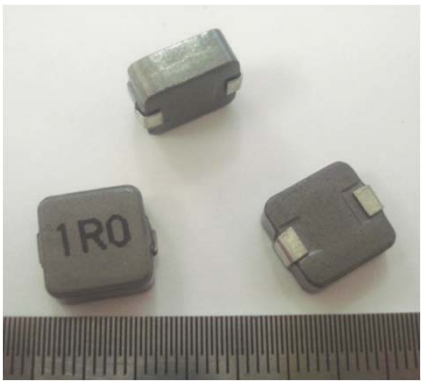
SMHC2511 Series

1. Features:

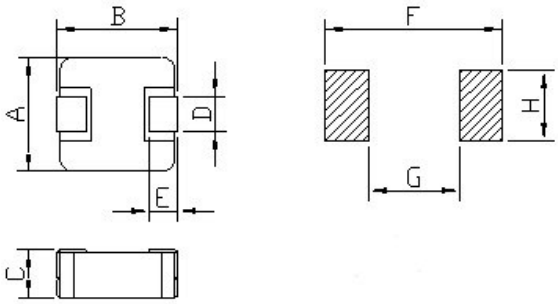
• 6.6x7.1mm foot Print, 3.0mm Max. height SMD Power Inductor for high frequency application.
• Inductance range from 0.1uH to 10uH.
•High saturation current characteristics by distributed gapped metal dust core.
• Ideal for computers servers, workstations, VGA card, Telecommunication Equipment, voltage-regulator 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) Typ.	DCR (mΩ) Max.	Irms (AMP)	Isat (AMP)
SMHC2511-R10MHF	0.10	1.50	1.70	32.50	60.00
SMHC2511-R15MHF	0.15	1.90	2.40	26.00	52.00
SMHC2511-R20MHF	0.20	2.40	2.70	24.00	41.00
SMHC2511-R22MHF	0.22	2.50	2.80	23.00	40.00
SMHC2511-R33MHF	0.33	3.50	3.90	20.00	30.00
SMHC2511-R47MHF	0.47	4.00	4.20	17.50	26.00
SMHC2511-R68MHF	0.68	5.00	5.50	15.50	25.00
SMHC2511-R82MHF	0.82	6.70	8.00	13.00	24.00
SMHC2511-1R0MHF	1.0	9.00	10.00	11.00	22.0
SMHC2511-1R5MHF	1.5	14.00	15.00	9.00	18.0
SMHC2511-2R2MHF	2.2	18.00	20.00	8.00	14.00
SMHC2511-3R3MHF	3.3	28.00	30.00	6.00	13.50
SMHC2511-4R7MHF	4.7	37.00	40.00	5.50	10.00
SMHC2511-6R8MHF	6.8	54.00	60.00	4.50	8.00
SMHC2511-8R2MHF	8.2	64.00	68.00	4.00	7.50
SMHC2511-100MHF	10.0	102.00	105.00	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:

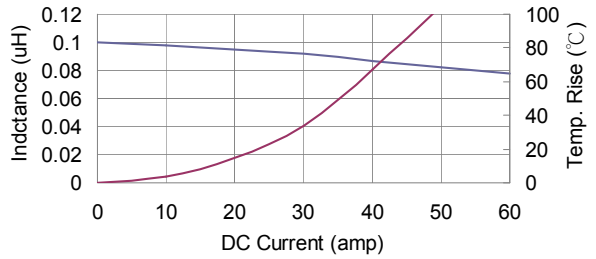
1.Open Circuit Inductance(OCL) and L@ Irms and L @Isat are measured at: 100KHz, 1.0V ;(Ta=25℃).
2.Isat: DC current that causes inductance to drop approximately by 30% from OCL ;(Ta=25℃).
3.Irms: DC current for an approximate temperature rise of 40℃ without core loss. Derating is necessary for AC currents, 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.

New York *1.914.347.2474* ●**Taiwan** *886.972.022.388* ●**Shenzhen** *86.755.8418.6263* ●**Shanghai** *86.21.5424.5141* ●**Hong Kong** *852.9688.9767*
sales@inter-technical.com ● www.inter-technical.com
Revised E: 12/21/12

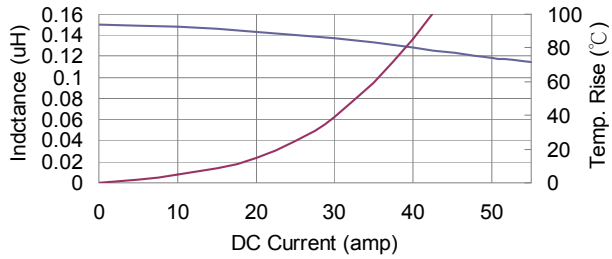
SMHC2511 Series

4. Inductance vs. Current vs. Temperature

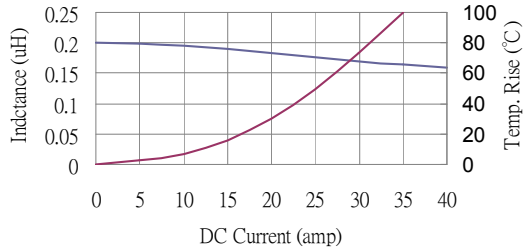
SMHC2511-R10MHF



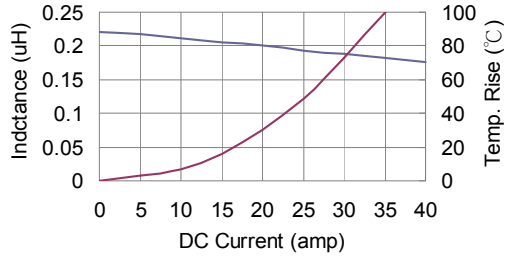
SMHC2511-R15MHF



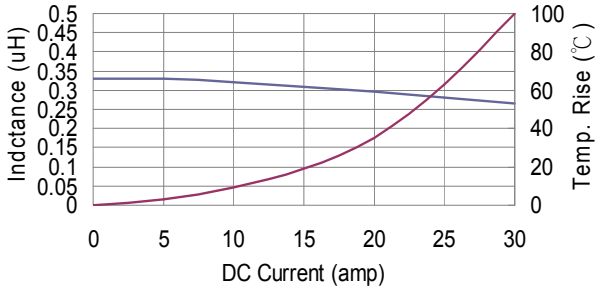
SMHC2511-R20MHF



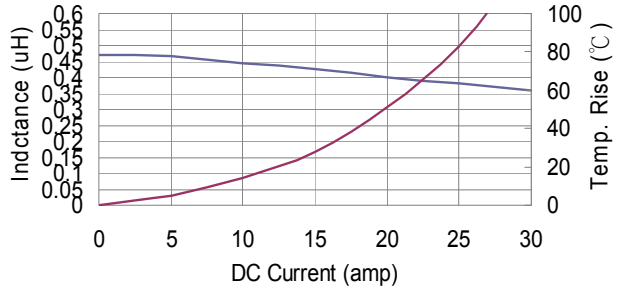
SMHC2511-R22MHF



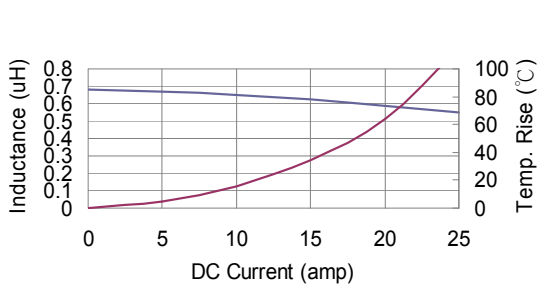
SMHC2511-R33MHF



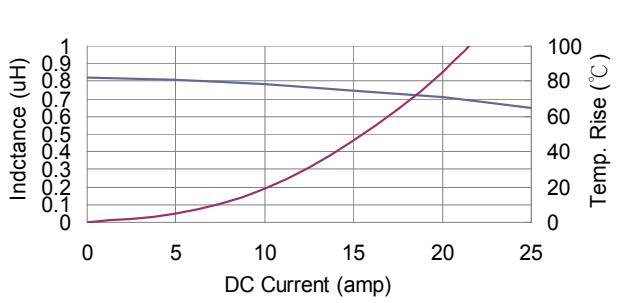
SMHC2511-R47MHF



SMHC2511-R68MHF



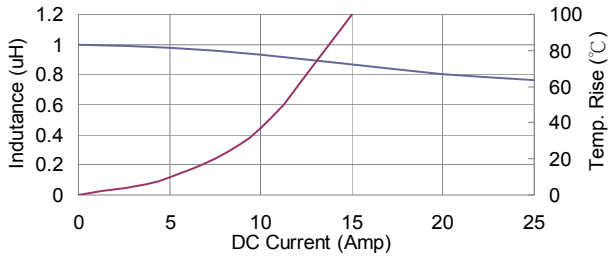
SMHC2511-R82MHF



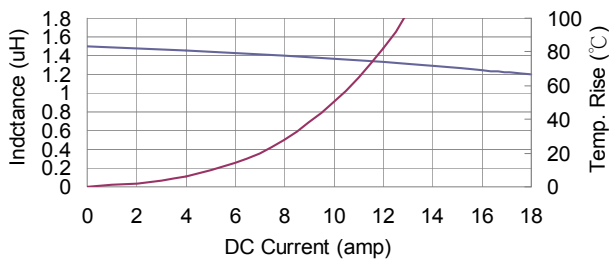
SMHC2511 Series

4. Inductance vs. Current vs. Temperature

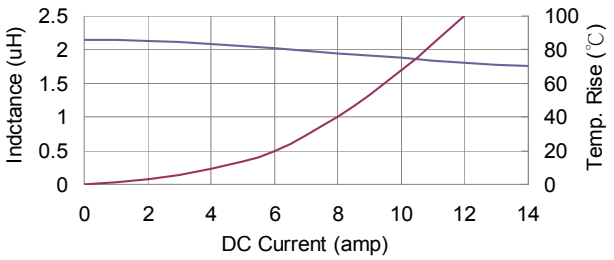
SMHC2511-1R0MHF



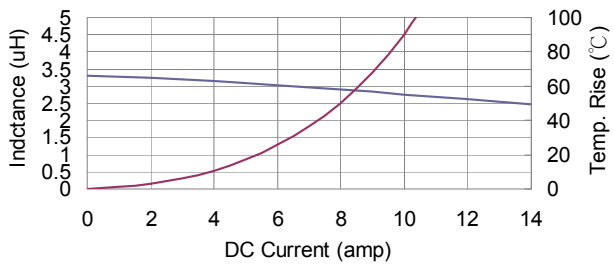
SMHC2511-1R5MHF



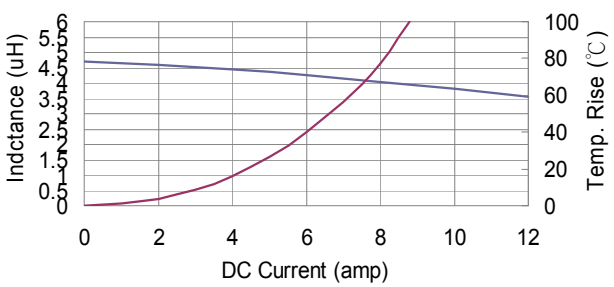
SMHC2511-2R2MHF



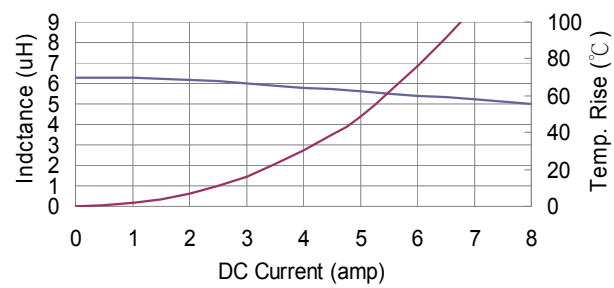
SMHC2511-3R3MHF



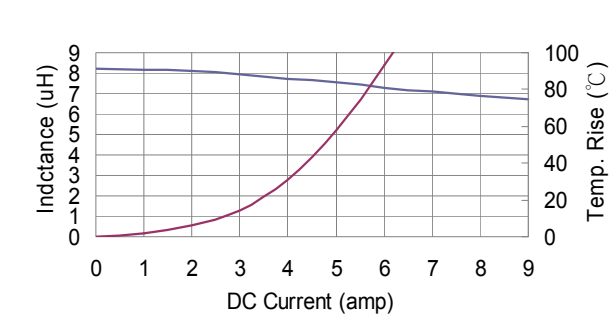
SMHC2511-4R7MHF



SMHC2511-6R8MHF



SMHC2511-8R2MHF



SMHC2511-100MHF