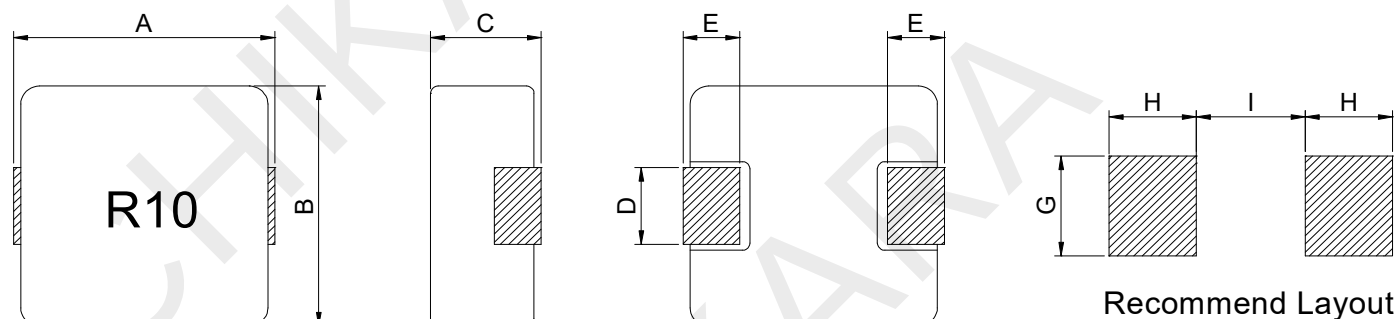


Features

- 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:2000pcs. Per 13-inch reel
- RoHs&Halogen-free compliant



Mechanical Dimension(Unit:mm)



A	B	C	D	E	G	H	I
5.4±0.35	5.2±0.3	3.0Max.	2.2±0.3	1.2±0.3	2.5	1.9	2.2

Part Number Description

SP14 - 057030 R10 M
① ② ③ ④

①	Type
②	Dimensions
③	Inductance value
④	Tolerance code

Electrical Schematic



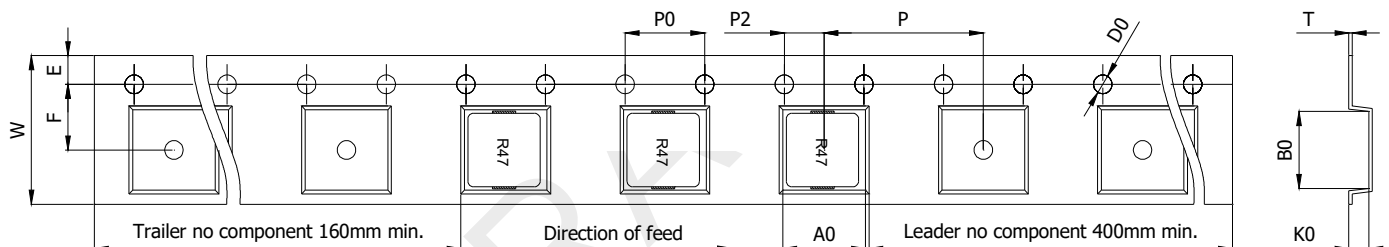
Electrical Characteristic

Part Number	Inductance L0(uH)	DCR (mΩ)Typ.	DCR (mΩ)Max.	SRF (MHz)Typ.	Isat (A)Typ.	Irms (A)Typ.
SP14-057030R10M	0.10±20%	2.4	3.0	120	30.0	25.0
SP14-057030R20M	0.20±20%	3.5	3.9	110	20.0	14.5
SP14-057030R33M	0.33±20%	4.0	5.5	98	18.0	14.0
SP14-057030R47M	0.47±20%	6.0	8.5	90	15.0	11.0
SP14-057030R68M	0.68±20%	10.5	12.0	80	11.5	9.0
SP14-0570301R0M	1.0±20%	12.0	14.0	65	10.0	8.5
SP14-0570301R2M	1.2±20%	14.5	16.0	60	9.5	8.5
SP14-0570301R5M	1.5±20%	20.0	25.0	52	8.5	8.2
SP14-0570302R2M	2.2±20%	25.0	29.0	39	7.5	7.0
SP14-0570303R3M	3.3±20%	32.0	38.0	32	6.0	5.5
SP14-0570304R7M	4.7±20%	50.0	60.0	27	5.0	4.5
SP14-0570306R8M	6.8±20%	75.0	90.0	23	4.0	3.5
SP14-057030100M	10±20%	110	125	18	3.5	3.2
SP14-057030150M	15±20%	160	200	15	2.0	1.8

- Test frequency and voltage:100KHz,1Vrms.
- All test data referenced to 25°C ambient.
- Absolute maximum voltage: 30Vdc.
- 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.

Packaging Specification

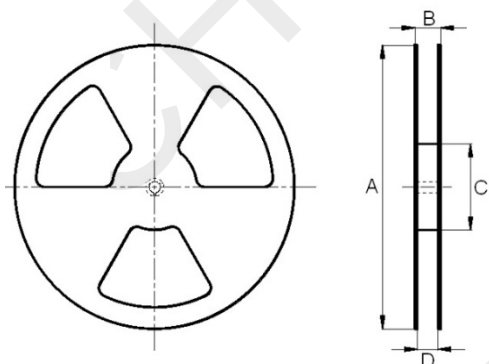
■ Carrier Tape (Unit:mm)



W	P	A0	B0	K0	E	F	P0	P2	D0	T
12.0±0.3	8.0±0.1	5.6±0.1	6.0±0.1	3.2±0.1	1.75±0.1	5.5±0.1	4.0±0.1	2.0±0.1	Φ1.5±0.1	0.30±0.05

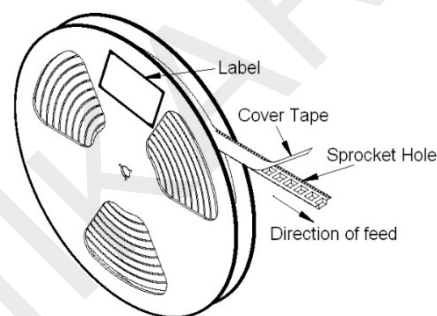
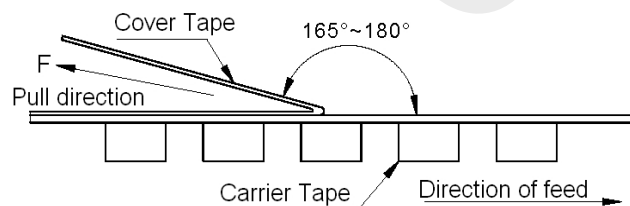
■ Reel (Unit:mm)

A	B	C	D
Φ330±1.0	18.4Max.	Φ100±1.0	13.0±0.5



■ Taping Method

Peel-off strength	Peel-off angle	Peel-off speed
F=0.1N~1.3N	165°~180°	300mm/min.



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

■ Package Quantity

Parts per reel
2000Pcs

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.