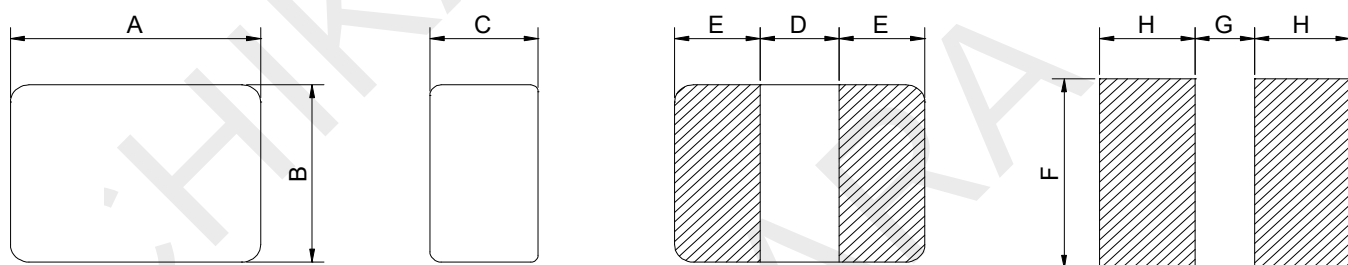


Features

- 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
3.2±0.2	2.5±0.2	1.25Max.	1.2±0.2	1.0±0.2	2.7	1.1	1.15

Part Number Description

SP16 - 322512 R10 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.
SP16-322512R10M	0.10±20%	7.0	5.2	16.5	18.0	11.0	12.0
SP16-322512R22M	0.22±20%	10	6.5	11.0	11.5	8.7	9.2
SP16-322512R24M	0.24±20%	12	7.0	10.5	11.0	8.5	9.0
SP16-322512R33M	0.33±20%	14	9.0	9.5	10.0	8.1	8.4
SP16-322512R47M	0.47±20%	19	14	8.2	8.6	7.2	7.5
SP16-322512R68M	0.68±20%	23	17	7.7	8.1	6.8	7.3
SP16-3225121R0M	1.0±20%	30	25	5.8	6.6	4.8	5.3
SP16-3225121R5M	1.5±20%	44	37	4.7	5.1	4.3	4.7
SP16-3225122R2M	2.2±20%	70	58	4.2	4.6	3.0	3.6
SP16-3225123R3M	3.3±20%	95	75	3.2	3.7	2.5	2.9
SP16-3225124R7M	4.7±20%	135	115	2.6	2.9	2.0	2.3
SP16-3225126R8M	6.8±20%	210	177	2.4	2.8	1.9	2.2
SP16-322512100M	10±20%	230	210	1.9	2.3	1.8	2.1

- 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.