MP201610A Series

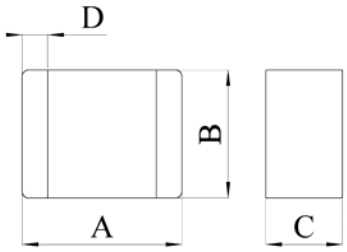
1. Features:

- 0806 Foot print (2.0x1.6 mm), 1.0mm Max. height SMD Power Inductor for high frequency application.
- 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. Wisthstand 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:

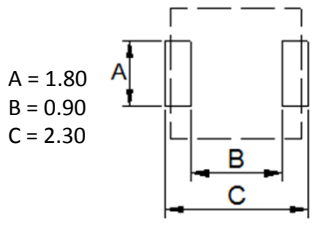
ITG Part Number	OCL (uH) ±30%	DCR (mΩ) Typ.	DCR (mΩ) Max.	Irms (AMP)	Isat1 (Amp)
MP201610A-R24NHF	0.24	30	40	3.20	3.50
MP201610A-R47NHF	0.47	38	46	3.00	3.20
MP201610A-R56NHF	0.56	51	64	2.60	2.70
MP201610A-R68NHF	0.68	52	65	2.50	2.60
MP201610A-1R0NHF	1.00	65	70	2.10	2.50
MP201610A-1R5NHF	1.50	120	144	1.60	1.80
MP201610A-2R2NHF	2.20	140	150	1.30	1.60

3. Mechanical Dimensions (unit: mm):



A ± 0.20	B ± 0.20	C Max.	D ± 0.30
2.00	1.60	1.00	0.50

Recommended PCB Layout
(Unit mm)



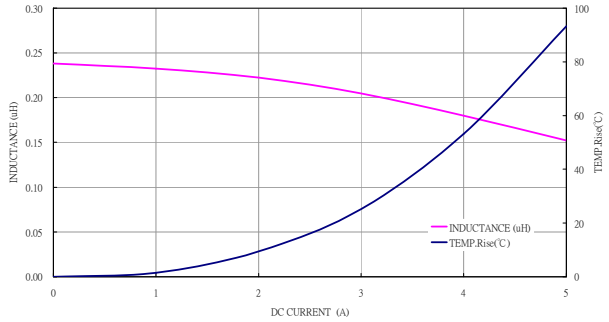
Notes:

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.

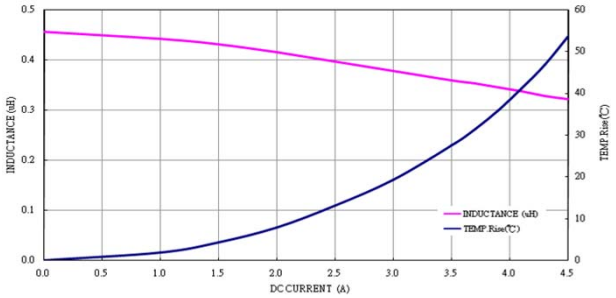
MP201610A Series

4. Inductance vs. Current vs. Temperature

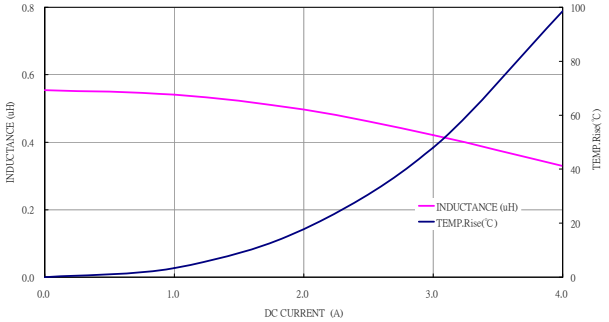
MP201610A-R24NHF



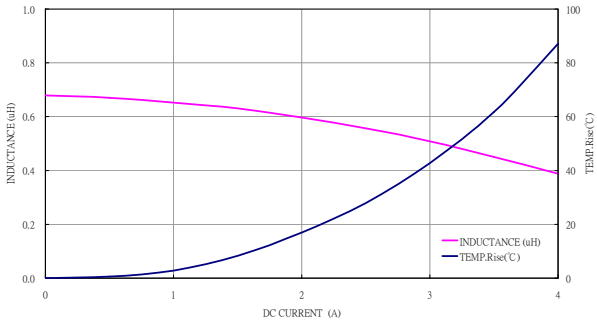
MP201610A-R47NHF



MP201610A-R56NHF



MP201610A-R68NHF



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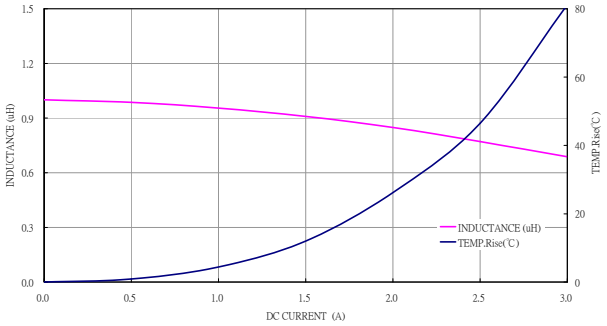

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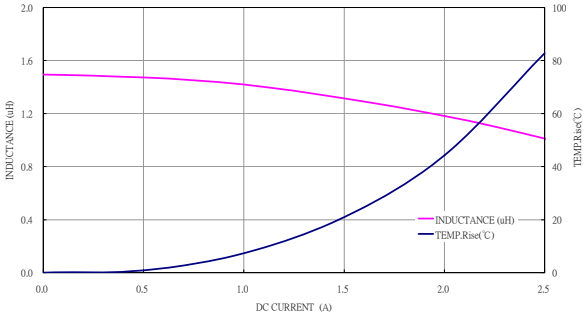
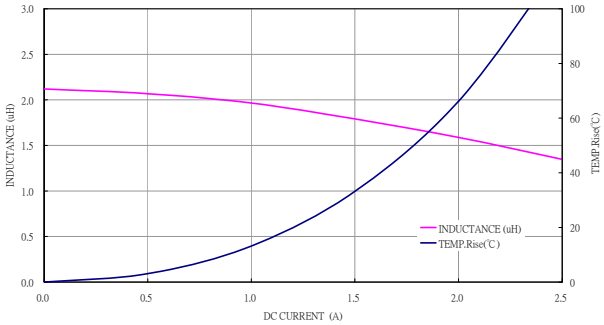


MP201610A-2R2NHF



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