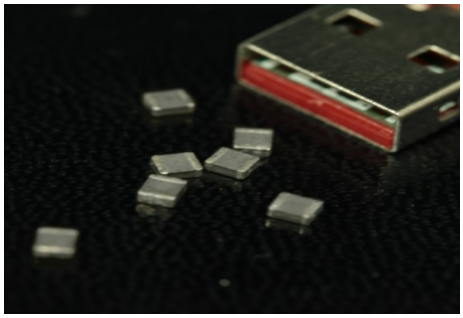
MP252010A Series

1. Features:

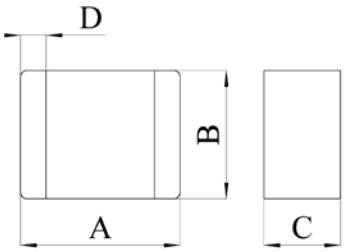
- 1008 Foot Print (2.5x2.0 mm).
- 1.0mm Max. height SMD Power Inductor.
- Inductance range from 0.24uH to 2.2uH.
- High saturation current characteristics by distributed gapped metal dust core.
- Ideal for portable device, PAD, Notebook, smart phone & High Density DC to DC converter Board.
- Lower DC resistance for higher current application.
- Max. Withstand Voltage: 25VDC
- 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:

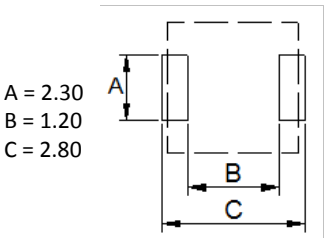
ITG Part Number	OCL (uH) ±30%	DCR (mΩ) Typ.	DCR (mΩ) Max.	Irms (AMP)	Isat1 (Amp)
MP252010A-R24NHF	0.24	14	17	4.00	5.00
MP252010A-R33NHF	0.33	25	31	3.50	4.70
MP252010A-R47NHF	0.47	25	33	3.00	4.50
MP252010A-R50NHF	0.50	29	37	2.85	4.00
MP252010A-R68NHF	0.68	40	50	2.70	3.70
MP252010A-1R0NHF	1.00	56	66	2.50	2.90
MP252010A-1R5NHF	1.50	88	98	1.90	2.70
MP252010A-2R2NHF	2.20	120	132	1.50	2.10

3. Mechanical Dimensions (unit: mm):



A ± 0.20	B ± 0.20	C Max.	D ± 0.20
2.50	2.00	1.00	0.60

Recommended PCB Layout
(Unit mm)



Notes:

1.Open Circuit Inductance(OCL), L@ Irms and L @Isat are measured at 100KHz,1.0V, (Ta=25℃).
2.Isat1: DC current that causes inductance to drop approximately by 30% from OCL.
3.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 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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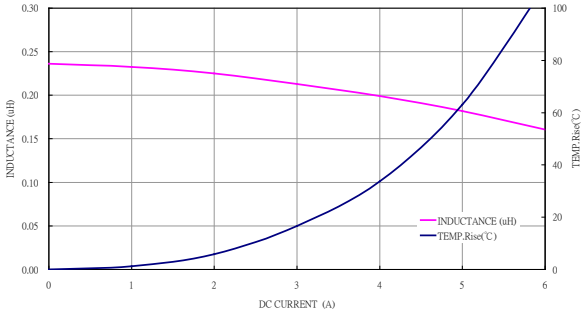
Revised A: 07/08/2014

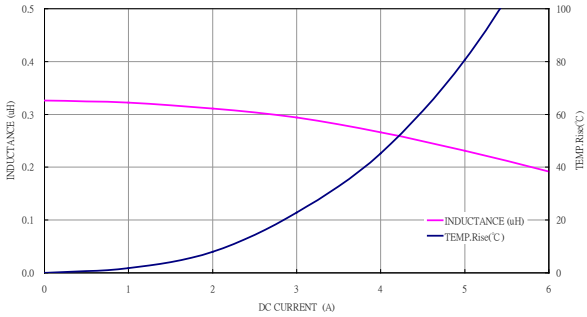
MP252010A Series

4. Inductance vs. Current vs. Temperature

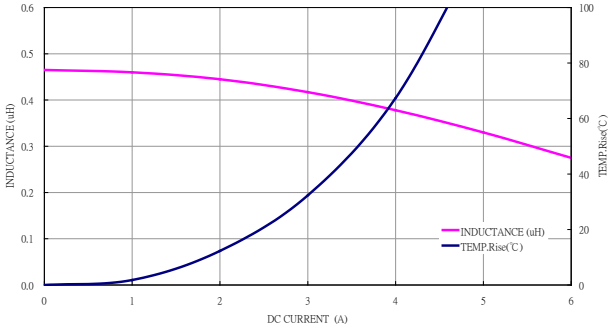
MP252010A-R24NHF



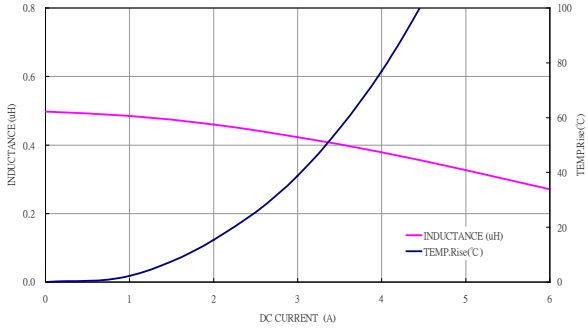
MP252010A-R33NHF



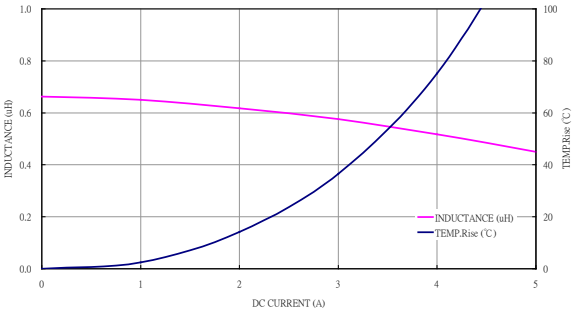
MP252010A-R47NHF



MP252010A-R50NHF



MP252010A-R68NHF



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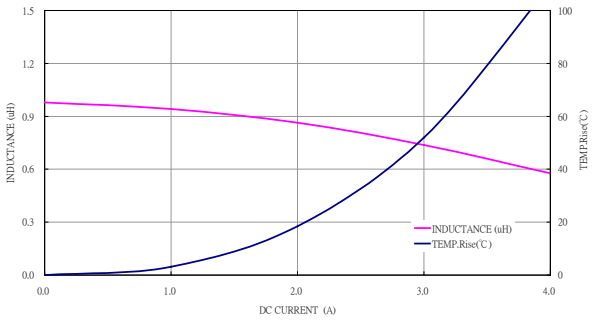
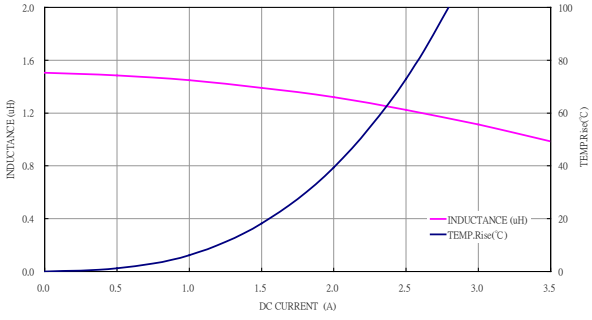


MP252010A-1R5NHF



MP252010A-2R2NHF