



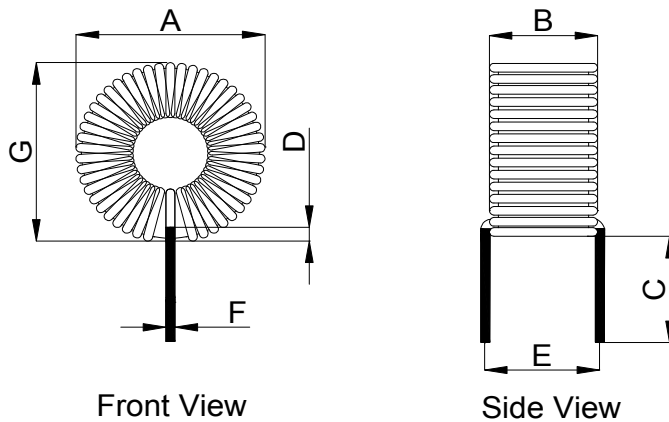
# AP1168xxx Series



## 1. Features:

- Sendust core is used to realize lower core loss.
- No thermal aging concerns.
- Low leakage magnetic flux.
- Elimination for impulse (EMI) noise.
- Ideally used as Power Factor Correction choke.
- Also can be used as boost inductor in power supplies.
- $\varnothing 50.0 \times 50.0 \times 23.5\text{mm}$  Max. Custom values are welcomed.
- Operating Temperature Range  $-55^{\circ}\text{C}$  to  $+130^{\circ}\text{C}$ ; RoHs & HF compliance.

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



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

## 3. Electrical Characteristics of AP1168xxx Series:

Part Number	OCL (uH) $\pm 20\%$	DCR (m $\Omega$ ) (Typ.)	DCR (m $\Omega$ ) (Max.)	Irms (A) @25 $^{\circ}\text{C}$	L@Irms (uH) Typ.	Isat <sup>1</sup> (A) @25 $^{\circ}\text{C}$	L @Isat <sup>1</sup> (uH) Typ.	Isat <sup>2</sup> (A) @25 $^{\circ}\text{C}$	L @Isat <sup>2</sup> (uH) Typ.	Dim. E (mm) $\pm 1.0$	Dim. F (mm) $\pm 0.1$
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

### Note:

- 1.OCL (Open Circuit Inductance) and L@ Irms and L @Isat are measured at: 100KHz, 0.25V @ 25 $^{\circ}\text{C}$ .
- 2.Isat<sup>1</sup>: DC current that causes inductance to drop by approximately 10% from OCL.
- 3.Isat<sup>2</sup>: DC current that causes inductance to drop by approximately 30% from OCL.
- 4.Irms: DC current that causes an approximate temperature rise ( $\Delta T$ ) of 40 $^{\circ}\text{C}$ .
- 5.Inductance vs. DC bias curve and Typical Core Loss curve, please refer to the next page for additional information.

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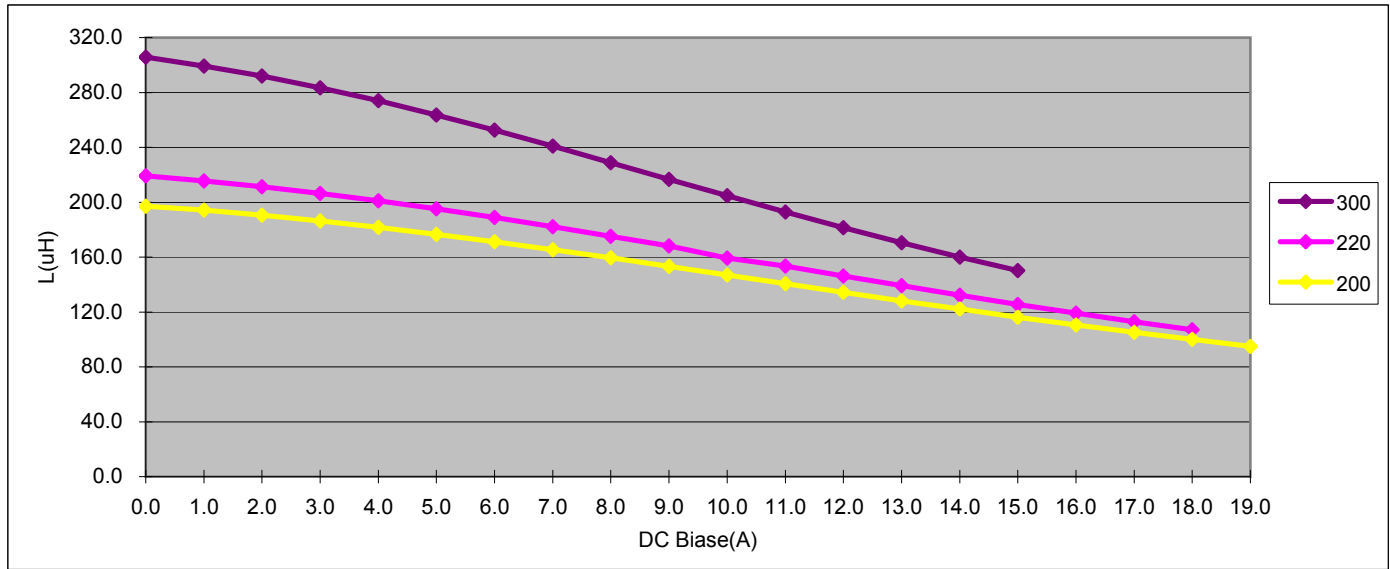
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## Inductance vs. Current



## Typical Core Loss Curves

