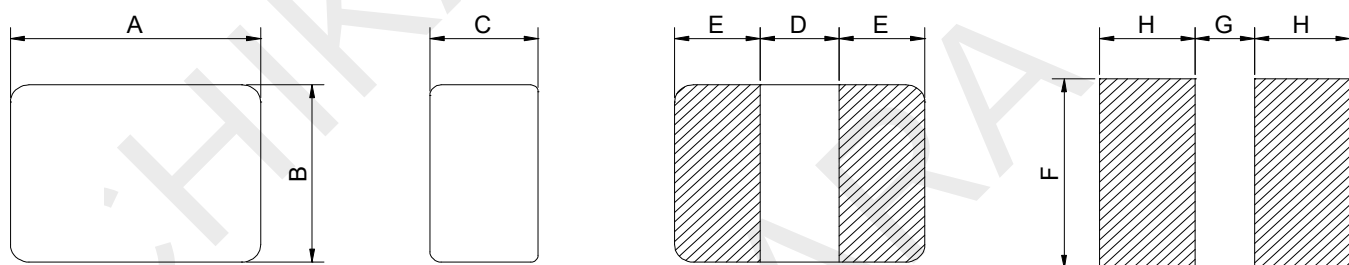


Features

- 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 7-inch reel
- RoHs&Halogen-free compliant



Mechanical Dimension(Unit:mm)



Recommended Layout

A	B	C	D	E	F	G	H
2.0±0.2	1.6±0.2	1.05Max.	0.6±0.2	0.7±0.2	1.8	0.5	0.85

Part Number Description

SP16 - 201610 R10 M

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.
SP16-201610R10M	0.10±20%	10	7	8.4	9.0	8.0	8.5
SP16-201610R15M	0.15±20%	12	8	8.0	8.7	7.0	7.6
SP16-201610R22M	0.22±20%	16	11	7.5	8.2	6.3	6.9
SP16-201610R24M	0.24±20%	17	12	7.4	8.0	6.2	6.8
SP16-201610R33M	0.33±20%	22	17	6.5	7.0	5.3	5.7
SP16-201610R47M	0.47±20%	25	22	5.5	6.0	5.0	5.5
SP16-201610R56M	0.56±20%	23	19	5.0	5.5	6.0	6.5
SP16-201610R68M	0.68±20%	32	25	4.7	5.2	4.3	4.6
SP16-2016101R0M	1.0±20%	43	35	4.2	4.6	4.1	4.5
SP16-2016101R5M	1.5±20%	100	80	2.9	3.2	2.3	2.6
SP16-2016102R2M	2.2±20%	130	115	2.8	3.0	2.1	2.5
SP16-2016103R3M	3.3±20%	170	140	2.0	2.3	1.5	1.7
SP16-2016104R7M	4.7±20%	220	190	1.8	2.0	1.4	1.6
SP16-2016106R8M	6.8±20%	350	320	1.5	1.7	1.5	1.7
SP16-201610100M	10±20%	580	483	1.1	1.4	0.7	1.0

- Test frequency and voltage:1MHz,1Vrms.
- All test data referenced to 25°C ambient.
- Absolute maximum voltage: 20Vdc.
- 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.