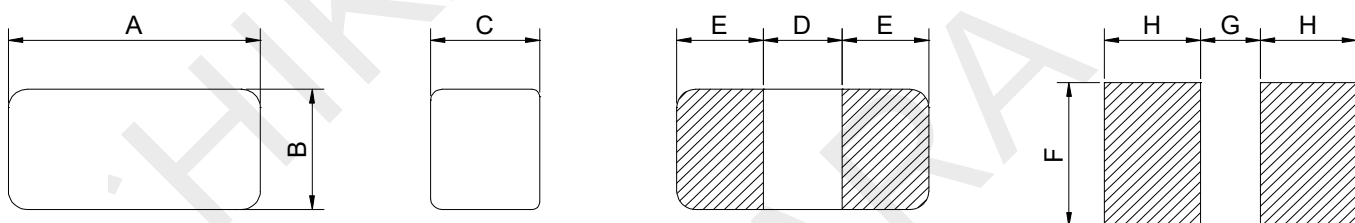


Features

- 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
1.6±0.2	0.8±0.2	0.9Max.	0.6±0.2	0.5±0.2	1.0	0.5	0.6

Part Number Description

SP16 - 160808 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.
SP16-160808R22M	0.22 $\pm$ 20%	40	33	5.0	5.5	3.0	3.4
SP16-160808R24M	0.24 $\pm$ 20%	42	35	4.8	5.3	2.9	3.3
SP16-160808R33M	0.33 $\pm$ 20%	35	30	4.4	4.7	4.3	4.7
SP16-160808R47M	0.47 $\pm$ 20%	100	80	3.7	4.2	2.3	2.6
SP16-160808R56M	0.56 $\pm$ 20%	110	85	3.5	4.0	1.9	2.2
SP16-160808R68M	0.68 $\pm$ 20%	130	110	3.0	3.3	1.9	2.1
SP16-1608081R0M	1.0 $\pm$ 20%	200	180	2.6	3.0	1.8	2.1
SP16-1608081R5M	1.5 $\pm$ 20%	285	242	2.0	2.4	1.4	1.7
SP16-1608082R2M	2.2 $\pm$ 20%	260	220	1.3	1.5	1.2	1.4
SP16-1608083R3M	3.3 $\pm$ 20%	600	510	1.2	1.4	0.9	1.0
SP16-1608084R7M	4.7 $\pm$ 20%	700	590	1.0	1.2	0.8	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.