

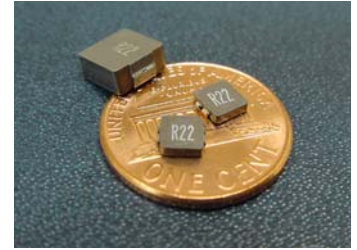


SM1608 Series High Current Inductor



Features:

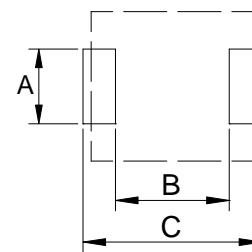
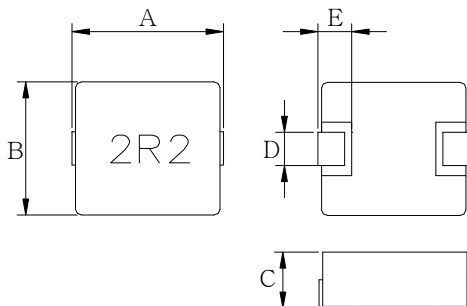
- Molded inductor structure.
- High saturation current realized by distributed gap metal dust core.
- Low profile: 2 mm max. Height.
- Working frequency up to 5 MHz.
- Ideal for DC/DC converters, PDA, notebook, and server applications.
- T&R quantity: 3000 pieces per reel.



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)
SM1608-R10M	0.10	4.5	5	11	35
SM1608-R22M	0.22	7.3	8	13	24
SM1608-R33M	0.33	9.6	13	9	18
SM1608-R47M	0.47	16	18	5.6	11.5
SM1608-1R0M	1.00	33	37	3.75	8.5
SM1608-1R5M	1.50	35	43	4	6
SM1608-2R2M	2.20	52	58	3	5

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

Pad Dimension	SM1608
A	2.30mm
B	1.16mm
C	4.95mm

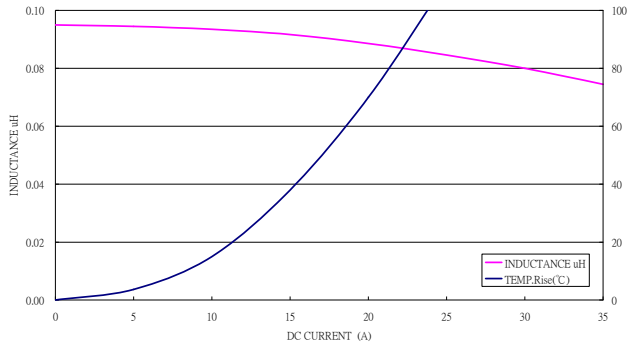


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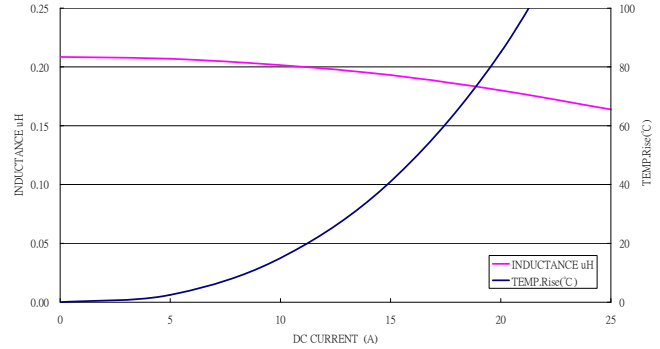


Inductance vs. DC Current vs. Temperature Rise Curve

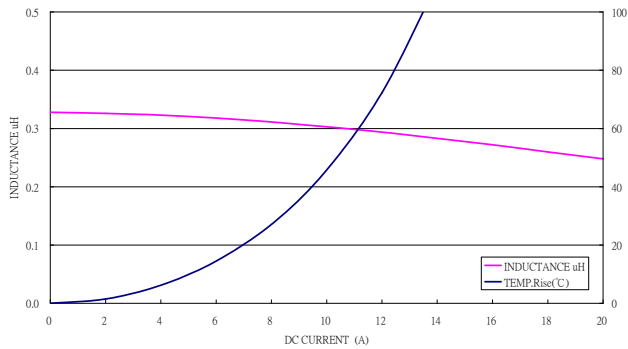
SM1608-R10M



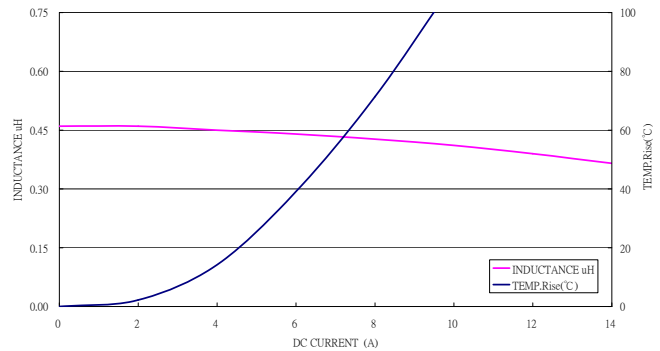
SM1608-R22M



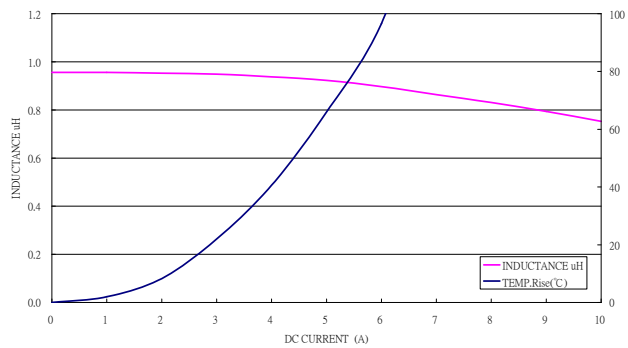
SM1608-R33M



SM1608-R47M



SM1608-1R0M



SM1608-2R2M

