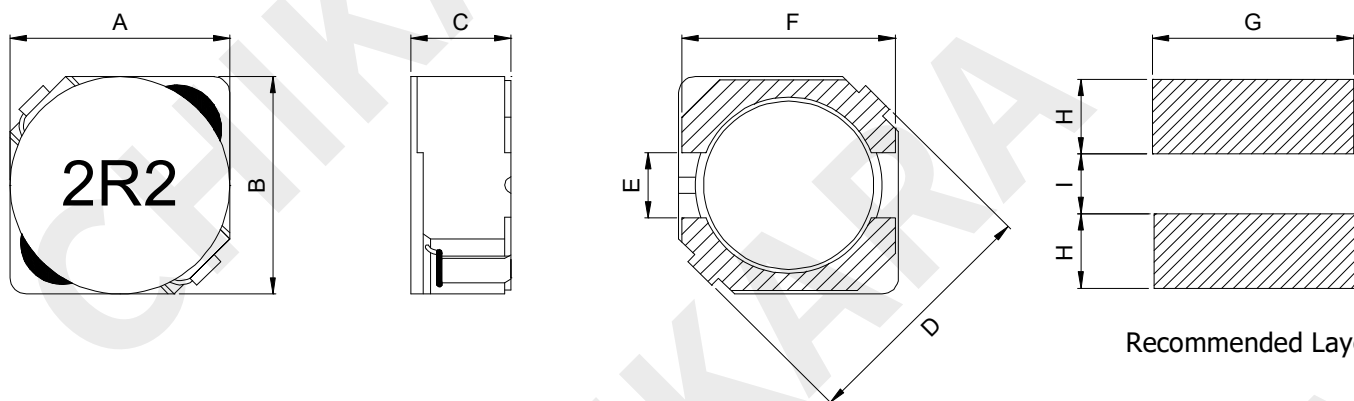


Features

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



Mechanical Dimension(Unit:mm)



A	B	C	D	E	F	G	H	I
4.7±0.3	4.7±0.3	2.1Max.	6.9Max.	1.5±0.3	4.5±0.3	5.3	1.9	1.5

Part Number Description

SP18 - 0502 2R2 M
① ② ③ ④

①	Type
②	Dimensions
③	Inductance value
④	Tolerance code

Electrical Schematic



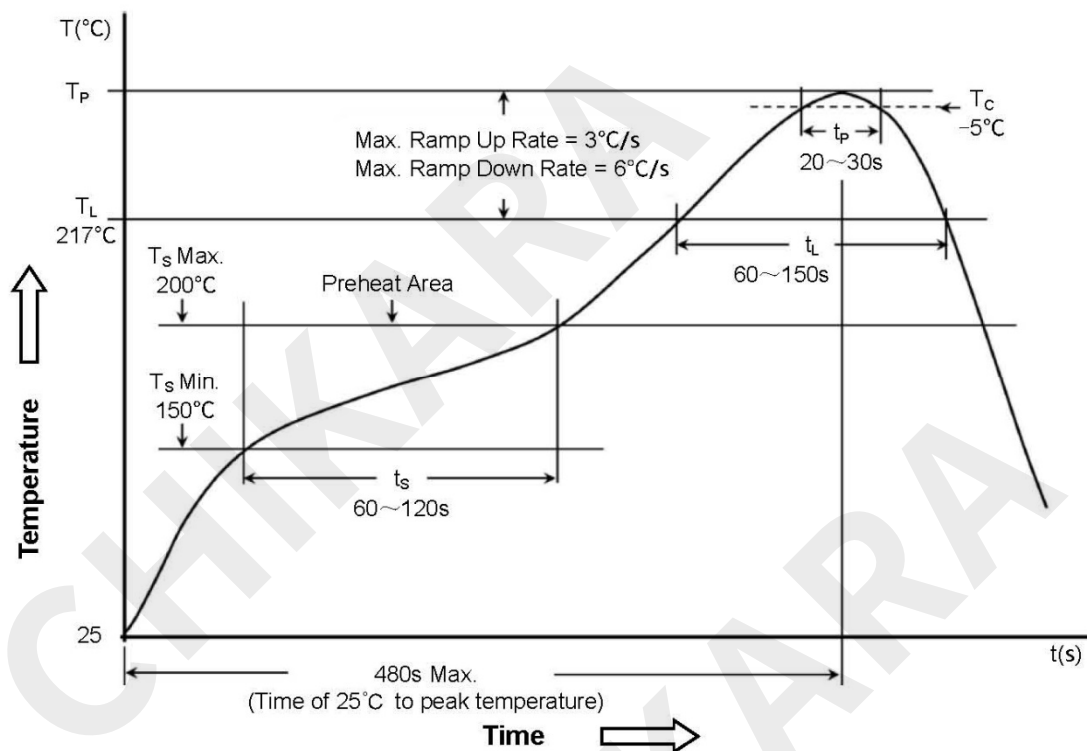
Electrical Characteristic

Part Number	Inductance L0(μH)	DCR (mΩ)Max.	SRF (MHz)Typ.	Isat (A)Typ.	Irms (A)Typ.
SP18-05022R2M	2.2±20%	50	120	2.30	2.90
SP18-05023R3M	3.3±20%	70	90	2.00	2.30
SP18-05024R7M	4.7±20%	95	80	1.65	1.90
SP18-05025R6M	5.6±20%	100	73	1.54	1.80
SP18-05026R8M	6.8±20%	110	65	1.38	1.60
SP18-05028R2M	8.2±20%	135	55	1.32	1.50
SP18-0502100M	10±20%	160	47	1.18	1.30
SP18-0502120M	12±20%	190	41	1.05	1.20
SP18-0502150M	15±20%	280	37	0.90	1.10
SP18-0502180M	18±20%	300	35	0.86	1.00
SP18-0502220M	22±20%	330	32	0.82	0.97
SP18-0502270M	27±20%	420	27	0.74	0.85
SP18-0502330M	33±20%	480	25	0.67	0.76
SP18-0502390M	39±20%	530	23	0.58	0.73
SP18-0502470M	47±20%	750	21	0.54	0.63
SP18-0502560M	56±20%	860	19	0.49	0.60
SP18-0502680M	68±20%	1000	18	0.46	0.56
SP18-0502820M	82±20%	1200	15	0.42	0.47
SP18-0502101M	100±20%	1400	13	0.35	0.44
SP18-0502121M	120±20%	1600	12	0.32	0.41
SP18-0502151M	150±20%	2100	9.0	0.31	0.38
SP18-0502181M	180±20%	2310	8.5	0.27	0.34
SP18-0502221M	220±20%	3100	7.5	0.25	0.29

- 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.

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.