

# Leadless Power Inductors PLC-1235 Series

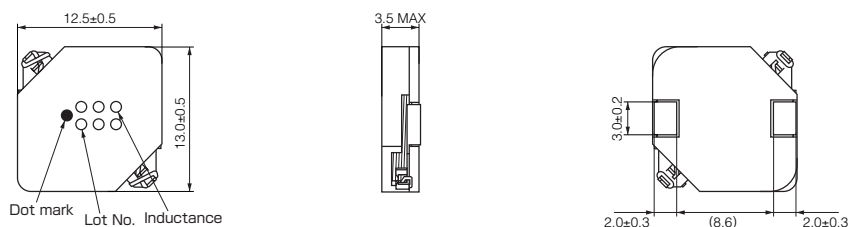
[RoHS Compliant]



| Model        | Inductance<br>at 100kHz, 1mA<br>( $\mu$ H) | DC resistance<br>RDC (m $\Omega$ ) max. | Rated current (A) |                                           |                                            |
|--------------|--------------------------------------------|-----------------------------------------|-------------------|-------------------------------------------|--------------------------------------------|
|              |                                            |                                         | $I_{rms}^{*1}$    | $I_{sat}$ (Ref.) <sup>*2</sup><br>at 20°C | $I_{sat}$ (Ref.) <sup>*2</sup><br>at 100°C |
| PLC-1235-2R0 | 2.0 $\pm$ 30%                              | 15                                      | 6.7               | 12.3                                      | 9.1                                        |
| PLC-1235-3R3 | 3.3 $\pm$ 30%                              | 19                                      | 6.0               | 9.6                                       | 7.1                                        |
| PLC-1235-4R7 | 4.7 $\pm$ 30%                              | 27                                      | 5.4               | 8.5                                       | 6.5                                        |
| PLC-1235-5R6 | 5.6 $\pm$ 30%                              | 35                                      | 4.5               | 7.7                                       | 6.0                                        |
| PLC-1235-6R8 | 6.8 $\pm$ 30%                              | 39                                      | 4.3               | 6.7                                       | 5.1                                        |
| PLC-1235-8R2 | 8.2 $\pm$ 30%                              | 53                                      | 3.6               | 6.2                                       | 4.6                                        |
| PLC-1235-100 | 10.0 $\pm$ 20%                             | 58                                      | 3.5               | 6.0                                       | 4.5                                        |
| PLC-1235-120 | 12.0 $\pm$ 20%                             | 65                                      | 3.2               | 5.9                                       | 4.4                                        |
| PLC-1235-150 | 15.0 $\pm$ 20%                             | 77                                      | 3.1               | 5.4                                       | 4.0                                        |
| PLC-1235-180 | 18.0 $\pm$ 20%                             | 120                                     | 2.2               | 4.8                                       | 3.3                                        |
| PLC-1235-220 | 22.0 $\pm$ 20%                             | 140                                     | 2.1               | 4.3                                       | 3.0                                        |
| PLC-1235-330 | 33.0 $\pm$ 20%                             | 170                                     | 1.8               | 3.3                                       | 2.5                                        |

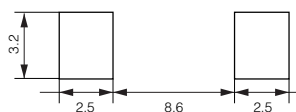
\*1 T=40K rise at rated current. \*2 Inductance drop 30% at rated current.  
 ●Operating temperature range : -25to+120°C (without self-temperature rise)

## Shape and Dimensions



[mm]

## Recommended Land Pattern

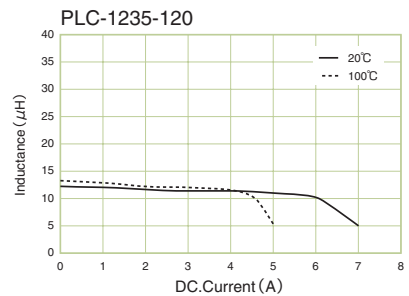
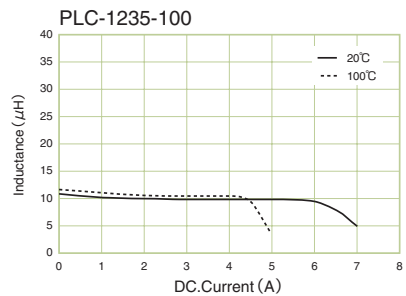
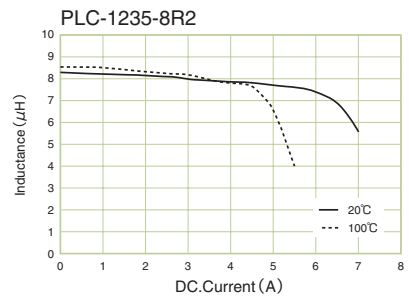
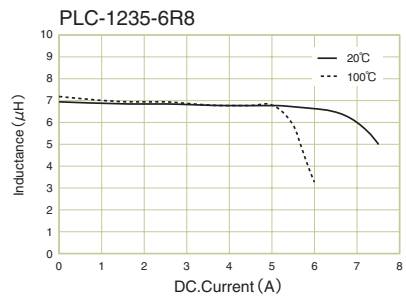
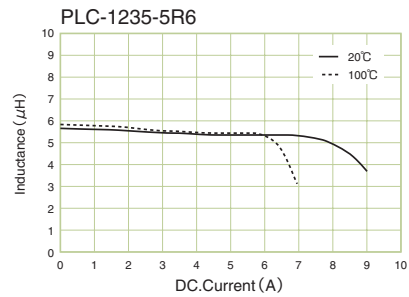
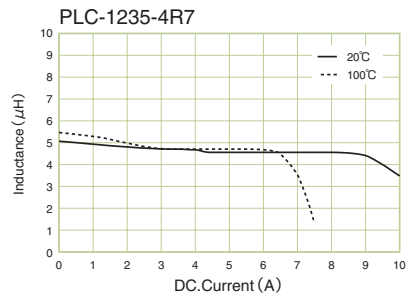
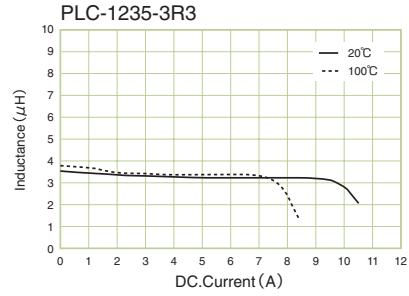
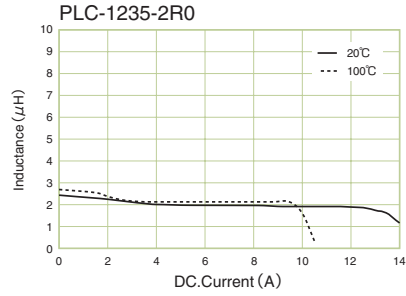


[mm]



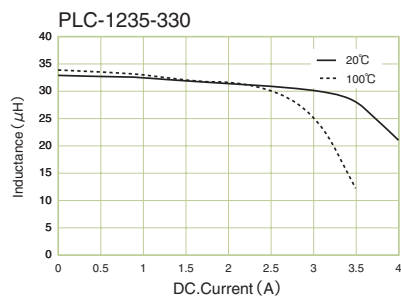
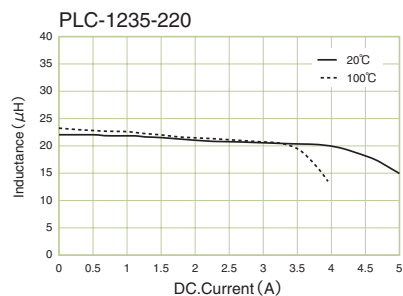
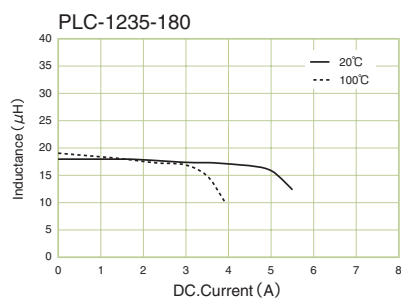
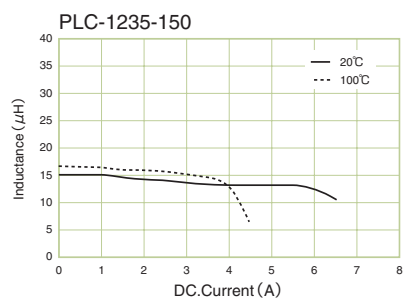
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- Before using the product in this catalog, please read "Precautions" and other safety precautions listed in the printed version catalog.

DC-Superposed Characteristics



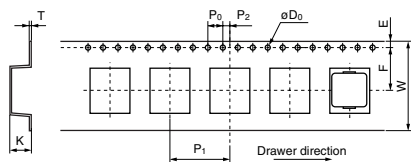
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## DC-Superposed Characteristics



## PLC-1235 Series

## Dimensions of indented square hole plastic tape

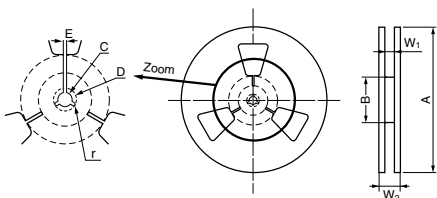


|             | W     | F     | E     | P1    | P2    | P0    | øD0    | T      | K     |
|-------------|-------|-------|-------|-------|-------|-------|--------|--------|-------|
|             | ± 0.3 | ± 0.1 | ± 0.1 | ± 0.1 | ± 0.1 | ± 0.1 | ± 0.05 | ± 0.05 | ± 0.1 |
| 1235 Series | 24.0  | 11.5  | 1.75  | 16.0  | 2.0   | 4.0   | 1.55   | 0.4    | 3.8   |

[mm]

|             | pcs./reel |
|-------------|-----------|
| 1235 Series | 700       |

## Reel dimensions



|  | A   | B   | C     | D     | E     | r    | W1    | W2    |
|--|-----|-----|-------|-------|-------|------|-------|-------|
|  | ± 5 | ± 5 | ± 0.5 | ± 0.8 | ± 0.5 |      | ± 0.5 | ± 0.5 |
|  | 380 | 80  | 13.5  | 21.0  | 2.0   | R1.0 | 25.5  | 29.5  |

[mm]



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