



SM4015 Series High Current Inductor



Features:

- Super Low Resistance, Ultra High Current Rating.
- High Performance (I_{sat}) realized by metal dust core.
- Low profile: 4 mm max. Height.
- Frequency Range up to 1 MHz.
- Taping Quantity: 500pcs./reel



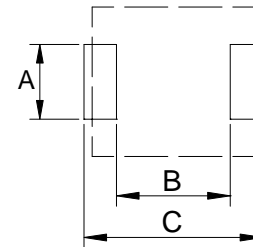
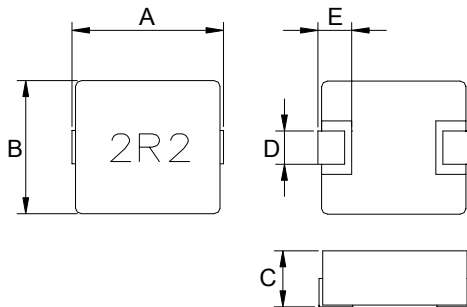
Application:

- Ideal for DC/DC converters, PDA, notebook, and server applications.

Electrical Specifications					
Part Number	$L \pm 20\%$ @ 0A (μH)	DCR Typ. ($\text{m}\Omega$)	DCR Max. ($\text{m}\Omega$)	I_{rate} (Amps)	I_{sat} (Amps)
SM4015-R19M	0.19	0.87	0.95	40.0	90.0
SM4015-R36M	0.36	1.30	1.40	31.5	60.0
SM4015-R56M	0.56	1.70	1.80	27.5	49.0
SM4015-1R0M	1.00	3.70	4.10	17.5	36.0
SM4015-1R5M	1.50	5.30	5.80	15.0	27.5
SM4015-2R2M	2.20	8.20	9.00	12.0	25.6
SM4015-3R3M	3.30	10.8	11.8	10.0	18.6
SM4015-4R7M	4.70	15.0	16.5	9.5	17.0
SM4015-5R6M	5.60	17.6	19.3	8.5	16.0
SM4015-6R8M	6.80	21.2	23.3	8.0	13.5
SM4015-100M	10.00	33.2	36.5	6.8	12.0

Notes:

1. I_{rate} : DC current that will cause an approximate ΔT of 40 °C.
2. I_{sat} : DC current that will cause inductance to drop approximately by 20%.
3. Test conditions: 100 kHz, 0.25 V, 25 °C ambient temperature.
4. Operating Temperature Range: -55 °C ~ 125 °C.



Recommended PCB Layout

Mechanical Dimensions (Unit: mm)					
Part Number	A Max.	B ± 0.3	C Max.	D ± 0.5	E ± 0.3
SM4015	11.5	10.0	4.0	3.0	2.0

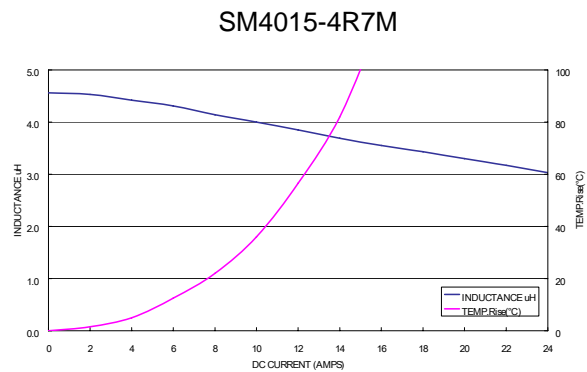
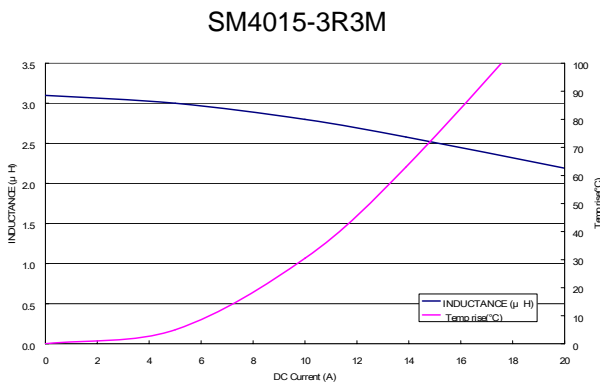
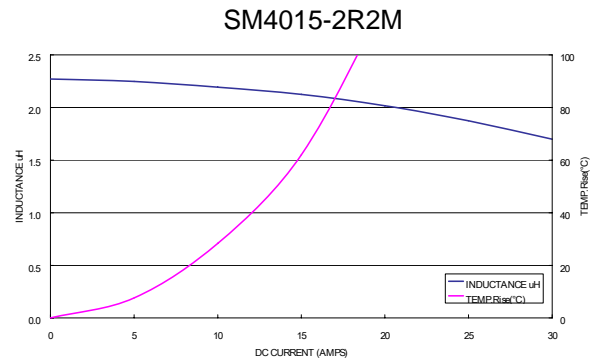
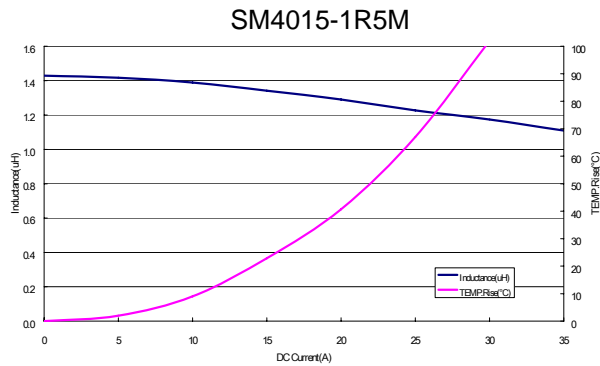
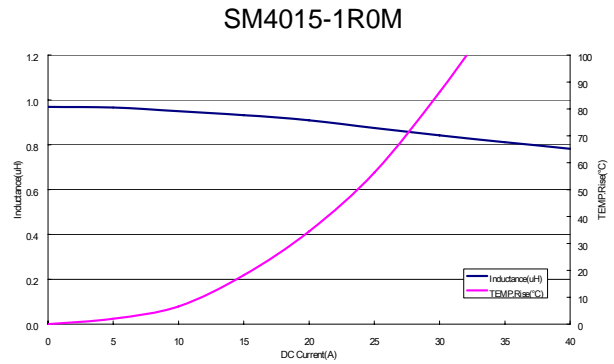
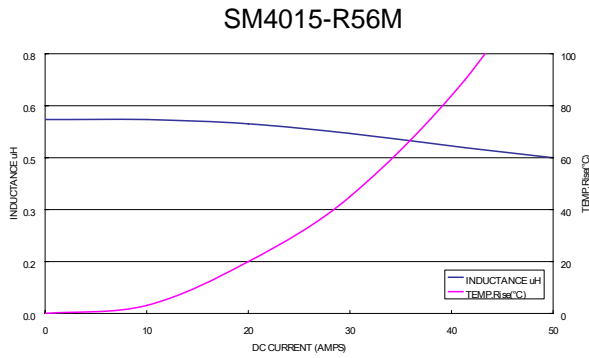
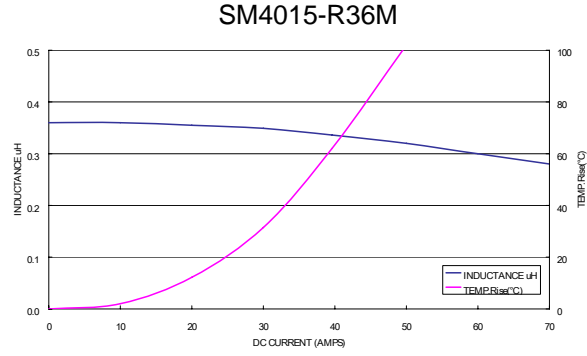
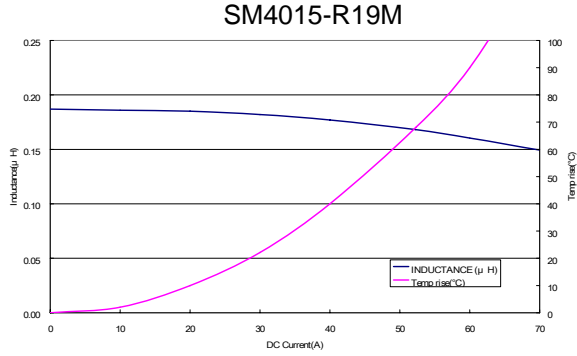
Type	SM4015
A	4.0
B	6.0
C	13.0



SM4015 Series High Current Inductor



Inductance vs. DC Current vs. Temperature Rise Curve

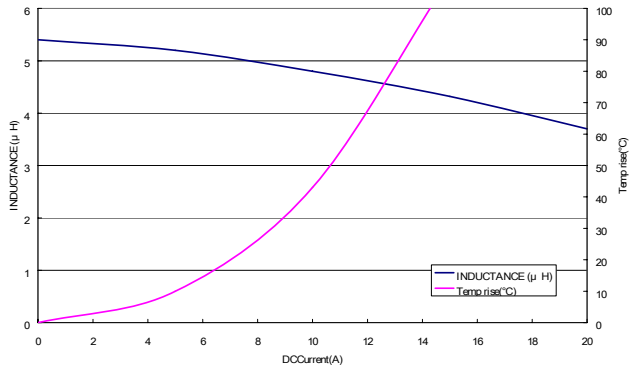




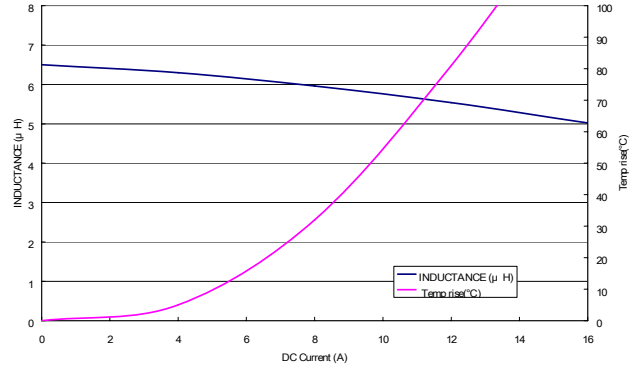
SM4015 Series High Current Inductor



SM4015-5R6M



SM4015-6R8M



SM4015-100M

