

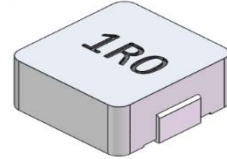


SM1605A Series



1. Features of SM1605A series:

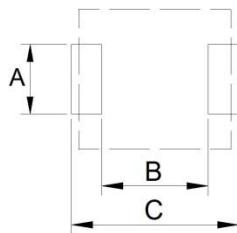
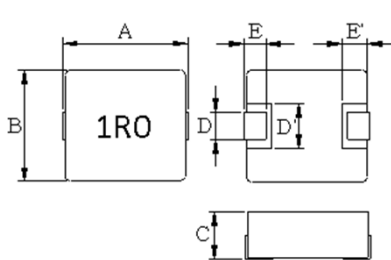
- 4.45x4.75mm foot Print, 1.2mm Max. height SMD Power Inductor for high frequency application. Operating frequency up to 5MHz.
- Inductance range from 1.0uH to 4.7uH. Custom values are welcomed.
- High saturation current characteristics by distributed gapped metal dust core.
- Ideal for portable device, Pad, E-reader and high density DC to DC Converter
- Tape & Reel Quantity: 3,000 piece per 13 inches reel. RoHS and HF compliant.



2. Electrical Characteristics of SM1605A series:

ITG Part Number	Inductance (uH) ± 20%	DCR (mΩ) Typ.	DCR (mΩ) Max.	Isat (A) @25°C	Irms (A) @25°C
SM1605A-R22MHF	0.22	9.35	10.70	11.00	7.00
SM1605A-R33MHF	0.33	15.40	17.70	8.40	6.50
SM1605A-R47MHF	0.47	19.50	21.00	6.80	6.00
SM1605A-R68MHF	0.68	27.90	32.00	6.00	4.70
SM1605A-1R0MHF	1.00	36.30	42.00	5.50	4.50
SM1605A-1R5MHF	1.50	62.30	71.50	4.00	3.25
SM1605A-2R2MHF	2.20	76.50	83.50	3.50	2.75
SM1605A-4R7MHF	4.70	175.50	193.00	2.80	1.80

3. Mechanical Dimensions of SM1605A series (unit: mm):



Recommended PCB Layout

Pad Dimension	SM1605A
A	2.50
B	2.20
C	5.20

Type	A	B	C	D	D'	E	E'
SM1605A	4.40 ± 0.35	4.20 ± 0.25	1.00 ± 0.20	2.00 ± 0.30	2.50 ± 0.20	0.80 ± 0.30	1.00 ± 0.10

Notes:

1. I_{rms}: DC current that will cause an approximate ΔT of 40°C .
2. Isat: DC current that causes inductance to drop 30%(Typ.) from OCL. (Ta=25°C).
3. Test conditions: 100KHz, 1.0V, 25°C ambient temperature .
4. Operating Temperature Range: -55°C to 125°C .

● New York 1 914 347 2474 ● Taipei 886 2 2698 8669 ● Kaohsiung 886 7 350 2275
 ● Tokyo 81 568 85 2830 ● Shenzhen 86 755 8418 6263 ● Shanghai 86 21 5424 5141 ● Hong Kong 852 9688 9767
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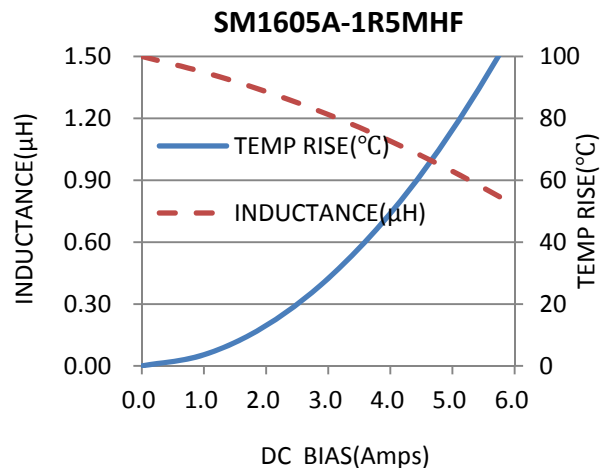
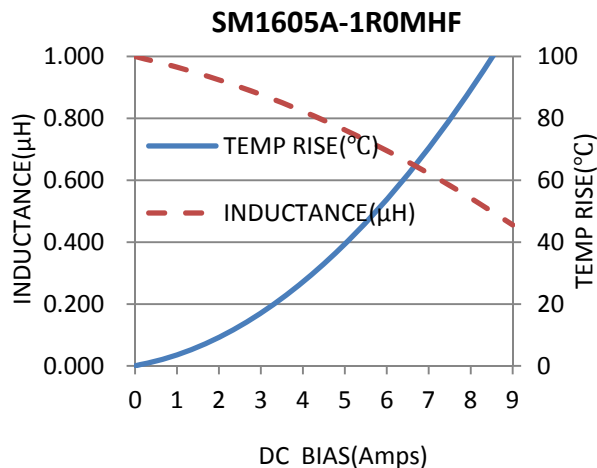
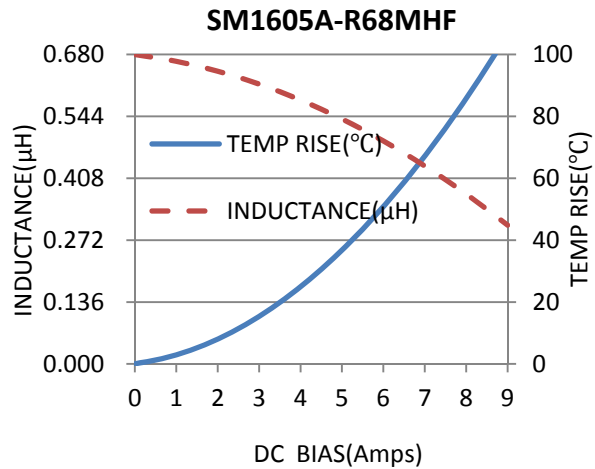
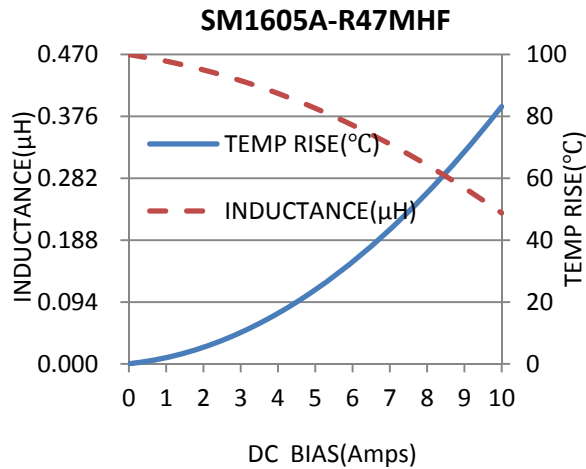
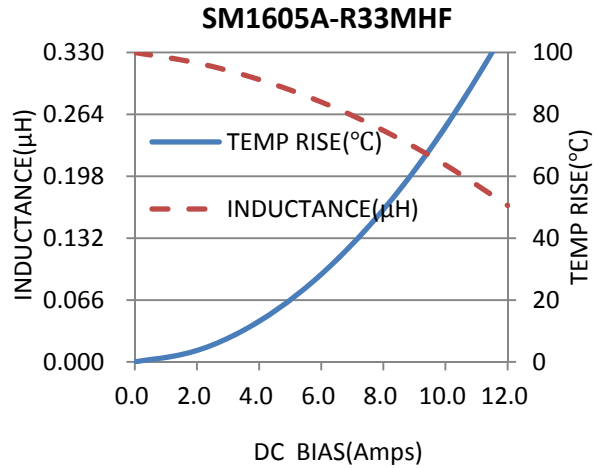
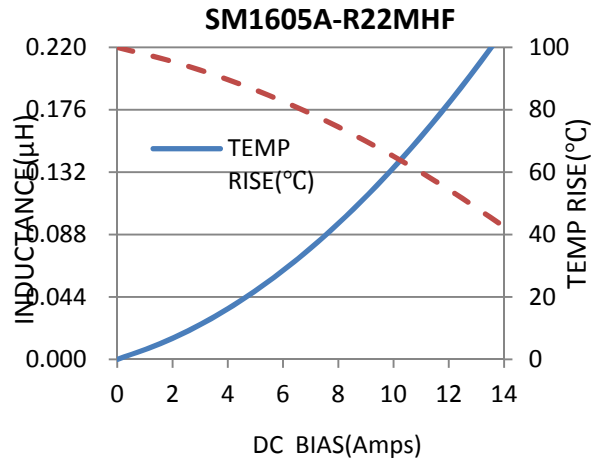
*Due to continuous product improvement, all specifications are subject to change without prior notice. Kindly contact an ITG field application engineer or a sales representative prior to purchase.



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4. Inductance vs. Temperature Rise Characteristics of SM1605A Series



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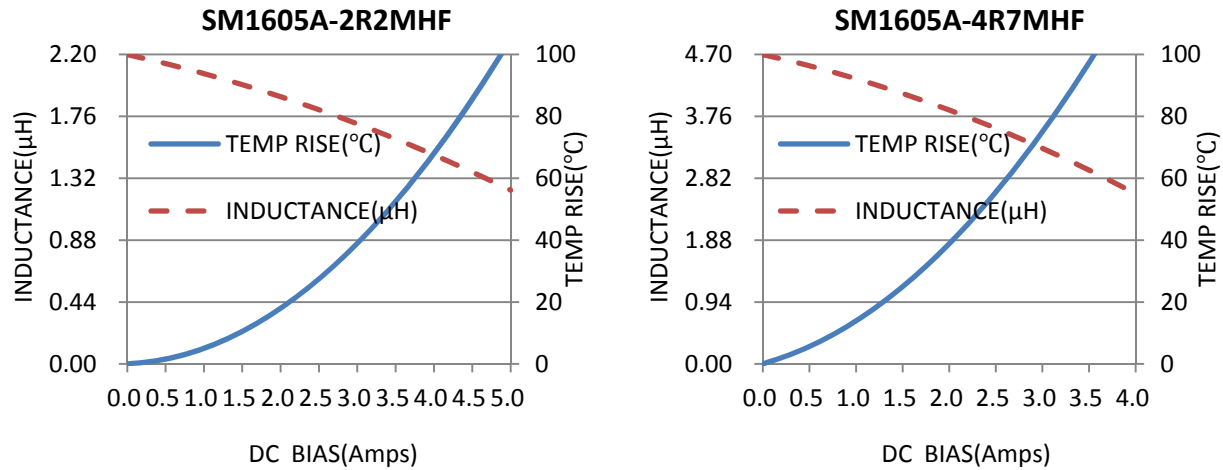
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