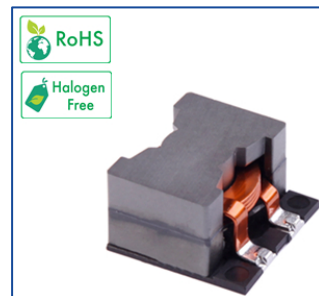
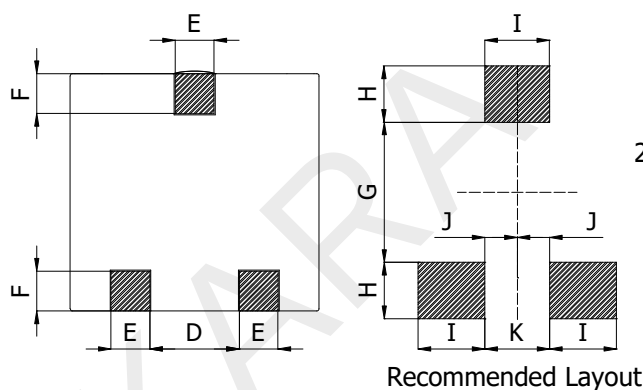
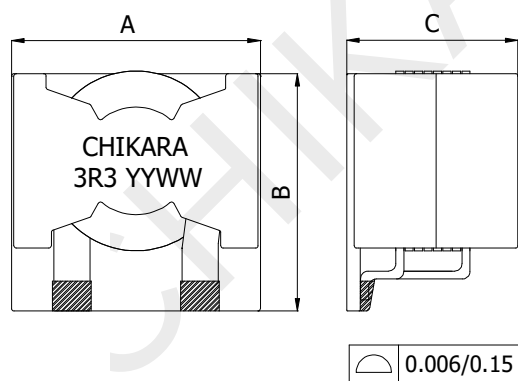


Features

- 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:50pcs. Per tray
- RoHs&Halogen-free compliant



Mechanical Dimension(Unit:mm)



CHIKARA

①
2R2 YYWW
② ③

- ① Brand
② Inductance code
(see table)
③ Year Week

A	B	C	D	E	F	G	H	I	J	K
27.9Max.	27.9Max.	20Max.	5.5±0.3	4.6±0.2	4.6±0.2	15.1	6.0	5.8	2.15	4.3

Part Number Description

SP13 - 2820 A 3R3 M
① ② ③ ④ ⑤

①	Type
②	Dimensions
③	Characteristic code
④	Inductance value
⑤	Tolerance code

Electrical Schematic



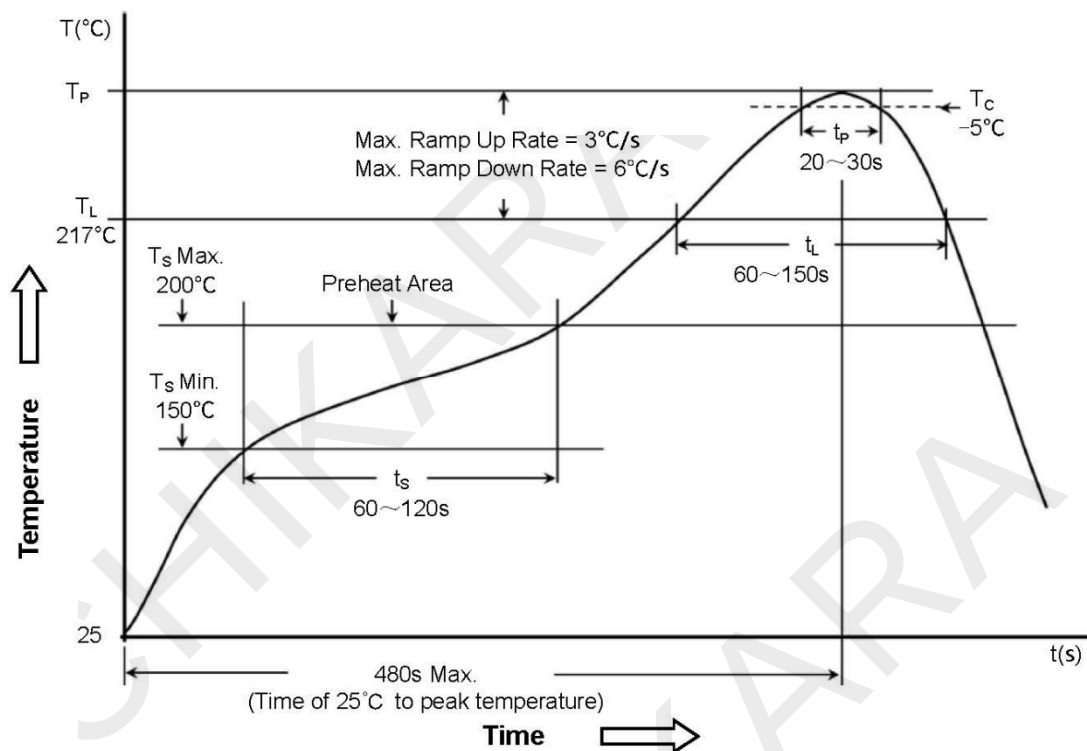
Electrical Characteristic

Part Number	Inductance L0(uH)	DCR (mΩ)Typ.	DCR (mΩ)Max.	SRF (MHz)Typ.	Isat ¹ (A)Typ.	Isat ² (A)Typ.	Isat ³ (A)Typ.	Irms (A)Typ.
SP13-2820A3R3M	3.3±20%	2.50	2.75	41.0	85.0	87.0	89.0	31.0
SP13-2820A4R7M	4.7±20%	2.50	2.75	30.0	60.5	63.0	65.0	31.0
SP13-2820A6R8M	6.8±20%	2.50	2.75	25.0	42.0	45.0	46.0	31.0
SP13-2820A8R2M	8.2±20%	2.50	2.75	22.0	36.0	38.5	39.4	31.0
SP13-2820A100M	10±20%	3.20	3.52	20.0	31.0	33.0	34.1	26.8
SP13-2820A120M	12±20%	3.20	3.52	18.5	28.5	31.0	32.0	26.8
SP13-2820A150M	15±20%	3.50	3.85	16.0	25.5	27.5	28.1	25.5
SP13-2820A180M	18±20%	4.50	4.95	14.8	22.5	24.9	25.6	22.0
SP13-2820A220M	22±20%	6.20	6.82	13.2	20.5	22.3	23.0	19.0
SP13-2820A330M	33±20%	8.90	9.79	9.8	17.5	19.0	19.8	15.6
SP13-2820A470M	47±20%	11.5	12.7	7.5	15.0	16.8	17.4	13.7
SP13-2820A560M	56±20%	15.0	16.5	6.8	13.5	14.8	15.2	12.0
SP13-2820A620M	62±20%	15.0	16.5	6.2	12.5	13.4	14.0	12.0
SP13-2820A680M	68±20%	15.0	16.5	5.8	11.0	12.3	12.9	12.0
SP13-2820A101M	100±20%	22.0	25.3	4.5	8.9	9.5	9.8	10.0
SP13-2820A151M	150±20%	31.5	36.2	3.3	7.7	8.3	8.7	7.5
SP13-2820A221M	220±20%	41.1	47.3	2.8	5.5	6.0	6.3	6.5
SP13-2820A331M	330±20%	56.0	64.4	2.5	4.5	5.1	5.3	5.5
SP13-2820A471M	470±20%	76.5	88.0	1.8	3.9	4.3	4.5	4.5

- Test frequency and voltage:300KHz,1Vrms.
- All test data referenced to 25°C ambient.
- Saturation current(Isat¹) will cause L0 to drop approximately 10%.
- Saturation current(Isat²) will cause L0 to drop approximately 20%.
- Saturation current(Isat³) 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 (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.