

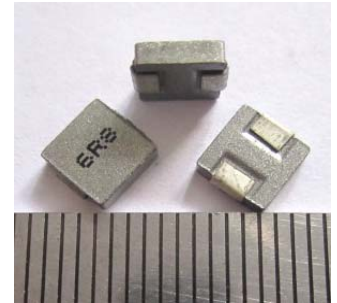


# SMHC2107 Series

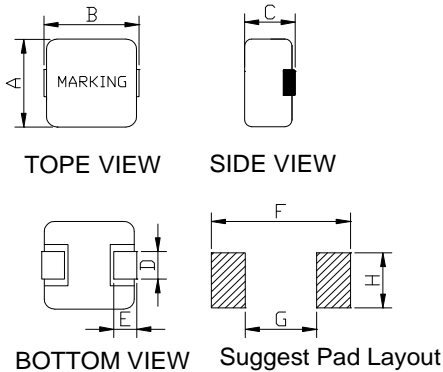


## 1. Features:

- 5.3x5.6mm foot Print, 1.8mm Max. height SMD Power Inductor for high frequency application. Operating frequency up to 5Mhz.
- Inductance range from 1.0uH to 6.8uH. 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: 2,000 piece per 13 inches reel.
- Operating Temperature Range -55°C to + 125°C.



## 2. Mechanical Dimension(Unit:mm):



Type	SMHC2107
A	5.3 ± 0.2
B	5.6 ± 0.3
C	1.8 (Max.)
D	2.4 ± 0.3
E	1.2 ± 0.3
F	6.2 (Ref.)
G	2.6 (Ref.)
H	3.0 (Ref.)

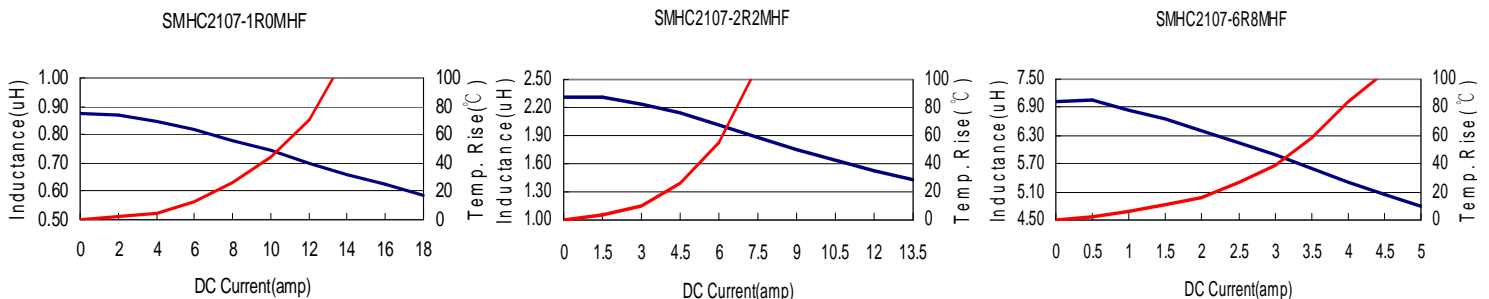
## 3. Electrical Characteristics:

EMC Part Number	OCL Inductance (uH) ±20%	DCR (mΩ) Typ.	DCR (mΩ) Max.	I <sub>rms</sub> (Amp)	I <sub>sat1</sub> 20% Roll Off (Amp)	I <sub>sat2</sub> 30% Roll Off (Amp)
SMHC2107-1R0MHF	1.0	15.0	17.0	8.0	9.0	14.0
SMHC2107-2R2MHF	2.2	30.0	35.0	5.0	6.5	9.5
SMHC2107-6R8MHF	6.8	107.0	120.0	2.8	3.4	3.7

### Note:

1. Open Circuit Inductance(OCL) and L@I<sub>rms</sub> and L@I<sub>sat</sub> are measured at: 100KHz, 1.0V ;(T<sub>a</sub>=25 °C).
2. I<sub>sat1</sub>: DC current that causes inductance to drop 20%(Typ.) from OCL ;(T<sub>a</sub>=25 °C).
3. I<sub>sat2</sub>: DC current that causes inductance to drop 30%(Typ.) from OCL ;(T<sub>a</sub>=25 °C).
4. I<sub>rms</sub>: DC current for temperature rise of 40 °C (Max.) 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 125°C under worst case operating conditions verified in the end application.

## 4. Inductance vs. Current Curve:



● Taiwan 886 2 2698 9699 ● Dongguan 86 769 8791 5567 ● Suzhou 86 512 6832 1472

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