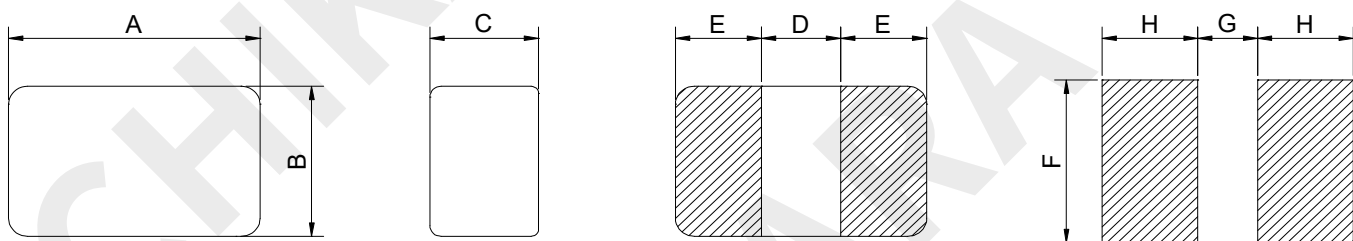


Features

- 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	1.05Max.	0.6±0.2	0.7±0.2	1.4	0.5	0.85

Part Number Description

SP16 - 201210 R22 M

①	Type
②	Dimensions
③	Inductance value
④	Tolerance code

Electrical Schematic



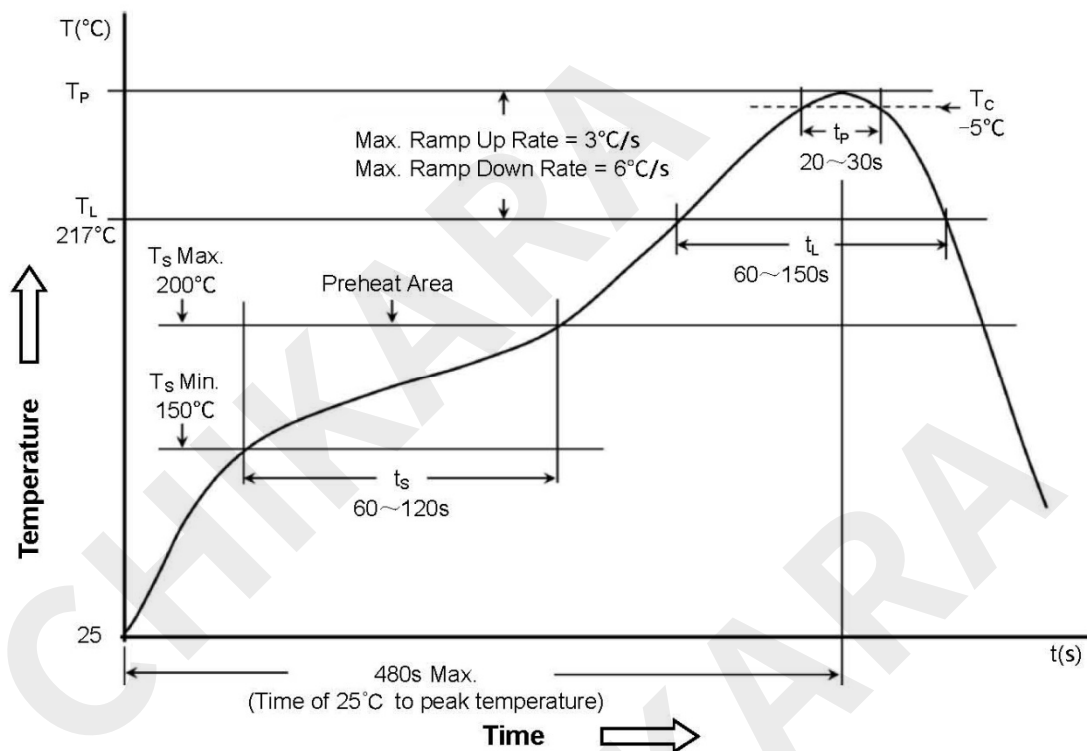
Electrical Characteristic

Part Number	Inductance L0(μ H)	DCR		Isat		Irms	
		(m Ω)Max.	(m Ω)Typ.	(A)Max.	(A)Typ.	(A)Max.	(A)Typ.
SP16-201210R22M	0.22 $\pm$ 20%	22	16	6.8	7.3	6.5	7.1
SP16-201210R24M	0.24 $\pm$ 20%	23	17	6.7	7.2	6.4	7.0
SP16-201210R33M	0.33 $\pm$ 20%	32	24	6.0	6.5	5.0	5.5
SP16-201210R47M	0.47 $\pm$ 20%	36	29	5.0	5.5	4.3	4.7
SP16-201210R56M	0.56 $\pm$ 20%	31	26	4.8	5.2	4.7	5.3
SP16-201210R68M	0.68 $\pm$ 20%	43	37	4.5	5.0	4.0	4.3
SP16-2012101R0M	1.0 $\pm$ 20%	63	55	3.5	4.0	3.5	3.9
SP16-2012101R5M	1.5 $\pm$ 20%	85	76	2.7	3.2	2.6	3.1
SP16-2012102R2M	2.2 $\pm$ 20%	150	135	2.4	2.7	1.7	2.0
SP16-2012103R3M	3.3 $\pm$ 20%	260	210	1.86	2.2	1.5	1.8
SP16-2012104R7M	4.7 $\pm$ 20%	300	275	1.6	1.8	1.4	1.6
SP16-2012106R8M	6.8 $\pm$ 20%	520	440	1.2	1.5	1.3	1.5
SP16-201210100M	10 $\pm$ 20%	660	600	1.0	1.2	1.0	1.1

- 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.