

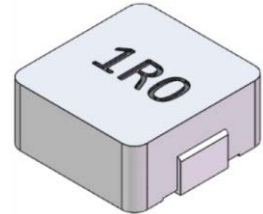


SM2011 Series



1. Features of SM2011 series:

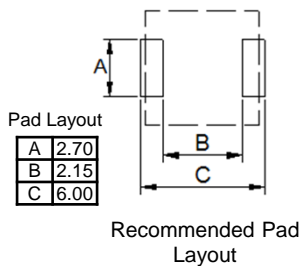
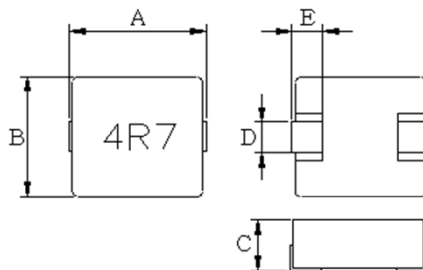
- 5.7x5.4mm foot Print, 3.0mm Max. height SMD Power Inductor for high frequency application.
- Inductance range from 0.20uH to 4.7uH with frequency of up to 5.0 Mhz
- High saturation current characterized by distributed gapped metal dust core.
- Ideal for portable device, computers servers, storage device, workstations, VGA card, Telecommunication Equipment, VRM modules & High Density DC to DC converter board.
- Lower DC resistance for higher current application.
- Tape & Reel Quantity: 1,000 piece per 13 inches reel.
- Operating Temperature Range -55°C to + 150°C.



2. Electrical Characteristics of SM2011 series:

ITG Part Number	OCL (uH) ±20%	DCR (mΩ) Typ.	DCR (mΩ) Max.	I _{rms} (Amp)	I _{sat1} (Amp)	I _{sat2} (Amp)	Dimension Code
SM2011-R20MHF	0.20	4.2	4.50	15.0	21.0	26.5	S3
SM2011-R33MHF	0.33	5.3	5.58	13.7	19.0	24.0	S1
SM2011-R47MHF	0.47	6.7	7.04	12.2	16.0	19.0	S1
SM2011-R68MHF	0.68	11.0	12.00	8.5	14.0	18.0	S2
SM2011-1R0MHF	1.00	13.0	14.00	7.0	11.0	14.0	S2
SM2011-1R2MHF	1.20	15.0	16.00	6.5	10.5	13.5	S2
SM2011-1R5MHF	1.50	20.0	25.00	6.0	10.0	11.0	S2
SM2011-2R2MHF	2.20	29.0	35.00	5.5	9.0	10.0	S2
SM2011-3R3MHF	3.30	34.0	38.00	5.0	7.0	9.0	S1
SM2011-4R7MHF	4.70	59.0	63.90	3.5	4.1	6.0	S1

3. Mechanical Dimensions of SM2011 series (unit: mm):



Size Code	A ±0.25	B ±0.25	C Max.	D ±0.30	E ±0.30
S1	5.49	5.18	3.00	2.00	1.02
S2	5.00	4.70	3.00	2.00	1.00
S3	5.10	4.70	3.00	2.00	1.00

Notes:

1. Open Circuit Inductance(OCL), L@I_{rms} and L @I_{sat} are measured at 100KHz,1.0V, (T_a=25°C).
2. I_{sat1}: DC current that causes inductance to drop approximately by 20% from OCL.
3. I_{sat2}: DC current that causes inductance to drop approximately by 30% from OCL.
4. I_{rms}: DC current for an approximate temperature rise of 40°C without core loss. Derating is necessary for AC currents, PCB pad layout, trace thickness and width, air-flow and proximity of other heat generating components will affect the temperature rise. It is recommended the part temperature not exceed 125°C under worst case operating conditions verified in the end application.

● 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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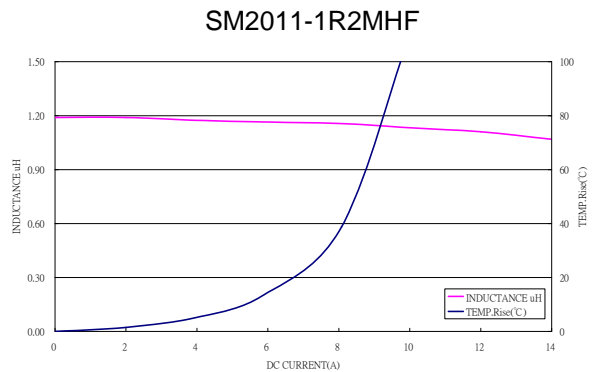
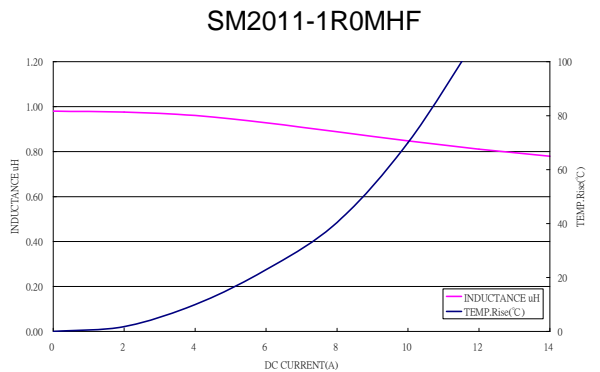
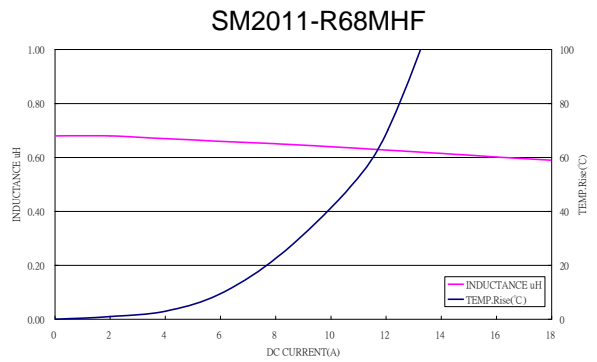
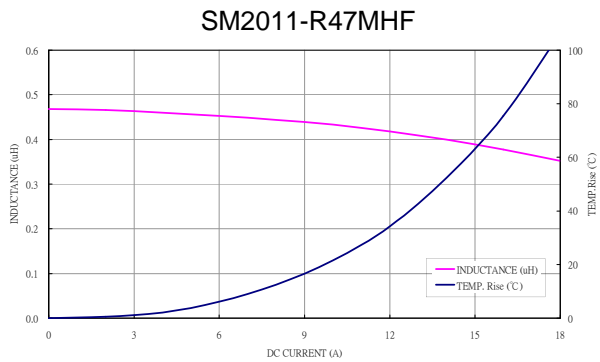
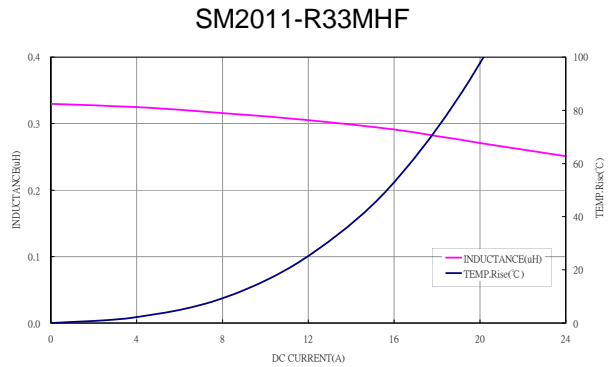
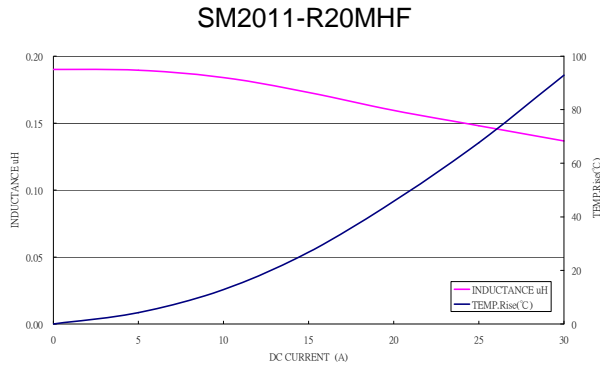
*Due to continuous product improvement, all specifications are subject to change without prior notice. Kindly contact an ITG field application engineer or a sales representative prior to purchase.



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4. Inductance vs. Temperature Rise Characteristics of SM2011 Series



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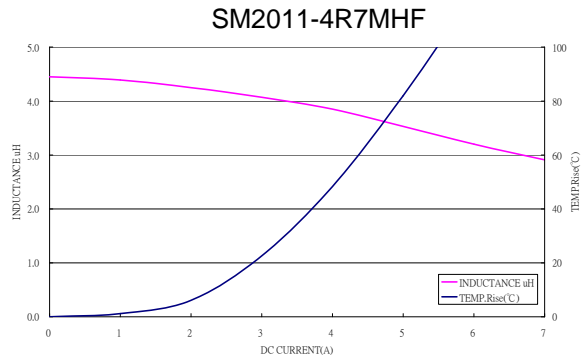
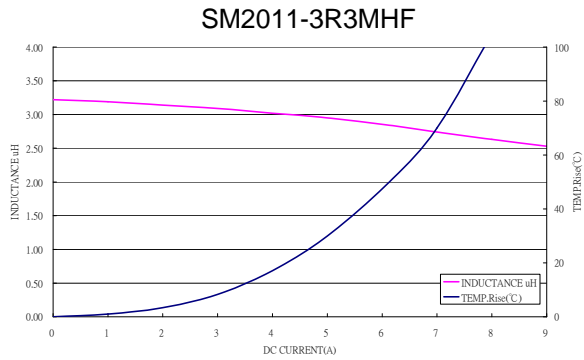
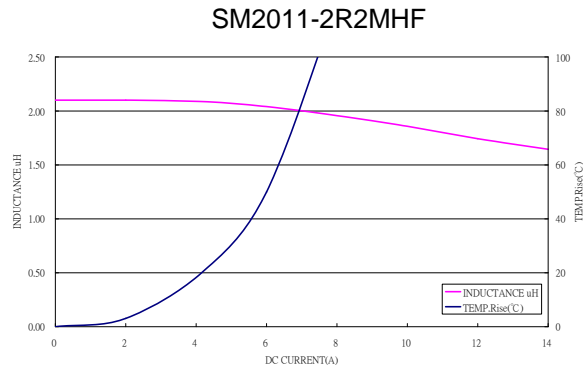
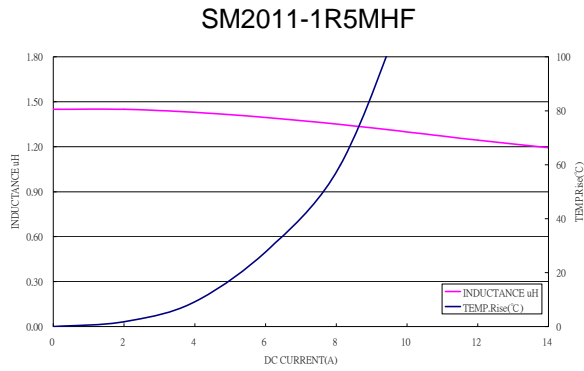
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