SM2511TK Series

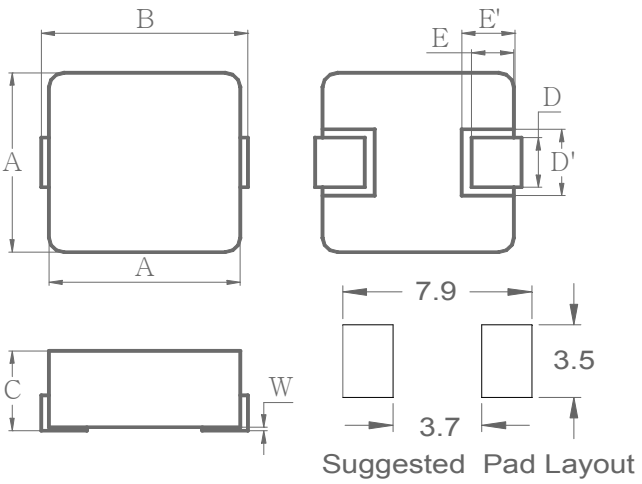
1. Features:

- Anti-Erosion surface, rust free metal alloy SMD Power Inductor.
- 6.9x7.3mm foot Print, 3.0mm Max. height.
- Inductance range from 0.10 uH to 15.0 uH.
- High saturation current characteristics by distributed gapped core.
- Ideal for industrial, computers servers, workstations, VGA card, Telecommunication Equipment, voltage-regulator modules & High Density DC to DC converter Board.
- 10% tolerance DCR control.
- Working Frequency up to 1Mhz.
- Tape & Reel Quantity: 1,000 piece per 13 inches reel.
- Operating Temperature Range -55℃ to + 150℃ .

2. Electrical Characteristics:

ITG Part Number	OCL Inductance (uH) ± 20%	DCR (mΩ) ± 10% @25℃	Irms (Amp.)	Isat1 20% roll off (Amp.)	Isat2 30% roll off (Amp.)
SM2511TK-R10MHF	0.10	0.75	28.00	45.00	60.00
SM2511TK-R22MHF	0.22	1.10	25.00	22.00	30.00
SM2511TK-R47MHF	0.47	4.50	14.00	14.00	26.00
SM2511TK-R68MHF	0.68	5.50	14.50	13.50	23.00
SM2511TK-R82MHF	0.82	6.90	13.00	13.00	20.00
SM2511TK-1R0MHF	1.00	7.50	11.00	10.50	17.00
SM2511TK-1R5MHF	1.50	13.60	8.00	10.00	15.00
SM2511TK-2R0MHF	2.00	14.40	7.50	9.00	14.50
SM2511TK-2R2MHF	2.20	16.50	7.00	8.00	14.00
SM2511TK-3R3MHF	3.30	26.30	6.00	7.00	11.00
SM2511TK-4R7MHF	4.70	40.00	5.00	6.50	10.00
SM2511TK-6R8MHF	6.80	54.00	4.50	5.00	7.00
SM2511TK-8R2MHF	8.20	64.00	3.50	4.50	6.00
SM2511TK-100MHF	10.00	66.00	3.00	3.00	5.00
SM2511TK-150MHF	15.00	122.00	4.00	2.80	4.50

3. Mechanical Dimensions (unit: mm):



A ± 0.30	B ± 0.30	C (Max.)	D ± 0.30	D' ± 0.20	E ± 0.30	E' ± 0.10	W (Ref.)
6.60	7.00	3.00	3.00	3.60	1.60	2.00	0.15

Notes:

•Open Circuit Inductance(OCL) and L@ Irms and L@Isat are measured at: 100KHz ,1.0V ;(Ta=25 ℃).
•Isat1: DC current that causes inductance to drop approximately by 20% from OCL ;(Ta=25 ℃).
•Isat2: DC current that causes inductance to drop approximately by 30% from OCL ;(Ta=25 ℃
•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 155 ℃ under worst case operating conditions verified in the end application.
•Inductance vs. DC Current vs. Temperature Curve, please see the next page to get more detail information.

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Revised B: 08/12/2014

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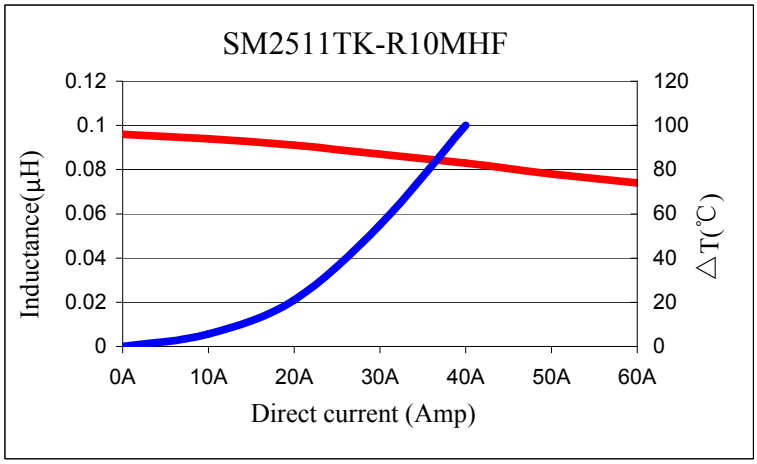
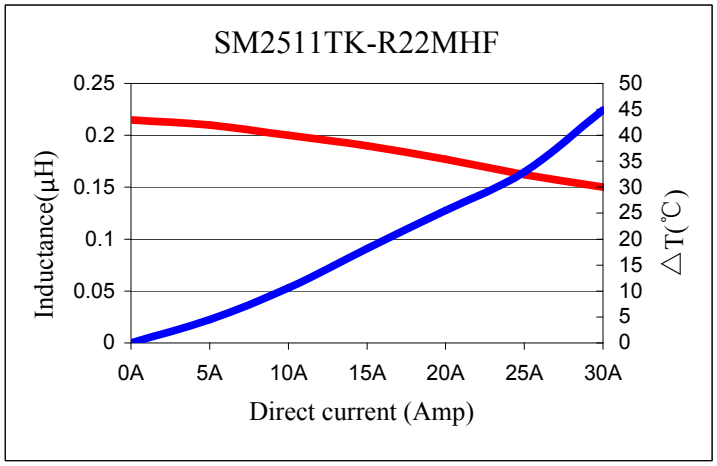
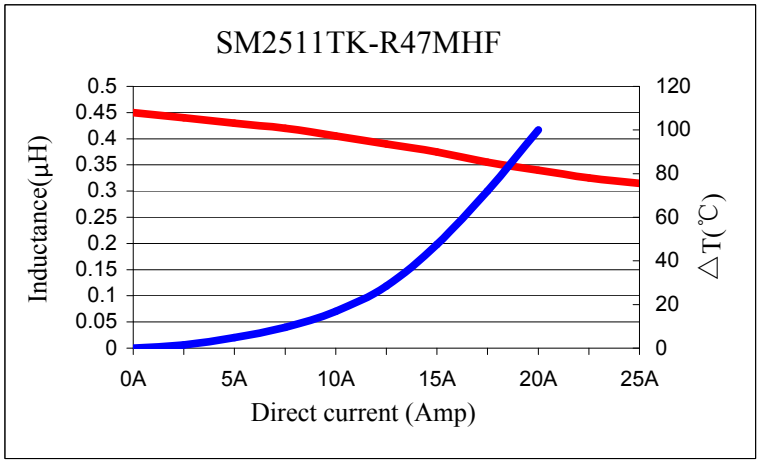
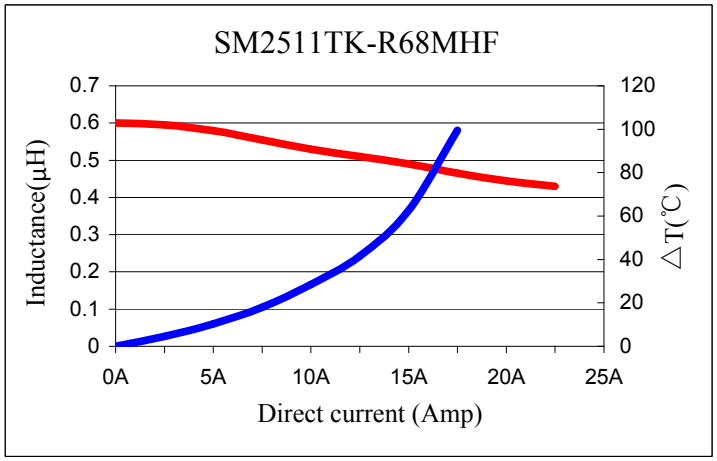
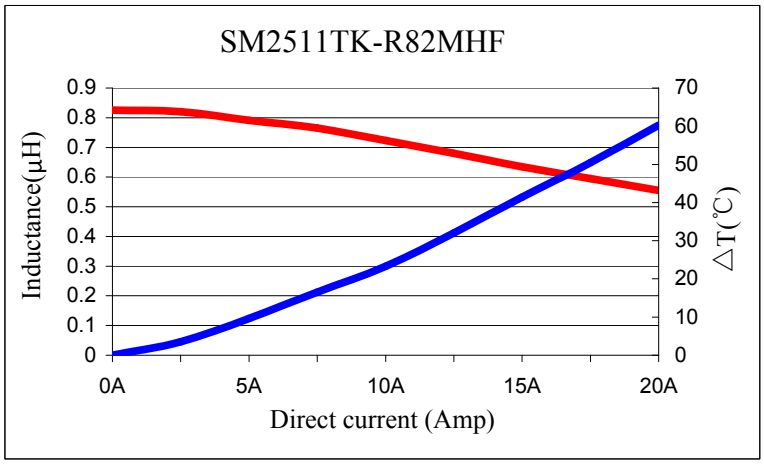
4. Inductance vs Current vs Temperature:

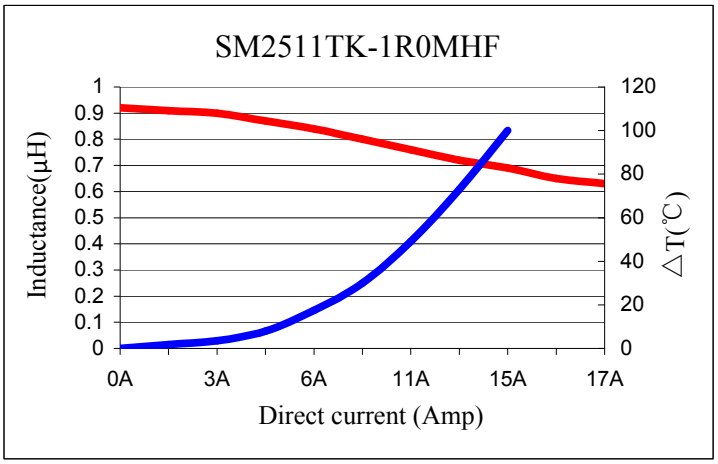












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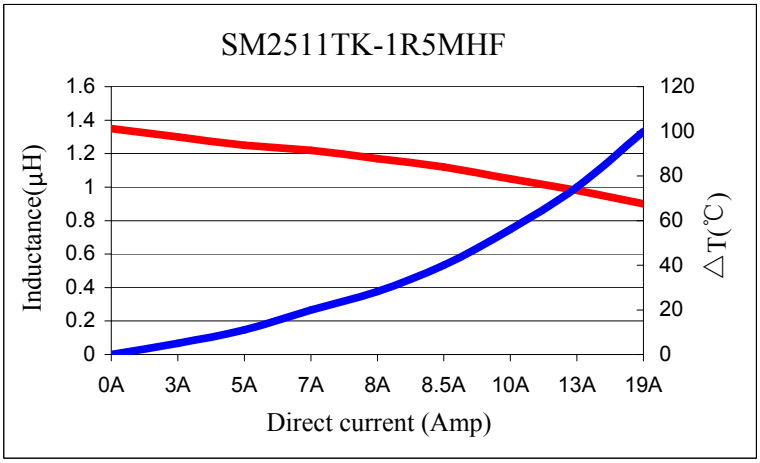

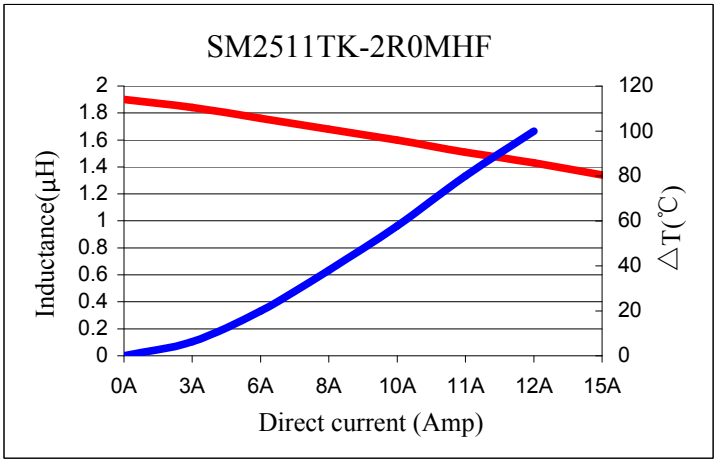

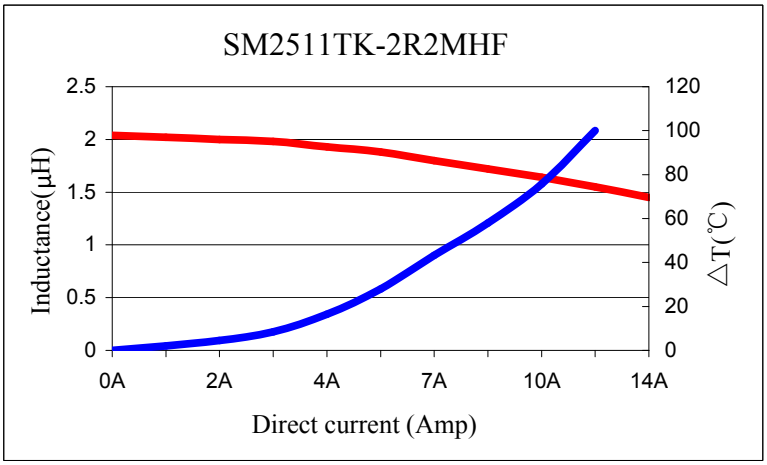

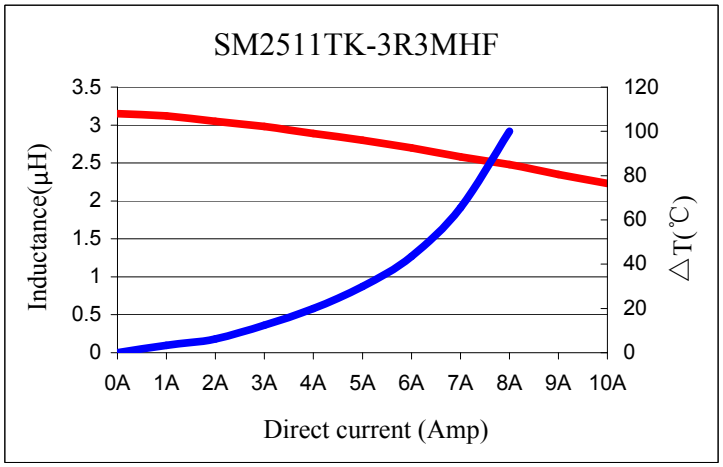

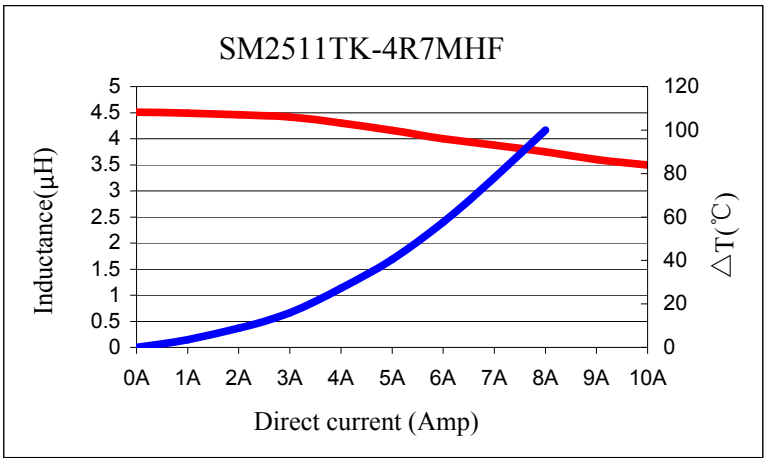

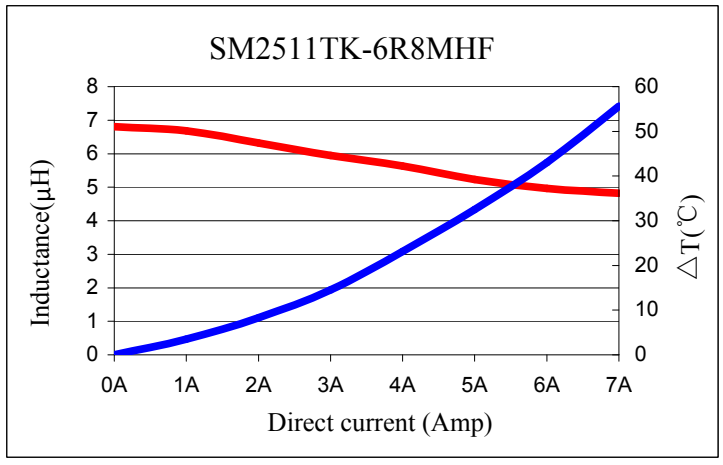

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