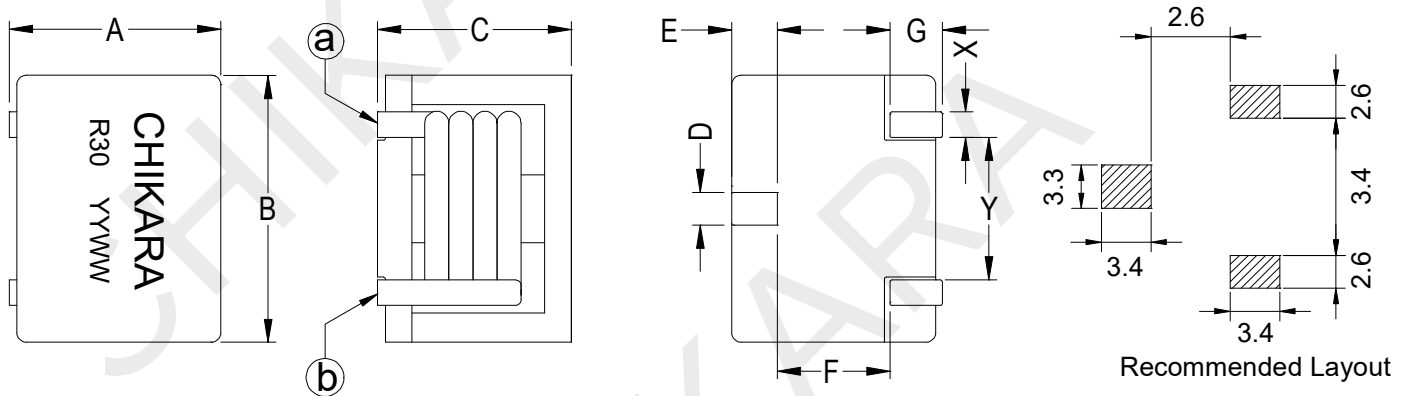


Features

- High saturation current, Lower DCR, High efficiency
- Storage temperature range:-55°C to +135°C
- Operating temperature range:-55°C to +135°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)



X&Y See table

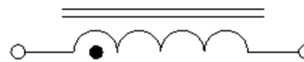
A	B	C	D	E	F	G
9.2Max.	10.8Max.	8.0Max.	2.5±0.2	2.4±0.2	3.5±0.4	2.3±0.4

Part Number Description

SP02 - 1108 R30 M
① ② ③ ④

①	Type
②	Dimensions
③	Inductance value
④	Tolerance code

Electrical Schematic



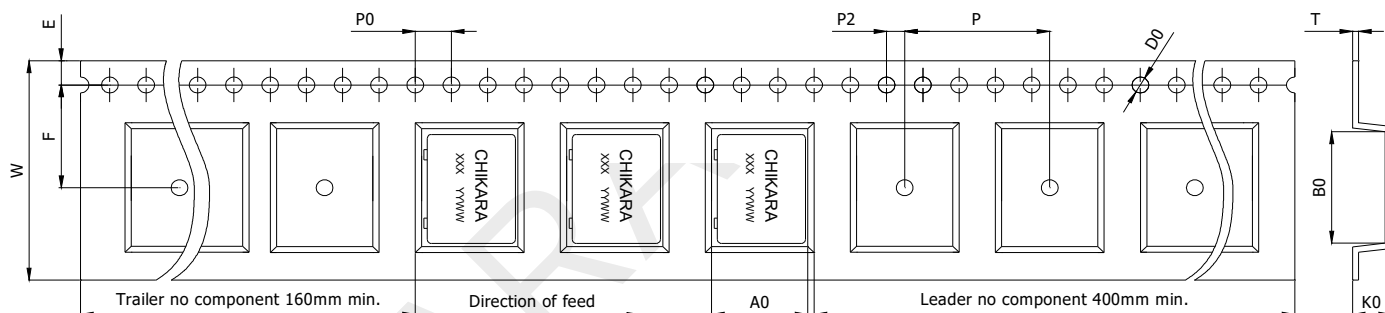
Electrical Characteristic

Part Number	Inductance L0(uH)	DCR (mΩ)±6%	Isat		Irms (A)Typ.	X (mm)±0.2	Y (mm)±0.4
			(A)Typ.@25°C	(A)Typ.@100°C			
SP02-1108R30M	0.30±20%	0.68	42.5	33.5	47.0	1.8	4.5
SP02-1108R40M	0.40±20%	0.91	43.0	34.0	38.0	1.8	4.5
SP02-1108R45M	0.45±20%	0.91	41.0	31.7	38.0	1.8	4.5
SP02-1108R60M	0.60±20%	0.91	32.0	25.5	38.0	1.8	4.5
SP02-11081R0M	1.0±20%	1.76	26.0	20.3	26.1	1.8	4.5
SP02-11082R2M	2.2±20%	3.30	15.9	12.7	16.4	1.6	4.8
SP02-11083R0M	3.0±20%	5.90	16.0	12.5	12.4	1.6	4.8
SP02-11084R7M	4.7±20%	5.30	8.40	6.70	13.2	1.6	4.8
SP02-11086R8M	6.8±20%	7.70	8.50	6.80	9.60	1.6	4.8

- Test frequency and voltage:100KHz,0.1Vrms.
- All test data referenced to 25°C ambient.
- The nominal DCR is measured from point "a" to point "b",as shown above on the mechanical drawing.
- Saturation current(Isat) will cause L0 to drop approximately 20%.
- Heat rated current(Irms) will cause the coil temperature rise approximately Δt of 40°C.

Packaging Specification

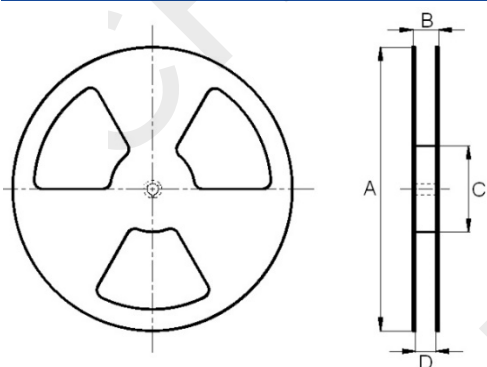
Carrier Tape (Unit:mm)



W	P	A0	B0	K0	E	F	P0	P2	D0	T
24.0±0.3	16.0±0.1	9.4±0.1	11.0±0.1	8.9±0.1	1.75±0.1	11.5±0.1	4.0±0.1	2.0±0.1	Φ1.5±0.1	0.5±0.05

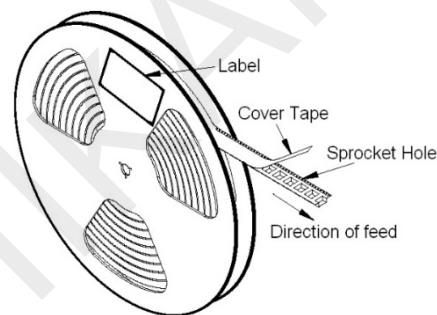
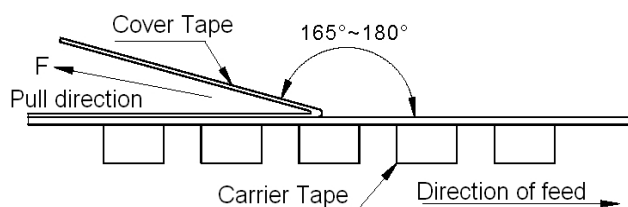
Reel (Unit:mm)

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



Taping Method

Peel-off strength	Peel-off angle	Peel-off speed
F=0.1N~1.0N	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.