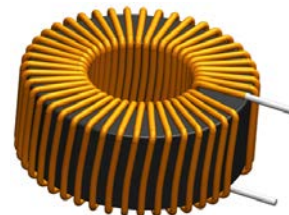
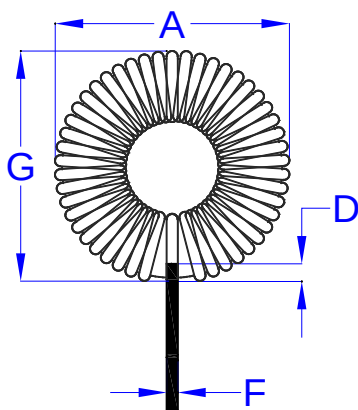


1. Features of AP1168xxx series:

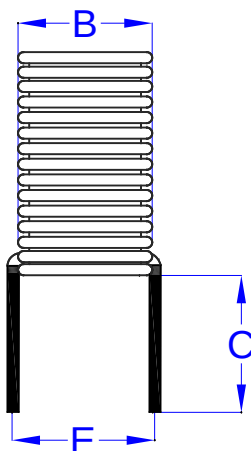
- Sendust core is used to realize lower core loss.
- No thermal aging concerns and low leakage magnetic flux.
- Elimination for impulse (EMI) noise.
- Inductance range from 200uH to 300uH. Custom values are welcomed.
- Ideally used as Power Factor Correction choke.
- Also can be used as boost inductor in power supplies.
- Ø50.0 x 50.0 x 23.5mm Max. , Custom values are welcomed.
- Operating Temperature Range: -55°C to 130°C (ambient + self-temperature rise).
- RoHs & HF compliant.



2. Mechanical Dimensions of AP1168xxx series (unit: mm):



Front View



Side View

Type	AP1168xxx
A	50.0 (Max.)
B	23.5 (Max.)
C	10.0 ± 1.0
D	0.0 (Min.)
E	See below table
F	See below table
G	50.0 (Max.)

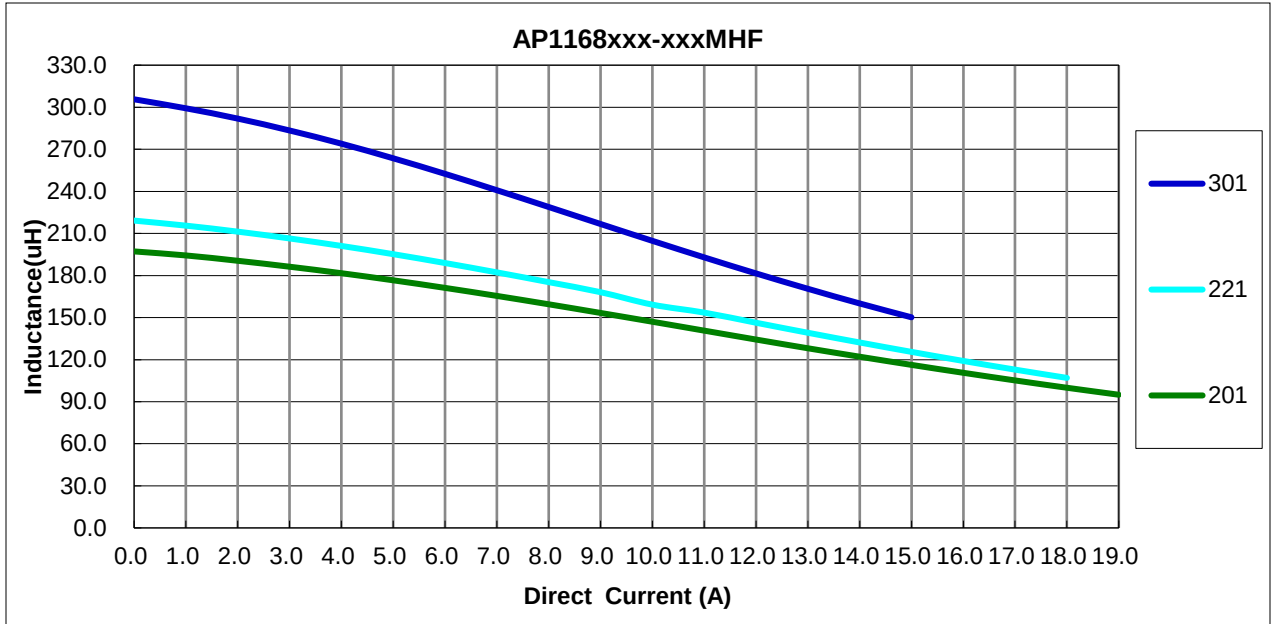
3. Electrical Characteristics of AP1168xxx series:

ITG Part Number	OCL ¹ (uH) ± 20%	DCR (mΩ) Typ. @25°C	DCR (mΩ) Max. @25°C	Irms ² (A) @25°C	L@Irms (uH) Typ.	Isat1 ³ (A) @25°C	L@Isat1 (uH) Typ.	Isat2 ⁴ (A) @25°C	L@Isat2 (uH) Typ.	Dim. E (mm) ± 1.0	Dim. F (mm) ± 0.1
AP116816043P-201MHF	200.00	31.23	37.50	13.50	125.09	3.80	183.03	10.50	143.87	20.00	1.30
AP116816045P-221MHF	220.00	33.39	41.00	13.00	139.18	3.50	203.81	10.00	159.23	20.00	1.30
AP116816053P-301MHF	300.00	38.68	46.50	11.00	192.93	3.00	283.42	8.50	222.80	20.00	1.30

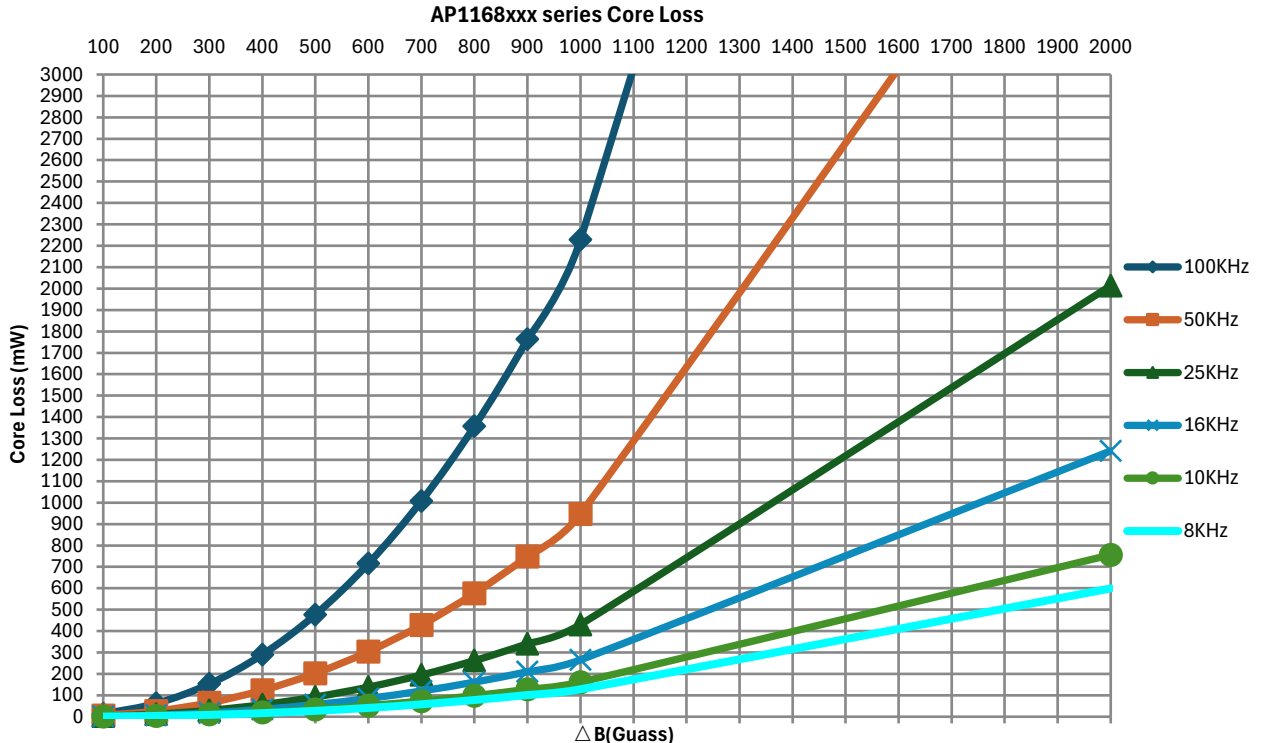
Notes:

1. OCL (Open Circuit Inductance) and L@ Irms and L @Isat are measured at 100KHz, 0.25V @ 25°C.
2. Irms: DC current that causes an approximate temperature rise (ΔT) of 40°C.
3. Isat1: DC current that causes inductance to drop by approximately 10% from OCL.
4. Isat2: DC current that causes inductance to drop by approximately 30% from OCL.

4. Inductance vs. Current Characteristics of AP1168xxx Series:



5. Core Loss Curves:



Where $\Delta B = k \cdot L(uH) \cdot \Delta I(Amp.)$

k: 201 is 1.58 , 221 is 1.51 , 301 is 1.28