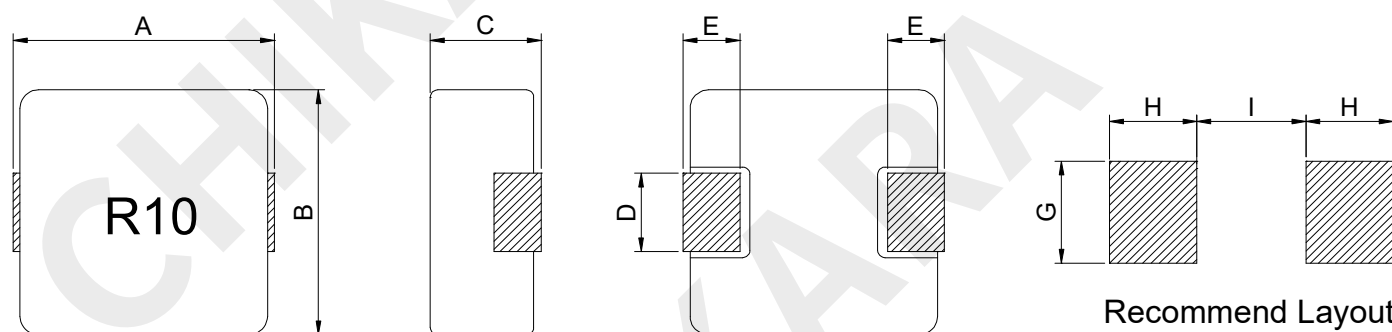


Features

- 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:3000pcs. Per 13-inch reel
- RoHs&Halogen-free compliant



Mechanical Dimension(Unit:mm)



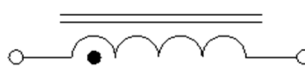
A	B	C	D	E	G	H	I
4.4±0.4	4.2±0.3	2.0Max.	2.0±0.3	0.8±0.3	2.5	1.5	2.2

Part Number Description

SP15 - 047020 R10 M
① ② ③ ④

①	Type
②	Dimensions
③	Inductance value
④	Tolerance code

Electrical Schematic

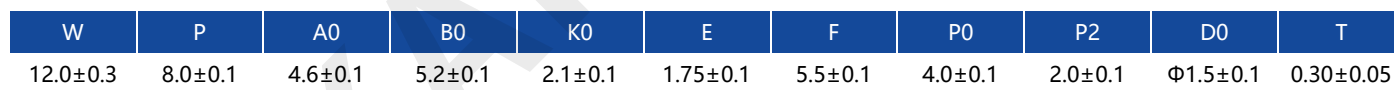


Electrical Characteristic

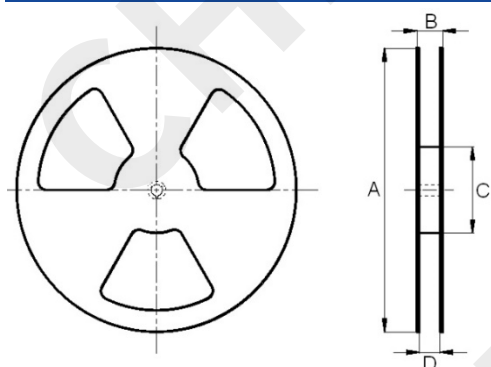
Part Number	Inductance L0(uH)	DCR (mΩ)Typ.	DCR (mΩ)Max.	SRF (MHz)Typ.	Isat (A)Typ.	Irms (A)Typ.
SP15-047020R10M	0.10±20%	3.20	4.00	300	35.0	14.0
SP15-047020R22M	0.22±20%	6.50	7.50	190	24.0	13.0
SP15-047020R33M	0.33±20%	7.80	8.80	140	18.0	10.0
SP15-047020R47M	0.47±20%	11.5	14.0	120	12.0	8.00
SP15-047020R56M	0.56±20%	13.5	16.0	105	10.5	7.30
SP15-047020R68M	0.68±20%	16.5	19.0	90	10.0	7.00
SP15-047020R10M	1.0±20%	22.0	27.0	85	8.50	5.00
SP15-047020R15M	1.5±20%	35.0	42.0	64	7.00	4.50
SP15-047020R22M	2.2±20%	51.0	61.0	49	6.00	4.00
SP15-047020R33M	3.3±20%	70.0	76.0	40	4.00	3.50
SP15-047020R47M	4.7±20%	95.0	105	33	3.50	2.60
SP15-047020R68M	5.6±20%	112	125	30	3.00	2.20
SP15-047020R88M	6.8±20%	150	172	26	2.80	2.10
SP15-047020R82M	8.2±20%	160	180	22	2.50	2.00
SP15-047020R100M	10±20%	215	243	20	2.30	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.

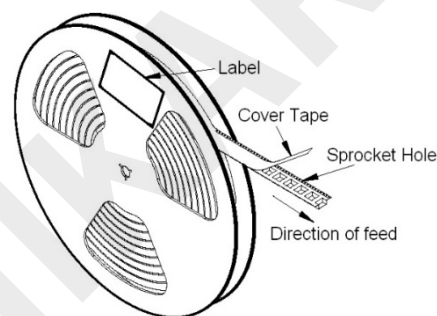
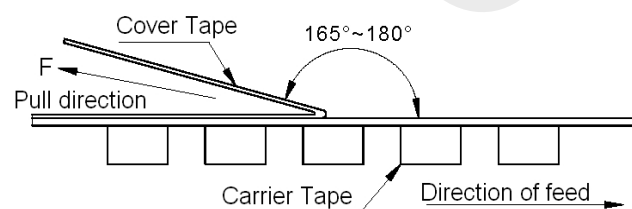
- Carrier Tape (Unit:mm)



A	B	C	D
$\Phi 330 \pm 1.0$	18.4Max.	$\Phi 100 \pm 1.0$	13.0 ± 0.5



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

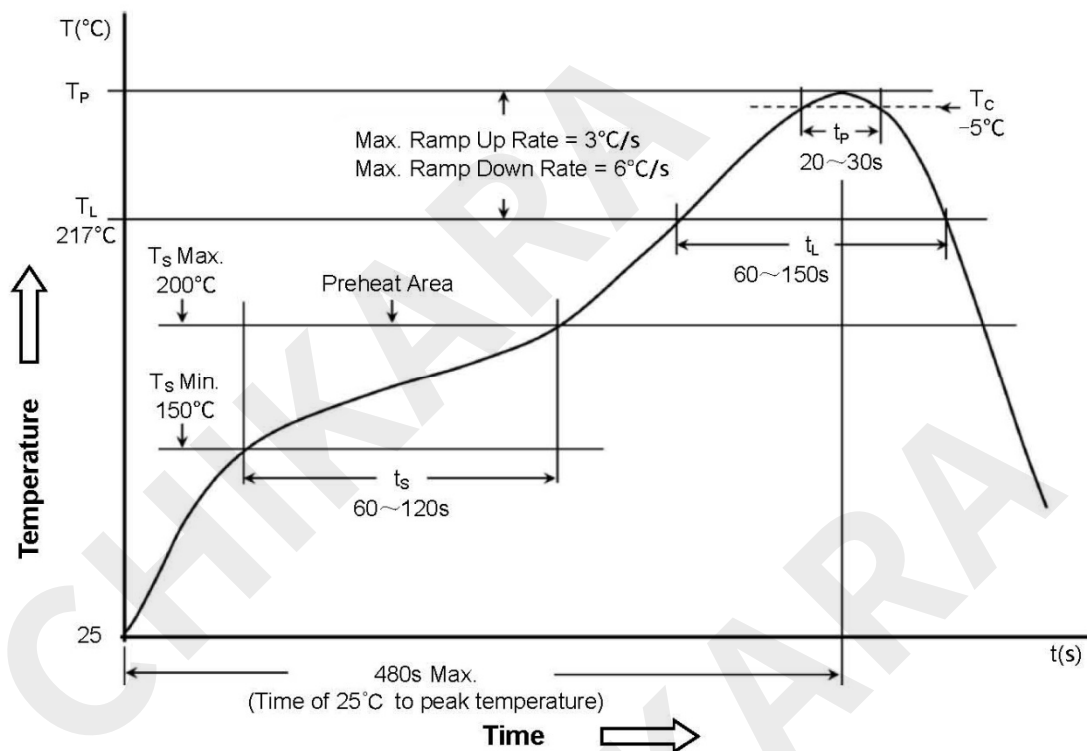


✖ Packing is referred to the international standard IEC 60286-3.

Parts per reel
3000Pcs

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.