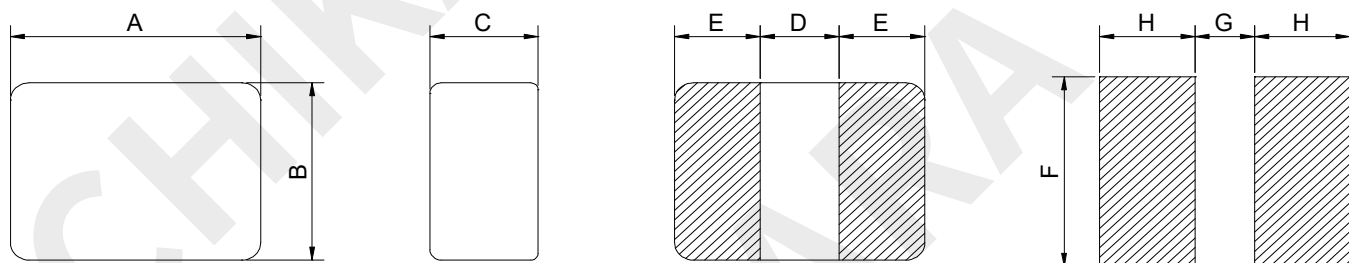


Features

- 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	1.25Max.	0.6±0.2	0.7±0.2	1.8	0.5	0.85

Part Number Description

SP16 - 201612 R10 M

①	Type
②	Dimensions
③	Inductance value
④	Tolerance code

Electrical Schematic



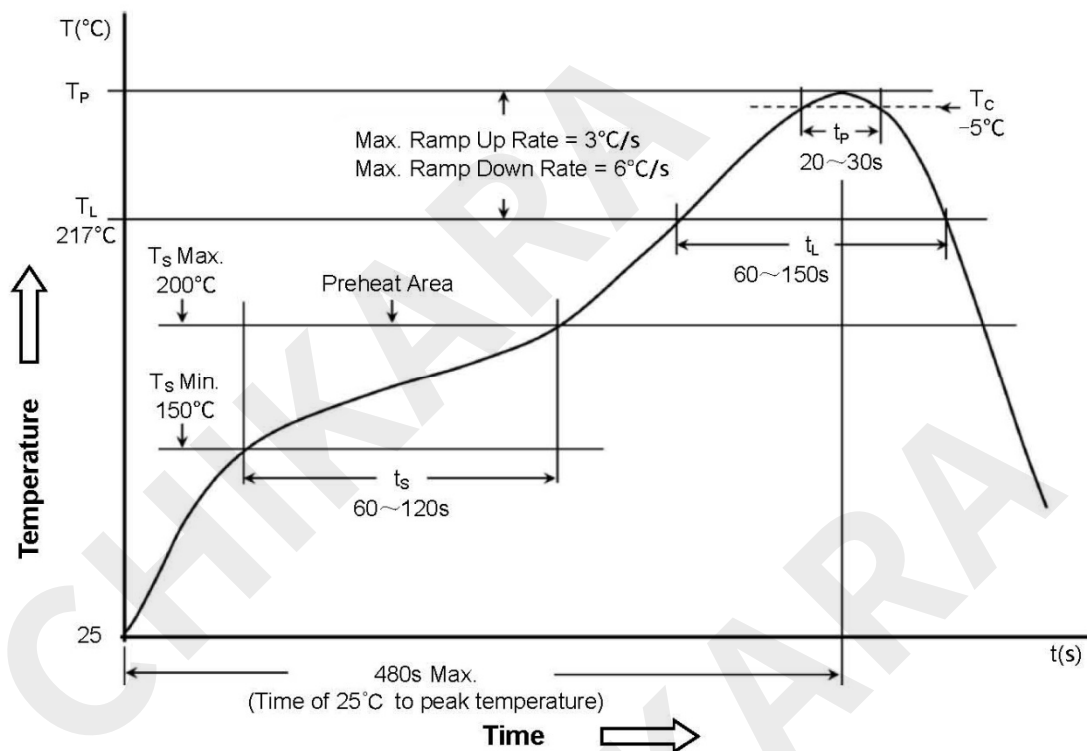
Electrical Characteristic

Part Number	Inductance L0(uH)	DCR		Isat		Irms	
		(mΩ)Max.	(mΩ)Typ.	(A)Max.	(A)Typ.	(A)Max.	(A)Typ.
SP16-201612R10M	0.10±20%	6.0	4.0	11.5	13.0	10.0	12.0
SP16-201612R11M	0.11±20%	5.6	4.8	11.0	12.5	14.5	15.5
SP16-201612R15M	0.15±20%	10	7.5	10.5	12.0	9.0	10.0
SP16-201612R24M	0.24±20%	11	9.0	8.7	9.2	8.6	9.1
SP16-201612R33M	0.33±20%	15	10	7.3	7.8	7.2	7.7
SP16-201612R47M	0.47±20%	17	13	6.0	6.7	6.0	6.7
SP16-201612R68M	0.68±20%	23	19	5.3	6.0	5.3	6.0
SP16-201612R10M	1.0±20%	36	30	4.5	5.0	4.5	5.0
SP16-201612R15M	1.5±20%	50	40	3.5	4.0	3.5	4.0
SP16-201612R22M	2.2±20%	90	77	2.7	3.1	2.9	3.3
SP16-201612R33M	3.3±20%	165	135	2.3	2.7	2.0	2.4
SP16-201612R68M	6.8±20%	300	255	1.7	1.9	1.7	1.8

- 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.