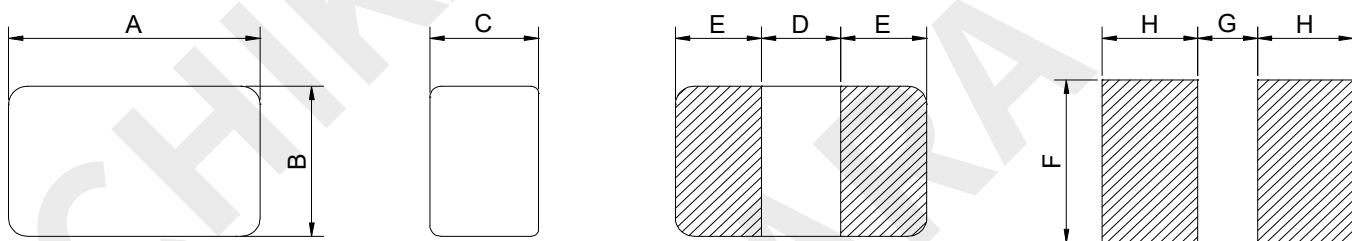


Features

- 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	1.2±0.2	0.9Max.	0.6±0.2	0.7±0.2	1.4	0.5	0.85

Part Number Description

SP16 - 201208 R15 M

① ② ③ ④

①	Type
②	Dimensions
③	Inductance value
④	Tolerance code

Electrical Schematic



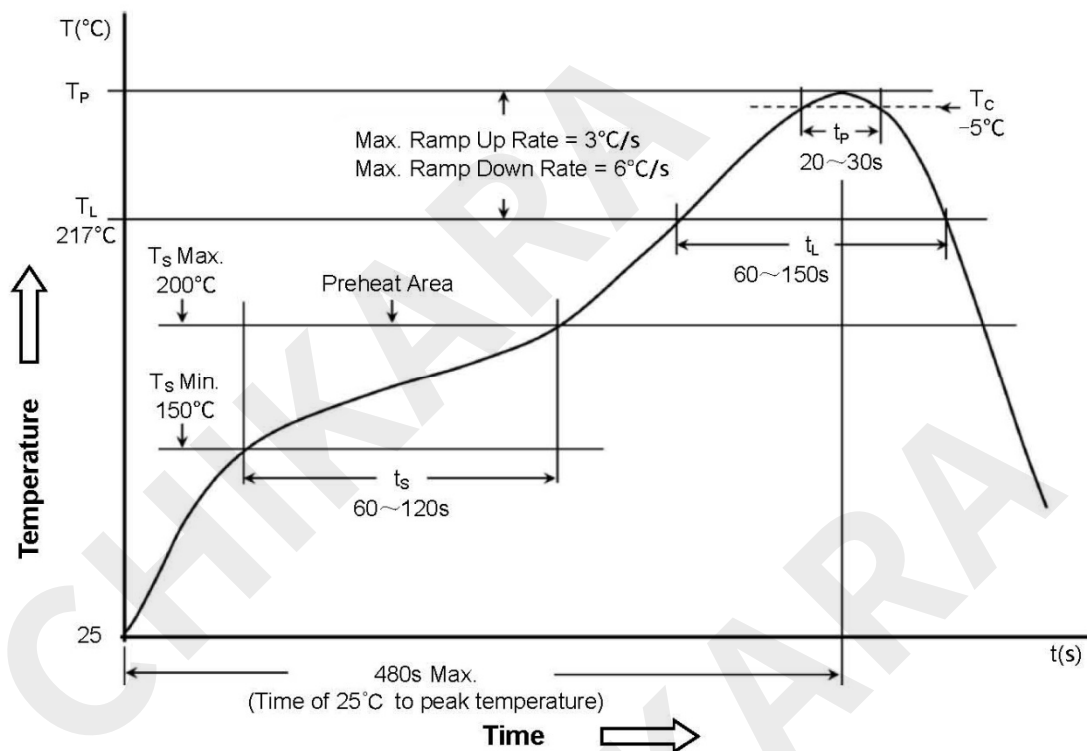
Electrical Characteristic

Part Number	Inductance L0(μ H)	DCR		Isat		Irms	
		(m Ω)Max.	(m Ω)Typ.	(A)Max.	(A)Typ.	(A)Max.	(A)Typ.
SP16-201208R15M	0.15 $\pm$ 20%	13	11	7.0	7.5	6.3	6.8
SP16-201208R24M	0.24 $\pm$ 20%	23	18	6.0	6.5	5.9	6.5
SP16-201208R33M	0.33 $\pm$ 20%	45	33	4.8	5.2	4.0	4.3
SP16-201208R47M	0.47 $\pm$ 20%	50	34	4.6	5.0	3.3	3.5
SP16-201208R68M	0.68 $\pm$ 20%	60	50	3.7	4.2	3.3	3.7
SP16-2012081R0M	1.0 $\pm$ 20%	70	55	3.5	4.0	2.9	3.3
SP16-2012081R5M	1.5 $\pm$ 20%	135	118	2.5	3.0	1.9	2.2
SP16-2012082R2M	2.2 $\pm$ 20%	185	160	2.3	2.6	1.8	2.2
SP16-2012083R3M	3.3 $\pm$ 20%	300	253	1.6	1.9	1.5	1.8
SP16-2012084R7M	4.7 $\pm$ 20%	325	285	1.4	1.6	1.5	1.7

- 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.