



SC5020 Series



1. Features of SC5020 Series :

- 0.50" Package SMD Power Inductor
- Ideal for DC to DC converter. VRM & High density board design
- Low leakage flux
- Shielded inductor design
- Low profile 5.1mm maximum height
- Suitable for IR reflow and wave solder process
- Tight DCR tolerance features for current sensing application
- RoHS and HF Compliant
- T & R Q'tys: 800pcs, 13" Reel / 4R7 & 9R0: 500pcs, 13" Reel



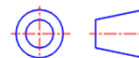
2. Electrical Characteristics of SC5020 Series:

Part Number	L $\pm$ 20% (uH)	DCR $\pm$ 7% (m Ω)	I _{rate} (A)	L @ I _{rate} (uH)	I _{max} (A)	L @ I _{max} (uH)	Figure
SC5020-R22MHF	0.22	0.50	34.00	0.20	80.00	0.16	2
SC5020-1R0MHF	1.00	1.74	21.00	0.85	34.00	0.74	2
SC5020-1R2MHF	1.20	1.70	20.00	0.90	32.00	0.80	2
SC5020-1R8MHF	1.80	2.90	17.00	1.44	28.00	1.25	2
SC5020-2R2MHF	2.20	4.00	18.50	1.76	25.00	1.58	2
SC5020-3R3MHF	3.30	5.13	14.00	2.55	19.00	2.27	2
SC5020-4R5MHF	4.50	6.50	12.00	3.85	18.00	3.36	2
SC5020-4R7MHF	4.70	6.70	12.00	3.64	17.00	3.30	1
SC5020-9R0MHF	9.00	13.90	7.50	7.65	13.00	6.50	1

3. Mechanical Dimensions (unit:mm):

Figure	A $\pm$ 0.4	B $\pm$ 0.4	C $\pm$ 0.4	D Ref.	E $\pm$ 0.4	F $\pm$ 0.4	G Ref.
1	12.6	12.6	12.7	8.2	5.80	5.1	XX
2	12.6	12.6	5.5	13.5	7.5	2.4	2.7

Third Angle Projection:



Part Marking:
Rxx x: xx is inductance value in uH(R:decimal point),
x is special code.
YYWW: Date Code

Figure 1

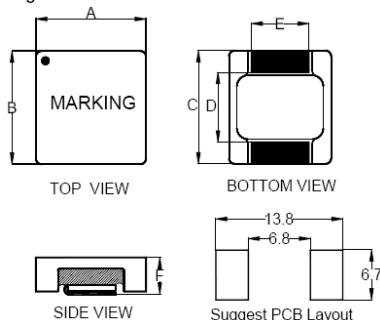
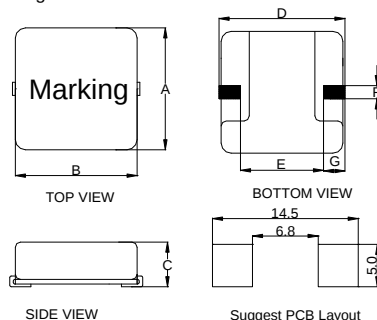


Figure 2



Test Condition:

1. Open Circuit Inductance (OCL) measured at 300KHz, 0.25Vrms, 0 Amp at 25°C.
2. Irms: DC current rating at 40°C temperature rise (typical)
3. I_{max}: DC current rating with maximum of 100°C temperature rise (typical)
5. DC Bias is measured at 300 KHz, 0.25V, 25°C.
6. Operating temperature -40°C ~ 150°C

● New York 1 914 347 2474 ● Taipei 886 2 2698 8669 ● Kaohsiung 886 7 350 2275
 ● Japan 81 568 85 2830 ● Shenzhen 86 755 8418 6263 ● Shanghai 86 21 5424 5141 ● Hong Kong 852 9688 9767
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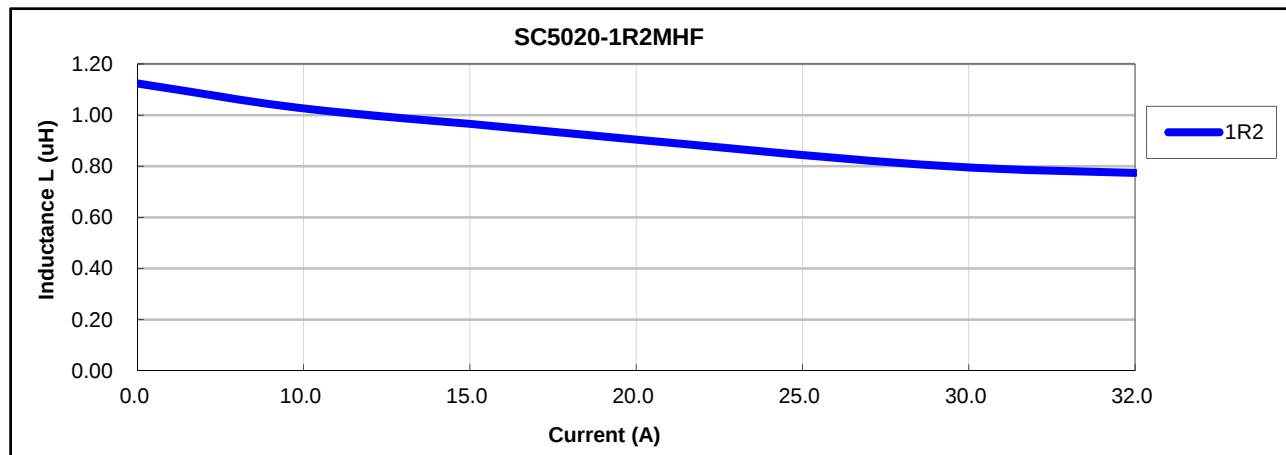
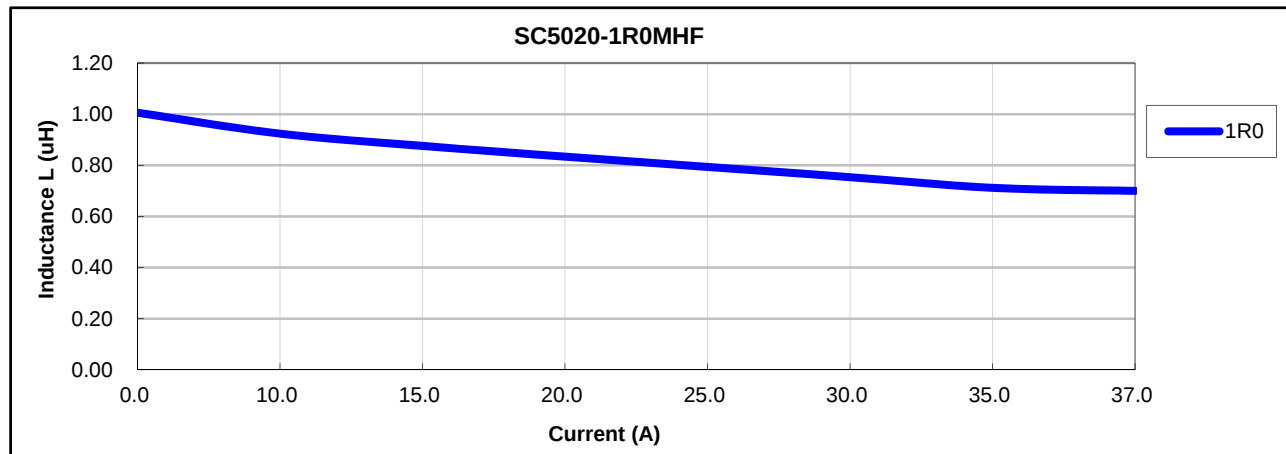
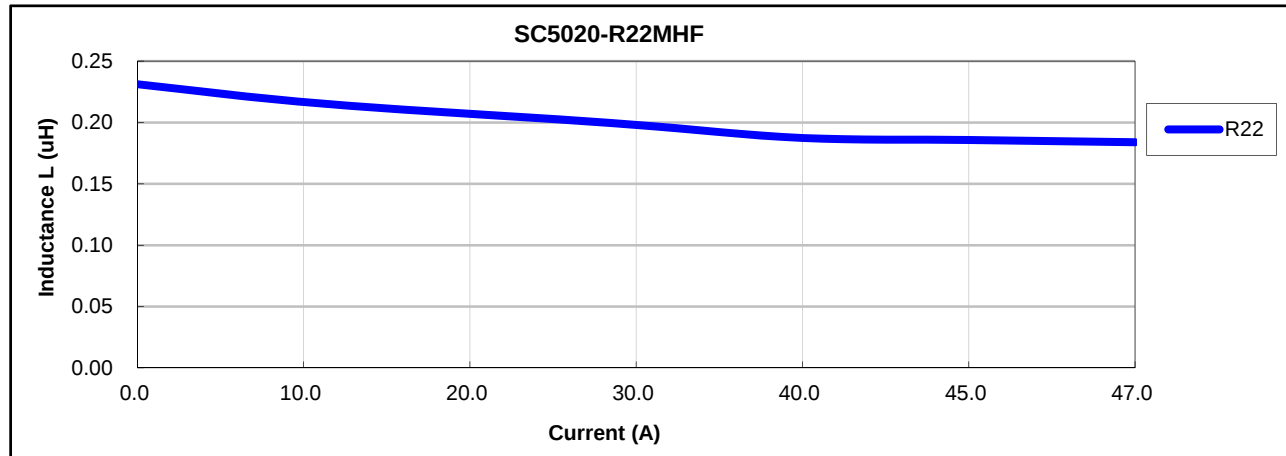
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4. SC5020 Family DC Bias Curve



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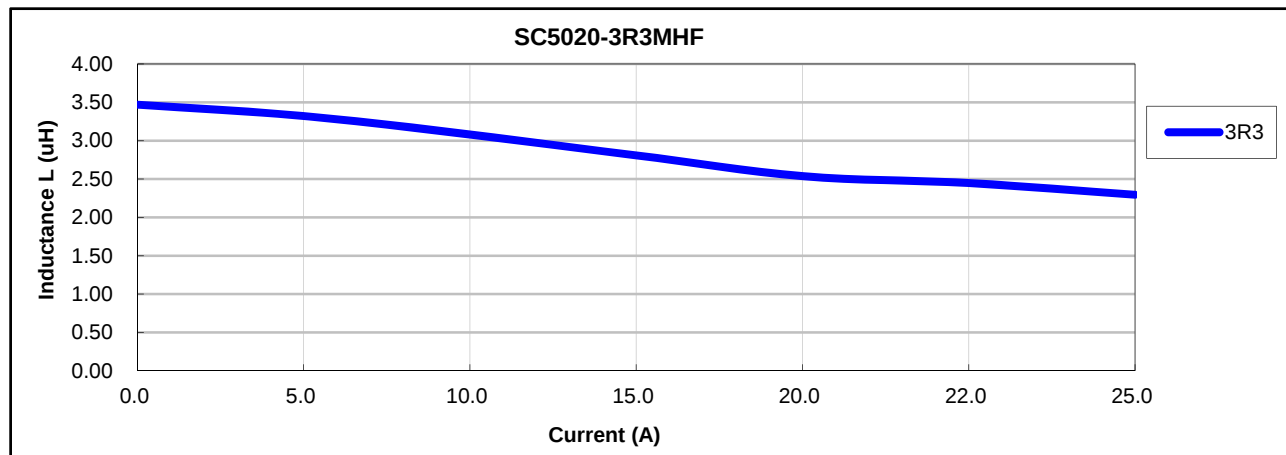
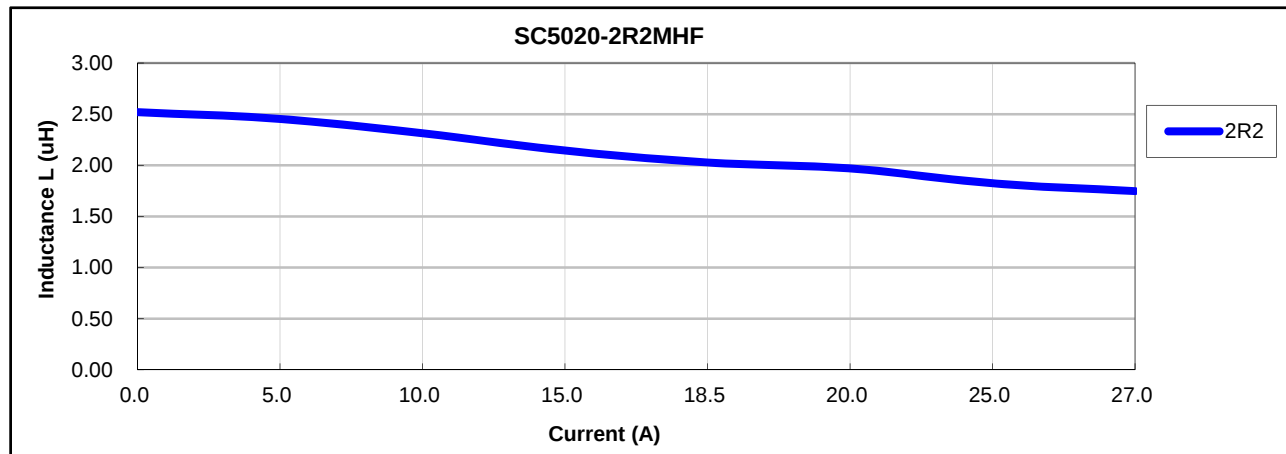
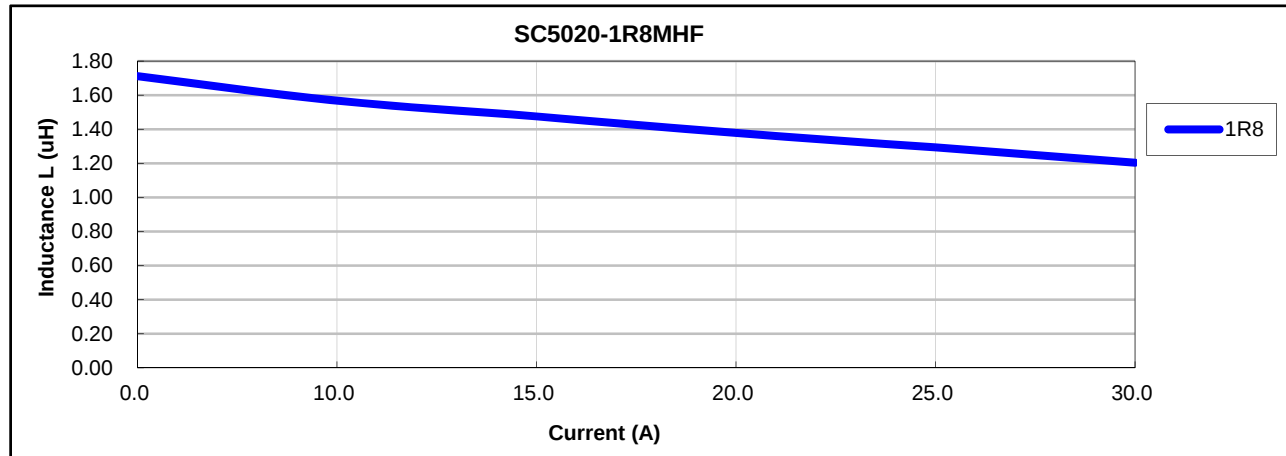
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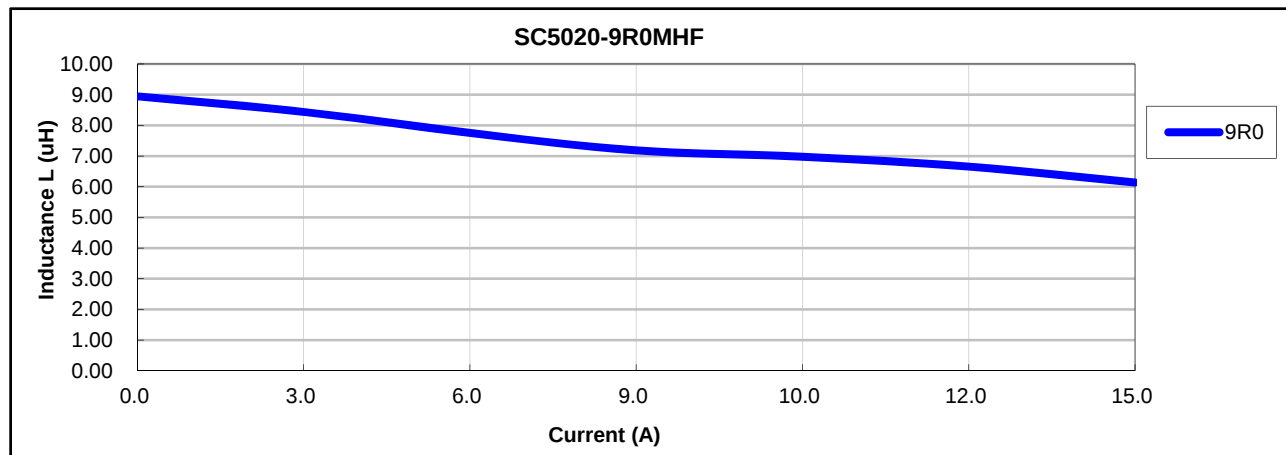
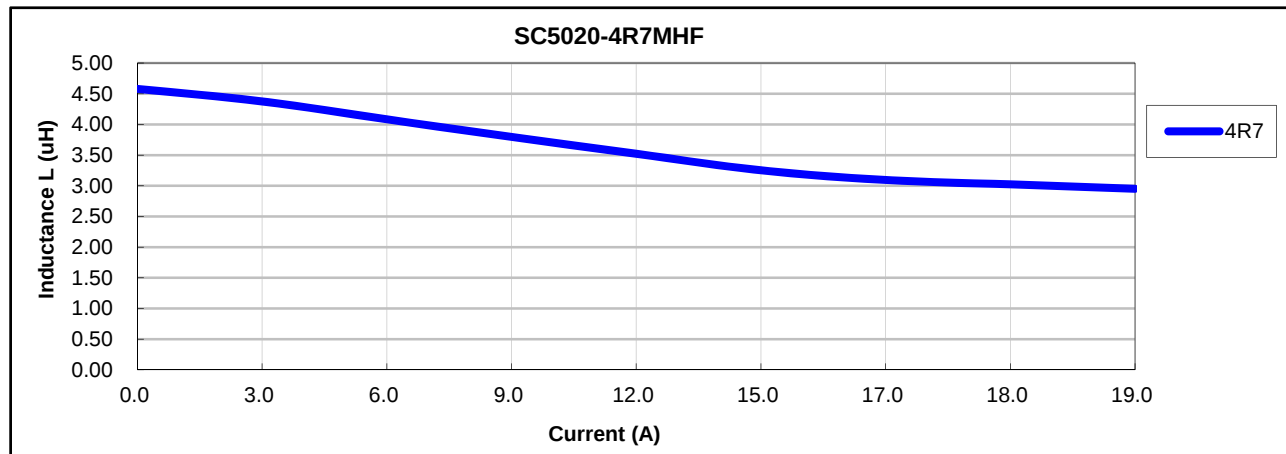
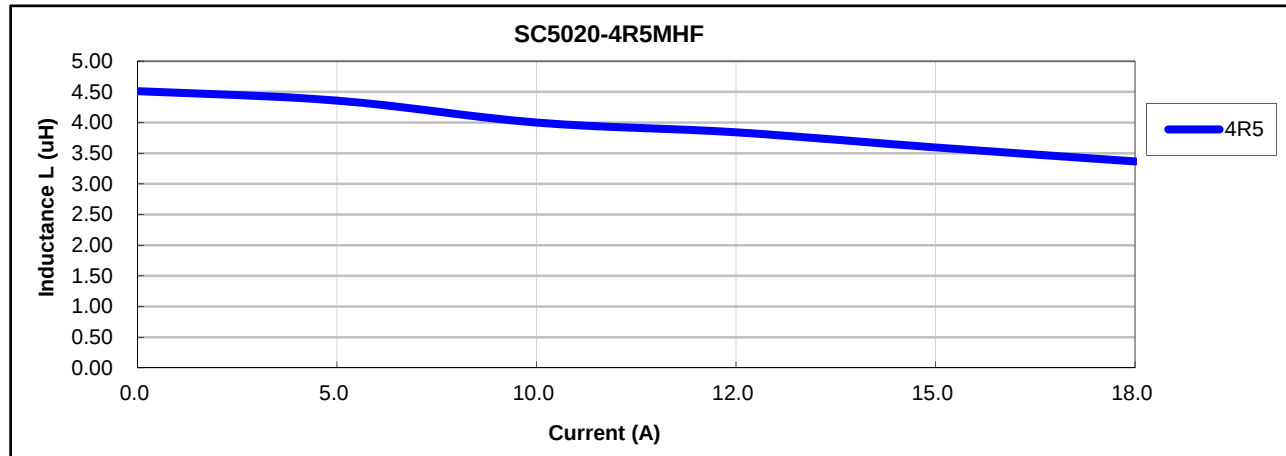
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