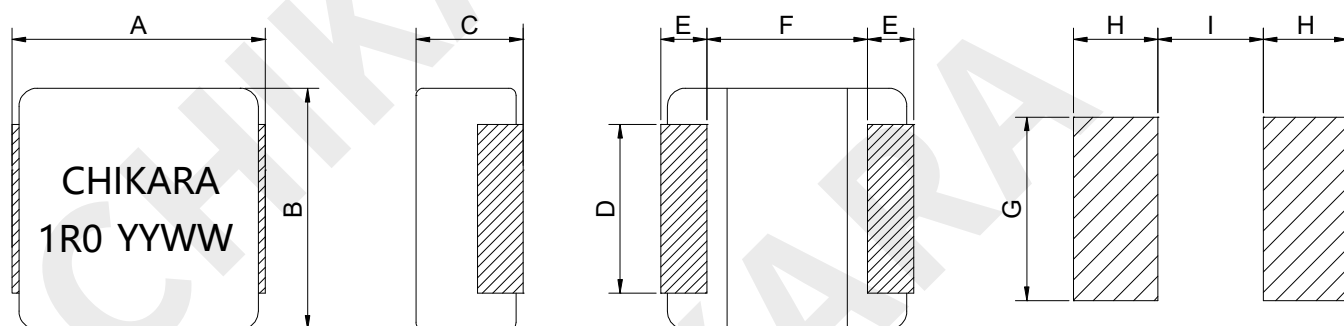


Features

- 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:80pcs. Per 13-inch reel
- RoHs&Halogen-free compliant



Mechanical Dimension(Unit:mm)



Recommended Layout

A	B	C	D	E	F	G	H	I
23.5±0.5	22.0±0.3	13.0Max.	19.0±0.3	5.0±0.4	13.5±0.5	19.6	5.75	12.5

Part Number Description

SP14 - 240130 1R0 M
① ② ③ ④

①	Type
②	Dimensions
③	Inductance value
④	Tolerance code

Electrical Schematic

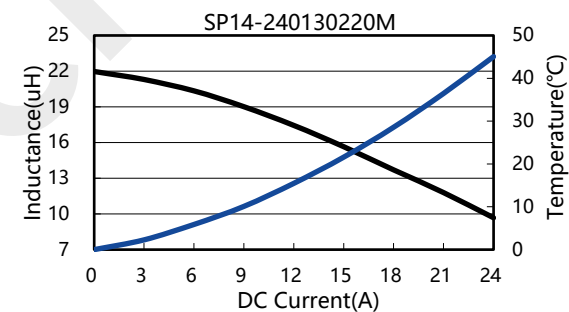
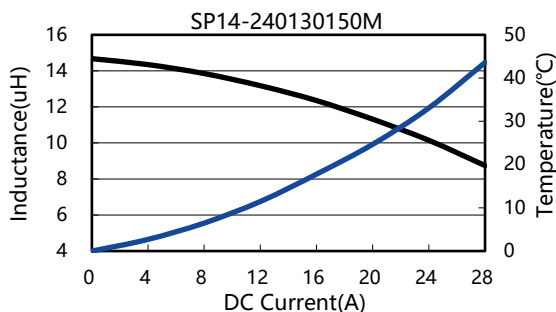
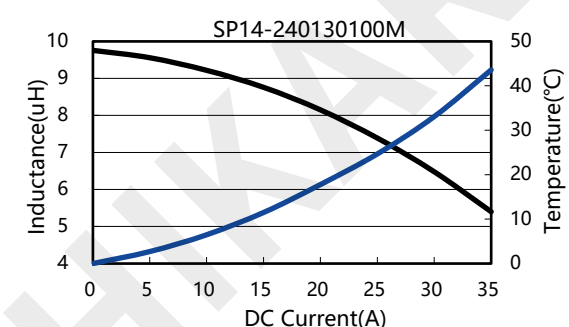
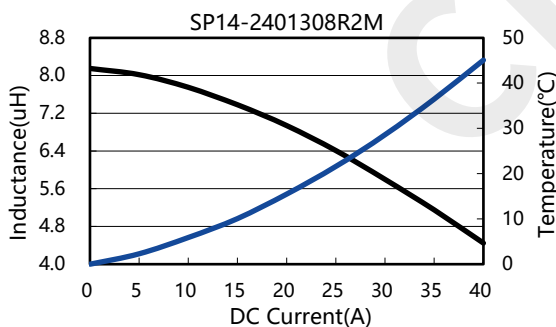
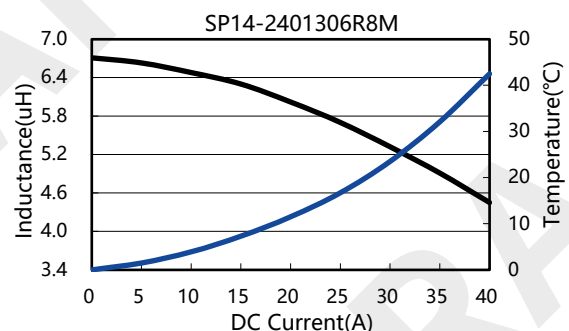
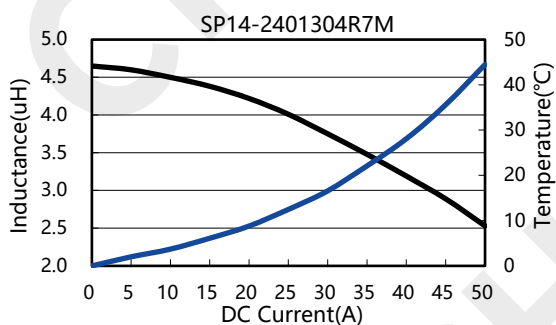
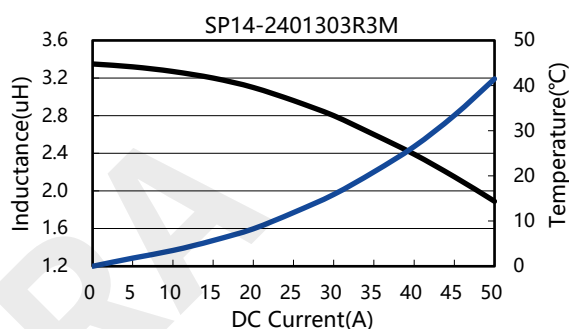
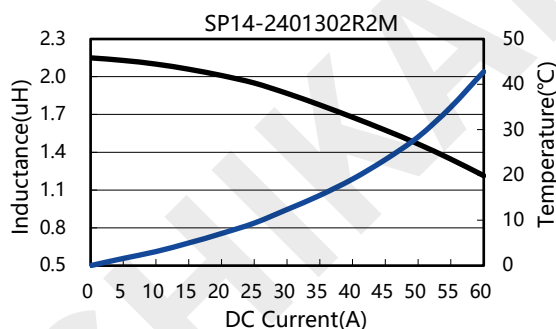
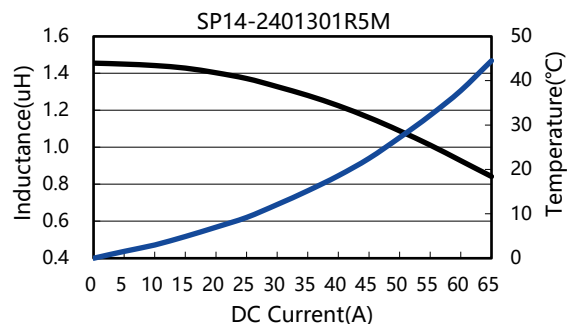
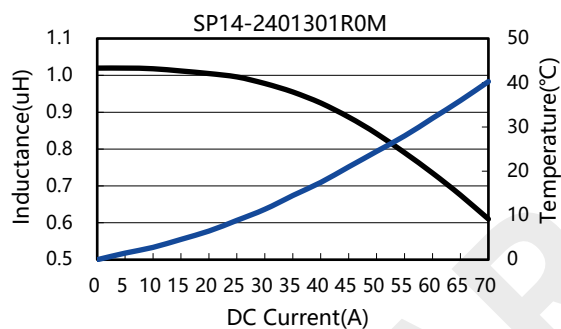


Electrical Characteristic

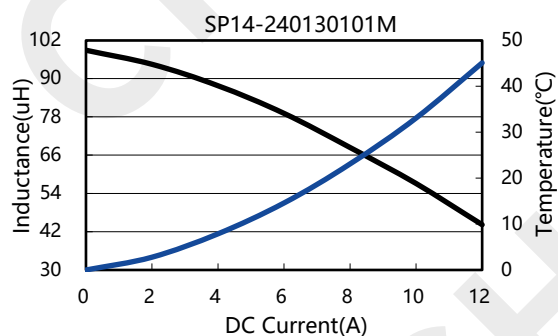
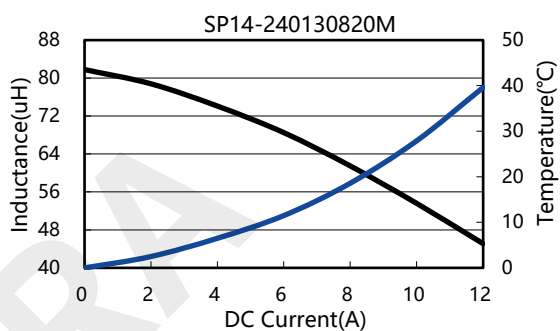
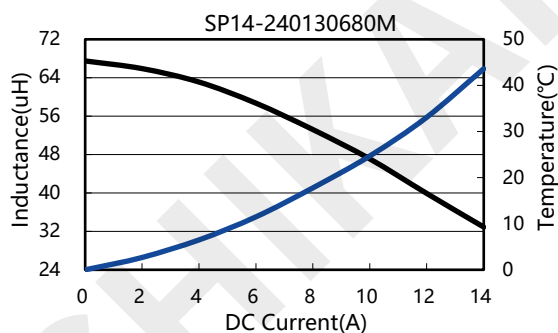
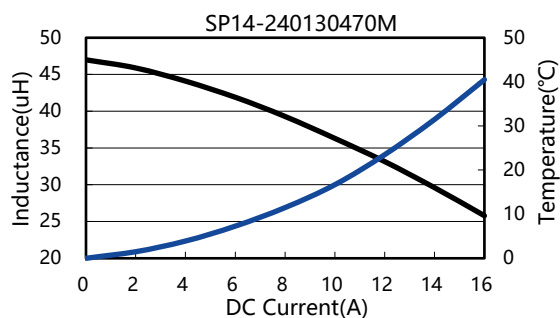
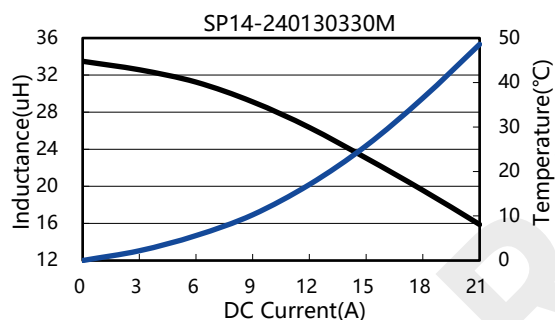
Part Number	Inductance L0(uH)	DCR		Isat	Irms	SRF
		(mΩ)Typ.	(mΩ)Max.	(A)Typ.	(A)Typ.	(MHz)Typ.
SP14-2401301R0M	1.0±20%	0.80	0.95	60.0	70.0	23.0
SP14-2401301R5M	1.5±20%	1.00	1.15	52.0	62.0	21.0
SP14-2401302R2M	2.2±20%	1.05	1.25	48.0	58.0	19.0
SP14-2401303R3M	3.3±20%	1.50	1.75	41.0	49.0	15.0
SP14-2401304R7M	4.7±20%	1.90	2.20	38.0	47.0	11.0
SP14-2401306R8M	6.8±20%	2.80	3.30	36.0	40.0	9.0
SP14-2401308R2M	8.2±20%	3.50	4.05	30.0	36.0	8.0
SP14-240130100M	10±20%	3.80	4.40	28.0	33.0	7.0
SP14-240130150M	15±20%	5.90	6.80	23.0	26.0	5.9
SP14-240130220M	22±20%	9.20	11.0	15.0	22.0	5.0
SP14-240130330M	33±20%	13.5	15.4	14.0	19.0	4.0
SP14-240130470M	47±20%	17.3	20.8	12.0	16.0	3.5
SP14-240130680M	68±20%	26.2	29.5	9.8	13.5	3.0
SP14-240130820M	82±20%	31.0	34.2	9.0	12.0	2.5
SP14-240130101M	100±20%	36.0	40.0	8.0	11.0	2.0

- 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)

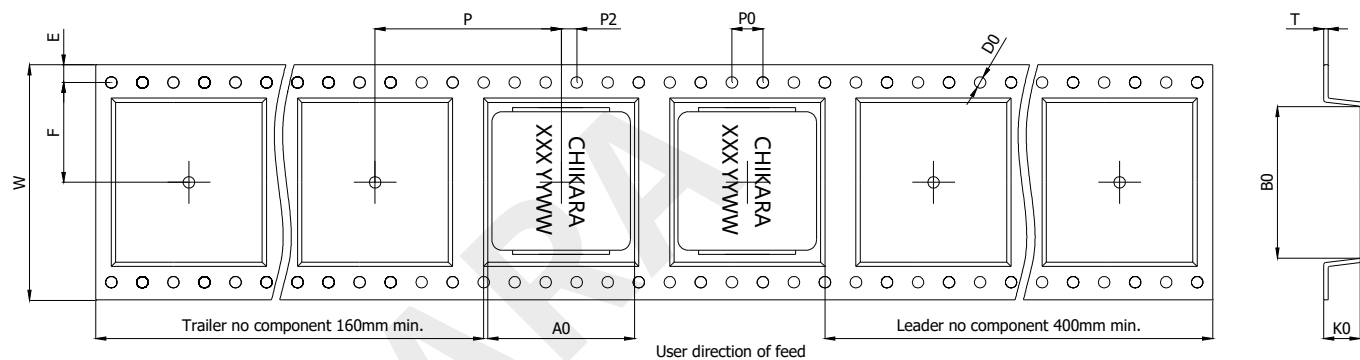


Characteristic Curve (Typical value)



Packaging Specification

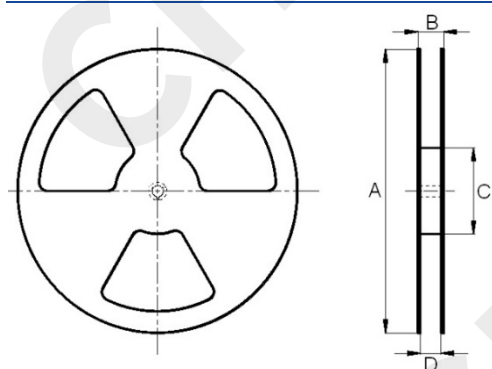
■ Carrier Tape (Unit:mm)



W	P	A0	B0	K0	E	F	P0	P2	D0	T
44±0.3	32±0.1	23.0±0.1	24.0±0.1	13.6±0.1	1.75±0.1	20.2±0.1	4.0±0.1	2.0±0.1	Φ1.5±0.1	0.5±0.05

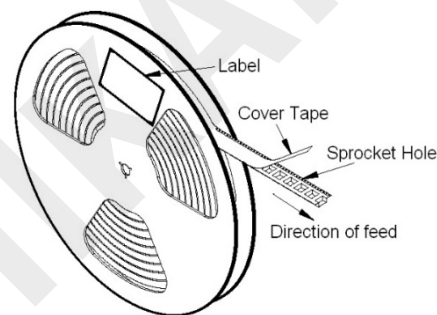
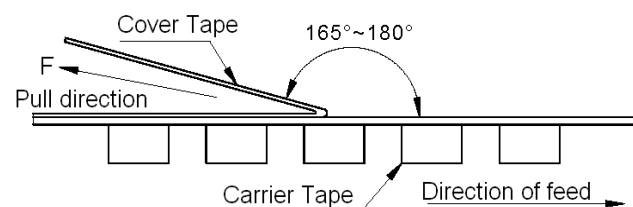
■ Reel (Unit:mm)

A	B	C	D
Φ330±1.0	50.4Max.	Φ100±1.0	45±0.5



■ Taping Method

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



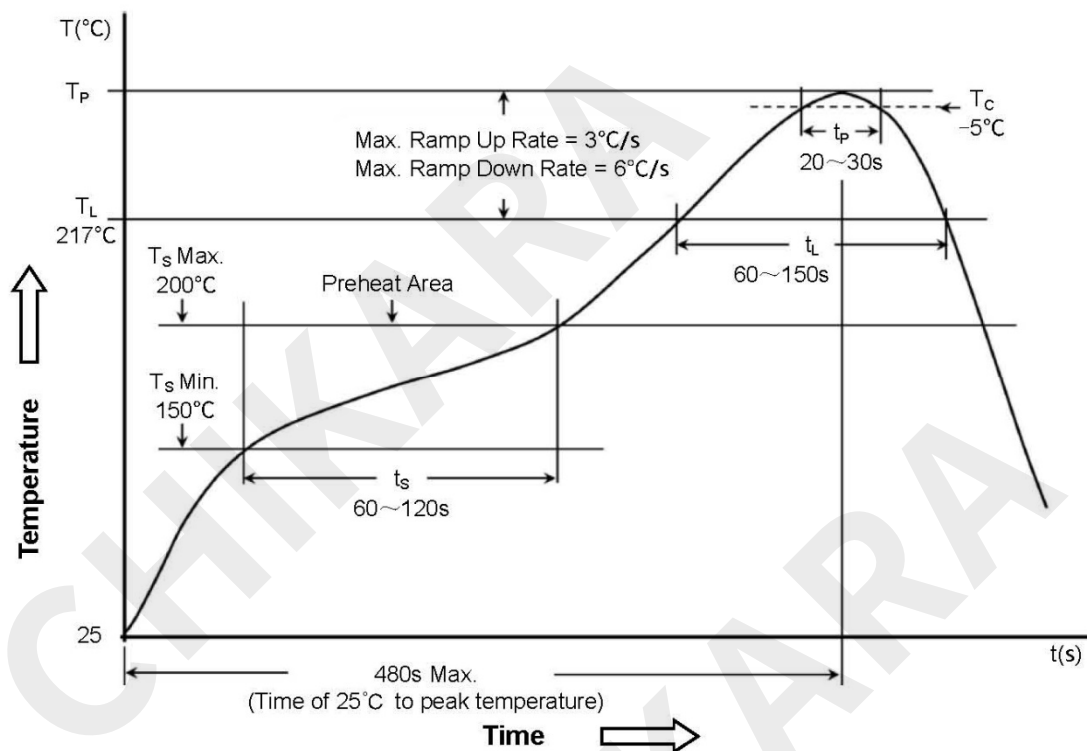
※ Packing is referred to the international standard IEC 60286-3.

■ Package Quantity

Parts per reel
80Pcs

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.