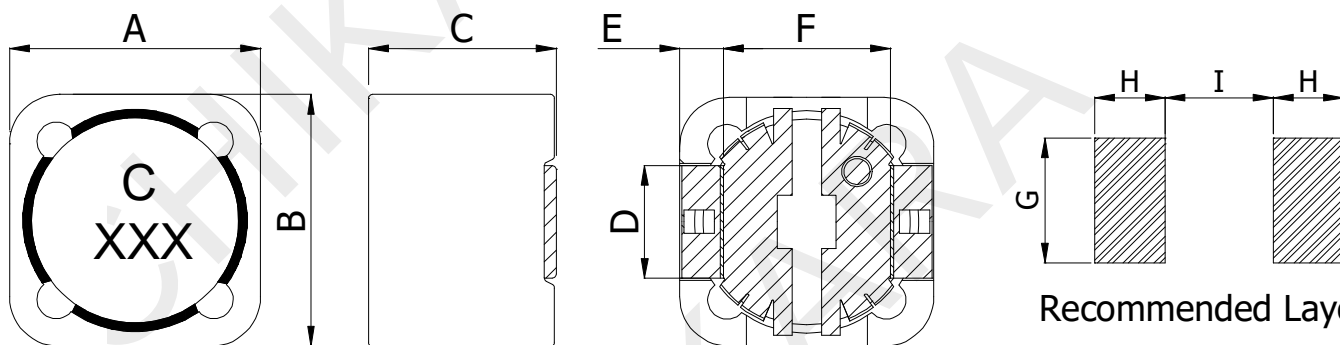


Features

- 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:350pcs. Per 13-inch reel
- RoHs&Halogen-free compliant



Mechanical Dimension(Unit:mm)



A	B	C	D	E	F	G	H	I
15±0.5	15±0.5	8.6Max.	4.9±0.2	2.45±0.2	9.9±0.3	5.4	3.0	9.4

Part Number Description

SP12 - 1508 100 M
① ② ③ ④

①	Type
②	Dimensions
③	Inductance value
④	Tolerance code

Electrical Schematic



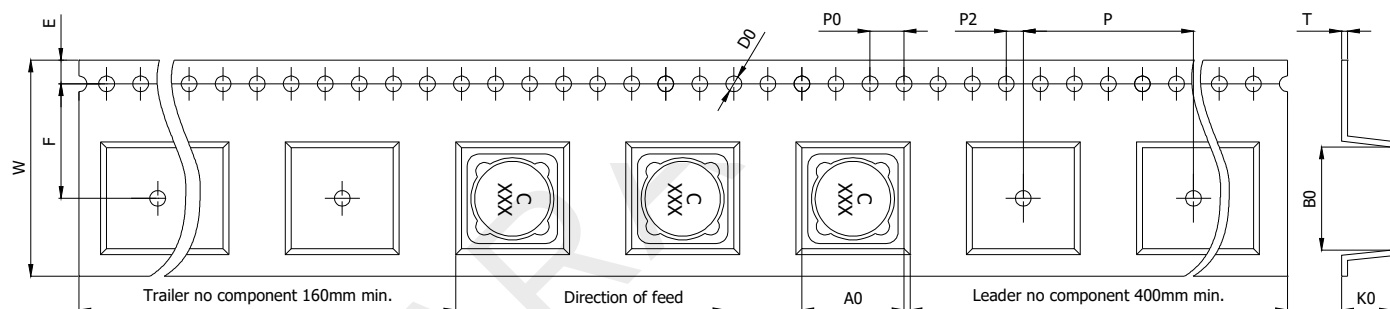
Electrical Characteristic

Part Number	Inductance L0(uH)	DCR (Ω)Typ.	DCR (Ω)Max.	SRF (MHz)Typ.	Isat (A)Typ.	Irms (A)Typ.
SP12-1508100M	10±20%	0.012	0.015	17.0	14.7	7.40
SP12-1508120M	12±20%	0.014	0.017	14.5	14.2	6.30
SP12-1508150M	15±20%	0.018	0.021	13.5	12.4	6.10
SP12-1508180M	18±20%	0.020	0.023	12.0	11.2	5.50
SP12-1508220M	22±20%	0.023	0.026	10.5	10.4	5.30
SP12-1508330M	33±20%	0.033	0.038	8.5	8.60	4.80
SP12-1508470M	47±20%	0.048	0.055	7.3	7.30	3.70
SP12-1508680M	68±20%	0.061	0.070	6.0	6.00	3.40
SP12-1508101K	100±10%	0.090	0.103	4.8	4.80	2.80
SP12-1508151K	150±10%	0.138	0.159	3.7	3.90	2.20
SP12-1508221K	220±10%	0.205	0.235	3.0	3.30	1.80
SP12-1508331K	330±10%	0.300	0.345	2.7	2.50	1.45
SP12-1508471K	470±10%	0.386	0.445	2.2	2.20	1.35
SP12-1508681K	680±10%	0.570	0.655	1.8	1.80	1.10
SP12-1508821K	820±10%	0.640	0.736	1.6	1.60	1.00
SP12-1508102K	1000±10%	0.860	0.990	1.5	1.40	0.86

- Test frequency and voltage:100KHz,0.1Vrms.
- All test data referenced to 25°C ambient.
- 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.

Packaging Specification

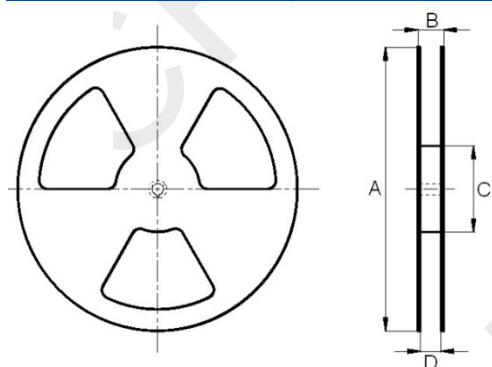
■ Carrier Tape (Unit:mm)



W	P	A0	B0	K0	E	F	P0	P2	D0	T
24.0±0.3	20.0±0.1	15.6±0.1	15.6±0.1	8.8±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

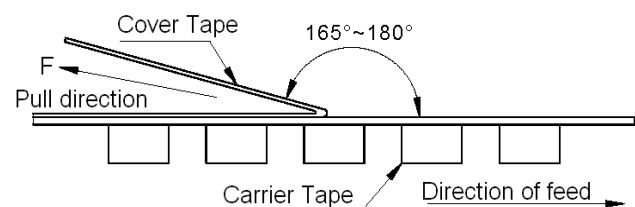
■ Reel (Unit:mm)

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



■ Taping Method

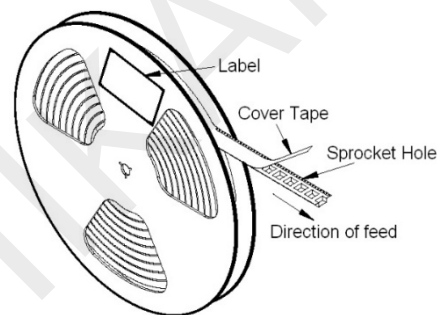
Peel-off strength	Peel-off angle	Peel-off speed
F=0.1N~1.3N	165°~180°	300mm/min.



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

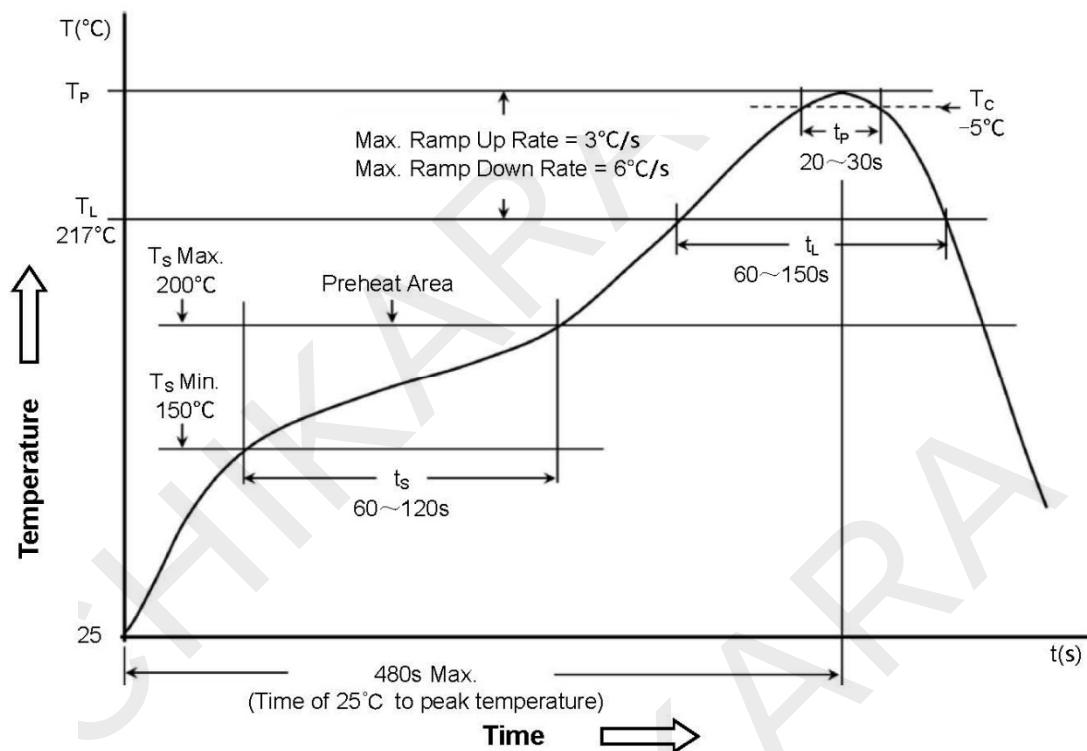
■ Package Quantity

Parts per reel
350Pcs



Soldering Specification

- Reflow profile for SMT components



- Classification of peak package body temperature (T_P)

	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.