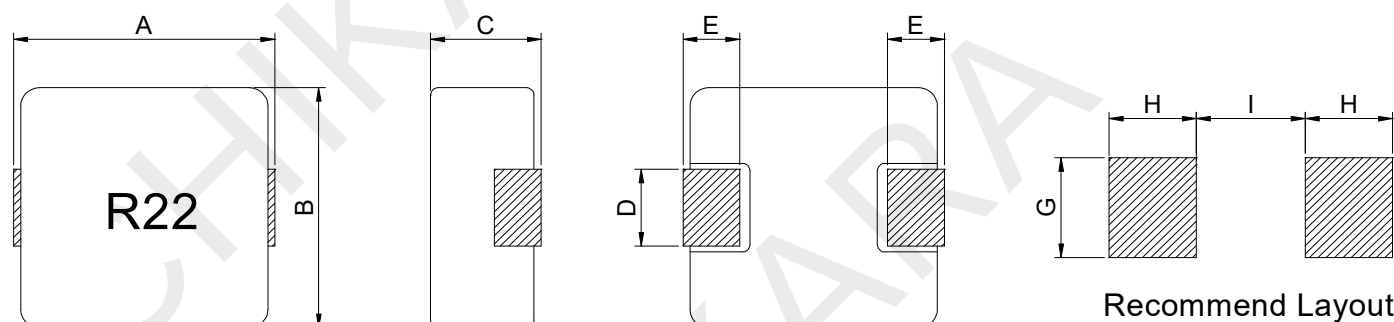


Features

- 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:500pcs. Per 13-inch reel
- RoHs&Halogen-free compliant



Mechanical Dimension(Unit:mm)



A	B	C	D	E	G	H	I
13.5±0.5	12.6±0.4	5.0Max.	See table	2.5±0.5	6.0	3.25	8.0

Part Number Description

SP15 - 138050 R22 M
① ② ③ ④

①	Type
②	Dimensions
③	Inductance value
④	Tolerance code

Electrical Schematic



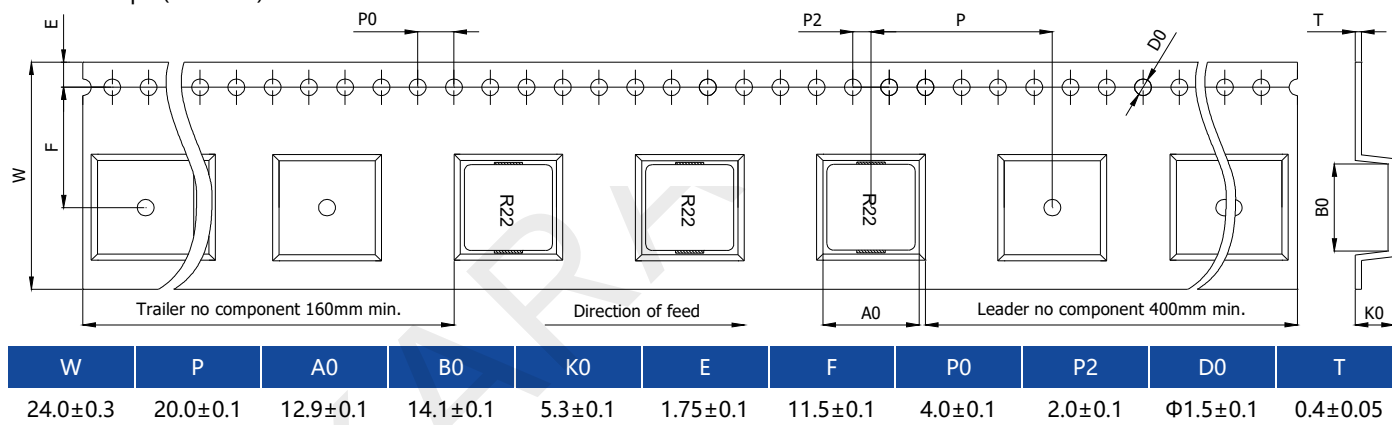
Electrical Characteristic

Part Number	Inductance L0(μH)	DCR (mΩ)Typ.	DCR (mΩ)Max.	SRF (MHz)Typ.	Isat (A)Typ.	Irms (A)Typ.	D (mm)±0.5
SP15-138050R22M	0.22±20%	0.50	0.70	120	110	52.0	3.3
SP15-138050R33M	0.33±20%	0.70	0.90	90	80.0	42.0	3.3
SP15-138050R47M	0.47±20%	0.86	1.10	80	65.0	38.0	3.3
SP15-138050R56M	0.56±20%	1.00	1.50	65	55.0	36.0	3.3
SP15-138050R68M	0.68±20%	1.40	1.70	55	54.0	34.0	3.3
SP15-138050R82M	0.82±20%	1.70	2.10	49	52.0	31.0	3.3
SP15-1380501R0M	1.0±20%	1.85	2.50	45	50.0	29.0	3.3
SP15-1380501R5M	1.5±20%	2.80	3.30	37	48.0	27.0	3.3
SP15-1380502R2M	2.2±20%	4.20	5.50	28	32.0	20.0	4.7
SP15-1380503R3M	3.3±20%	6.80	9.20	24	32.0	15.0	4.7
SP15-1380504R7M	4.7±20%	11.4	15.0	18	27.0	12.0	4.7
SP15-1380505R6M	5.6±20%	12.3	16.5	14	22.0	11.5	4.7
SP15-1380506R8M	6.8±20%	14.5	18.5	12	21.0	11.0	4.7
SP15-1380508R2M	8.2±20%	16.8	22.5	10	18.0	9.5	4.7
SP15-138050100M	10±20%	21.4	25.5	9	16.0	9.0	4.7
SP15-138050150M	15±20%	32.0	38.0	7	13.0	8.2	4.7
SP15-138050220M	22±20%	50.0	58.0	5	10.0	6.5	4.7
SP15-138050330M	33±20%	73.0	88.0	4	8.0	5.0	4.7
SP15-138050470M	47±20%	100	120	3	6.5	4.0	4.7

- Test frequency and voltage:100KHz,1Vrms.
- All test data referenced to 25°C ambient.
- Absolute maximum voltage: 50Vdc.
- 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.

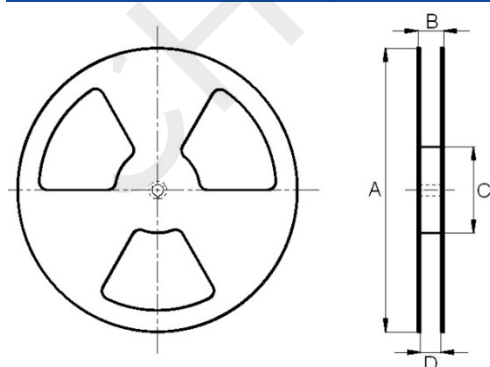
Packaging Specification

Carrier Tape (Unit:mm)



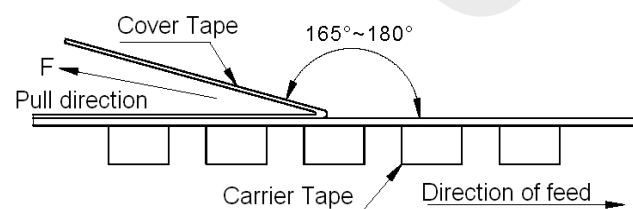
Reel (Unit:mm)

A	B	C	D
Φ330±1.0	28.9Max.	Φ100±1.0	24.5±0.5



Taping Method

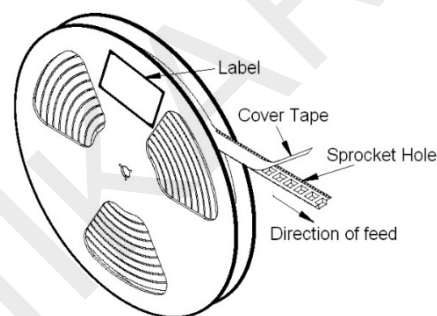
Peel-off strength	Peel-off angle	Peel-off speed
F=0.1N~1.3N	165°~180°	300mm/min.



※ Packing is referred to the international standard IEC 60286-3.

Package Quantity

Parts per reel
500Pcs



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.