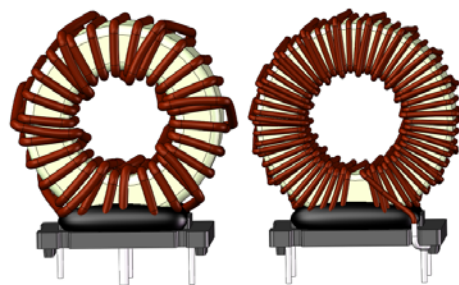


## 1. Features of PFC199224B Series :

- Alloy powder based DIP Inductor with lower core loss.
- No thermal aging concerns.
- Low leakage magnetic flux.
- Elimination for impulse (EMI) noise.
- Inductance Range: 100.0uH to 1000.0uH, custom values are welcomed.
- High current output chokes, up to 46.6 Amp with approx. 50% roll off.
- Designed and developed for Power Factor Correction applications.
- Foot Print: 50.5×27.0mm max., 57.0 max. Height.
- Surge Voltage: 400VDC.
- Operating Temperature Range: -55°C to + 130°C.
- RoHs & HF compliant.



## 2. Electrical Characteristics of PFC199224B Series:.

| ITG Part Number | OCL <sup>1</sup><br>(uH)<br>±10% | DCR<br>(mΩ)<br>Max. | Isat1 <sup>2</sup><br>(A)<br>@25°C | L@Isat1 <sup>2</sup><br>(uH)<br>Min. | Isat2 <sup>2</sup><br>(A)<br>@25°C | L@Isat2 <sup>2</sup><br>(uH)<br>Min. | Isat3 <sup>2</sup><br>(A)<br>@25°C | L@Isat3 <sup>2</sup><br>(uH)<br>Min. | Irms <sup>3</sup><br>(A)<br>@25°C |
|-----------------|----------------------------------|---------------------|------------------------------------|--------------------------------------|------------------------------------|--------------------------------------|------------------------------------|--------------------------------------|-----------------------------------|
| PFC199224B-101K | 100.0                            | 13.8                | 24.3                               | 76.3                                 | 31.9                               | 65.5                                 | 46.6                               | 45.3                                 | 21.2                              |
| PFC199224B-201K | 200.0                            | 23.0                | 17.5                               | 146.9                                | 23.0                               | 126.0                                | 33.6                               | 87.2                                 | 16.4                              |
| PFC199224B-251K | 250.0                            | 32.0                | 15.7                               | 183.1                                | 20.6                               | 157.0                                | 30.1                               | 108.7                                | 13.9                              |
| PFC199224B-351K | 350.0                            | 38.0                | 13.2                               | 258.2                                | 17.4                               | 221.4                                | 25.3                               | 153.3                                | 12.5                              |
| PFC199224B-471K | 470.0                            | 48.0                | 11.4                               | 346.2                                | 15.0                               | 296.9                                | 21.9                               | 205.5                                | 11.1                              |
| PFC199224B-561K | 560.0                            | 61.0                | 10.5                               | 412.0                                | 13.7                               | 353.3                                | 20.1                               | 244.6                                | 9.9                               |
| PFC199224B-691K | 690.0                            | 76.5                | 9.4                                | 508.7                                | 12.4                               | 436.2                                | 18.0                               | 302.0                                | 8.5                               |
| PFC199224B-821K | 820.0                            | 95.0                | 8.6                                | 601.6                                | 11.4                               | 515.9                                | 16.6                               | 357.2                                | 7.6                               |
| PFC199224B-102K | 1000.0                           | 121.5               | 7.7                                | 747.9                                | 10.2                               | 641.3                                | 14.9                               | 444.0                                | 6.7                               |

### 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 PFC199224B Series (Unit:mm):

| ITG Part Number | Dim. A<br>(mm)<br>Max. | Dim. B<br>(mm)<br>Max. | Dim. C<br>(mm)<br>Max. | Dim. D<br>(mm)<br>±0.5 | Dim. E1<br>(mm)<br>±0.5 | Dim. E2<br>(mm)<br>±0.5 | Dim. E3<br>(mm)<br>±0.5 | Dim. E4<br>(mm)<br>±0.5 | Dim. F1<br>(mm)<br>±0.1 | Dim. F2<br>(mm)<br>±0.1 | Dim. H<br>(mm)<br>Ref. | Fig. |
|-----------------|------------------------|------------------------|------------------------|------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|------------------------|------|
| PFC199224B-101K | 50.5                   | 27.0                   | 57.0                   | 5.0                    | 15.0                    | 15.0                    | 18.0                    |                         | Φ1.2                    | Φ2.0                    | Φ2.5                   | 1    |
| PFC199224B-201K | 50.5                   | 27.0                   | 57.0                   | 5.0                    | 15.0                    | 15.0                    | 18.0                    |                         | Φ1.2                    | Φ1.8                    | Φ2.3                   | 1    |
| PFC199224B-251K | 50.5                   | 27.0                   | 57.0                   | 5.0                    | 15.0                    | 15.0                    | 18.0                    |                         | Φ1.2                    | Φ1.6                    | Φ2.1                   | 1    |
| PFC199224B-351K | 50.0                   | 27.0                   | 56.5                   | 5.0                    | 15.0                    | 15.0                    | 18.0                    |                         | Φ1.2                    | Φ1.6                    | Φ2.1                   | 1    |
| PFC199224B-471K | 50.0                   | 27.0                   | 56.5                   | 5.0                    | 15.0                    | 15.0                    | 18.0                    |                         | Φ1.2                    | Φ1.5                    | Φ2.0                   | 1    |
| PFC199224B-561K | 50.0                   | 27.0                   | 56.5                   | 5.0                    | 15.0                    | 15.0                    | 18.0                    |                         | Φ1.2                    | Φ1.4                    | Φ1.9                   | 1    |
| PFC199224B-691K | 49.5                   | 27.0                   | 56.0                   | 5.0                    | 15.0                    | 15.0                    | 18.0                    |                         | Φ1.2                    | Φ1.3                    | Φ1.8                   | 1    |
| PFC199224B-821K | 49.5                   | 27.0                   | 56.0                   | 5.0                    |                         |                         | 18.0                    | 30.0                    | Φ1.2                    |                         | Φ1.7                   | 2    |
| PFC199224B-102K | 49.5                   | 27.0                   | 56.0                   | 5.0                    |                         |                         | 18.0                    | 30.0                    | Φ1.2                    |                         | Φ1.7                   | 2    |

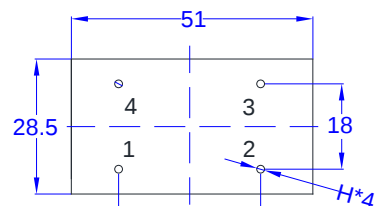
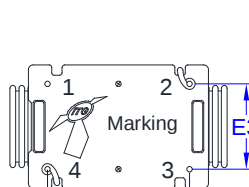
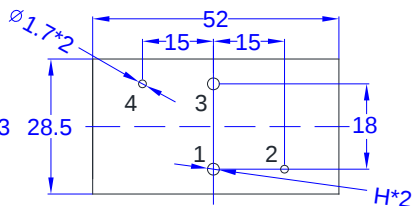
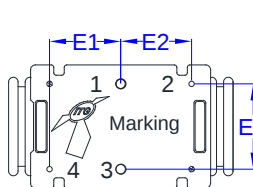
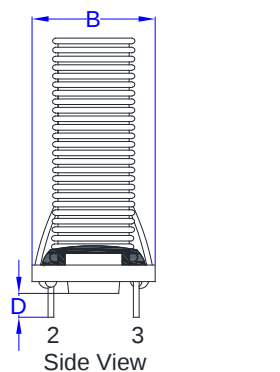
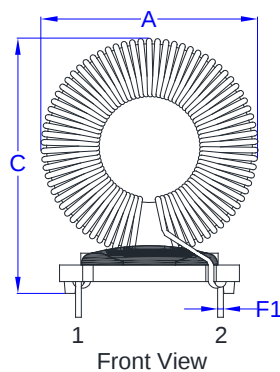
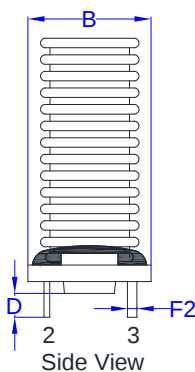
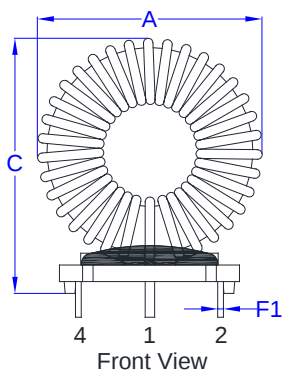


Fig. 1

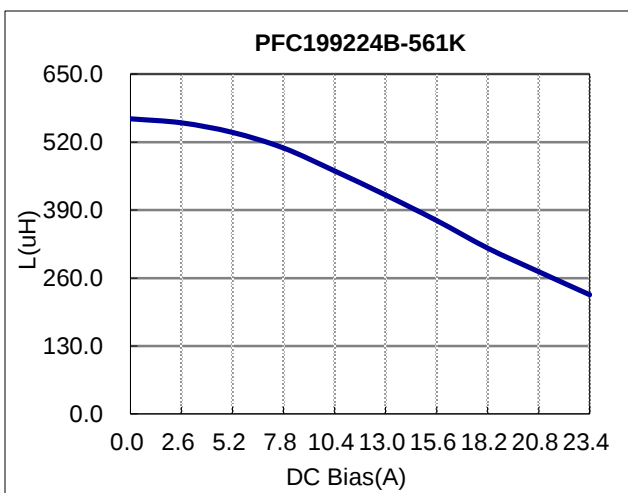
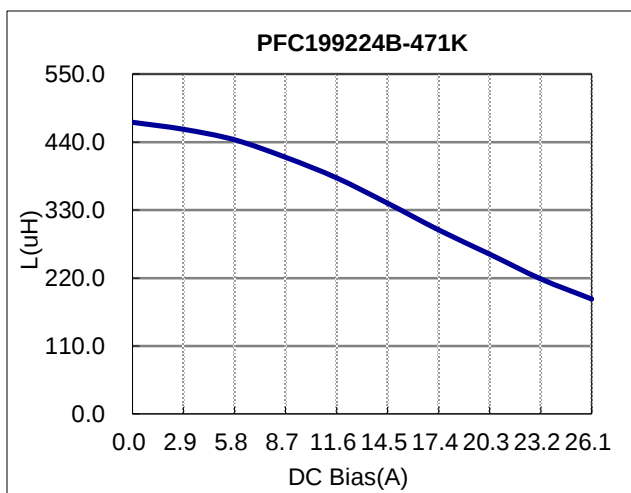
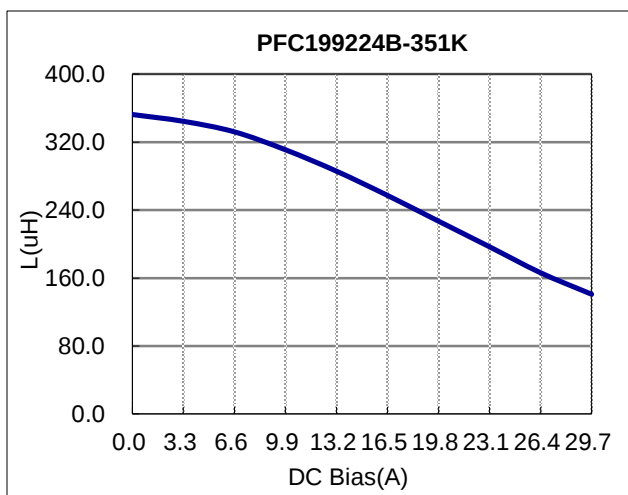
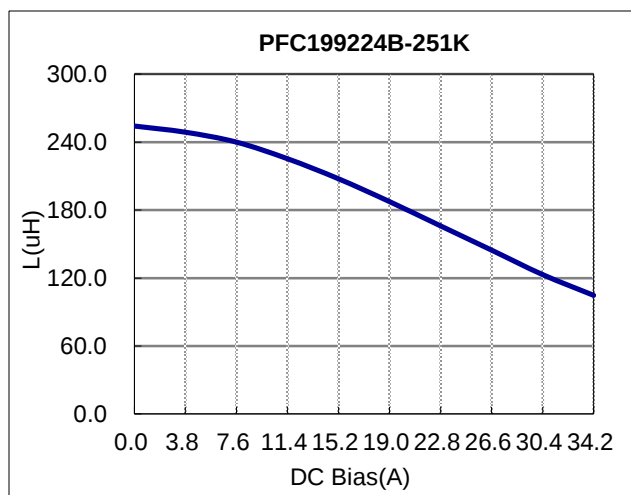
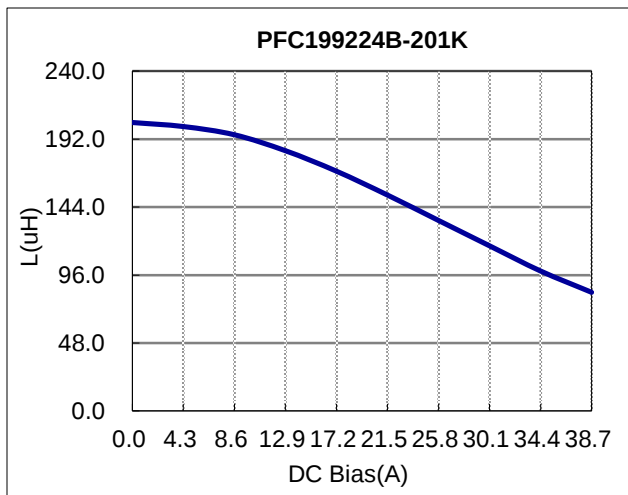
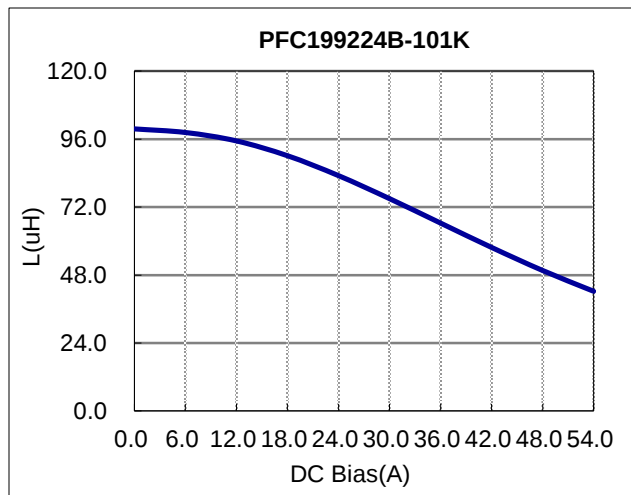
Fig. 2

Note:

Fig.1 : PIN2 & PIN4 provided for mounting stability only.

Fig.2 : PIN1 & PIN3 provided for mounting stability only.

## 4. Inductance vs. Current Characteristics of PFC199224B Series :



## 4. Inductance vs. Current Characteristics of PFC199224B Series :

