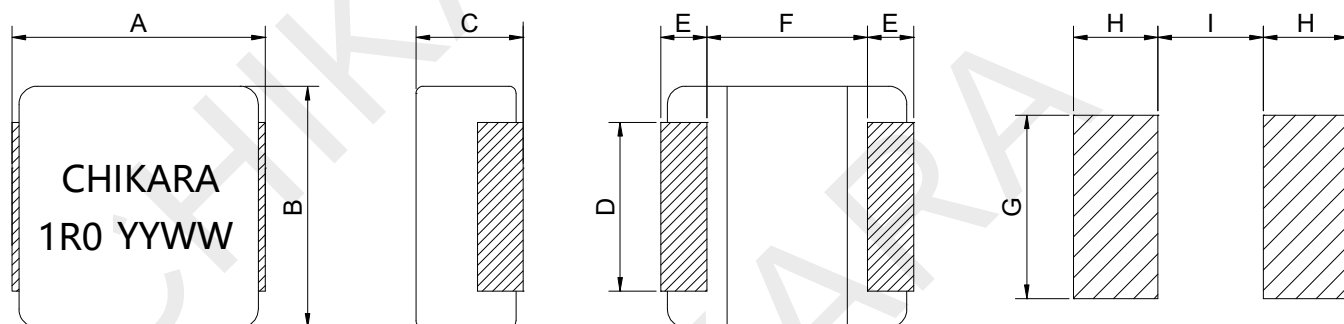


Features

- High energy storage and very low resistance
- Storage temperature range:-55°C to + 125°C
- Operating temperature range:-55°C to + 125°C
(including coil's self-temperature rise)
- Moisture sensitivity level:1
- Packaging:200pcs. Per 13-inch reel
- RoHs&Halogen-free compliant



Mechanical Dimension(Unit:mm)



Recommended Layout

A	B	C	D	E	F	G	H	I
17.15±0.35	17.1±0.3	7.0Max.	11.94±0.3	2.5±0.5	12.5±0.5	12.5	3.5	11.2

Part Number Description

SP14 - 175070 1R0 M
① ② ③ ④

①	Type
②	Dimensions
③	Inductance value
④	Tolerance code

Electrical Schematic

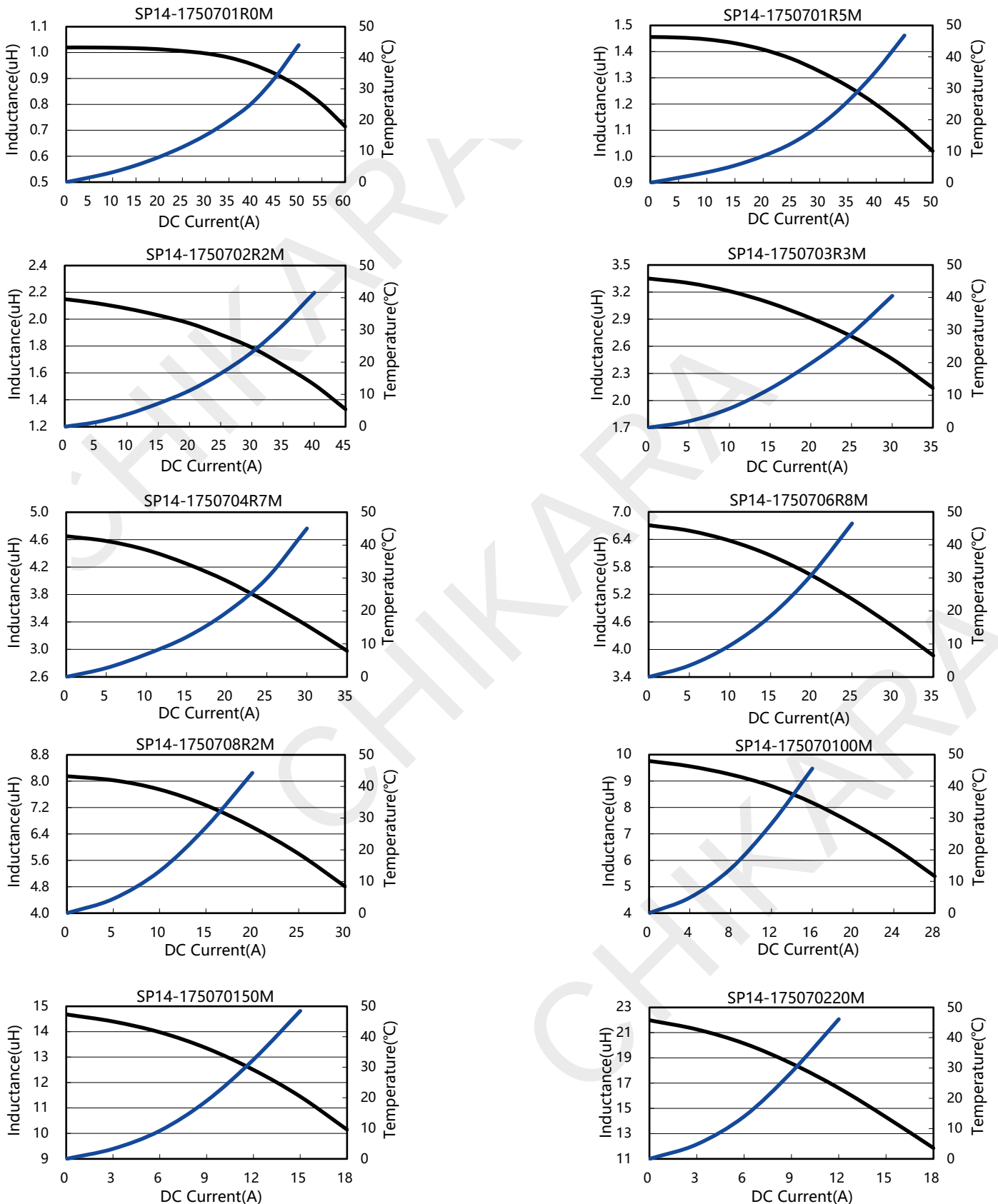


Electrical Characteristic

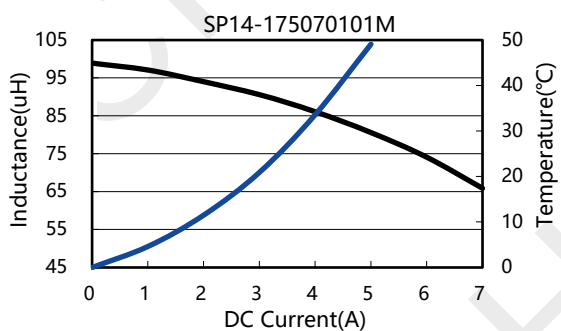
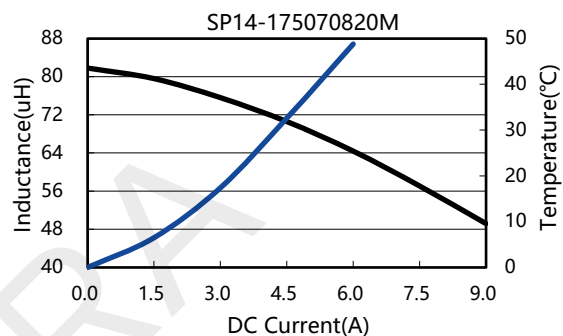
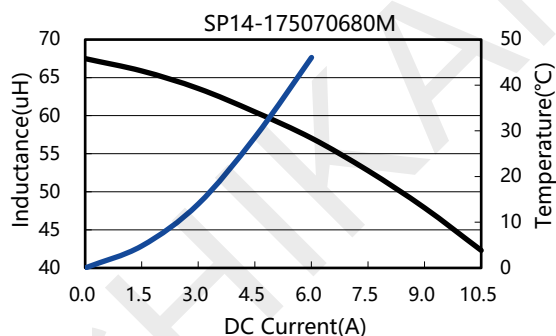
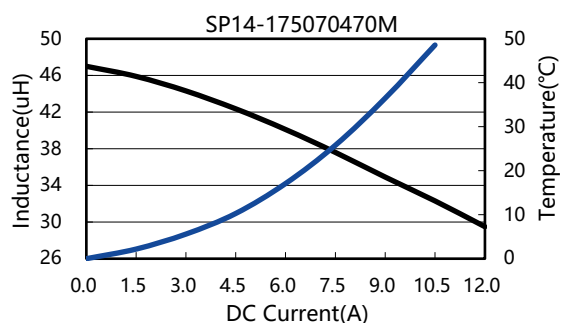
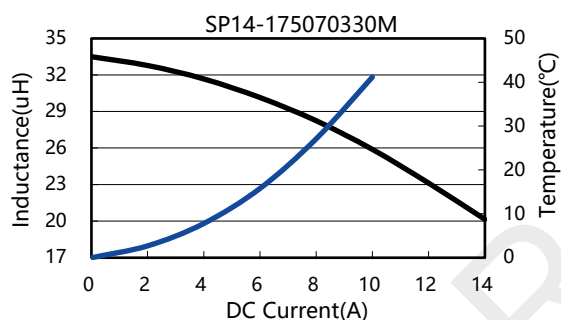
Part Number	Inductance L0(μH)	DCR		Isat	Irms	SRF
		(mΩ)Typ.	(mΩ)Max.	(A)Typ.	(A)Typ.	(MHz)Typ.
SP14-1750701R0M	1.0±20%	1.2	1.5	58	48	36
SP14-1750701R5M	1.5±20%	1.7	2.1	47	40	32
SP14-1750702R2M	2.2±20%	2.1	2.5	38	37	25
SP14-1750703R3M	3.3±20%	3.4	4.0	30	29	21
SP14-1750704R7M	4.7±20%	4.1	4.8	28	27	18
SP14-1750706R8M	6.8±20%	6.4	7.6	25	21	14
SP14-1750708R2M	8.2±20%	7.5	8.7	22	16	12
SP14-175070100M	10±20%	8.6	10	20	14	10
SP14-175070150M	15±20%	15	18	15.5	12	8.0
SP14-175070220M	22±20%	19	23	12.0	9.7	6.0
SP14-175070330M	33±20%	32	37	10.5	9.2	5.0
SP14-175070470M	47±20%	40	47	8.5	6.8	3.4
SP14-175070680M	68±20%	74	85	7.6	5.5	2.9
SP14-175070820M	82±20%	90	105	6.4	4.5	2.5
SP14-175070101M	100±20%	110	130	6.0	4.0	2.1

- Test frequency and voltage:100KHz,1Vrms.
- All test data referenced to 25°C ambient.
- Absolute maximum voltage: 50V.
- 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.
- Heat rated current (Irms) is tested on a typical PCB and apply a constant current in still air. The temperature rise is dependent on the application system condition including PCB PAD pattern, trace width and thickness and adjacent components etc. It' s suggested to verify the temperature rise of the component under the real operation application conditions.

Characteristic Curve (Typical value)

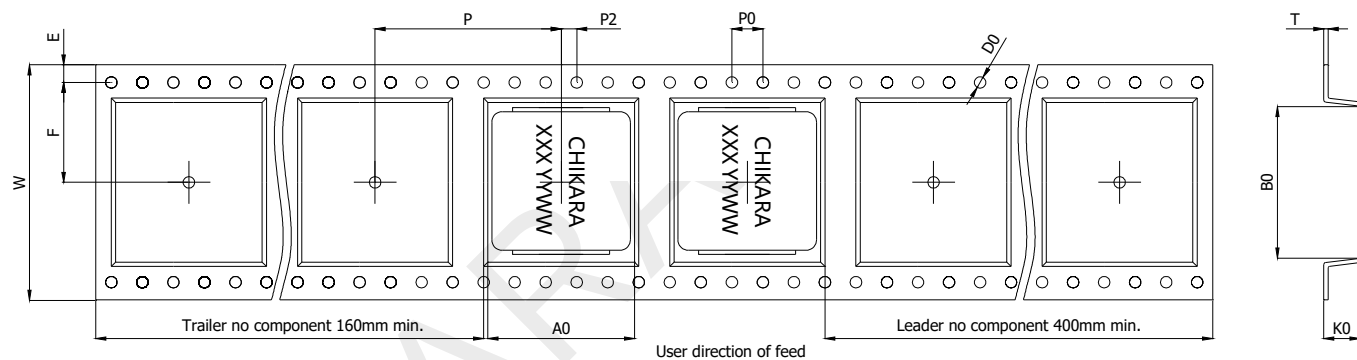


Characteristic Curve (Typical value)



Packaging Specification

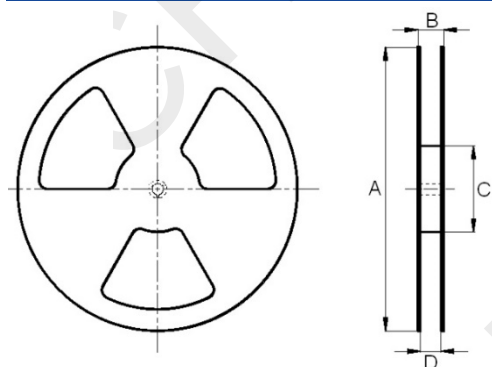
■ Carrier Tape (Unit:mm)



W	P	A0	B0	K0	E	F	P0	P2	D0	T
32±0.3	24±0.1	17.5±0.1	18.1±0.1	7.3±0.1	1.75±0.1	14.2±0.1	4.0±0.1	2.0±0.1	Φ1.5±0.1	0.5±0.05

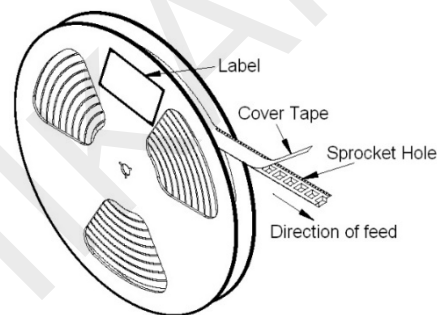
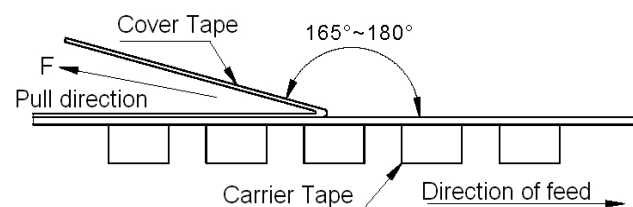
■ Reel (Unit:mm)

A	B	C	D
Φ330±1.0	38.4Max.	Φ100±1.0	33±0.5



■ Taping Method

Peel-off strength	Peel-off angle	Peel-off speed
F=0.1N~1.0N	165°~180°	300mm/min.



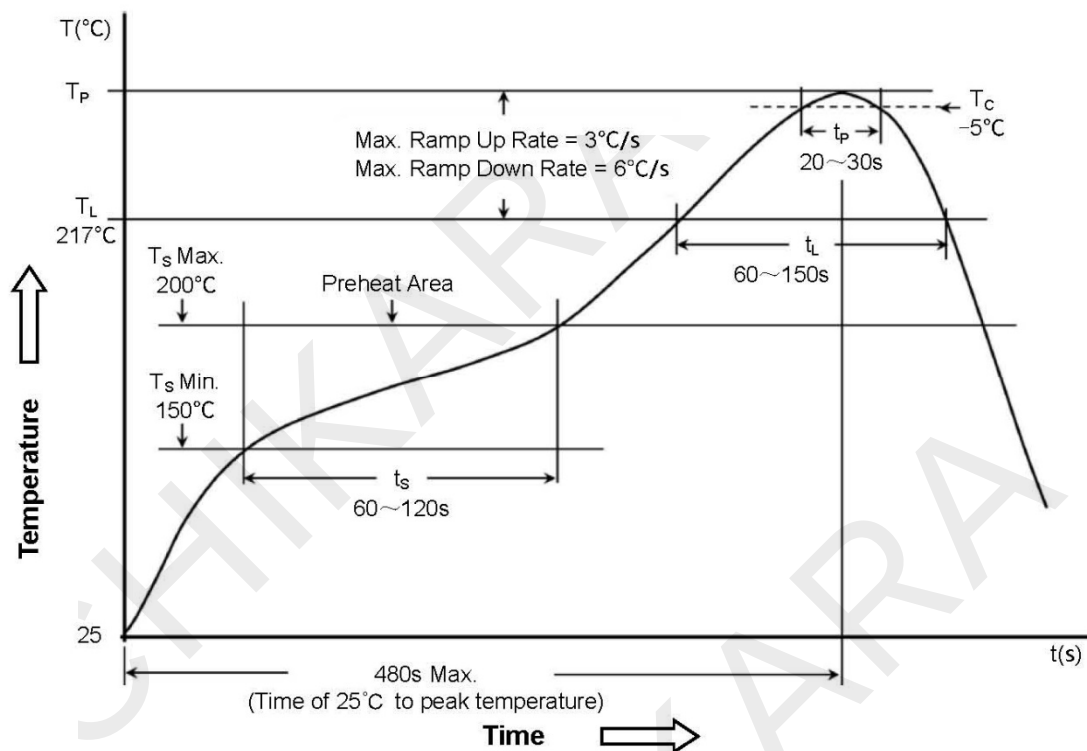
※ Packing is referred to the international standard IEC 60286-3.

■ Package Quantity

Parts per reel
200Pcs

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.