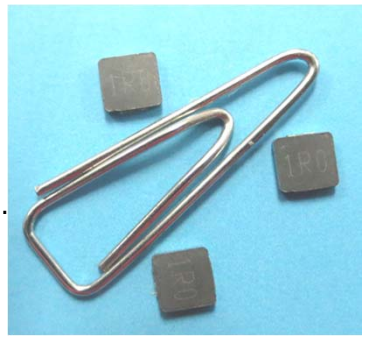
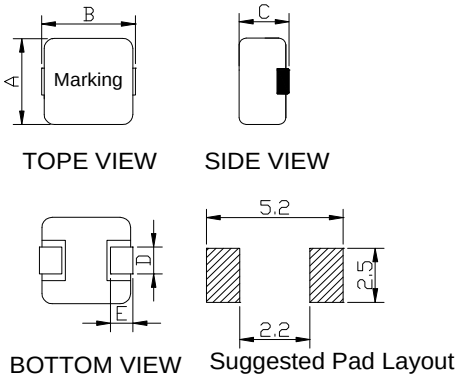
SM1605A Series

1. Features:



- 4.45x4.75mm foot Print, 1.2mm Max. height SMD Power Inductor for high frequency application. Operating frequency up to 5MHz.
- Inductance range from 1.0uH to 4.7uH. Custom values are welcomed.
- High saturation current characteristics by distributed gapped metal dust core.
- Ideal for portable device, Pad, E-reader and high density DC to DC Converter.
- Tape & Reel Quantity: 3,000 piece per 13 inches reel.
- Operating Temperature Range -55°C to + 125°C.

2. Mechanical Dimension (Unit in mm):



Type	SM1605A
A	4.20 ± 0.25
B	4.40 ± 0.35
C	1.2 (Max.)
D	2.0 ± 0.3
E	0.8 ± 0.3

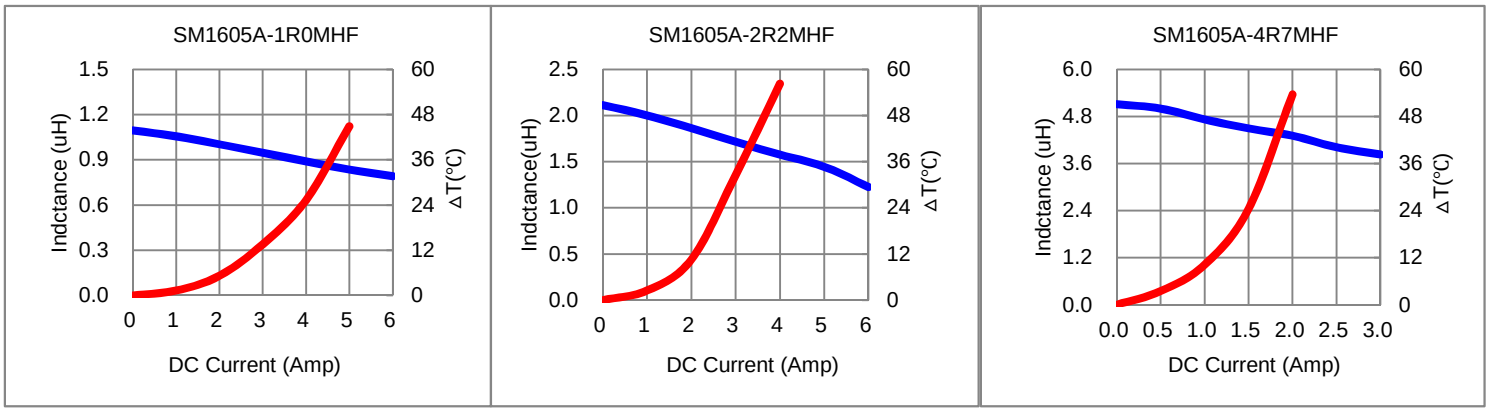
3. Electrical Characteristics:

ITG Part Number	OCL Inductance (uH) ±20%	DCR (mΩ) Typ.	DCR (mΩ) Max.	Irms 40℃Temp. Rise (Amp)	Isat[1] 20% roll off (Amp)	Isat[2] 30% Roll Off (Amp)
SM1605A-1R0MHF	1.0	36.0	40.0	4.20	3.50	5.20
SM1605A-2R2MHF	2.2	77.0	83.5	2.75	2.80	3.50
SM1605A-4R7MHF	4.7	193.0	212.0	1.80	2.00	2.80

Note:

1.Open Circuit Inductance(OCL) and L@Irms and L@Isat are measured at: 100KHz, 1.0V ;(Ta=25℃).
2.Isat[1]: DC current that causes inductance to drop 20%(Typ.) from OCL ;(Ta=25℃).
3.Isat[2]: DC current that causes inductance to drop 30%(Typ.) from OCL ;(Ta=25℃).
4.Irms: DC current for temperature rise of 40℃(Typ.) without core loss. Deratingis 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 125°C under worst case operating conditions verified in the end application.

4. Inductance vs. Current vs. Temperature Rise Curve:



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