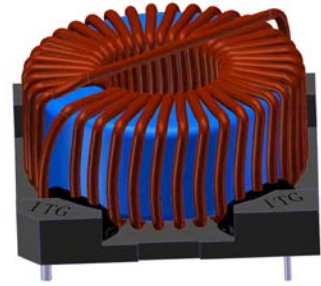




## 1. Features of PFC212138A Series :

- Alloy powder based DIP Inductor with lower core loss.
- No thermal aging concerns.
- Low leakage magnetic flux.
- Elimination for impulse (EMI) noise.
- Inductance Range: 105.0uH to 1000.0uH, custom values are welcomed.
- High current output chokes, up to 55.5 Amp with approx. 50% roll off.
- Designed and developed for Power Factor Correction applications.
- Foot Print: 53.9x53.9mm max., 35.0 max. Height.
- Surge Voltage: 400VDC.
- Operating Temperature Range: -55°C to + 130°C.
- RoHs & HF compliant.



## 2. Electrical Characteristics of PFC212138A Series:

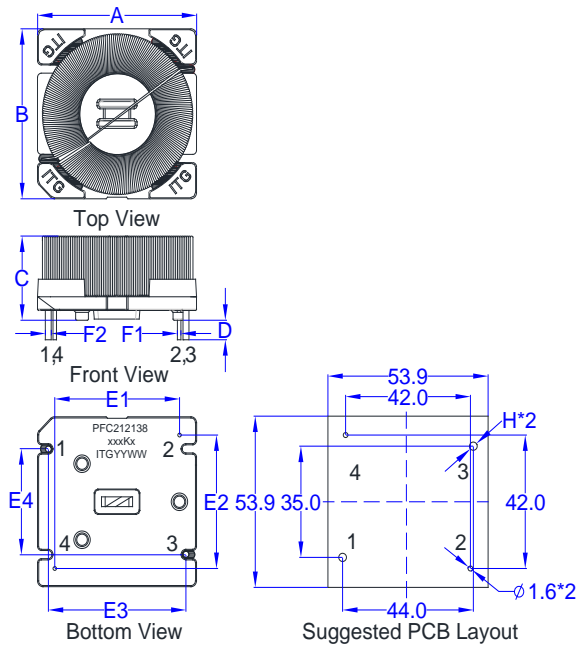
ITG Part Number	OCL <sup>1</sup> (uH) ± 10%	DCR (mΩ) Max.	Isat1 <sup>2</sup> (A) @25°C	L@Isat1 <sup>2</sup> (uH) Min.	Isat2 <sup>2</sup> (A) @25°C	L@Isat2 <sup>2</sup> (uH) Min.	Isat3 <sup>2</sup> (A) @25°C	L@Isat3 <sup>2</sup> (uH) Min.	Irms <sup>3</sup> (A) @25°C
PFC212138A-101K	105.0	14.5	28.3	77.8	37.2	66.7	55.5	46.2	24.3
PFC212138A-201K	205.0	20.5	20.3	151.1	26.7	129.5	39.9	89.7	21.0
PFC212138A-251K	250.0	26.5	18.4	183.7	24.2	157.5	36.1	109.0	17.6
PFC212138A-351K	350.0	40.0	15.5	258.4	20.4	221.6	30.5	153.4	13.7
PFC212138A-471K	470.0	54.5	13.4	345.8	17.6	296.5	26.3	205.3	11.7
PFC212138A-501K	500.0	57.0	13.0	369.7	17.1	317.0	25.5	219.5	11.5
PFC212138A-681K	680.0	74.0	11.2	500.8	14.6	429.4	21.9	297.3	10.0
PFC212138A-821K	820.0	81.0	10.1	604.5	13.3	518.3	19.9	358.9	9.5
PFC212138A-102K	1000.0	106.5	9.2	734.8	12.1	630.1	18.0	436.3	8.3

### Notes:

1. Open Circuit Inductance (OCL) and L@Isat are measured at 100KHz,0.25V@ 25°C.
2. Isat1: DC current that causes inductance to drop 20%(Typ.) from OCL (Ta=25°C).  
Isat2: DC current that causes inductance to drop 30%(Typ.) from OCL (Ta=25°C).  
Isat3: DC current that causes inductance to drop 50%(Typ.) from OCL (Ta=25°C).
3. Irms: DC current that causes an approximate temperature rise (ΔT) of 40°C (Ta=25°C).

### 3. Mechanical Dimension of PFC212138A Series (Unit:mm):

EMC Part Number	Dim. A (mm) ±0.4	Dim. B (mm) ±0.4	Dim. C (mm) Max.	Dim. D (mm) ±1.0	Dim. E1 (mm) ±0.4	Dim. E2 (mm) ±0.4	Dim. E3 (mm) ±0.6	Dim. E4 (mm) ±0.6	Dim. F1 (mm) ±0.1	Dim. F2 (mm) ±0.1	H (mm) Ref.
PFC212138A-101K	53.5	53.5	33.5	5.0	42.0	42.0	44.0	35.0	Φ1.2	Φ2.0	Φ2.6
PFC212138A-201K	53.5	53.5	35.0	5.0	42.0	42.0	44.0	35.0	Φ1.2	Φ2.0	Φ2.6
PFC212138A-251K	53.5	53.5	34.0	5.0	42.0	42.0	44.0	35.0	Φ1.2	Φ1.8	Φ2.4
PFC212138A-351K	53.5	53.5	32.0	5.0	42.0	42.0	44.0	35.0	Φ1.2	Φ1.5	Φ2.1
PFC212138A-471K	53.5	53.5	32.0	5.0	42.0	42.0	44.0	35.0	Φ1.2	Φ1.4	Φ2.0
PFC212138A-501K	53.5	53.5	32.0	5.0	42.0	42.0	44.0	35.0	Φ1.2	Φ1.4	Φ2.0
PFC212138A-681K	53.5	53.5	32.0	5.0	42.0	42.0	44.0	35.0	Φ1.2	Φ1.3	Φ1.9
PFC212138A-821K	53.5	53.5	32.0	5.0	42.0	42.0	44.0	35.0	Φ1.2	Φ1.3	Φ1.9
PFC212138A-102K	53.5	53.5	32.0	5.0	42.0	42.0	44.0	35.0	Φ1.2	Φ1.2	Φ1.8



Part Marking:

PFC212138: Series Name.

xxxKx: xxx is inductance value in uH (R: decimal point),

K is tolerance, x is special code.

YYWW: YYWW is Date Code.

Note: PIN 2 & 4 provided for mounting stability only.

● New York 1 914 347 2474 ● Taipei 886 2 2698 8669 ● Kaohsiung 886 7 350 2275

● Japan 81 568 85 2830 ● Shenzhen 86 755 8418 6263 ● Shanghai 86 21 5424 5141 ● Hong Kong 852 9688 9767

● [sales@ITG-Electronics.com](mailto:sales@ITG-Electronics.com) ● [www.ITG-Electronics.com](http://www.ITG-Electronics.com) Revision A.1: April 09, 2024

\*Due to continuous product improvement, all specifications are subject to change without prior notice. Kindly contact an ITG field application engineer or a sales representative prior to purchase.

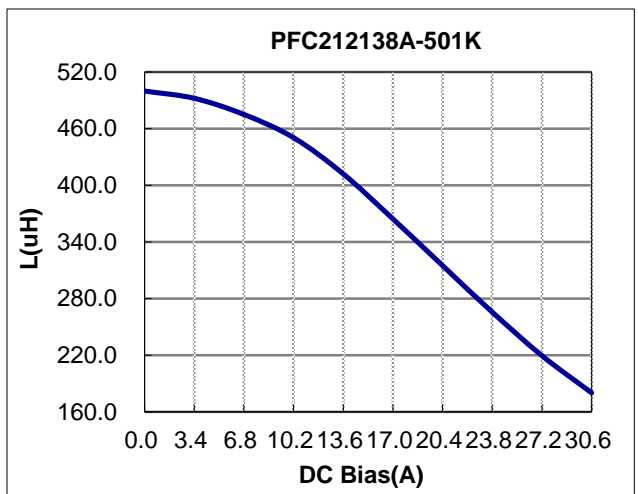
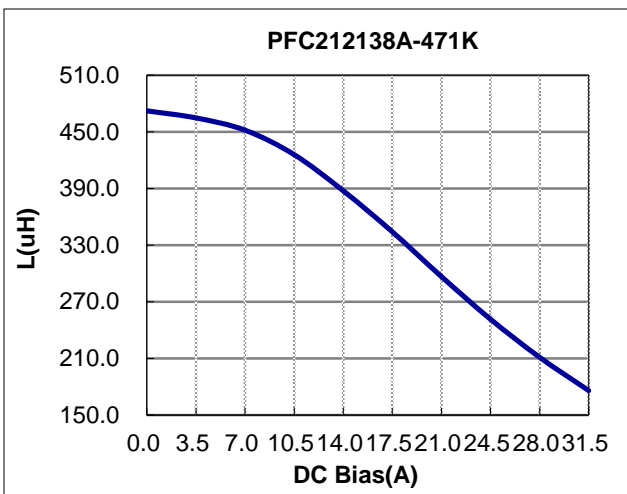
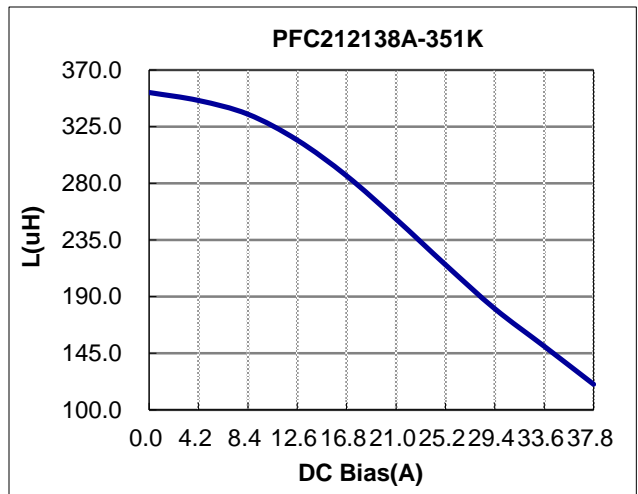
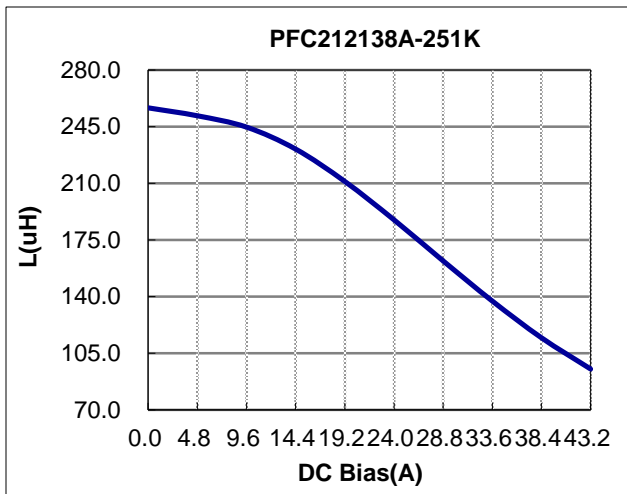
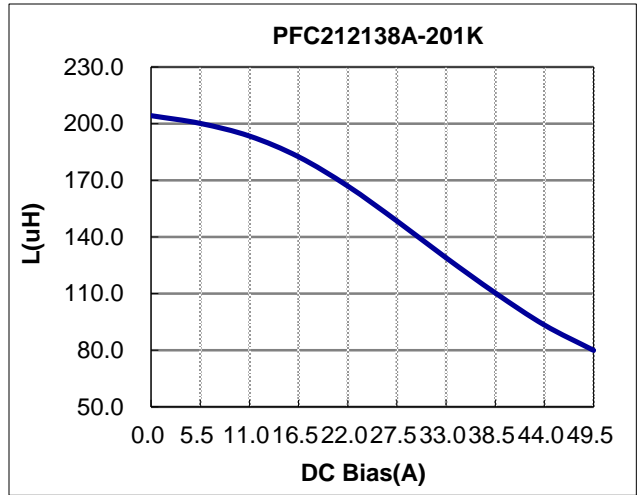
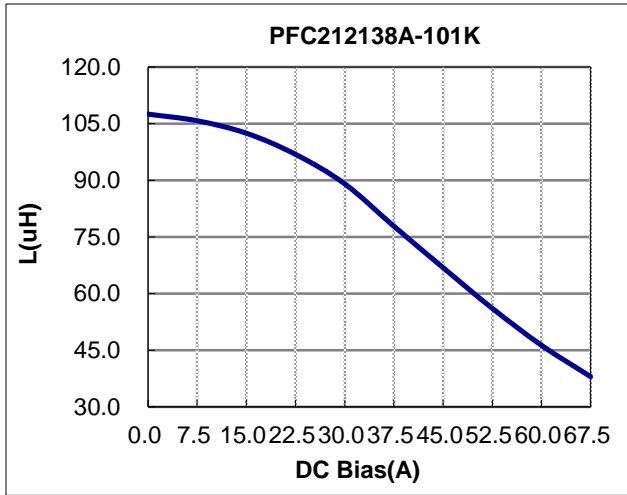


Halogen Free

# PFC212138A Series



## 4. Inductance vs. Current Characteristics of PFC212138A Series :



● New York 1 914 347 2474 ● Taipei 886 2 2698 8669 ● Kaohsiung 886 7 350 2275  
 ● Japan 81 568 85 2830 ● Shenzhen 86 755 8418 6263 ● Shanghai 86 21 5424 5141 ● Hong Kong 852 9688 9767  
 ● [sales@ITG-Electronics.com](mailto:sales@ITG-Electronics.com) ● [www.ITG-Electronics.com](http://www.ITG-Electronics.com) Revision A.1: April 09, 2024

\*Due to continuous product improvement, all specifications are subject to change without prior notice. Kindly contact an ITG field application engineer or a sales representative prior to purchase.



#### 4. Inductance vs. Current Characteristics of PFC212138A Series :

