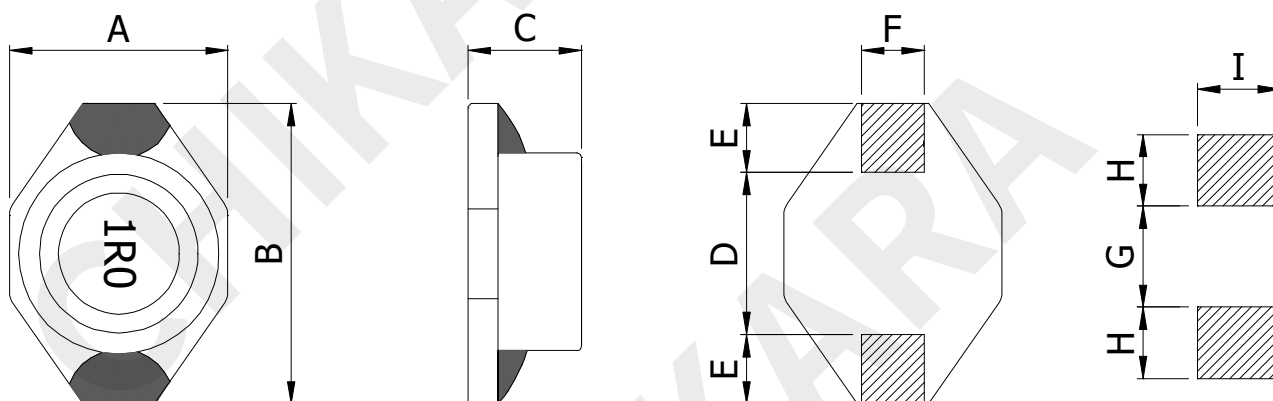


Features

- Magnetically shielded construction
- Storage temperature range:-40°C to +125°C
- Operating temperature range:-40°C to +125°C
(including coil's self-temperature rise)
- Moisture sensitivity level:1
- Packaging:1000pcs. Per 13-inch reel
- RoHs&Halogen-free compliant



Mechanical Dimension(Unit:mm)



Recommended Layout

A	B	C	D	E	F	G	H	I
9.4Max.	12.95Max.	5.08Max.	7.62±0.3	2.54±0.2	2.54±0.2	7.37	2.92	2.79

Part Number Description

SP11 - 130051 1R0 M
① ② ③ ④

①	Type
②	Dimensions
③	Inductance value
④	Tolerance code

Electrical Schematic



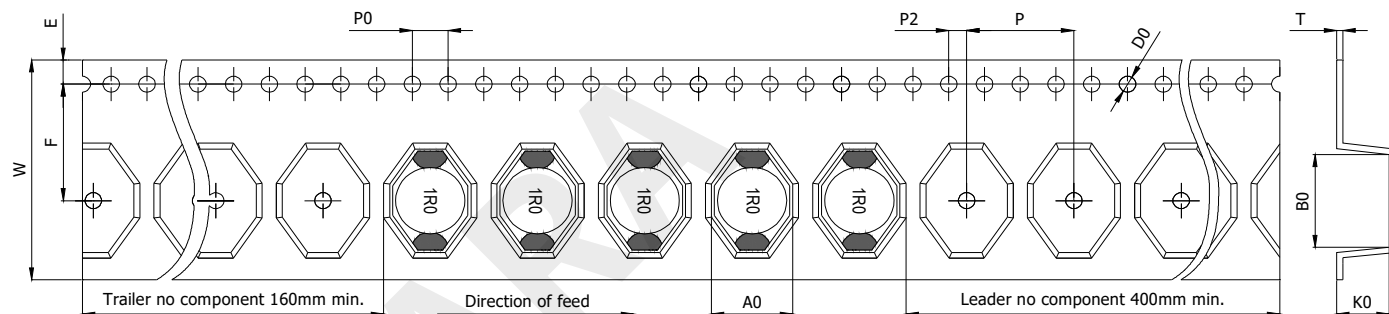
Electrical Characteristic

Part Number	Inductance L0(uH)	SRF (MHz)Typ.	DCR (Ω)Max.	Isat (A)Max.	Irms (A)Max.
SP11-1300511R0M	1.0±20%	140	0.021	5.6	5.0
SP11-1300511R5M	1.5±20%	120	0.022	5.2	4.5
SP11-1300512R2M	2.2±20%	80	0.032	5.0	3.8
SP11-1300513R3M	3.3±20%	70	0.039	3.9	3.3
SP11-1300514R7M	4.7±20%	40	0.054	3.2	2.7
SP11-1300516R8M	6.8±20%	38	0.075	2.8	2.2
SP11-130051100M	10±20%	35	0.101	2.4	2.0
SP11-130051150M	15±20%	25	0.150	2.0	1.5
SP11-130051220M	22±20%	19	0.207	1.6	1.3
SP11-130051330M	33±20%	15	0.334	1.4	1.1
SP11-130051470M	47±20%	13	0.472	1.0	0.8

- Test frequency and voltage:100KHz,0.1Vrms.
- All test data referenced to 25°C ambient.
- Saturation current(Isat) will cause L0 to drop approximately 10%.
- Heat rated current(Irms) will cause the coil temperature rise approximately Δt of 40°C.

Packaging Specification

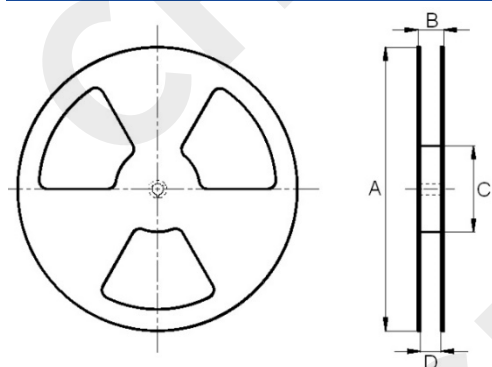
■ Carrier Tape (Unit:mm)



W	P	A0	B0	K0	E	F	P0	P2	D0	T
24.0±0.3	12.0±0.1	9.6±0.1	13.3±0.1	5.4±0.1	1.75±0.1	11.5±0.1	4.0±0.1	2.0±0.1	Φ1.5±0.1	0.4±0.05

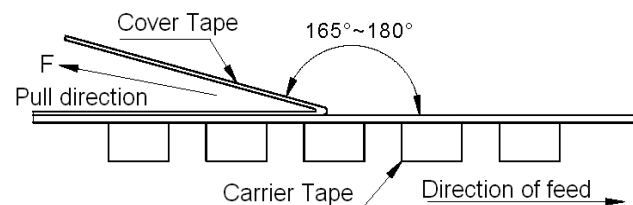
■ Reel (Unit:mm)

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



■ Taping Method

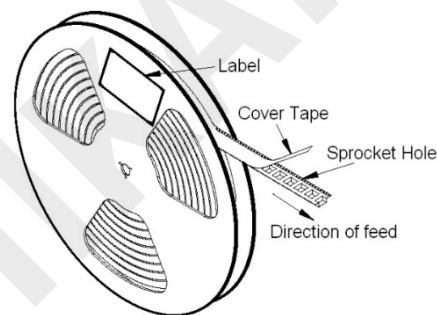
Peel-off strength	Peel-off angle	Peel-off speed
F=0.1N~1.3N	165°~180°	300mm/min.



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

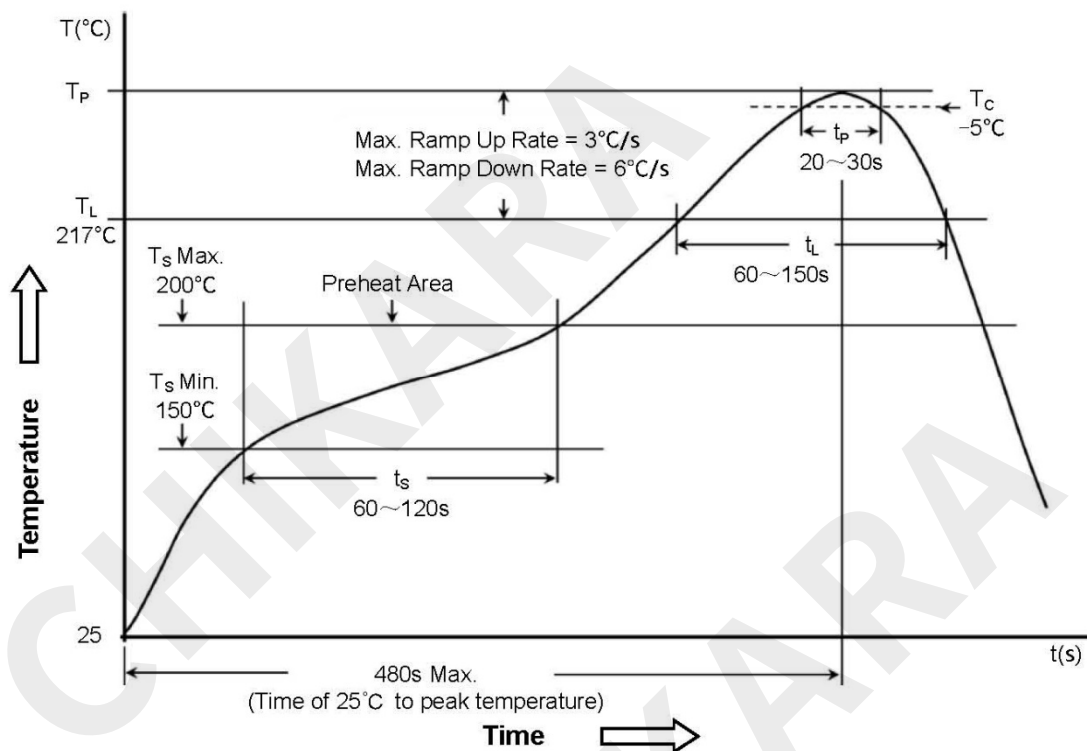
■ Package Quantity

Parts per reel
1000Pcs



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.