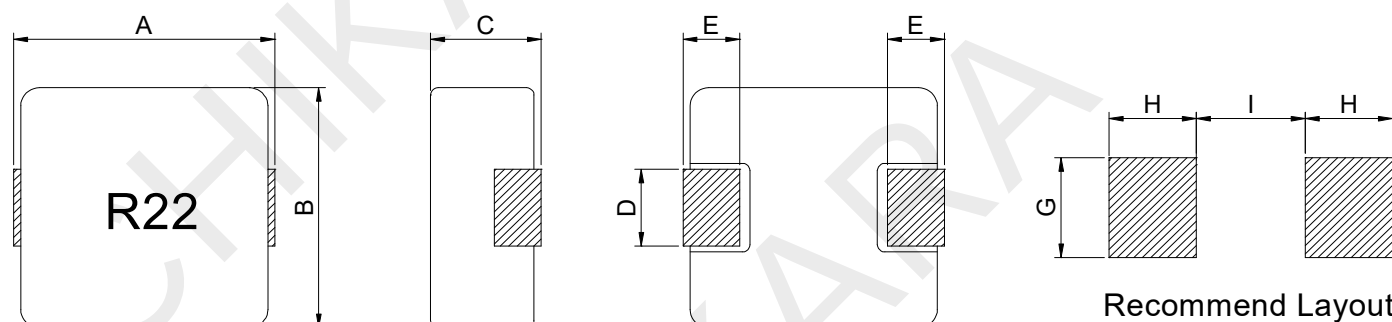


Features

- High energy storage and very low resistance
- 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:1500pcs. Per 13-inch reel
- RoHs&Halogen-free compliant



Mechanical Dimension(Unit:mm)



A	B	C	D	E	G	H	I
7.3±0.4	6.8±0.3	2.4Max.	3.0±0.3	1.6±0.5	3.5	2.35	3.7

Part Number Description

SP15 - 070024 R22 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 (mΩ)Typ.	DCR (mΩ)Max.	SRF (MHz)Typ.	Isat (A)Typ.	Irms (A)Typ.
SP15-070024R22M	0.22±20%	2.00	3.20	125	34.0	21.0
SP15-070024R33M	0.33±20%	3.60	4.50	113	30.0	18.0
SP15-070024R47M	0.47±20%	4.80	5.50	95	26.0	15.0
SP15-070024R56M	0.56±20%	5.50	6.50	87	24.0	13.0
SP15-070024R68M	0.68±20%	6.40	7.20	70	21.0	12.5
SP15-070024R82M	0.82±20%	8.00	9.50	60	17.0	11.5
SP15-0700241R0M	1.0±20%	10.5	13.5	51	16.0	11.0
SP15-0700241R5M	1.5±20%	17.0	20.0	42	15.0	9.00
SP15-0700242R2M	2.2±20%	23.0	28.0	30	14.0	7.00
SP15-0700243R3M	3.3±20%	34.0	39.0	26	10.0	6.00
SP15-0700244R7M	4.7±20%	41.0	50.0	21	9.00	5.50
SP15-0700245R6M	5.6±20%	56.0	63.0	19	8.00	5.00
SP15-0700246R8M	6.8±20%	65.0	72.0	17	7.00	4.00
SP15-0700248R2M	8.2±20%	81.0	95.0	15	6.00	3.60
SP15-070024100M	10±20%	92.0	101	13	5.00	3.20
SP15-070024150M	15±20%	150	180	11	3.50	2.50
SP15-070024220M	22±20%	185	215	8	3.00	1.80

- Test frequency and voltage:100KHz,1Vrms.
- All test data referenced to 25°C ambient.
- Absolute maximum voltage: 30Vdc.
- 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.