

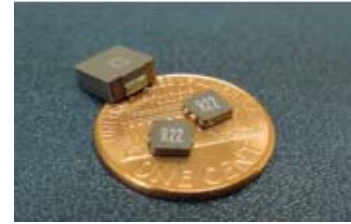


SMHC2011 Series



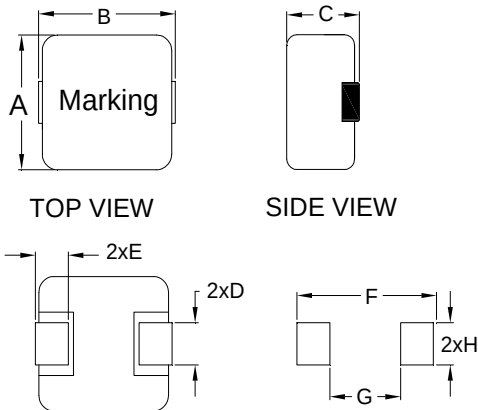
1. Features:

- Molding Inductor with lower core loss for high frequency(5MHz+) application.
- Inductance Range:0.20uH to 4.7uH. Custom values are welcomed.
- High current output chokes, up to 25.0 Amp.with approx. 30% roll off.
- Ideal for desktop computers,servers,workstations,VGA card ,High-End switches and routers,Voltage-regulator modules & High Density Board Design.
- Very low DC resistance and compact size,high performance,low cost.
- Operating Temperature Range -55°C to + 130°C ; RoHs & HF compliance .
- T & R Qty: 1000 pcs , 13" Reel ;



2. Mechanical Dimension(Unit:mm):

Series	A	B	C	D	E	F	G	H
Name	± 0.25	± 0.25	(Max.)	± 0.3	± 0.3	(Nom.)	(Nom.)	(Nom.)
R20MHF	4.70	5.10	3.00	2.00	1.00	6.90	3.00	2.50
R68~2R2MHF	4.70	5.00	3.00	2.00	1.00	6.90	3.00	2.50
3R3~4R7MHF	5.18	5.49	3.00	2.00	1.02	6.90	3.00	2.50



BOTTOM VIEW Suggested Pad Layout

3. Electrical Characteristic of SMHC2011 Series:

Part Number	Inductance (uH) ± 20%	DCR (mΩ) Typ.	DCR (mΩ) Max.	I _{rate} (A) @25°C	I _{sat} ¹ (A) @25°C	I _{sat} ² (A) @25°C
SMHC2011-R20MHF	0.20	4.20	4.50	15.00	21.00	25.00
SMHC2011-R68MHF	0.68	11.00	12.00	8.50	14.00	17.00
SMHC2011-1R0MHF	1.00	13.00	14.00	7.00	11.00	13.00
SMHC2011-1R2MHF	1.20	15.00	16.00	6.50	10.50	12.00
SMHC2011-1R5MHF	1.50	20.00	25.00	6.00	10.00	11.00
SMHC2011-2R2MHF	2.20	29.00	35.00	5.50	9.00	10.00
SMHC2011-3R3MHF	3.30	32.00	38.00	5.00	7.00	9.00
SMHC2011-4R7MHF	4.70	59.00	65.00	3.50	4.10	5.20

Note:

- 1>.Open Circuit Inductance(OCL) and L@I_{rms} and L@I_{sat} are measured at: 100KHz, 1.0V ;(Ta=25°C).
- 2>.I_{sat}¹: DC current that causes inductance to drop approximately by 20% from OCL ;(Ta=25°C).
- 3>.I_{sat}²: DC current that causes inductance to drop approximately by 30% from OCL ;(Ta=25°C).
- 4>. I_{rate}: 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 130°C under worst case operating conditions verified in the end application.
- 5>.Inductance Vs. DC current curve, please see the next page to get more detail information.

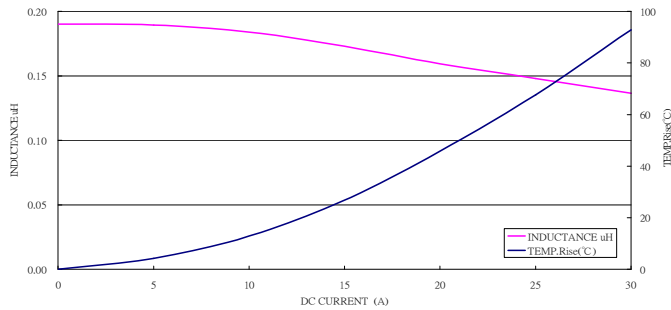


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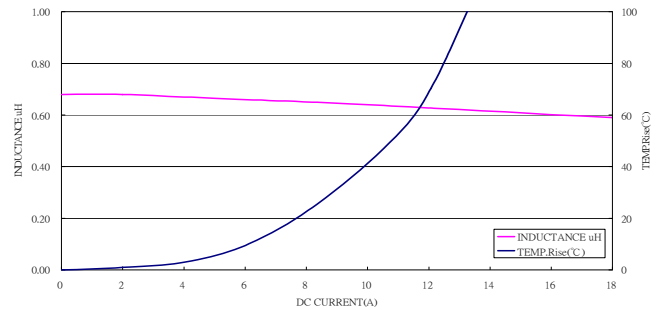


Inductance vs. Current

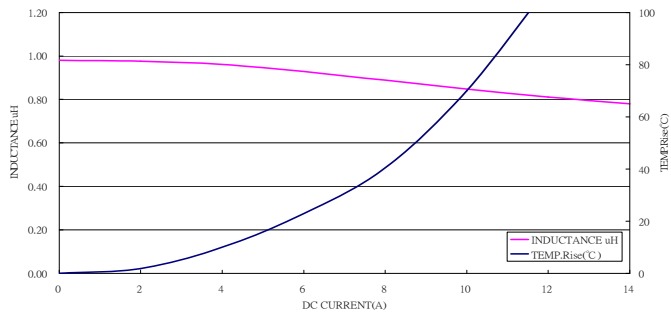
SMHC2011-R20MHF



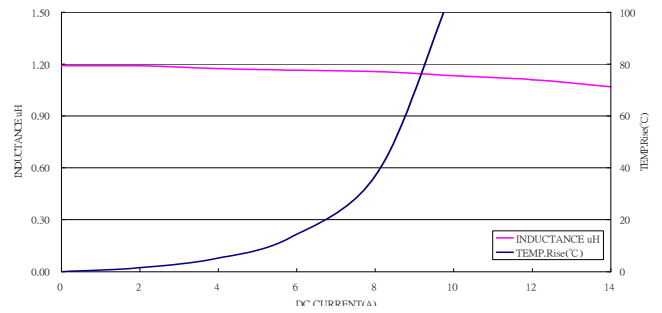
SMHC2011-R68MHF



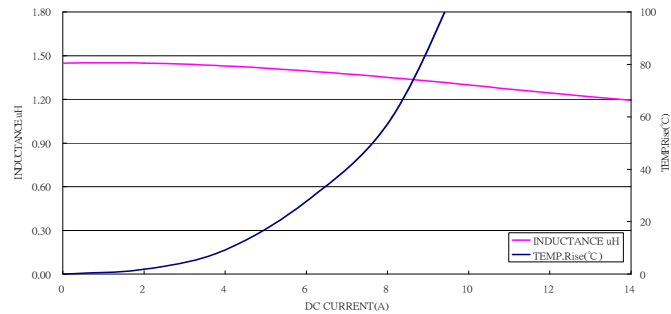
SMHC2011-1R0MHF



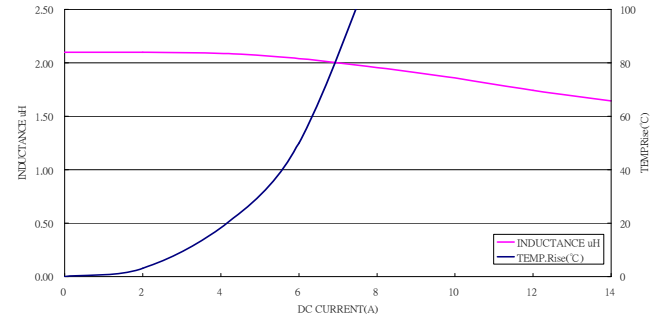
SMHC2011-1R2MHF



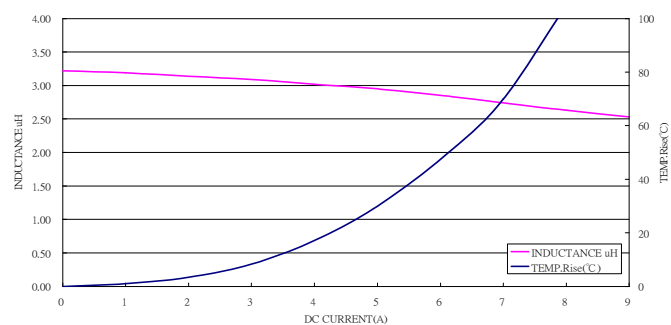
SMHC2011-1R5MHF



SMHC2011-2R2MHF



SMHC2011-3R3MHF



SMHC2011-4R7MHF

