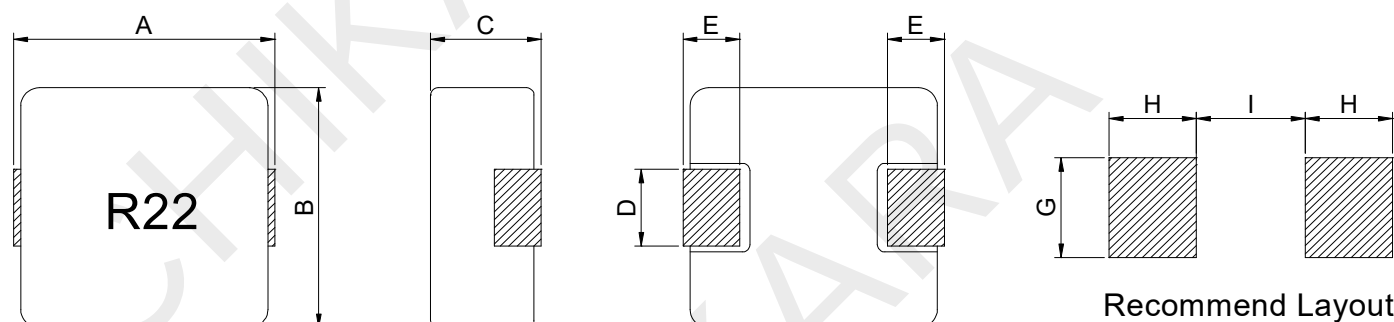


Features

- 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
13.3±0.5	12.6±0.4	5.0Max.	See table	2.5±0.5	6.0	3.25	8.0

Part Number Description

SP14 - 138050 R22 M
① ② ③ ④

①	Type
②	Dimensions
③	Inductance value
④	Tolerance code

Electrical Schematic



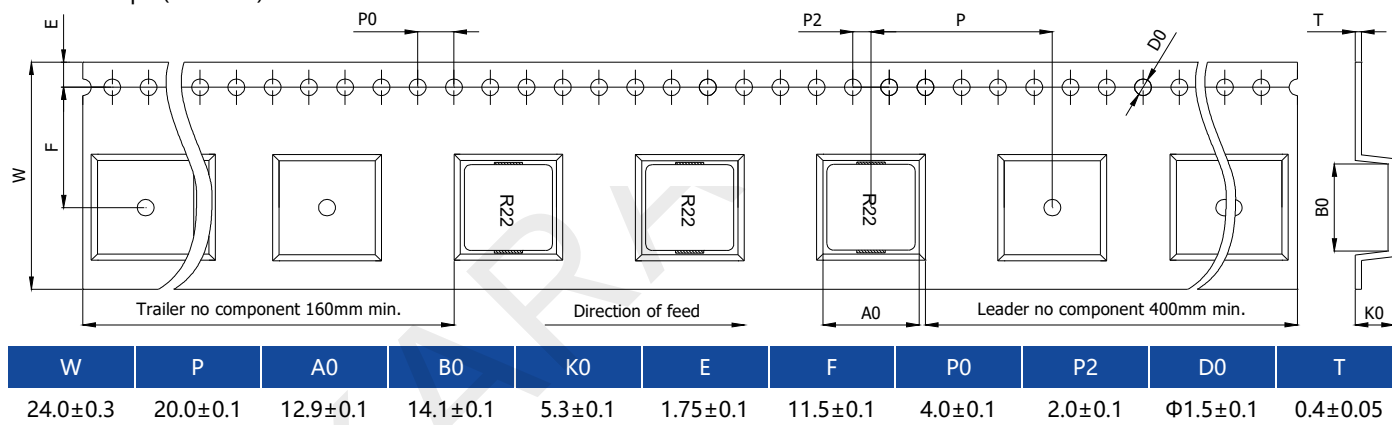
Electrical Characteristic

Part Number	Inductance L0(uH)	DCR (mΩ)Typ.	DCR (mΩ)Max.	SRF (MHz)Typ.	Isat (A)Typ.	Irms (A)Typ.	D (mm)±0.5
SP14-138050R22M	0.22±20%	0.60	0.70	110	75.0	50.0	3.3
SP14-138050R36M	0.36±20%	0.70	0.85	95	50.0	42.0	3.3
SP14-138050R68M	0.68±20%	1.30	1.55	72	46.0	33.0	3.3
SP14-138050R82M	0.82±20%	1.50	1.67	60	39.0	30.0	3.3
SP14-1380501R0M	1.0±20%	1.95	2.20	48	35.0	26.0	3.3
SP14-1380501R5M	1.5±20%	2.70	3.20	40	33.0	23.0	3.3
SP14-1380502R2M	2.2±20%	4.20	5.00	33	24.0	15.0	3.3
SP14-1380503R3M	3.3±20%	6.00	7.00	25	22.0	14.0	4.7
SP14-1380504R7M	4.7±20%	7.80	9.00	20	20.0	13.0	4.7
SP14-1380506R8M	6.8±20%	16.0	18.0	16	16.0	12.0	4.7
SP14-138050100M	10±20%	19.5	22.0	13	12.0	9.0	4.7
SP14-138050150M	15±20%	25.0	30.0	11	10.0	8.0	4.7
SP14-138050220M	22±20%	51.0	58.0	9.8	6.5	4.5	4.7
SP14-138050330M	33±20%	76.0	84.0	7.6	6.0	3.5	4.7
SP14-138050470M	47±20%	108.0	130.0	6.0	5.0	3.0	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.

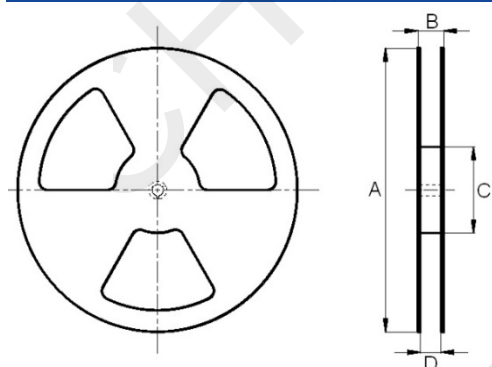
Packaging Specification

■ Carrier Tape (Unit:mm)



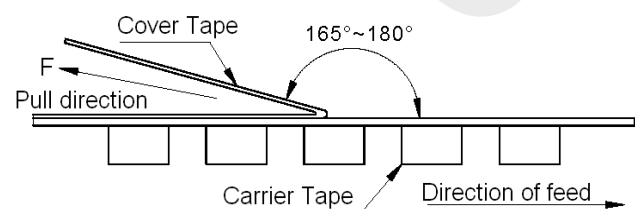
■ Reel (Unit:mm)

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



■ Taping Method

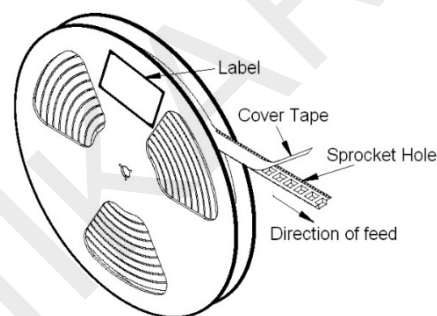
Peel-off strength	Peel-off angle	Peel-off speed
F=0.1N~1.3N	165°~180°	300mm/min.



※ 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.