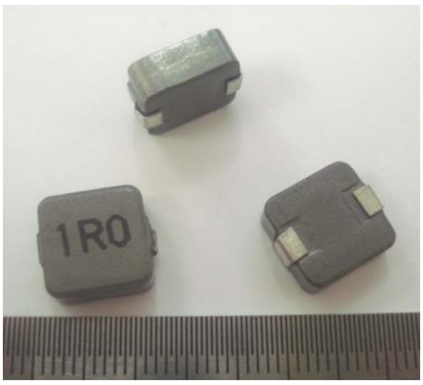
SMHC2511J Series

1. Features:

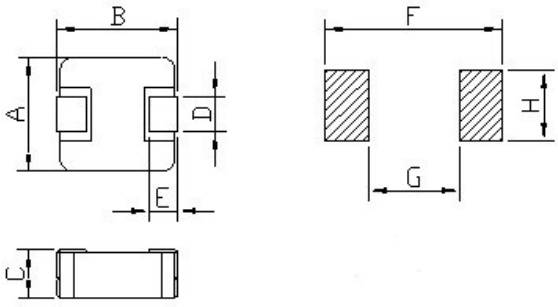
- 6.6x7.1mm foot Print, 3.0mm Max. height SMD Power Inductor for high frequency application.
- Inductance range from 0.1uH to 10uH.
- 5% DCR tolerance control
- High saturation current characteristics by distributed gapped metal dust core.
- Ideal for computers servers, workstations, VGA card, Telecommunication Equipment, voltage-regulator 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 + 125°C.



2. Electrical Characteristics:

ITG Part Number	OCL Inductance (uH) ±20%	DCR (mΩ) ±5%	Irms (AMP)	Isat (AMP)
SMHC2511J-R10MHF	0.10	1.40	32.50	60.00
SMHC2511J-R15MHF	0.15	1.40	26.00	52.00
SMHC2511J-R20MHF	0.20	2.50	24.00	41.00
SMHC2511J-R22MHF	0.22	2.50	23.00	40.00
SMHC2511J-R33MHF	0.33	2.85	20.00	30.00
SMHC2511J-R47MHF	0.47	3.85	17.50	26.00
SMHC2511J-R68MHF	0.68	5.15	15.50	25.00
SMHC2511J-R82MHF	0.82	7.00	13.00	24.00
SMHC2511J-1R0MHF	1.00	8.44	11.00	22.0
SMHC2511J-1R5MHF	1.50	14.50	9.00	18.0
SMHC2511J-2R2MHF	2.20	16.40	8.00	14.00
SMHC2511J-3R3MHF	3.30	26.50	6.00	13.50
SMHC2511J-4R7MHF	4.70	33.50	5.50	10.00
SMHC2511J-6R8MHF	6.80	56.00	4.50	8.00
SMHC2511J-8R2MHF	8.20	65.00	4.00	7.50
SMHC2511J-100MHF	10.00	97.00	3.00	7.00

3. Mechanical Dimensions (unit:mm):



A ± 0.20	B ± 0.30	C Max	D ± 0.30	E ± 0.50	F Ref	G Ref	H Ref
6.60	7.10	3.00	3.00	1.60	7.40	3.70	3.50

Notes:

1.Open Circuit Inductance(OCL) and L@ Irms and L @Isat are measured at: 100KHz, 1.0V ;(Ta=25℃).
2.Isat: DC current that causes inductance to drop approximately by 30% from OCL ;(Ta=25℃).
3.Irms: DC current for an approximate temperature rise of 40℃ 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.
4.Inductance vs. DC Current vs. Temperature Curve, please see the next page to get more detail information.

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Revised A: January 2, 2013

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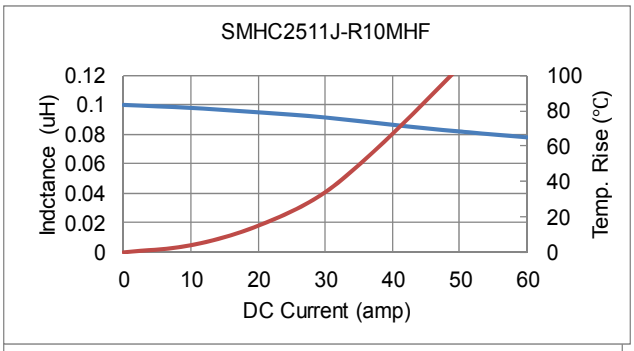
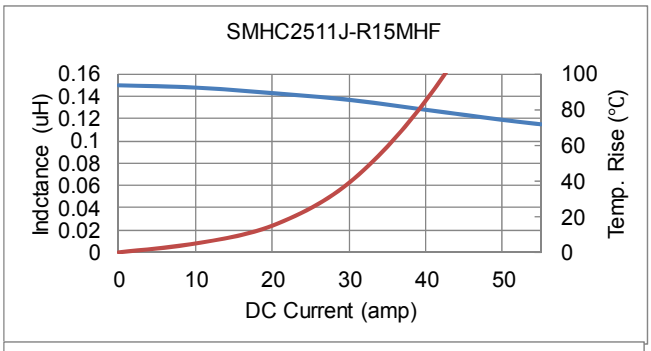
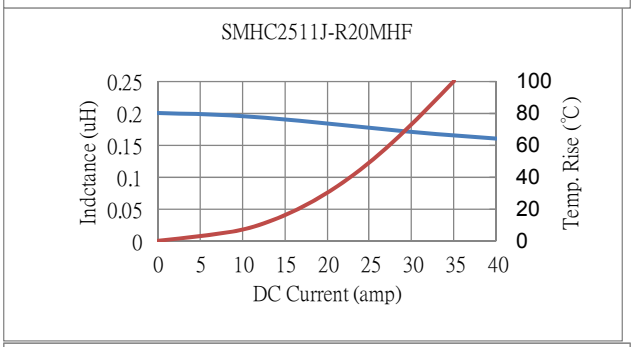
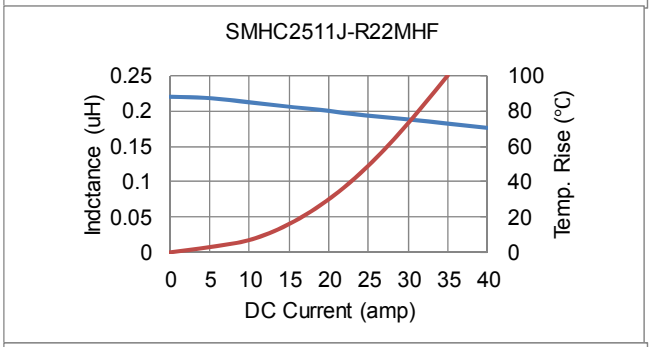
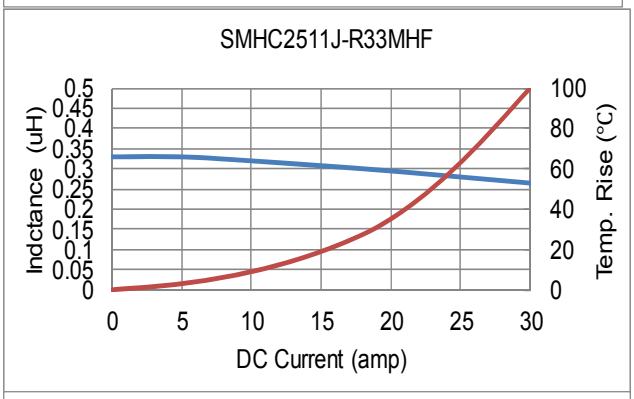
4. Inductance vs. Current vs. Temperature

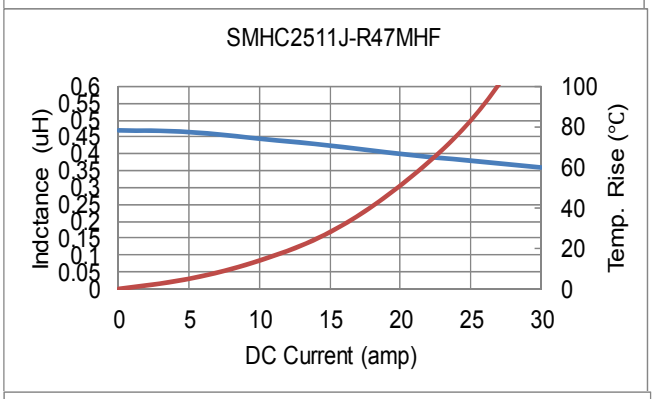


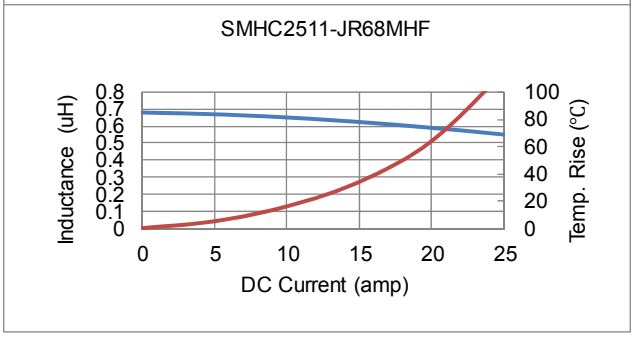


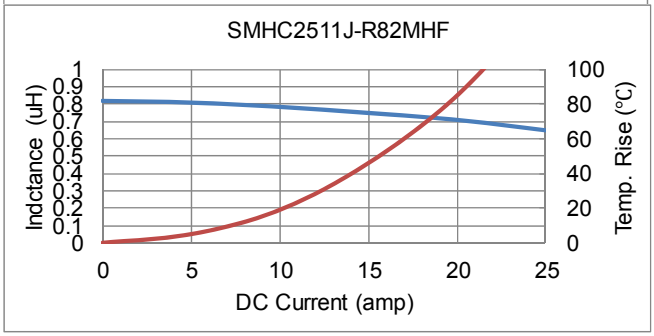












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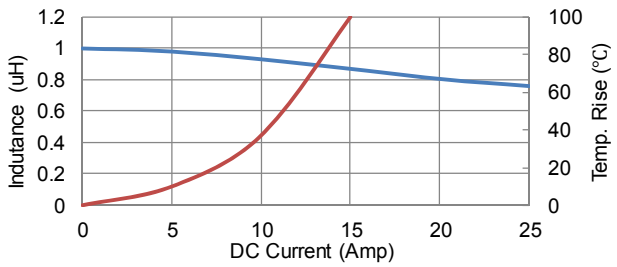
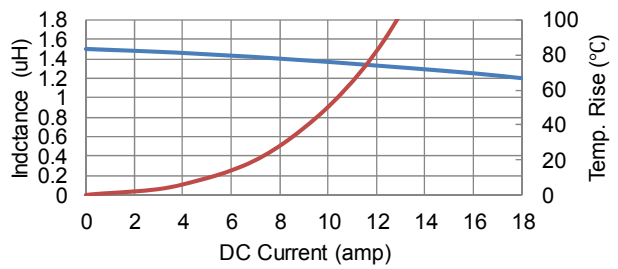
4. Inductance vs. Current vs. Temperature

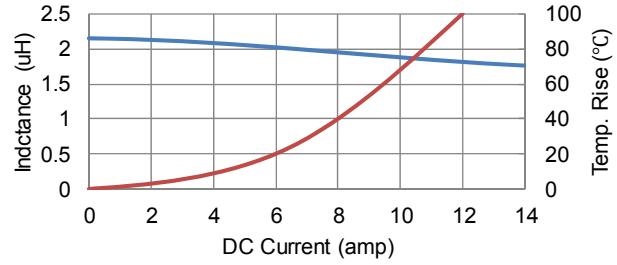
SMHC2511J-1R0MHF



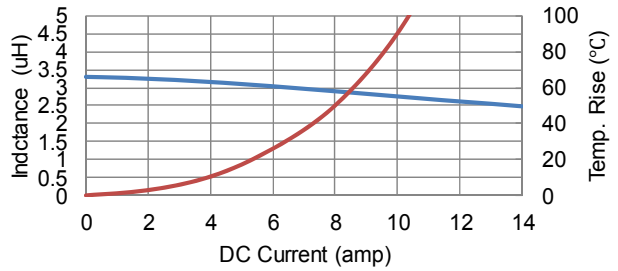
SMHC2511J-1R5MHF



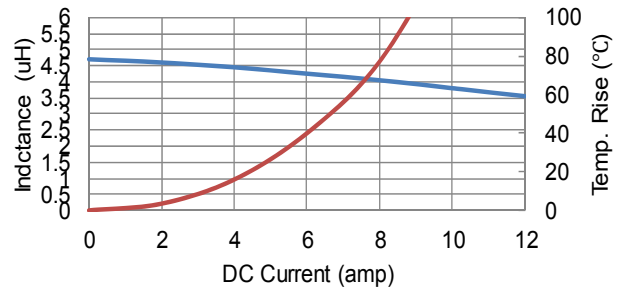
SMHC2511J-2R2MHF



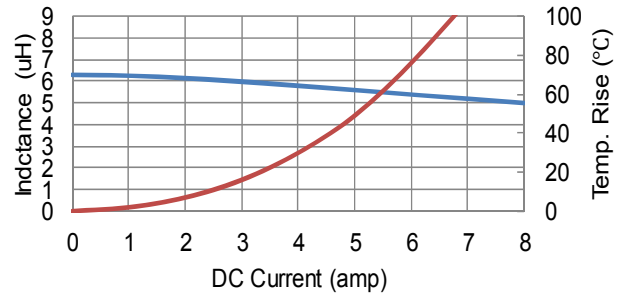
SMHC2511J-3R3MHF



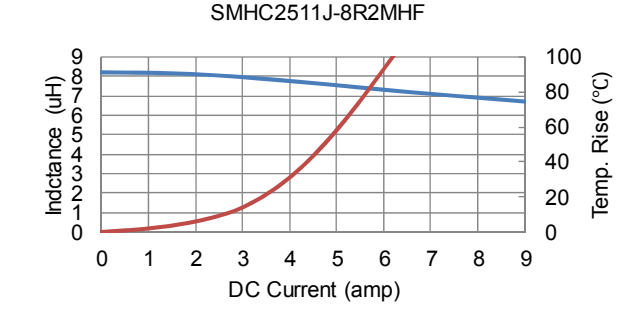
SMHC2511J-4R7MHF



SMHC2511J-6R8MHF



SMHC2511J-8R2MHF



SMHC2511J-100MHF