

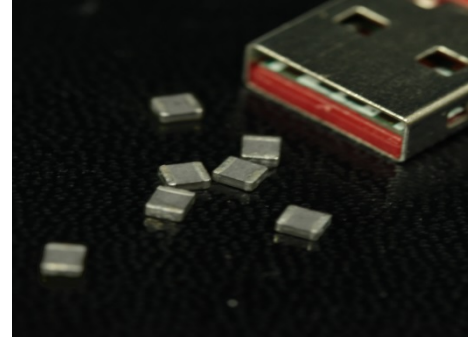


MP252012A Series



1. Features:

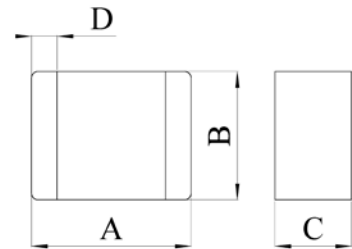
- 1008 Foot print (2.5x2.0 mm).
- 1.2mm Max. height SMD Power Inductor.
- Inductance range from 0.24uH to 3.3uH.
- High saturation current characteristics by distributed gapped metal dust core.
- Ideal for portable device, PAD, Notebook, smart phone & High Density DC to DC converter Board.
- Lower DC resistance for higher current application.
- Max. Withstand Voltage: 25V DC
- Working Frequency up to 5Mhz.
- Tape & Reel Quantity: 3,000 piece per 6 inches reel.
- Operating Temperature Range -40°C to + 85°C.



2. Electrical Characteristics:

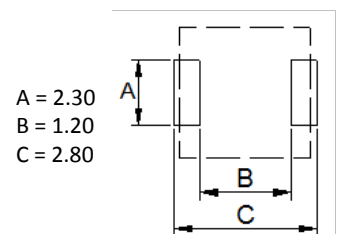
ITG Part Number	OCL (uH) ±30%	DCR (mΩ) Typ.	DCR (mΩ) Max.	I _{rms} (AMP)	I _{sat1} (Amp)
MP252012A-R33NHF	0.33	25	30	4.00	5.00
MP252012A-R47NHF	0.47	28	34	3.70	3.80
MP252012A-R68NHF	0.68	35	40	3.30	3.50
MP252012A-1R0NHF	1.00	40	50	3.20	3.30
MP252012A-1R5NHF	1.50	56	65	2.60	3.00
MP252012A-2R2NHF	2.20	90	102	2.10	2.50
MP252012A-3R3NHF	3.3	117	130	1.60	2.10

3. Mechanical Dimensions (unit: mm):



A ±	B ±	C	D ±
0.20	0.20	Max.	0.20
2.50	2.00	1.20	0.60

Recommended PCB Layout (Unit mm)



Notes:

1. Open Circuit Inductance(OCL), L @ I_{rms} and L @ I_{sat} are measured at 100KHz, 1.0V, (T_a=25°C).
2. I_{sat1}: DC current that causes inductance to drop approximately by 30% from OCL.
3. I_{rms}: DC current for an approximate temperature rise of 40°C 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 85°C under worst case operating conditions verified in the end application.
4. Inductance vs. DC Current vs. Temperature Curve, please see the next pages for more detail information.

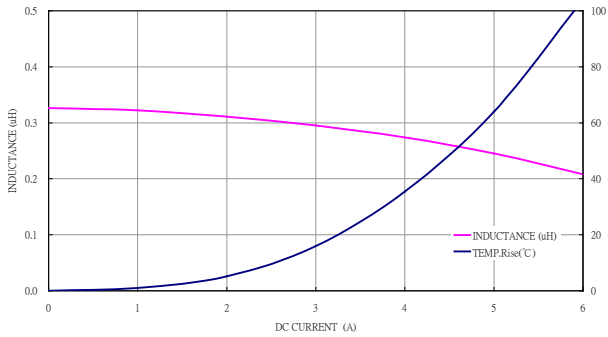


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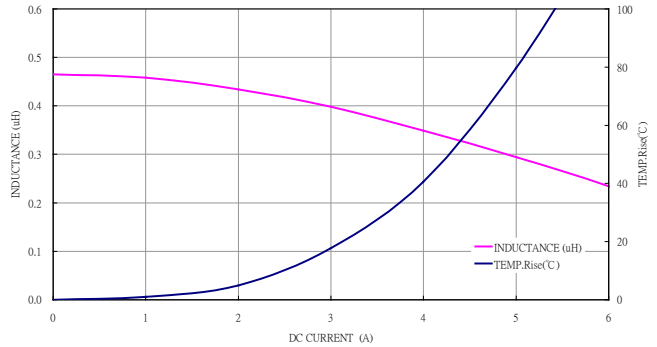


4. Inductance vs. Current vs. Temperature

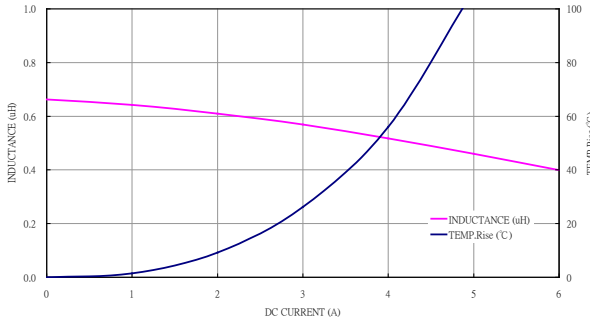
MP252012A-R33NHF



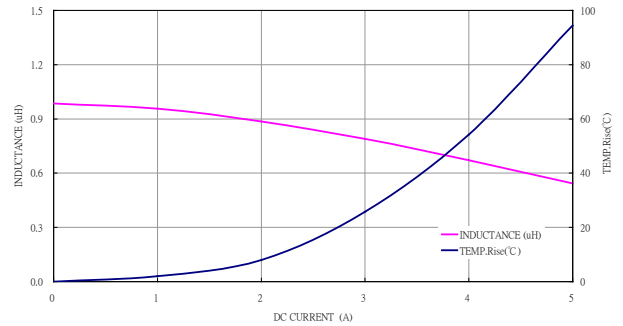
MP252012A-R47NHF



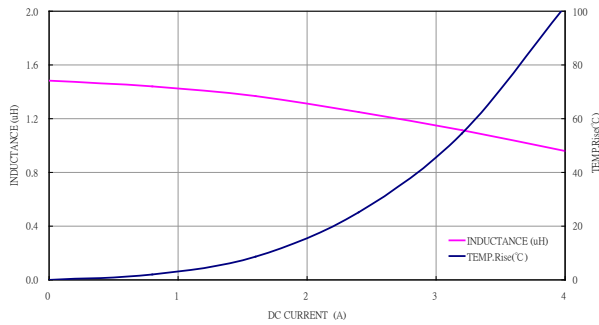
MP252012A-R68NHF



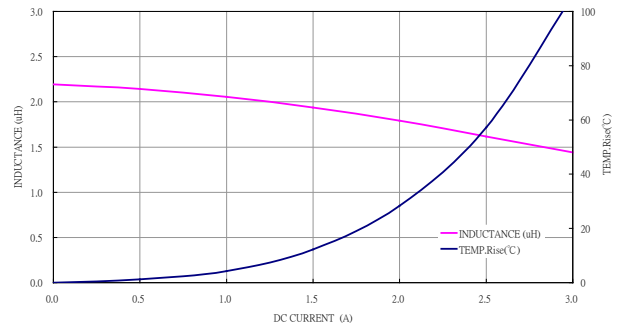
MP252012A-1R0NHF



MP252012A-1R5NHF



MP252012A-2R2NHF



MP252012A-3R3NHF

