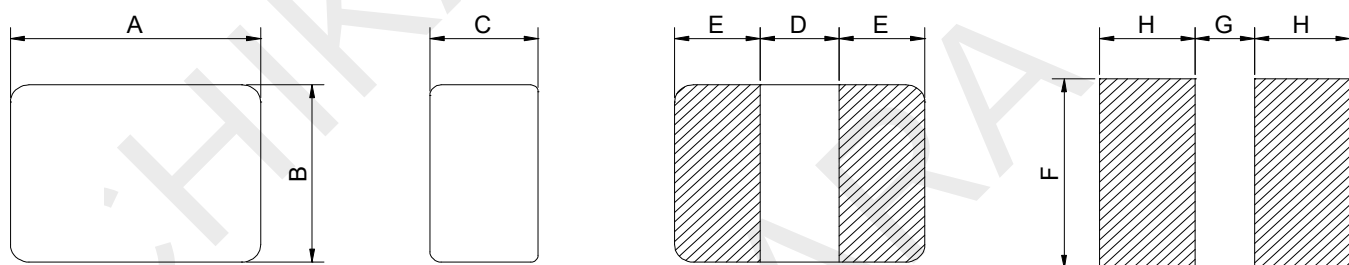


Features

- 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
2.5±0.2	2.0±0.2	0.9Max.	0.8±0.2	0.85±0.2	2.2	0.7	1.0

Part Number Description

SP16 - 252008 R47 M
① ② ③ ④

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.
SP16-252008R47M	0.47±20%	27	22	5.3	6.0	6.0	6.5
SP16-2520081R0M	1.0±20%	40	34	4.0	4.5	4.0	4.3
SP16-2520081R5M	1.5±20%	75	64	3.0	3.5	3.0	3.4
SP16-2520082R2M	2.2±20%	78	69	2.6	3.0	2.6	3.0
SP16-2520083R3M	3.3±20%	180	150	2.1	2.5	2.1	2.5
SP16-2520084R7M	4.7±20%	215	180	1.5	1.9	1.5	2.0
SP16-252008100M	10±20%	600	500	0.9	1.1	1.2	1.4

- 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.