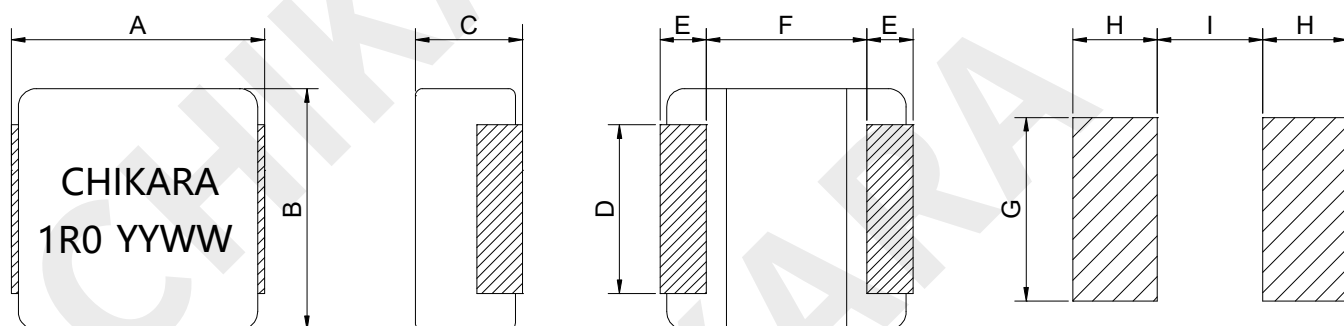


Features

- 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:200pcs. Per 13-inch reel
- RoHs&Halogen-free compliant



Mechanical Dimension(Unit:mm)



Recommended Layout

A	B	C	D	E	G	H	I
18.1±0.5	17.1±0.4	7.0Max.	11.94±0.3	2.5±0.5	12.5±0.5	12.5	3.5

Part Number Description

SP15 - 175070 1R0 M
① ② ③ ④

①	Type
②	Dimensions
③	Inductance value
④	Tolerance code

Electrical Schematic



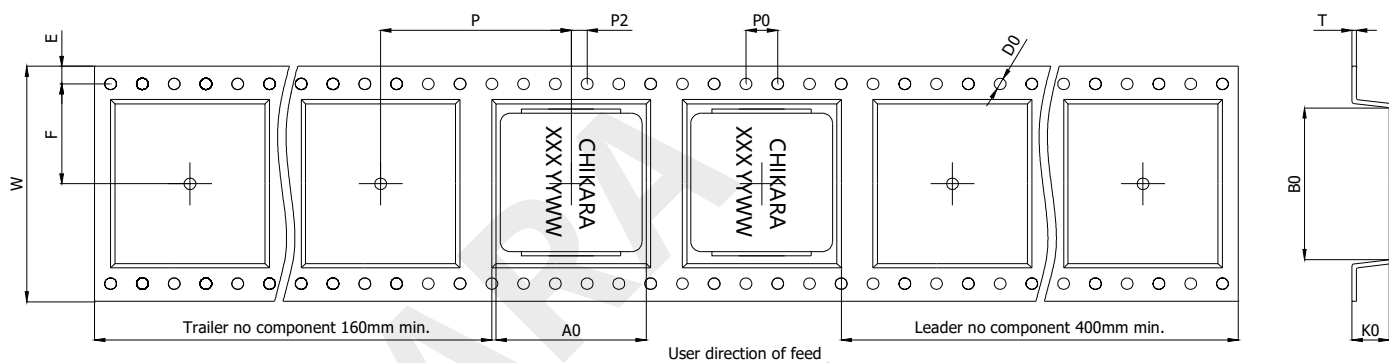
Electrical Characteristic

Part Number	Inductance L0(μH)	DCR (mΩ)Typ.	DCR (mΩ)Max.	SRF (MHz)Typ.	Isat (A)Typ.	Irms (A)Typ.
SP15-1750701R0M	1.0±20%	1.60	2.00	37	70.0	52.0
SP15-1750701R5M	1.5±20%	2.00	2.50	30	65.0	47.0
SP15-1750702R2M	2.2±20%	2.40	2.90	23	62.0	43.5
SP15-1750703R3M	3.3±20%	3.50	4.00	18	54.0	28.0
SP15-1750704R7M	4.7±20%	4.80	5.50	16	50.0	25.0
SP15-1750705R6M	5.6±20%	5.80	7.05	12	45.0	21.0
SP15-1750706R8M	6.8±20%	8.40	9.20	11	39.0	19.0
SP15-1750708R2M	8.2±20%	9.60	10.8	10	31.0	18.0
SP15-175070100M	10±20%	11.8	13.0	9	29.0	16.5
SP15-175070150M	15±20%	17.8	20.5	7	27.0	12.5
SP15-175070220M	22±20%	25.1	26.5	6	23.0	12.0
SP15-175070330M	33±20%	38.0	44.0	5	20.0	10.7
SP15-175070470M	47±20%	48.0	55.0	4	16.0	8.7
SP15-175070560M	56±20%	54.0	62.0	3	15.0	7.8
SP15-175070680M	68±20%	68.0	80.0	2	13.0	7.0
SP15-175070820M	82±20%	87.0	100	2	12.5	5.7
SP15-175070101M	100±20%	102	118	2	12.0	5.3

- 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

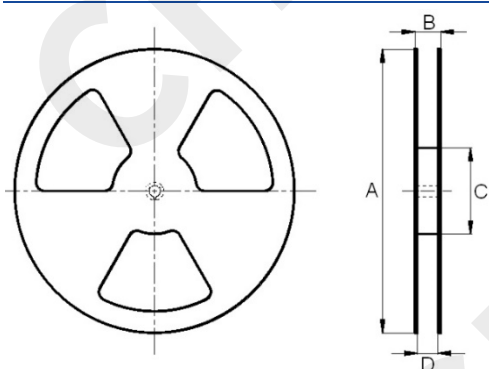
■ Carrier Tape (Unit:mm)



W	P	A0	B0	K0	E	F	P0	P2	D0	T
32±0.3	24±0.1	17.5±0.1	18.6±0.1	7.3±0.1	1.75±0.1	14.2±0.1	4.0±0.1	2.0±0.1	Φ1.5±0.1	0.5±0.05

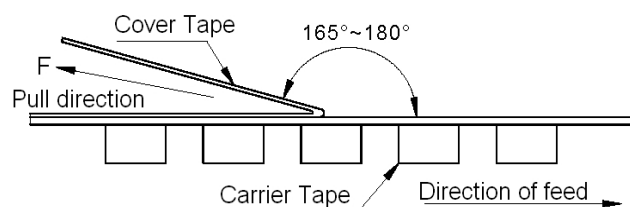
■ Reel (Unit:mm)

A	B	C	D
Φ330±1.0	38.4Max.	Φ100±1.0	33±0.5



■ Taping Method

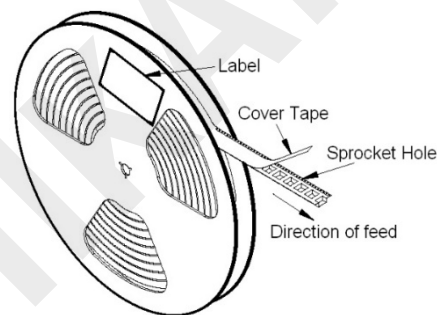
Peel-off strength	Peel-off angle	Peel-off speed
F=0.1N~1.3N	165°~180°	300mm/min.



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

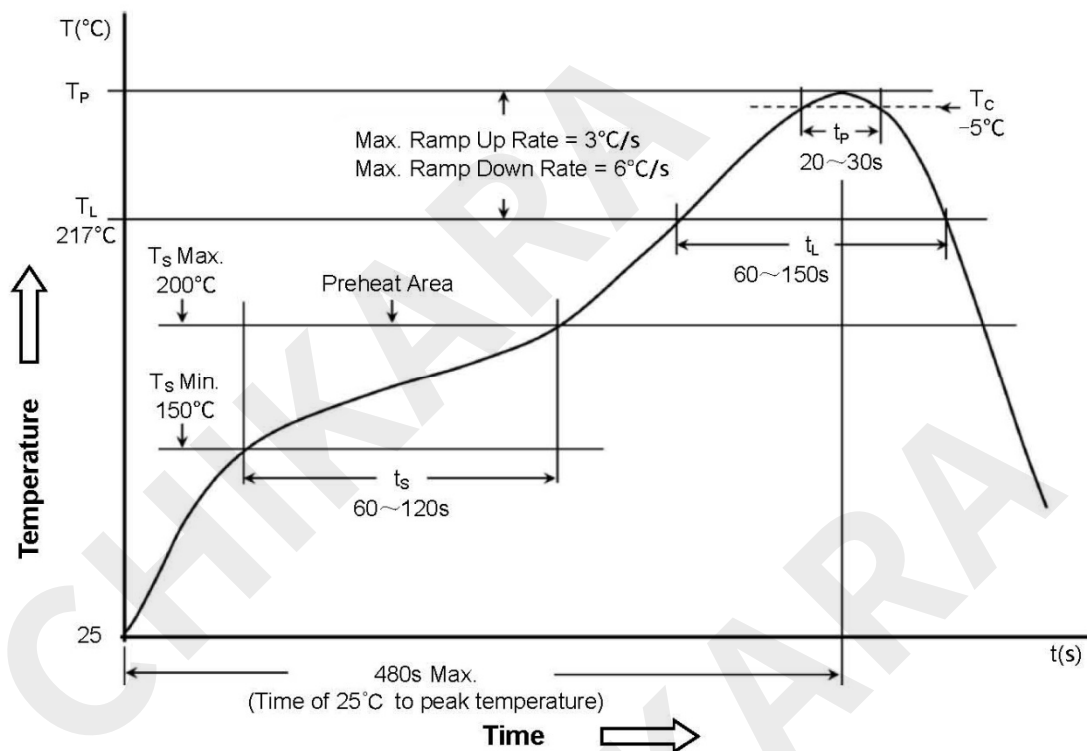
■ Package Quantity

Parts per reel
200Pcs



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.