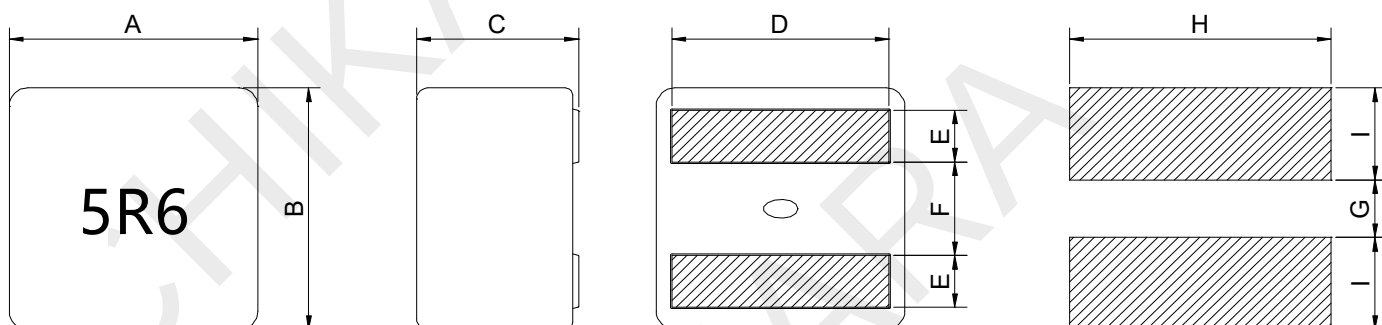


Features

- Compact design, Flat wire
- 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:1500pcs. Per 13-inch reel
- RoHs&Halogen-free compliant



Mechanical Dimension(Unit:mm)



Recommended Layout

A	B	C	D	E	F	G	H	I
5.5±0.3	5.3±0.3	4.8±0.3	4.3±0.3	1.1±0.3	2.3±0.3	2.0	4.8	1.3

Part Number Description

SP16 - 050050 A 5R6 M
① ② ③ ④ ⑤

①	Type
②	Dimensions
③	Special code
④	Inductance value
⑤	Tolerance code

Electrical Schematic



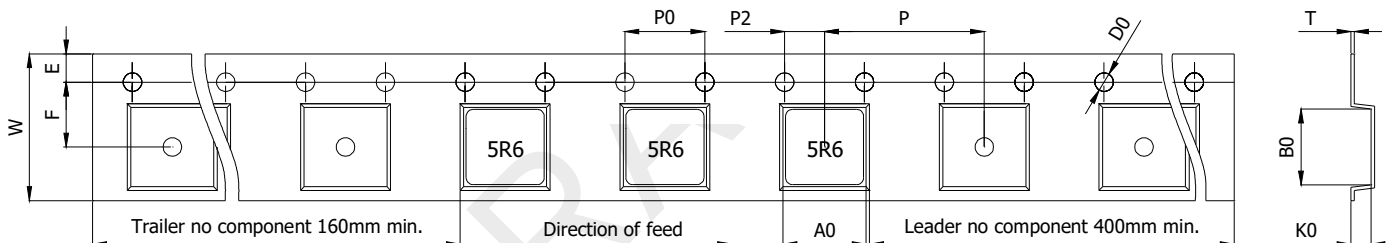
Electrical Characteristic

Part Number	Inductance L0(uH)	DCR		SRF (MHz)Typ.	Isat		Irms	
		(mΩ)Max.	(mΩ)Typ.		(A)Max.	(A)Typ.	(A)Max.	(A)Typ.
SP16-050050A5R6M	5.6±20%	24.2	22.0	20	7.2	8.6	5.3	7.2
SP16-050050A6R8M	6.8±20%	28.6	26.0	18	6.6	7.8	4.8	6.4
SP16-050050A8R2M	8.2±20%	32.5	29.5	15	6.1	7.2	4.6	6.1
SP16-050050A100M	10±20%	43.0	39.0	13	5.4	6.5	3.8	5.0
SP16-050050A150M	15±20%	76.7	61.4	12	3.3	4.0	3.0	3.9
SP16-050050A220M	22±20%	100	83.0	10	3.0	3.6	2.5	3.4

- Test frequency and voltage:100KHz,0.1Vrms.
- All test data referenced to 25°C ambient.
- Absolute maximum voltage: 40Vdc.
- 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

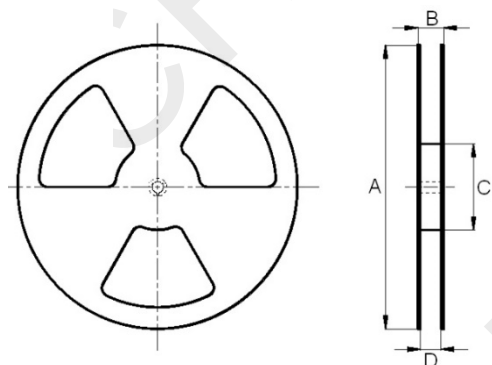
■ Carrier Tape (Unit:mm)



W	P	A0	B0	K0	E	F	P0	P2	D0	T
16.0±0.3	8.0±0.1	5.9±0.1	5.6±0.1	5.4±0.1	1.75±0.1	7.5±0.1	4.0±0.1	2.0±0.1	Φ1.5±0.1	0.35±0.05

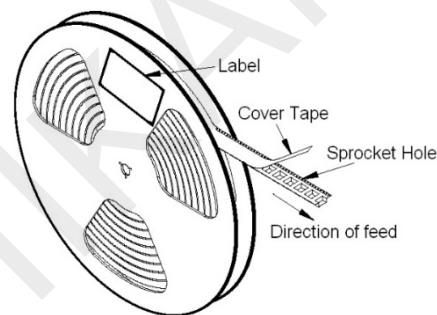
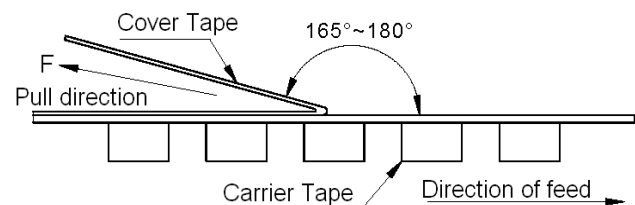
■ Reel (Unit:mm)

A	B	C	D
Φ330±1.0	22.1Max.	Φ100±1.0	16.5±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
1500Pcs

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.