SM2011TK Series

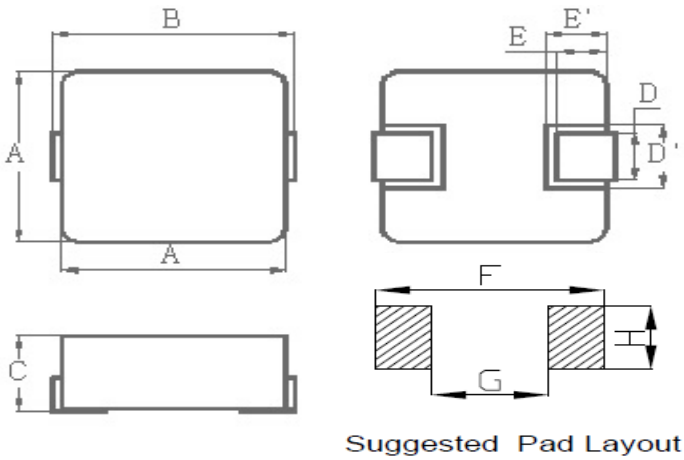
1. Features:

- Anti-Erosion surface, rust free metal alloy SMD Power Inductor.
- 4.7x5.2mm foot print, 3.0mm Max. height.
- High saturation current characteristics by distributed grapped core.
- Ideal for industrial, computers servers, workstations, VGA card, Telecommunication Equipment, voltage regulator modules & High Density DC to DC coverter Board.
- 10% tolerance DCR control.
- Working Frequency up to 1MHz.
- Tape & Rell Quantity: 1,000 pieces per 13 inches reel.
- Operating temperature Range -55°C to + 150°C.

2. Electrical Characteristics:

ITG Part Number	OCL Inductance (uH) ±20%	DCR (mΩ) Typ. ±10%	Irms (AMP)	Isat1 20% roll off (AMP)	Isat2 30% roll off (AMP)
SM2011TK-R68MHF	0.68	8.20	10.0	9.0	11.0
SM2011TK-1R0MHF	1.00	12.73	7.0	8.0	10.5
SM2011TK-2R2MHF	2.20	24.00	5.0	5.5	9.0
SM2011TK-3R3MHF	3.30	38.00	4.5	4.2	6.0
SM2011TK-4R7MHF	4.70	61.00	4.3	3.5	5.0
SM2011TK-6R8MHF	6.80	115.00	2.5	2.7	3.0

3. Mechanical Dimensions (unit: mm):



Suggested Pad Layout

A ± 0.20	B (Max)	C (Max)	D ± 0.30	D' ± 0.20	E ± 0.30	E' ± 0.10
4.7	5.2	3.0	1.5	1.8	1.0	1.5

F (Ref)	G (Ref)	H (Ref)
5.7	2.1	2.3

Note:

- 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°C 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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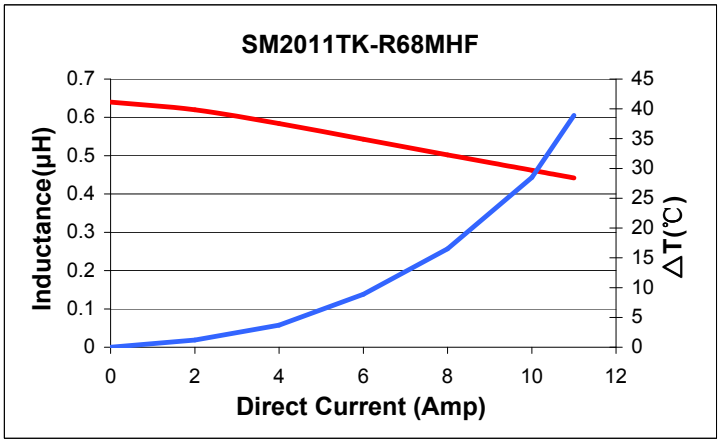
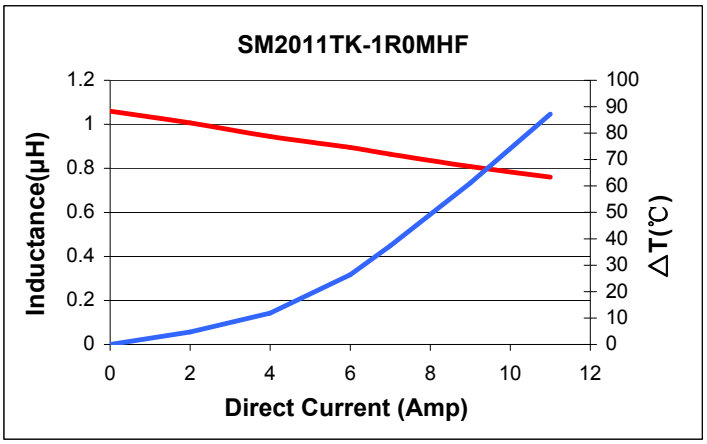
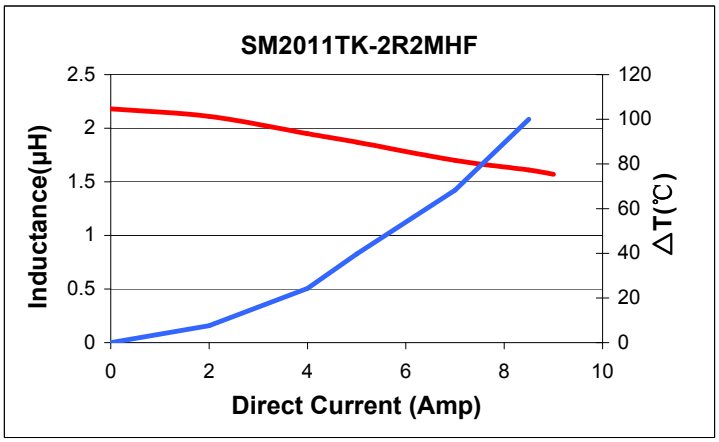
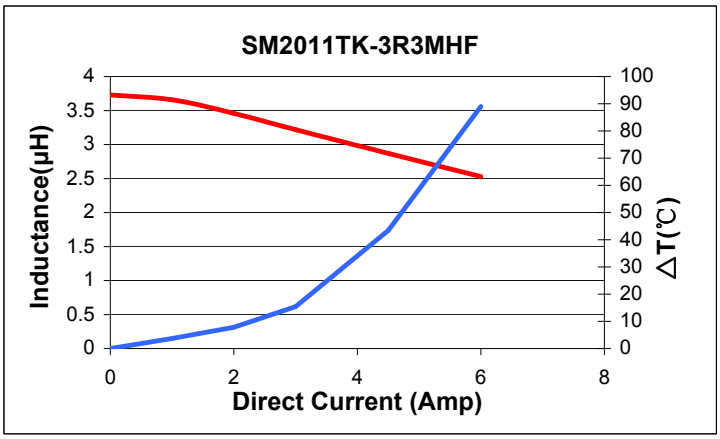
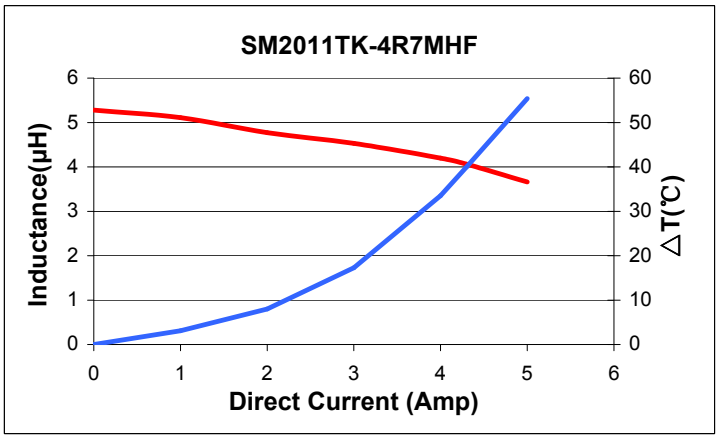
4. Inductance vs Current vs Temperature:

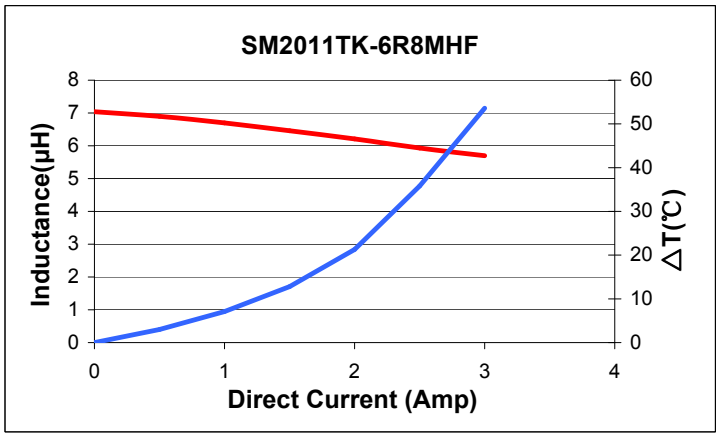












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