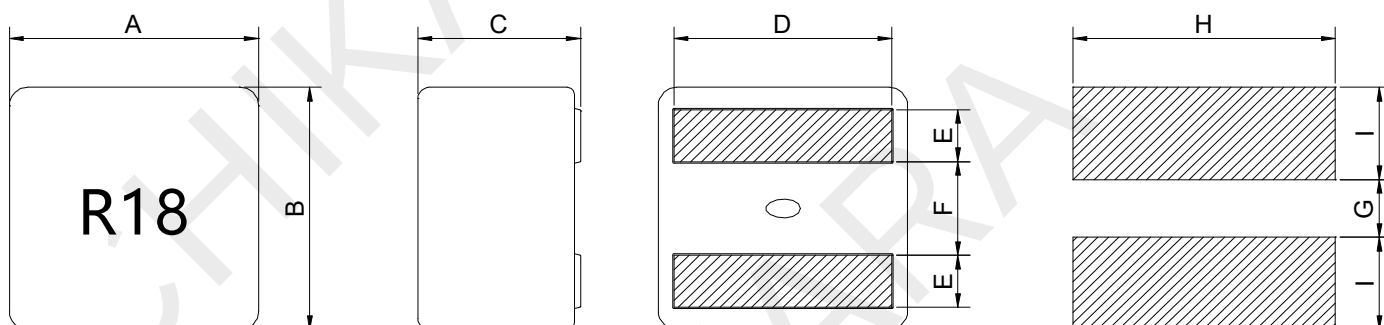


Features

- 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
6.6±0.3	6.4±0.3	2.8±0.3	5.4±0.3	1.5±0.3	2.6±0.3	2.3	5.8	1.8

Part Number Description

SP16 - 060030 A R18 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.
SP16-060030AR18M	0.18±20%	1.75	1.55	170	36.0	40.0	24.0	32.0
SP16-060030AR33M	0.33±20%	2.50	2.20	112	28.0	32.0	20.0	25.0
SP16-060030AR56M	0.56±20%	3.31	2.95	78	25.0	29.0	17.0	22.0
SP16-060030AR68M	0.68±20%	5.17	4.58	65	21.0	25.0	15.0	20.0
SP16-060030A1R0M	1.0±20%	6.05	5.35	58	18.0	23.0	13.0	18.0
SP16-060030A1R2M	1.2±20%	7.40	6.55	52	16.0	22.0	12.0	16.0
SP16-060030A1R5M	1.5±20%	9.13	8.00	50	15.5	20.0	11.0	15.0
SP16-060030A1R8M	1.8±20%	10.2	9.00	37	13.0	18.2	10.0	14.0
SP16-060030A2R2M	2.2±20%	12.2	10.7	35	11.0	15.9	7.0	10.0
SP16-060030A3R3M	3.3±20%	20.8	18.5	30	9.0	12.2	6.0	8.0
SP16-060030A4R5M	4.5±20%	25.3	22.5	27	8.0	10.0	5.0	7.0

- 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.

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.