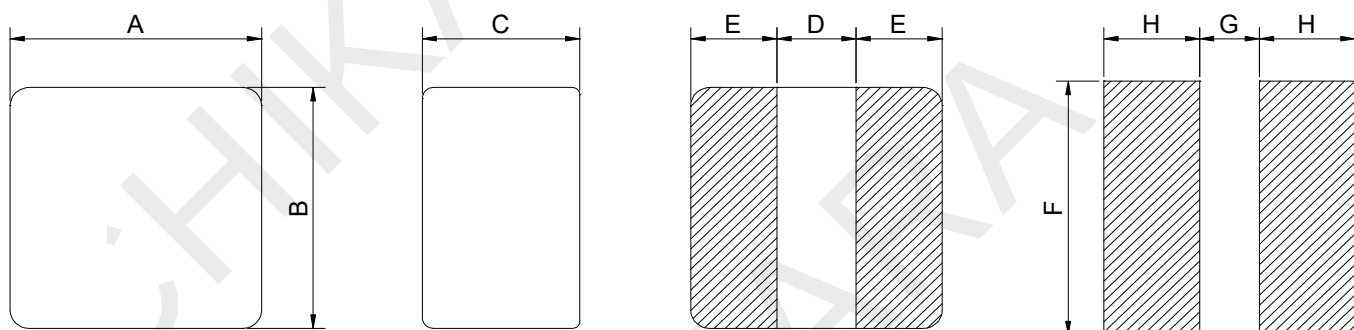


Features

- 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:3000pcs. Per 13-inch reel
- RoHs&Halogen-free compliant



Mechanical Dimension(Unit:mm)



Recommended Layout

A	B	C	D	E	F	G	H
3.0±0.2	3.0±0.2	2.0Max.	1.1±0.2	0.95±0.2	3.2	1.0	1.1

Part Number Description

SP16 - 303020 R15 M
① ② ③ ④

①	Type
②	Dimensions
③	Inductance value
④	Tolerance code

Electrical Schematic



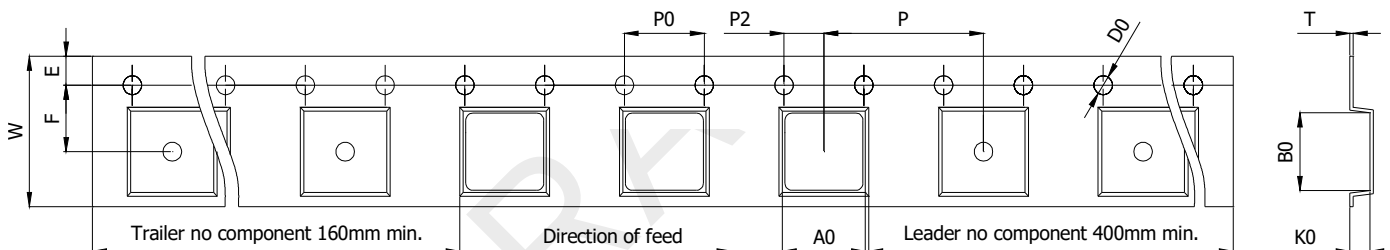
Electrical Characteristic

Part Number	Inductance L0(μH)	DCR		Isat		Irms	
		(mΩ)Max.	(mΩ)Typ.	(A)Max.	(A)Typ.	(A)Max.	(A)Typ.
SP16-303020R15M	0.15±20%	5.0	4.0	17.0	18.0	12.0	13.0
SP16-303020R33M	0.33±20%	9.0	7.5	15.0	16.0	9.0	10.0
SP16-303020R47M	0.47±20%	11	8.0	13.5	15.0	8.0	9.0
SP16-303020R50M	0.50±20%	12	9.0	13.0	14.5	8.0	9.0
SP16-303020R68M	0.68±20%	16	13	11.0	13.0	7.8	8.5
SP16-3030201R0M	1.0±20%	20	15	7.3	8.0	6.0	6.5
SP16-3030201R5M	1.5±20%	25	19	6.5	7.0	5.8	6.3
SP16-3030202R2M	2.2±20%	45	37	5.5	6.0	4.3	4.7
SP16-3030203R3M	3.3±20%	63	52	5.4	5.9	4.0	4.5
SP16-3030204R7M	4.7±20%	73	60	4.0	4.8	3.8	4.2
SP16-3030206R8M	6.8±20%	135	108	3.8	4.5	3.0	3.3
SP16-303020100M	10±20%	160	135	3.3	3.7	2.2	2.5
SP16-303020150M	15±20%	260	235	2.2	2.6	1.5	1.8

- Test frequency and voltage:1MHz,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

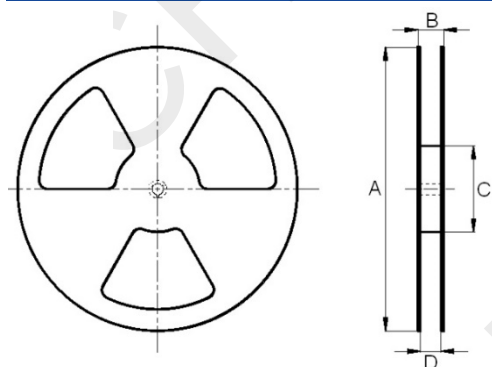
■ Carrier Tape (Unit:mm)



W	P	A0	B0	K0	E	F	P0	P2	D0	T
12.0±0.3	8.0±0.1	3.4±0.1	3.4±0.1	2.3±0.1	1.75±0.1	5.5±0.1	4.0±0.1	2.0±0.1	Φ1.5±0.1	0.3±0.05

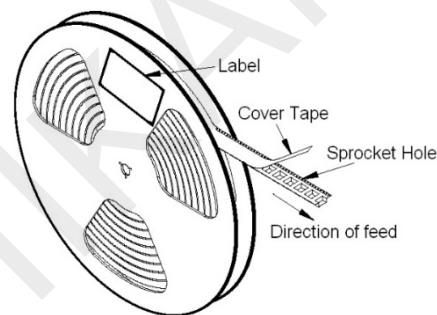
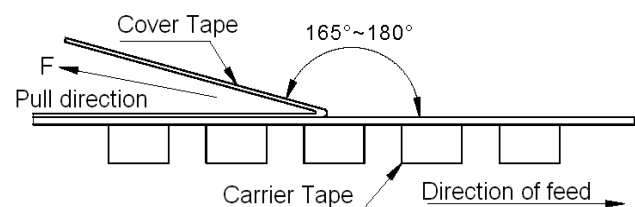
■ Reel (Unit:mm)

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~1.0N	165°~180°	300mm/min.



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

■ Package Quantity

Parts per reel
3000Pcss

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.