



SM2511 Series High Current Inductor



1. Features of SM2511 series

- Molded inductor structure. No audio noise.
- High saturation current realized by distributed gap metal dust core.
- Low profile: 3.0 mm max. height.
- Working frequency up to 3 MHz.
- Ideal for DC/DC converters, PDA, notebook, and server applications.
- T&R quantity: 1000 pieces per reel.
- RoHS and Halogen Free (HF) Compliant

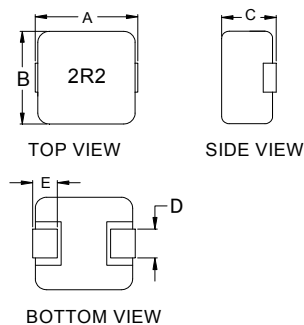


2. Electrical Characteristics of SM2511 series:

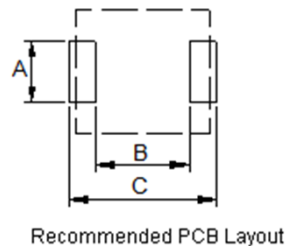
ITG Part Number	L $\pm 20\%$ @ 0A (μH)	DCR Typ. (m Ω)	DCR Max. (m Ω)	I _{rate} (A)	I _{sat} (A)
SM2511-R10MHF	0.10	1.50	1.70	32.50	60.00
SM2511-R22MHF	0.22	2.50	2.80	23.00	40.00
SM2511-R33MHF	0.33	3.50	3.90	20.00	30.00
SM2511-R47MHF	0.47	4.00	4.20	17.50	26.00
SM2511-R68MHF	0.68	5.00	5.50	15.50	25.00
SM2511-R82MHF	0.82	6.70	8.00	13.00	24.00
SM2511-1R0MHF	1.00	9.00	10.00	11.00	22.00
SM2511-1R5MHF	1.50	14.00	15.00	9.00	18.00
SM2511-2R2MHF	2.20	18.00	20.00	8.00	14.00
SM2511-3R3MHF	3.30	28.00	30.00	6.00	13.50
SM2511-4R7MHF	4.70	37.00	40.00	5.50	10.00
SM2511-6R8MHF	6.80	54.00	60.00	4.50	8.00
SM2511-8R2MHF	8.20	64.00	68.00	4.00	7.50
SM2511-100MHF	10.00	102.00	105.00	3.00	7.00

3. Mechanical Dimensions of SM2511 series (unit:mm):

ITG Part Number	A ± 0.38	B ± 0.25	C Max.	D ± 0.30	E ± 0.30
SM2511	6.86	6.47	3.00	3.18	1.27



Type	SM2511
A	3.43
B	3.71
C	7.37



Notes:

1. I_{rate}: DC current that will cause an approximate ΔT of 40 °C.
2. I_{sat}: DC current that will cause inductance to drop approximately by 20%.
3. Test conditions: 100 kHz, 0.25 V, 25 °C ambient temperature.
4. Operating Temperature Range: -55 °C ~ 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
 ● sales@ITG-Electronics.com ● www.ITG-Electronics.com Revision D: January 19, 2016

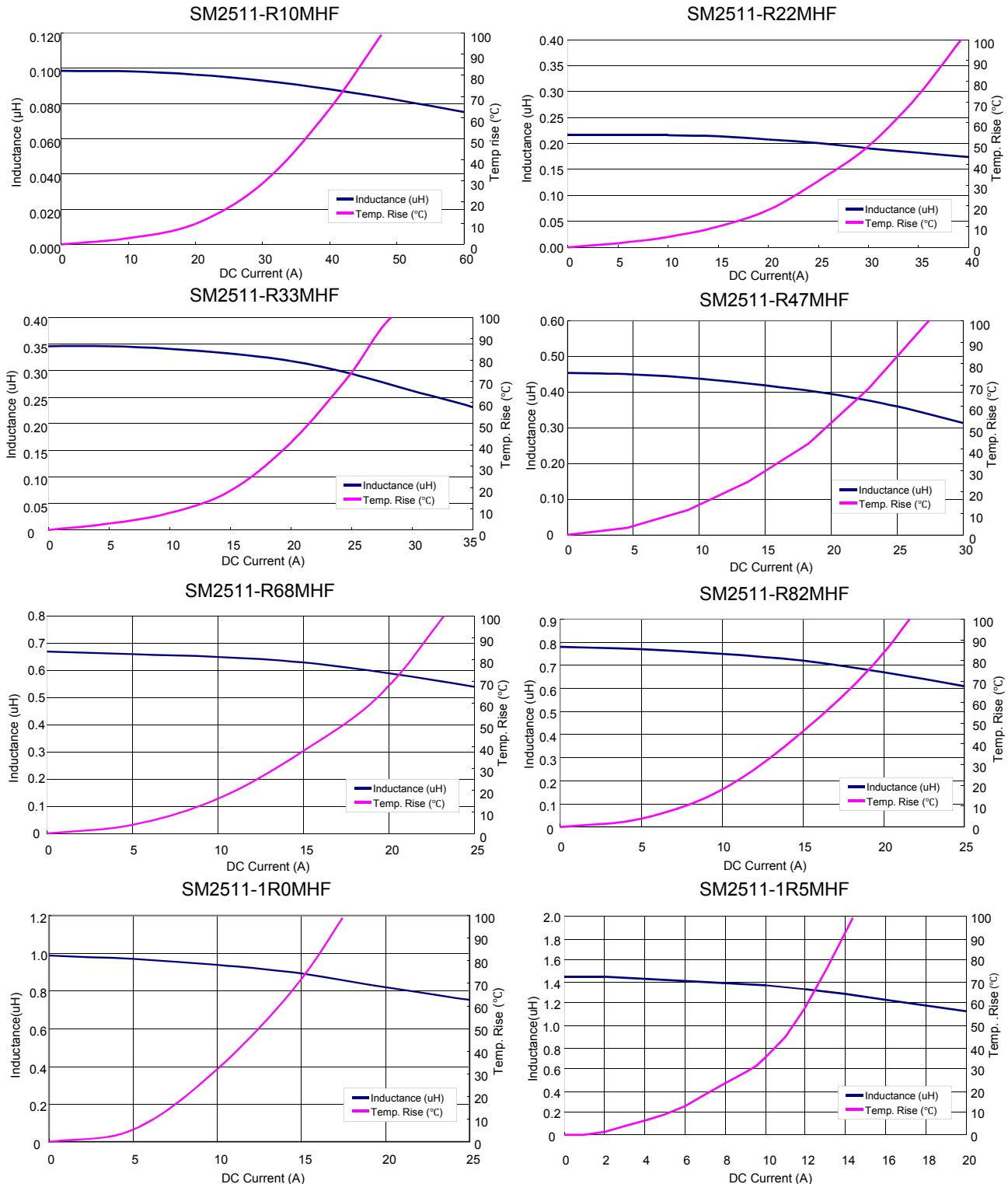
*Due to continuous product improvement, all specifications are subject to change without prior notice. Kindly contact an ITG field application engineer or a sales representative prior to purchase.



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4. Inductance vs. Temperature Rise Characteristics of SM2511 Series



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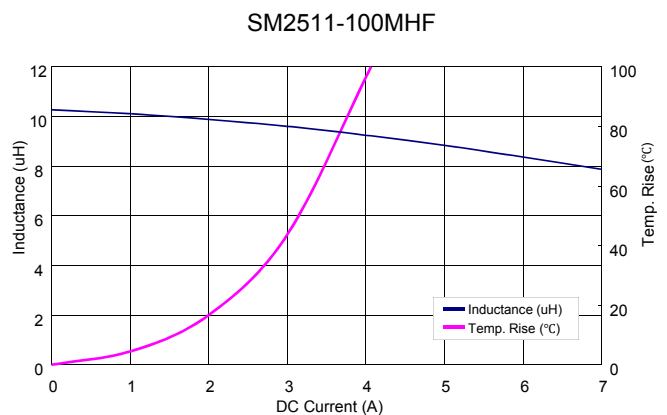
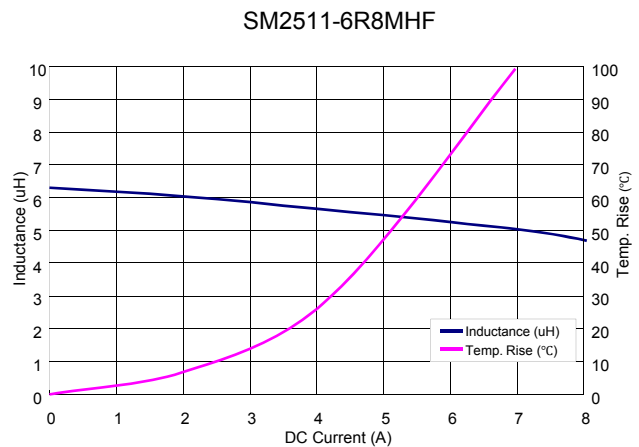
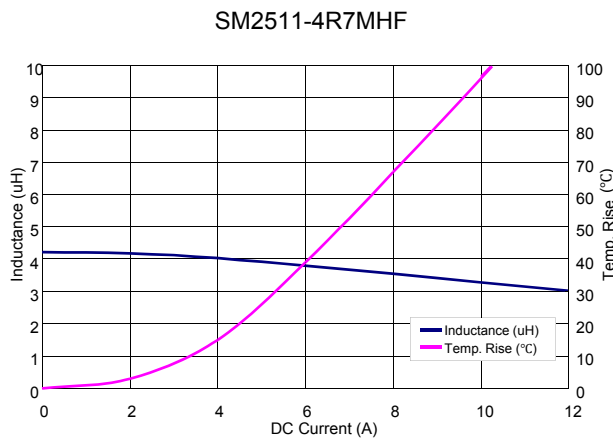
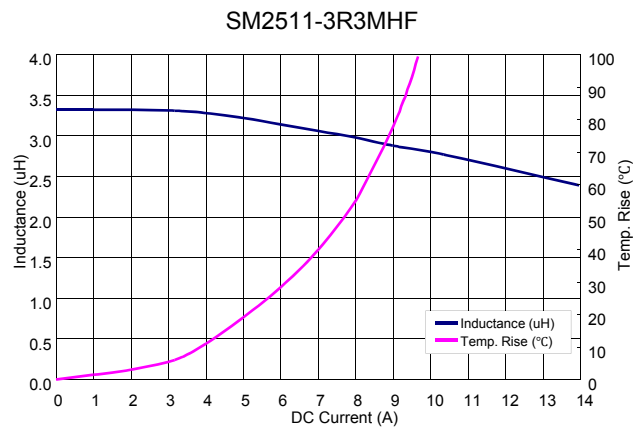
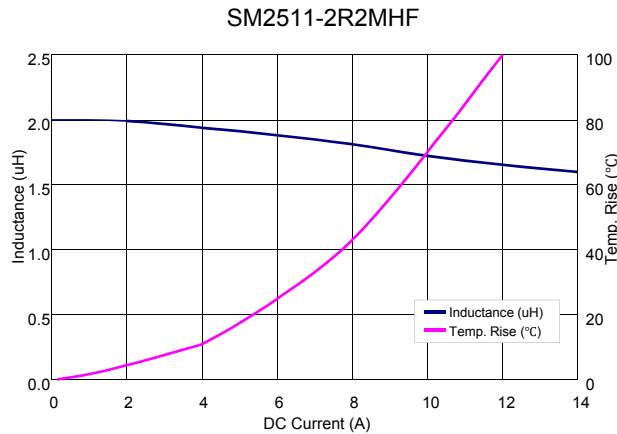
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4. Inductance vs. Temperature Rise Characteristics of SM2511 Series (Continued)



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