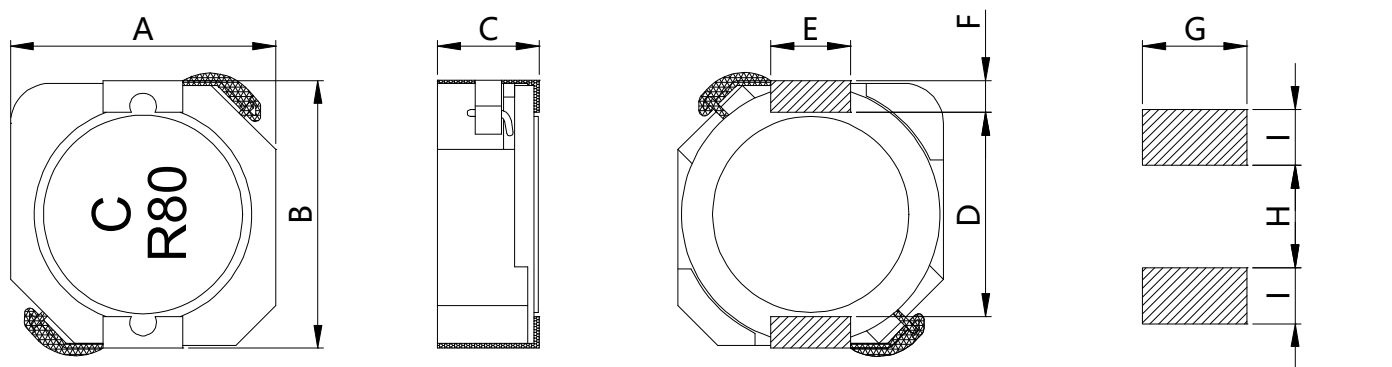


Features

- 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:1000pcs. 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.	3.1Max.	7.9±0.3	3.0±0.1	1.2±0.2	3.6	7.3	1.7

Part Number Description

SP01 - 1003 R80 N
① ② ③ ④

①	Type
②	Dimensions
③	Inductance value
④	Tolerance code

Electrical Schematic

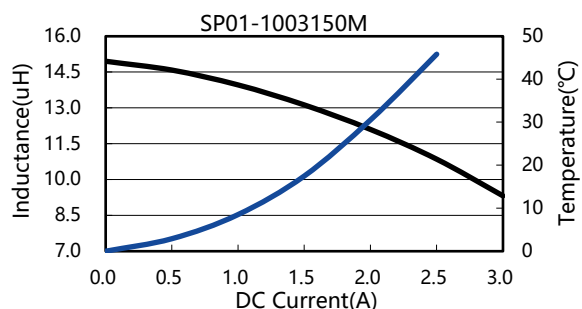
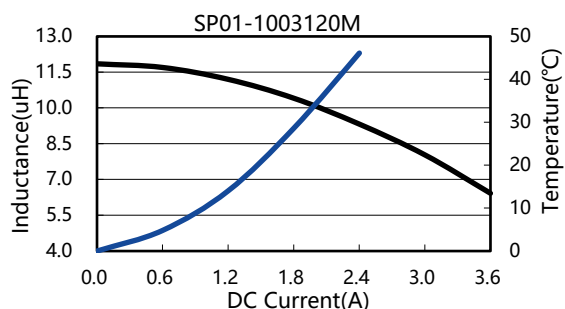
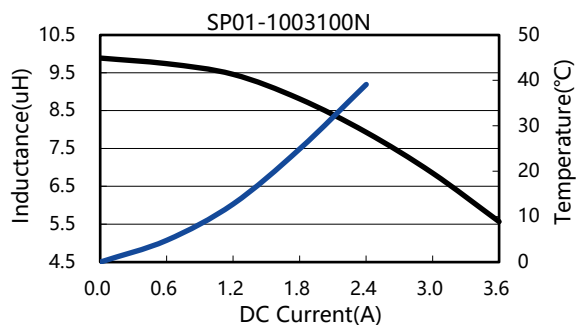
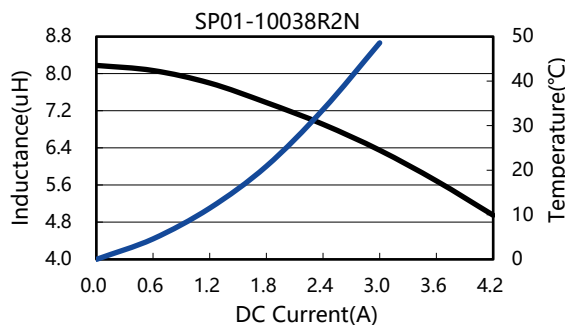
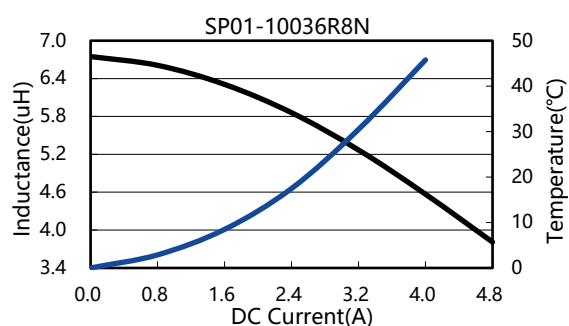
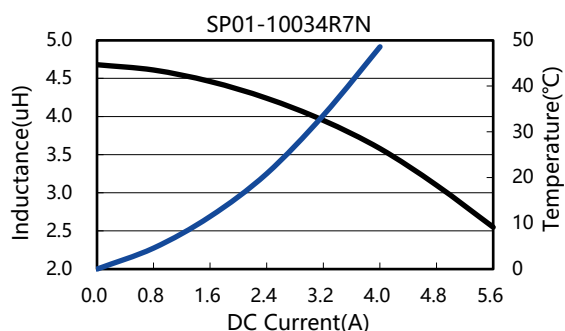
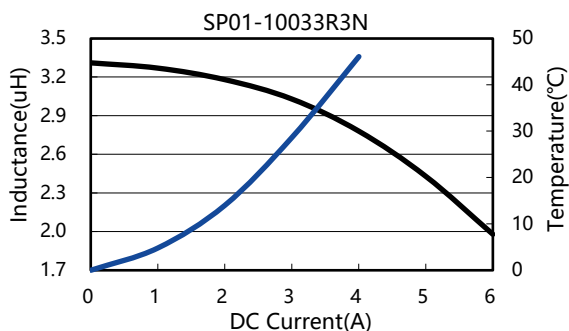
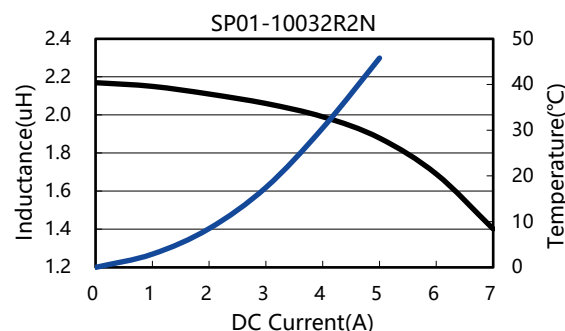
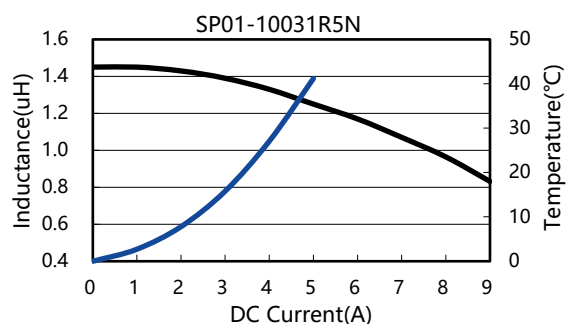
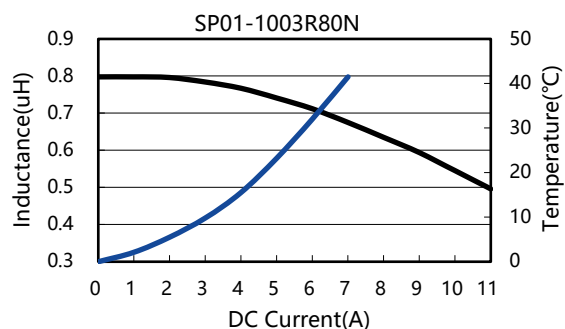


Electrical Characteristic

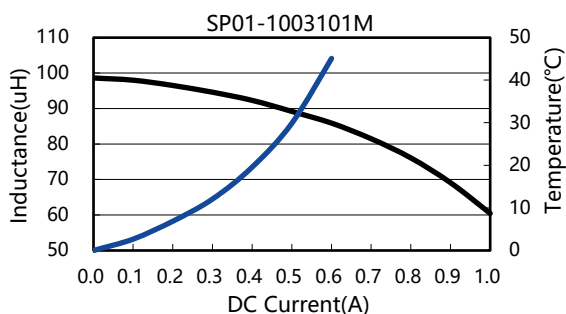
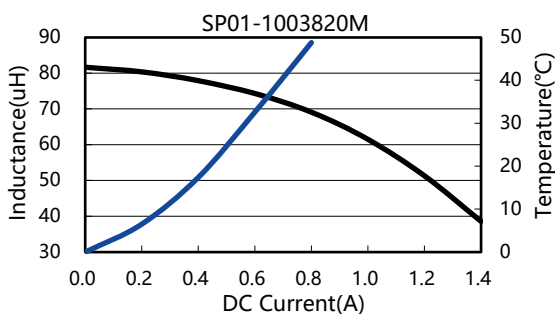
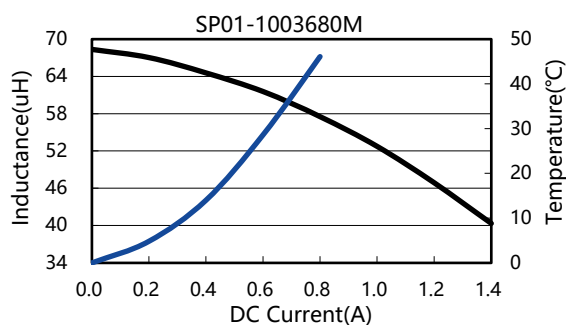
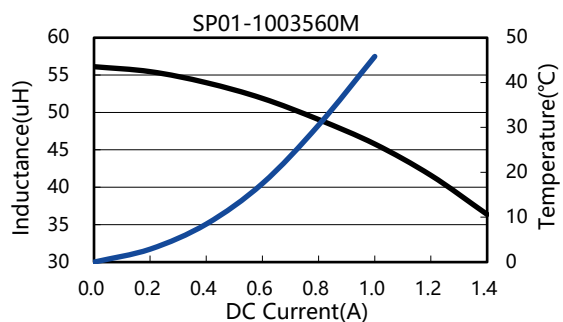
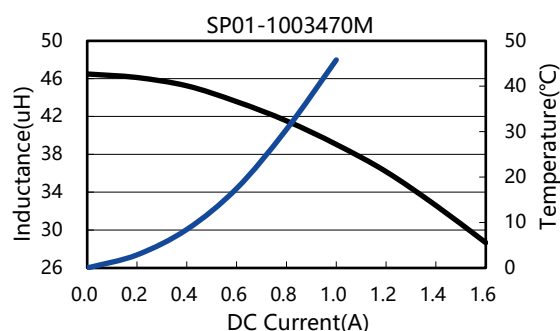
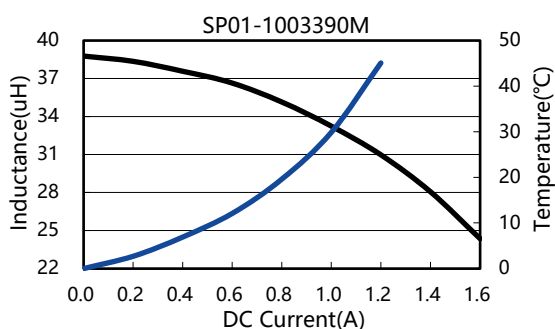
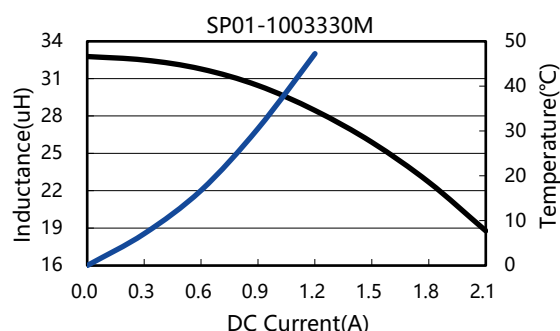
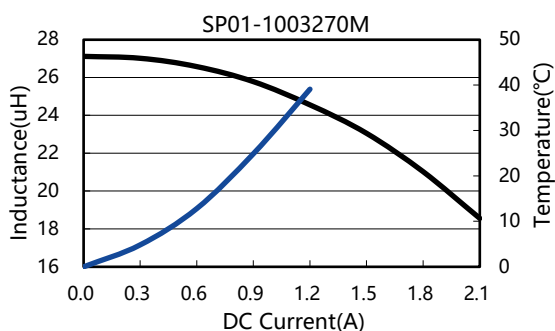
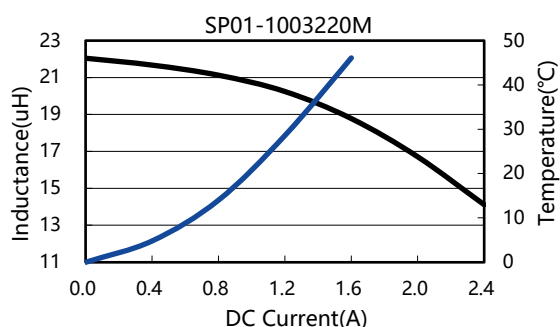
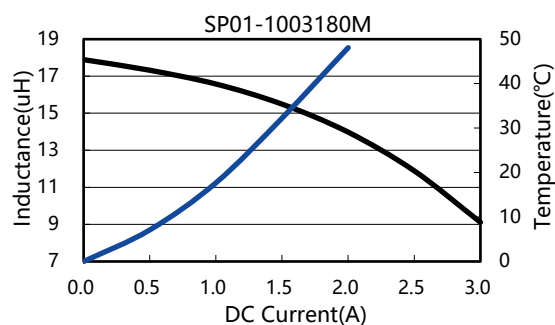
Part Number	Inductance L0(μH)	DCR		Isat (A)Typ.	Irms (A)Typ.	SRF (MHz)Typ.
		(mΩ)Typ.	(mΩ)Max.			
SP01-1003R80N	0.8±30%	4.4	5.7	9.00	6.50	125
SP01-10031R5N	1.5±30%	8.5	11.0	7.00	4.20	103
SP01-10032R2N	2.2±30%	13.0	16.9	5.80	4.05	78.0
SP01-10033R3N	3.3±30%	16.0	21.0	4.60	3.80	61.5
SP01-10034R7N	4.7±30%	23.0	30.0	4.00	3.30	55.0
SP01-10036R8N	6.8±30%	27.0	35.0	3.20	3.15	43.0
SP01-10038R2N	8.2±30%	38.0	50.0	3.00	2.50	38.0
SP01-1003100N	10±30%	45.0	59.0	2.70	2.40	34.0
SP01-1003120M	12±20%	55.4	72.1	2.40	2.10	31.0
SP01-1003150M	15±20%	70.0	91.0	2.20	2.05	29.0
SP01-1003180M	18±20%	90.0	116.1	2.00	1.50	25.5
SP01-1003220M	22±20%	110.0	143.0	1.80	1.20	22.0
SP01-1003270M	27±20%	136.0	175.9	1.65	1.15	19.0
SP01-1003330M	33±20%	155.0	202.0	1.48	1.10	17.0
SP01-1003390M	39±20%	210.0	268.9	1.35	1.00	15.0
SP01-1003470M	47±20%	230.0	299.0	1.20	0.90	13.0
SP01-1003560M	56±20%	250.0	325.0	1.15	0.78	11.8
SP01-1003680M	68±20%	330.0	429.0	1.05	0.68	10.2
SP01-1003820M	82±20%	380.0	494.0	0.95	0.63	9.6
SP01-1003101M	100±20%	525.0	683.0	0.85	0.56	8.9
SP01-1003121K	120±10%	580.0	754.0	0.76	0.53	8.3
SP01-1003151K	150±10%	670.0	871.0	0.70	0.51	7.8

- 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.

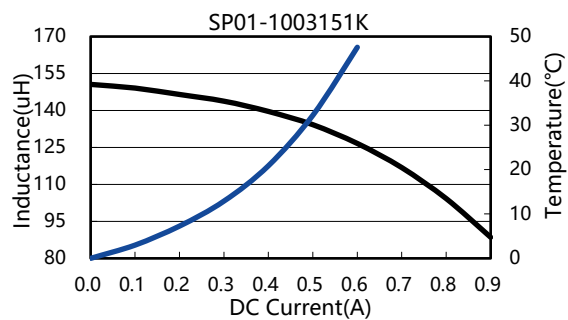
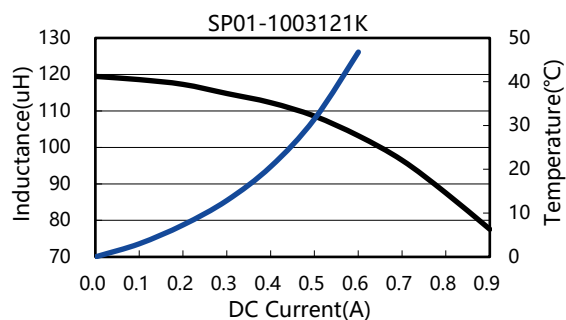
Characteristic Curve (Typical value)



Characteristic Curve (Typical value)

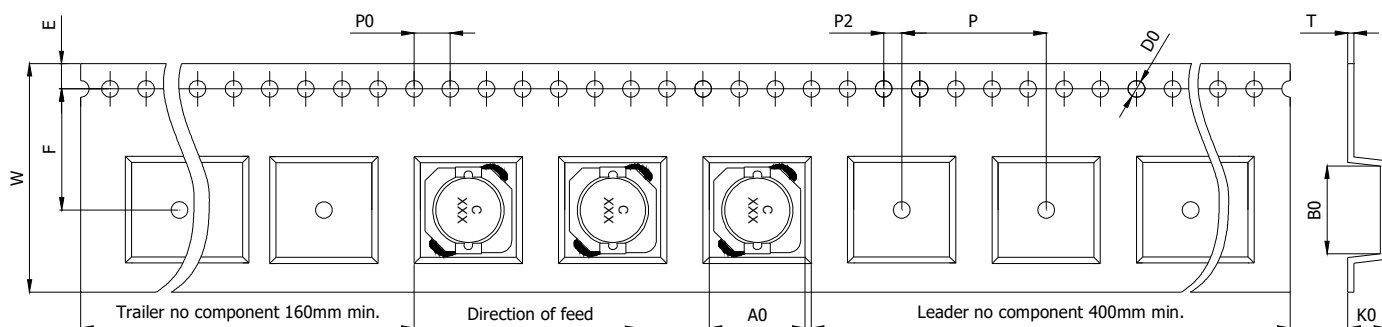


Characteristic Curve (Typical value)



Packaging Specification

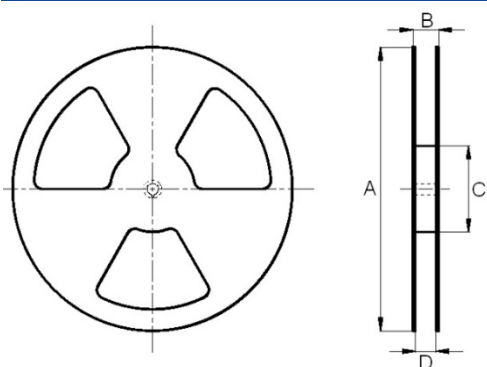
■ Carrier Tape (Unit:mm)



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	3.3±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

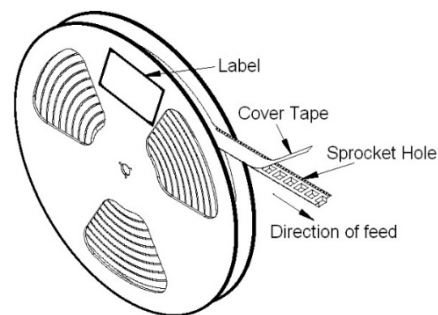
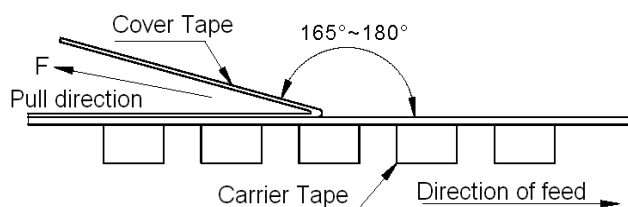
■ Reel (Unit:mm)

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.



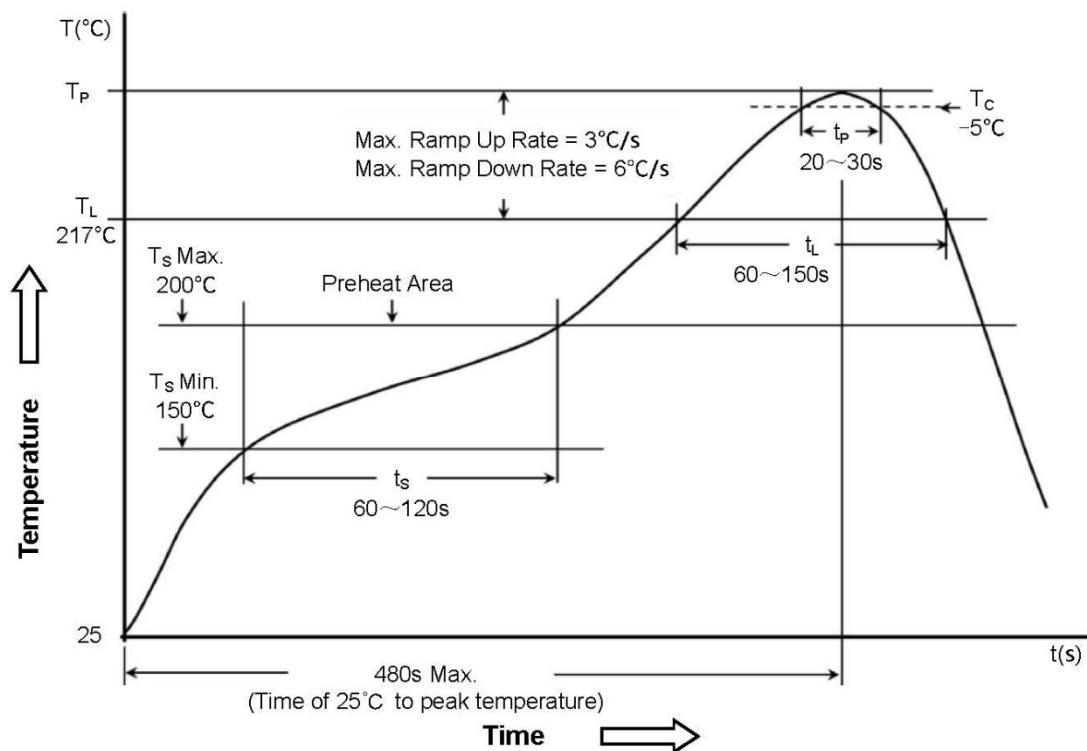
※ Packing is referred to the international standard IEC 60286-3.

■ Package Quantity

Parts per reel
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.