

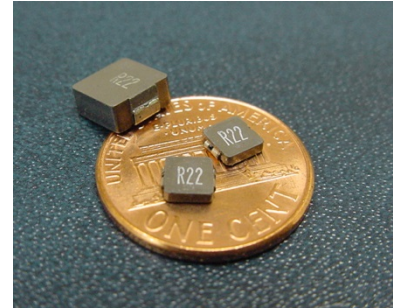


SM1608 Series



1. Features of SM1608 series:

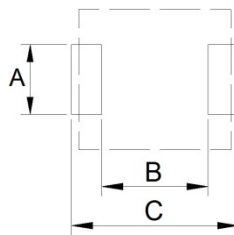
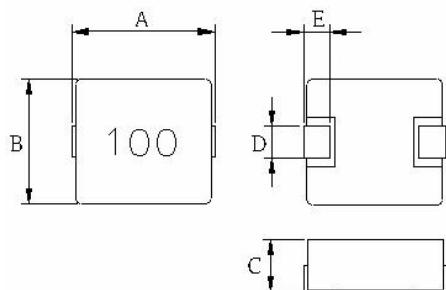
- Molded Inductor Structure.
- High saturation current from distributed gap metal dust core.
- Low profile: 2mm Max. Height
- Ideal for DC/DC converters, PDA, Notebook and Server Application
- RoHS and HF compliant
- T & R Qtys: 2,000pcs on a 13" Reel



2. Electrical Characteristics of SM1608 series:

ITG Part Number	Inductance (uH) ±20%	DCR (mΩ) Typ.	DCR (mΩ) Max.	Isat (A) @25°C	Irms (A) @25°C
SM1608-R10M	0.10	4.5	5	11.00	35.0
SM1608-R22M	0.22	7.3	8	13.00	24.0
SM1608-R33M	0.33	9.6	13	9.00	18.0
SM1608-R47M	0.47	16.0	18	5.60	11.5
SM1608-1R0M	1.00	33.0	37	3.75	8.5
SM1608-1R5M	1.50	35.0	43	4.00	6.0
SM1608-2R2M	2.20	52.0	58	3.00	5.0
SM1608-3R3M	3.30	76.0	87	2.50	4.0
SM1608-4R7M	4.70	118.0	132	2.40	2.8
SM1608-6R8M	6.80	162.0	178	2.00	2.1
SM1608-8R2M	8.20	188.0	207	1.80	2.0
SM1608-100M	10.00	256.0	282	1.60	1.8
SM1608-220M	22.00	460.0	550	0.80	1.0

3. Mechanical Dimensions of SM1608 series (unit: mm):



Recommended PCB Layout

Pad Dimension	SM1608
A	2.30
B	2.16
C	4.95

Type	A	B	C	D	E
SM1608	4.45 ± 0.25	4.06 ± 0.25	2.0 Max	2.0 ± 0.3	0.76 ± 0.3

Notes:

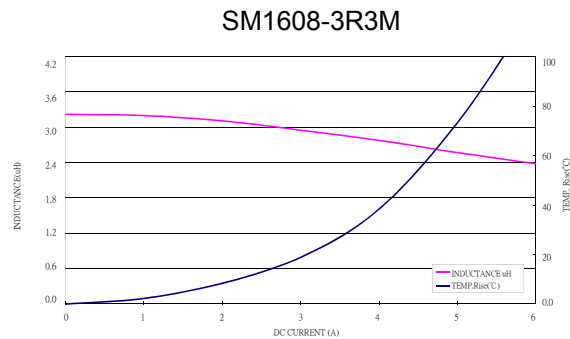
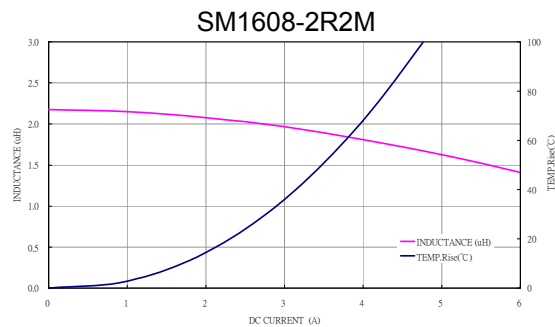
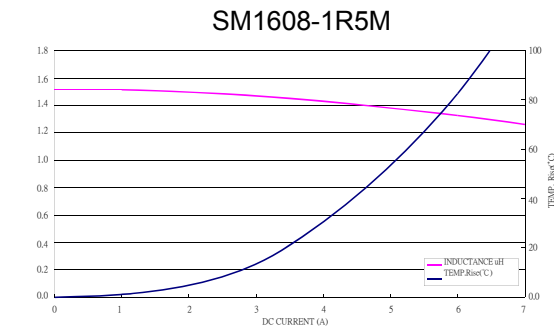
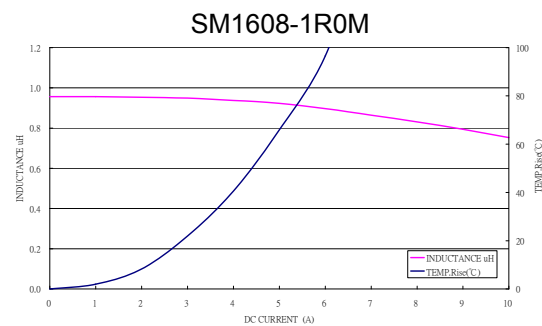
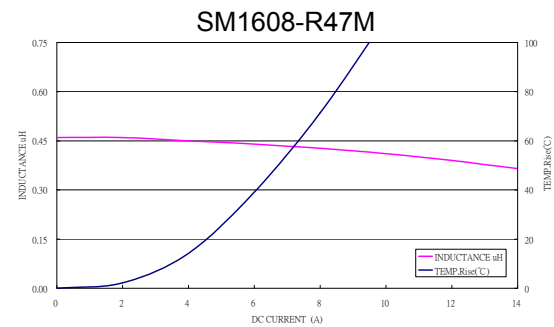
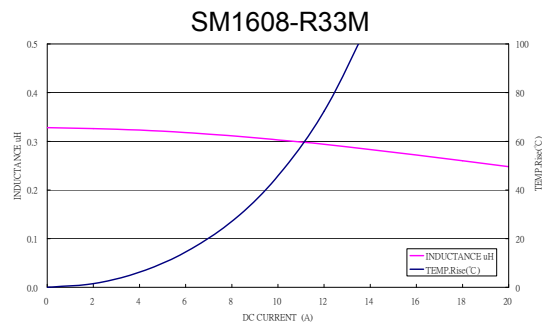
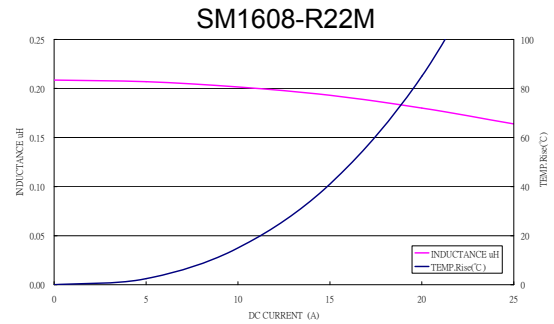
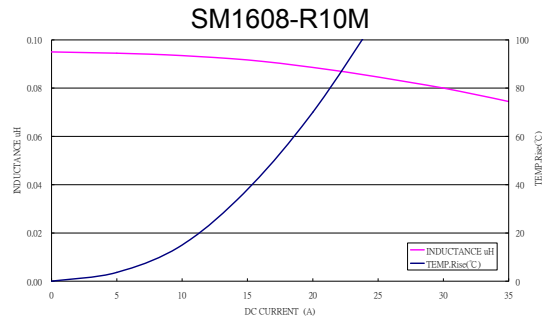
1. Irat: DC current that will cause an approximate ΔT of 40°C
2. Isat: DC current that causes inductance to drop 20%(Typ.) from OCL ;($T_a=25^\circ\text{C}$).
3. Test conditions: 100kHz, 0.25V, 25°C ambient temperature
4. Operating Temperature Range: -55°C to 125°C



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4. Inductance vs. Temperature Rise Characteristics of SM1608 Series





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4. Inductance vs. Temperature Rise Characteristics of SM1608 Series

