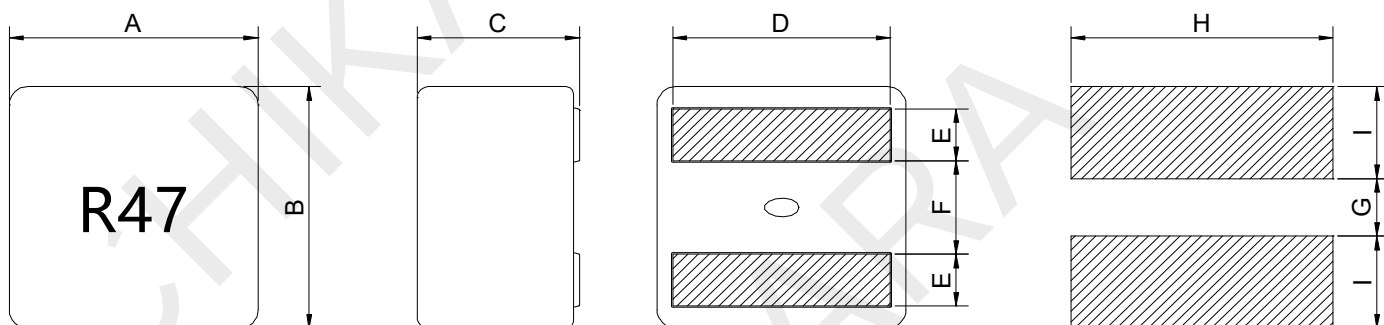


Features

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



Mechanical Dimension(Unit:mm)



Recommended Layout

A	B	C	D	E	F	G	H	I
4.1±0.3	4.1±0.3	2.8±0.3	3.4±0.3	0.88±0.3	1.7±0.3	1.3	3.8	1.2

Part Number Description

SP16 - 040030 A R47 M
① ② ③ ④ ⑤

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

Electrical Schematic



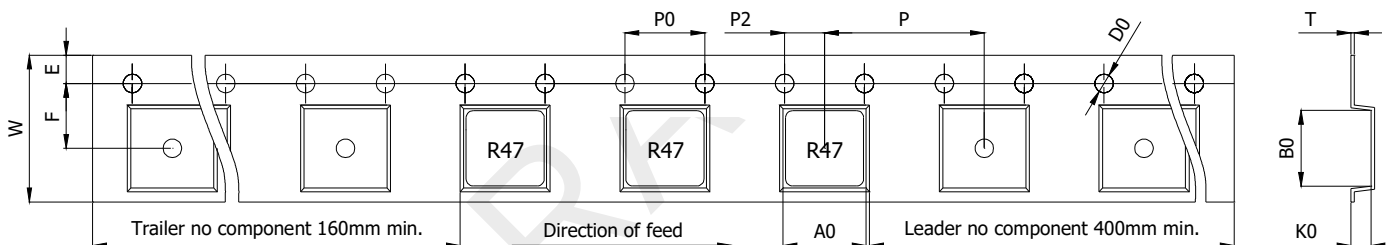
Electrical Characteristic

Part Number	Inductance L0(uH)	DCR		SRF (MHz)Typ.	Isat		Irms	
		(mΩ)Max.	(mΩ)Typ.		(A)Max.	(A)Typ.	(A)Max.	(A)Typ.
SP16-040030AR47M	0.47±20%	7.30	6.40	100	15.0	17.0	10.0	14.0
SP16-040030AR90M	0.90±20%	10.1	8.90	60	9.2	10.0	8.2	11.2
SP16-040030A1R0M	1.0±20%	10.1	8.90	55	9.2	9.8	8.0	11.0
SP16-040030A1R2M	1.2±20%	11.5	10.1	52	8.7	9.2	7.8	9.8
SP16-040030A1R5M	1.5±20%	13.2	11.6	48	7.0	8.0	7.0	9.0
SP16-040030A2R2M	2.2±20%	22.6	20.0	40	6.1	7.0	6.0	7.8
SP16-040030A3R3M	3.3±20%	28.6	25.3	30	5.3	6.2	5.0	6.6
SP16-040030A4R7M	4.7±20%	44.1	38.8	28	4.0	4.5	3.9	5.1
SP16-040030A6R8M	6.8±20%	74.1	65.2	22	3.0	3.6	3.0	3.9

- Test frequency and voltage:100KHz,0.1Vrms.
- 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

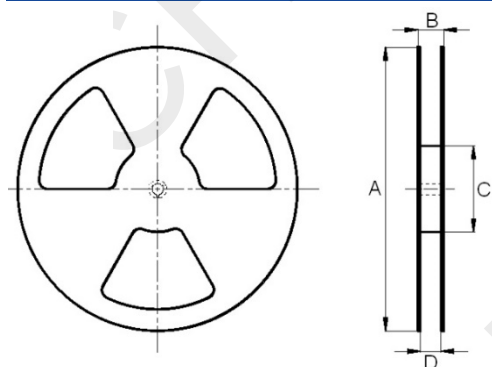
■ Carrier Tape (Unit:mm)



W	P	A0	B0	K0	E	F	P0	P2	D0	T
12.0±0.3	8.0±0.1	4.4±0.1	4.4±0.1	3.3±0.1	1.75±0.1	5.5±0.1	4.0±0.1	2.0±0.1	Φ1.5±0.1	0.35±0.05

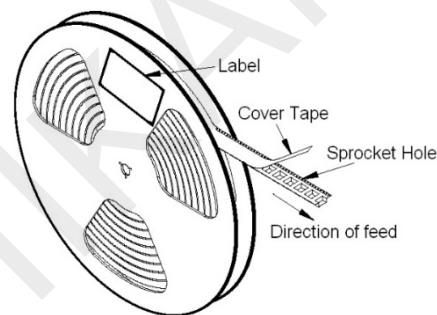
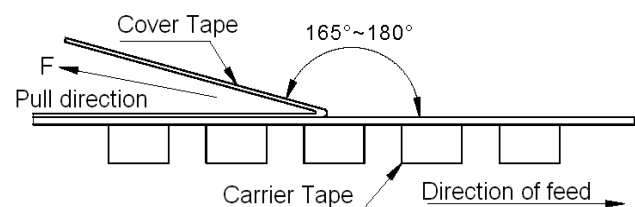
■ Reel (Unit:mm)

A	B	C	D
Φ330±1.0	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.