



MP322510A Series



1. Features:

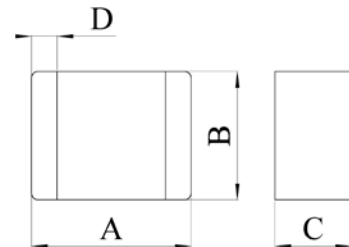
- 1210 Foot Print (3.2x2.5mm)
- 1.0mm Max. height SMD Power Inductor
- Inductance range from 0.47uH to 2.2uH.
- High saturation current characteristics in a compact size.
- Ideal for portable device, PAD, Notebook, smart phone & High Density DC to DC converter Board.
- Max. withstand voltage 25VDC.
- 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.	I _{rms} (AMP)	I _{sat1} (Amp)
MP322510A-R47NHF	0.47	28	36	2.75	4.50
MP322510A-1R0NHF	1.00	45	53	2.30	4.00
MP322510A-2R2NHF	2.20	96	110	1.50	2.90

3. Mechanical Dimensions (unit: mm):

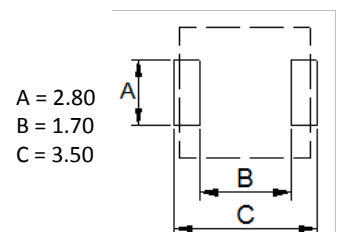


A ±	B ±	C	D ±
0.20	0.20	Max.	0.20
3.20	2.50	1.00	0.60

Notes:

1. Open Circuit Inductance (OCL), L @ I_{rms} and L @ I_{sat1} 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.

Recommended PCB Layout (Unit mm)



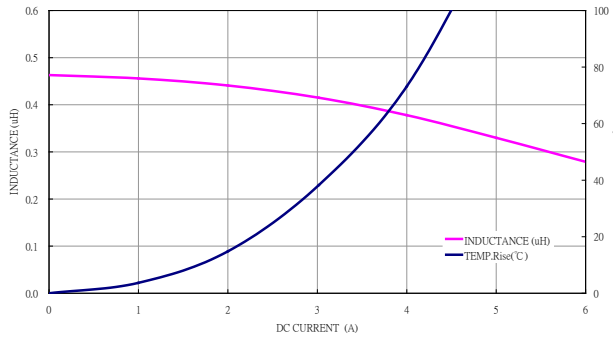


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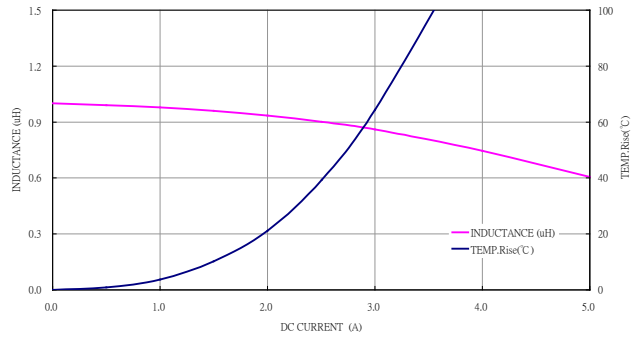


4. Inductance vs. Current vs. Temperature

MP322510A-R47NHF



MP322510A-1R0NHF



MP322510A-2R2NHF

