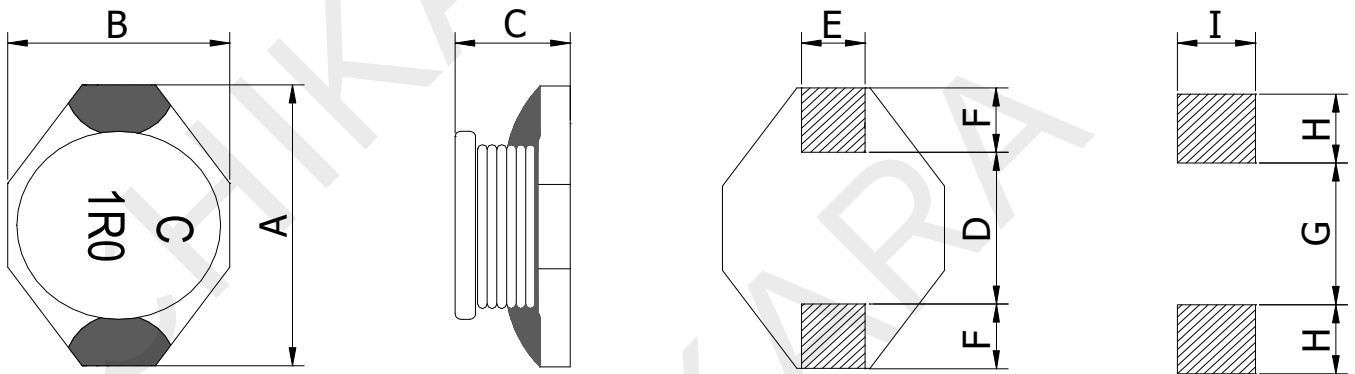


Features

- 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:1000pcs. Per 13-inch reel
- RoHs&Halogen-free compliant



Mechanical Dimension(Unit:mm)



Recommended Layout

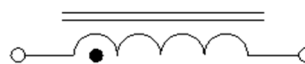
A	B	C	D	E	F	G	H	I
12.95Max.	9.40Max.	5.21Max.	7.62±0.3	2.54±0.2	2.54±0.2	7.37	2.92	2.79

Part Number Description

SP08 - 1305 1R0 M
① ② ③ ④

①	Type
②	Dimensions
③	Inductance value
④	Tolerance code

Electrical Schematic



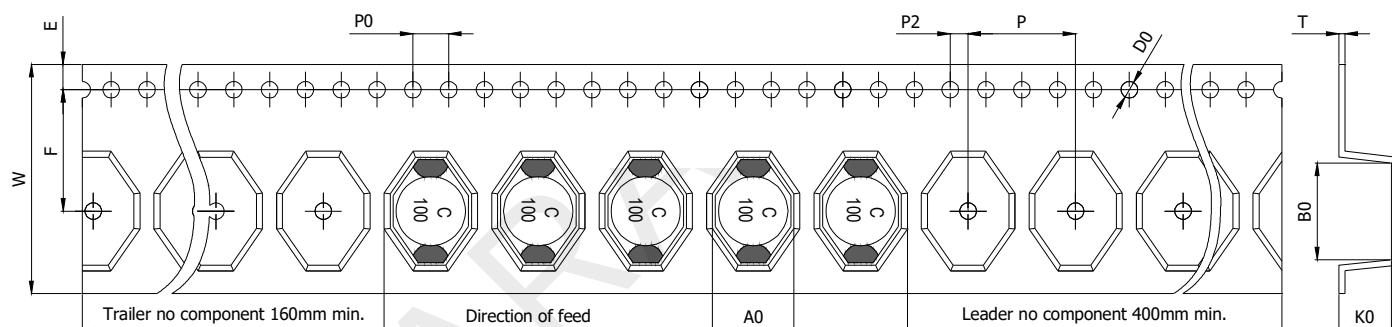
Electrical Characteristic

Part Number	Inductance L0(uH)	SRF (MHz)Typ.	DCR (Ω)Max.	Isat (A)Max.	Irms (A)Max.
SP08-13051R0M	1.0±20%	100.0	0.009	9.0	6.8
SP08-13051R5M	1.5±20%	90.0	0.010	8.0	6.4
SP08-13052R2M	2.2±20%	80.0	0.012	7.0	6.1
SP08-13053R3M	3.3±20%	65.0	0.015	6.4	5.4
SP08-13054R7M	4.7±20%	45.0	0.018	5.4	4.8
SP08-13056R8M	6.8±20%	38.0	0.027	4.6	4.4
SP08-1305100M	10±20%	30.0	0.038	3.8	3.9
SP08-1305150M	15±20%	27.0	0.046	3.0	3.1
SP08-1305220M	22±20%	19.0	0.085	2.6	2.7
SP08-1305330M	33±20%	15.0	0.100	2.0	2.1
SP08-1305470M	47±20%	12.0	0.140	1.6	1.8
SP08-1305680M	68±20%	10.0	0.200	1.4	1.5
SP08-1305101K	100±10%	9.0	0.280	1.2	1.3
SP08-1305151K	150±10%	6.0	0.400	1.0	1.0
SP08-1305221K	220±10%	5.0	0.610	0.80	0.80
SP08-1305331K	330±10%	4.5	1.02	0.60	0.60
SP08-1305471K	470±10%	3.5	1.27	0.50	0.50
SP08-1305681K	680±10%	2.5	2.02	0.40	0.40
SP08-1305102K	1000±10%	2.0	3.00	0.30	0.30
SP08-1305152K	1500±10%	1.7	4.49	0.29	0.27
SP08-1305332K	3300±10%	1.1	8.97	0.19	0.17

- Test frequency and voltage:100KHz,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

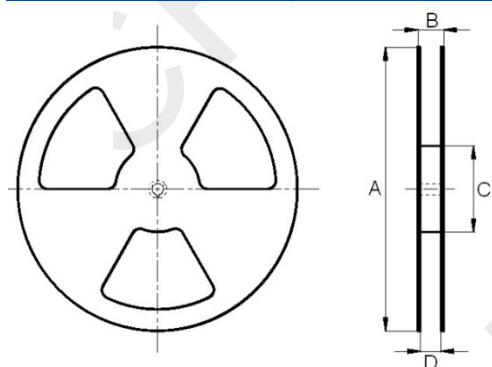
■ Carrier Tape (Unit:mm)



W	P	A0	B0	K0	E	F	P0	P2	D0	T
24.0±0.3	12.0±0.1	9.5±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

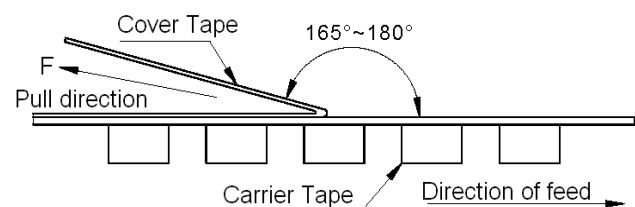
■ Reel (Unit:mm)

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



■ Taping Method

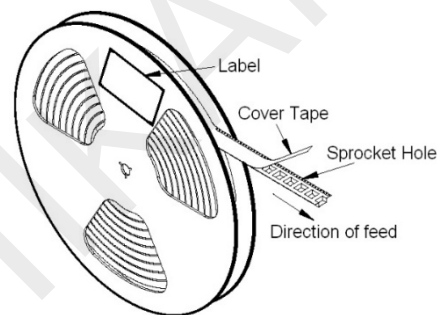
Peel-off strength	Peel-off angle	Peel-off speed
F=0.1N~1.3N	165°~180°	300mm/min.



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

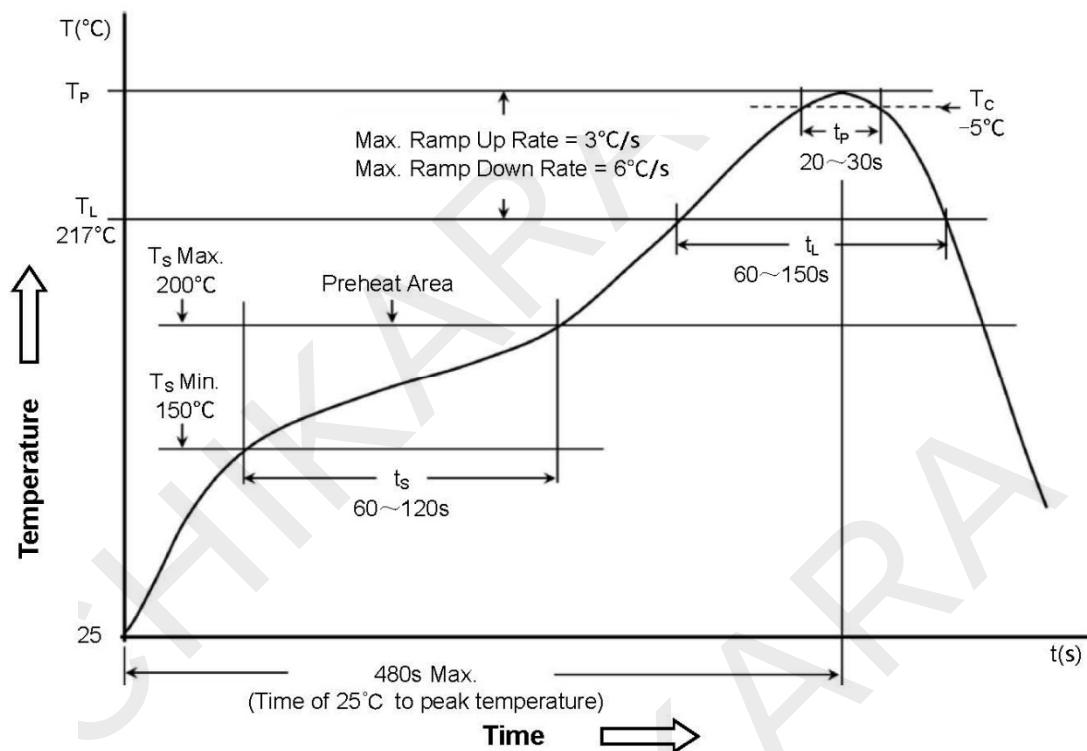
■ Package Quantity

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.