

# Leadless Power Inductors PLFC 1045R-D Series



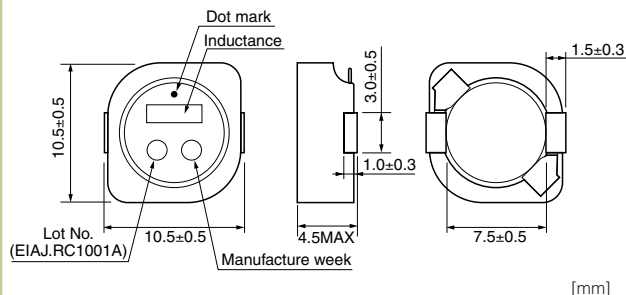
• Tape and Reel Dimensions (see page 119) • Precautions (see page 124)

| Model          | Inductance<br>( $\mu$ H) at 100kHz | DC resistance<br>(m $\Omega$ ) max. | Rated current (A)   |                                   |                                    |
|----------------|------------------------------------|-------------------------------------|---------------------|-----------------------------------|------------------------------------|
|                |                                    |                                     | I <sub>rms</sub> *1 | I <sub>sat</sub> (Ref.)*2 at 20°C | I <sub>sat</sub> (Ref.)*2 at 100°C |
| PLFC1045R-3R3D | 3.3 $\pm$ 30%                      | 17                                  | 6.6                 | 7.9                               | 5.7                                |
| PLFC1045R-4R7D | 4.7 $\pm$ 30%                      | 22                                  | 5.5                 | 7.5                               | 5.4                                |
| PLFC1045R-6R8D | 6.8 $\pm$ 30%                      | 29                                  | 5.0                 | 5.9                               | 4.3                                |
| PLFC1045R-8R2D | 8.2 $\pm$ 30%                      | 33                                  | 4.4                 | 5.4                               | 4.1                                |
| PLFC1045R-100D | 10 $\pm$ 20%                       | 42                                  | 3.8                 | 5.2                               | 3.6                                |
| PLFC1045R-120D | 12 $\pm$ 20%                       | 46                                  | 3.6                 | 4.3                               | 3.2                                |
| PLFC1045R-150D | 15 $\pm$ 20%                       | 61                                  | 3.0                 | 4.1                               | 2.9                                |
| PLFC1045R-180D | 18 $\pm$ 20%                       | 69                                  | 2.8                 | 3.8                               | 2.4                                |
| PLFC1045R-220D | 22 $\pm$ 20%                       | 87                                  | 2.5                 | 3.5                               | 2.4                                |
| PLFC1045R-330D | 33 $\pm$ 20%                       | 128                                 | 1.9                 | 2.7                               | 1.5                                |
| PLFC1045R-470D | 47 $\pm$ 20%                       | 176                                 | 1.7                 | 2.2                               | 1.4                                |
| PLFC1045R-560D | 56 $\pm$ 20%                       | 228                                 | 1.5                 | 2.1                               | 1.4                                |
| PLFC1045R-680D | 68 $\pm$ 20%                       | 253                                 | 1.4                 | 1.7                               | 1.4                                |
| PLFC1045R-820D | 82 $\pm$ 20%                       | 310                                 | 1.3                 | 1.7                               | 1.2                                |
| PLFC1045R-101D | 100 $\pm$ 20%                      | 381                                 | 1.2                 | 1.5                               | 1.1                                |
| PLFC1045R-121D | 120 $\pm$ 20%                      | 432                                 | 1.1                 | 1.4                               | 1.1                                |
| PLFC1045R-151D | 150 $\pm$ 20%                      | 593                                 | 1.0                 | 1.3                               | 0.8                                |

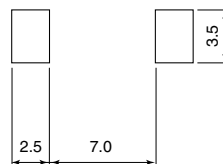
\*1. 40°C rise typ. at I<sub>rms</sub> \*2. Inductance drop 20% typ. at I<sub>sat</sub>

• Operating temperature range: -25 to +80°C (Without self-temperature rise) • Storage temperature range: -25 to +85°C

## Shape and Dimensions



## Recommended Land Pattern



## Numbering System

PLFC ○○○○ ○ - ○○○ ○

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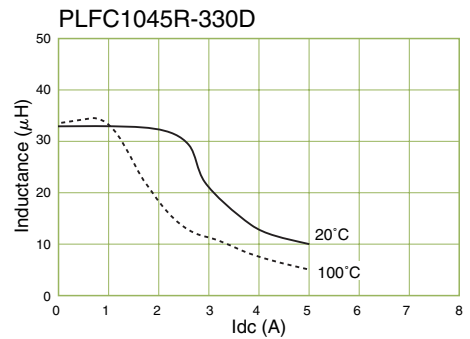
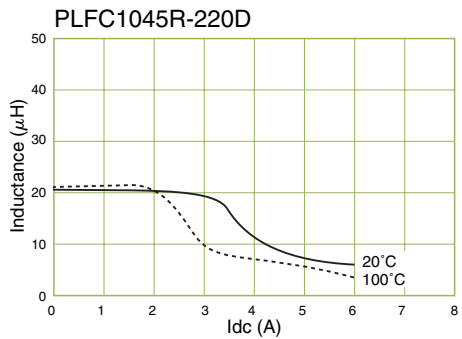
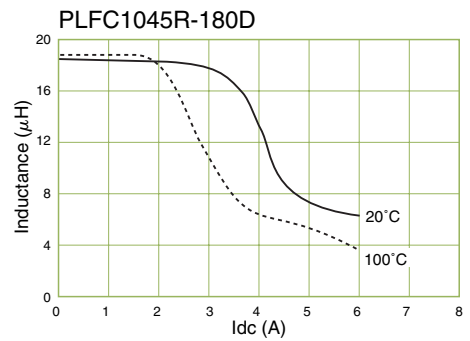
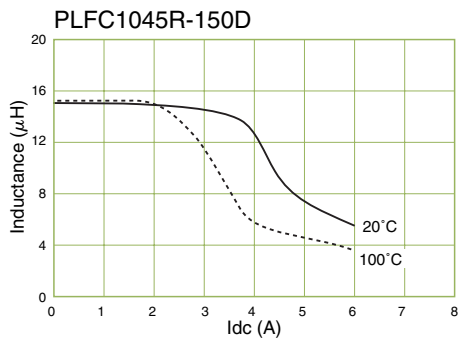
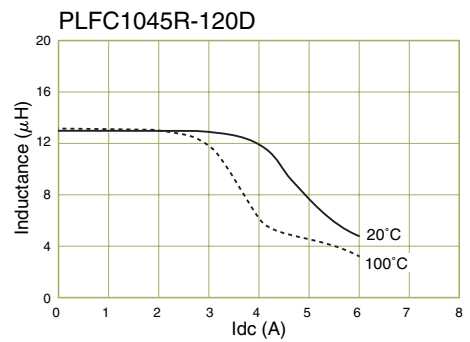
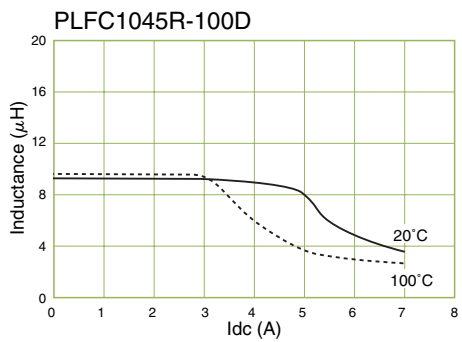
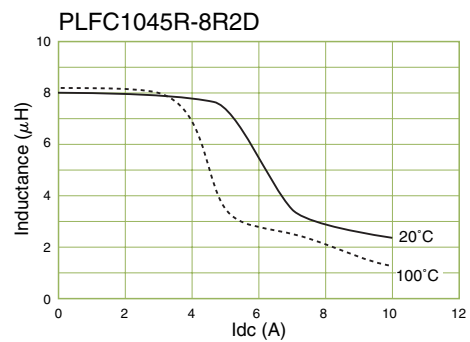
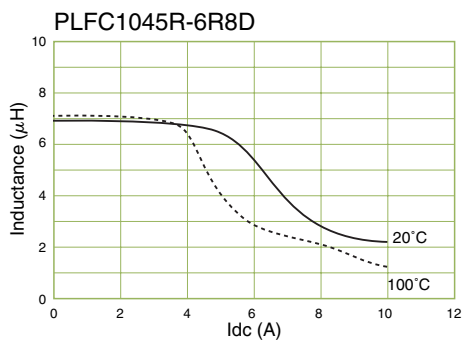
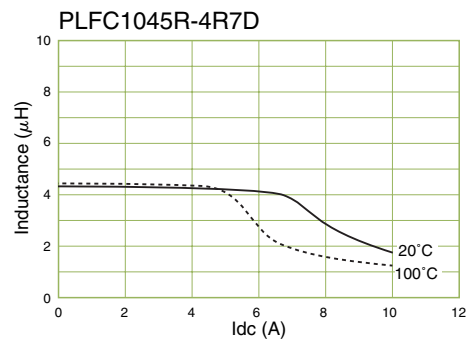
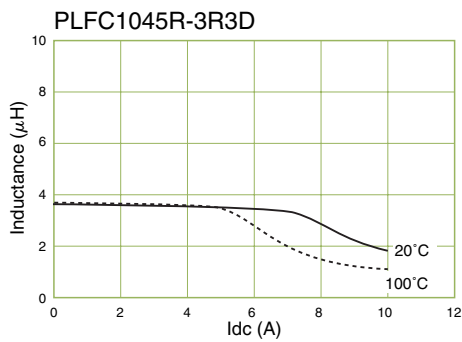
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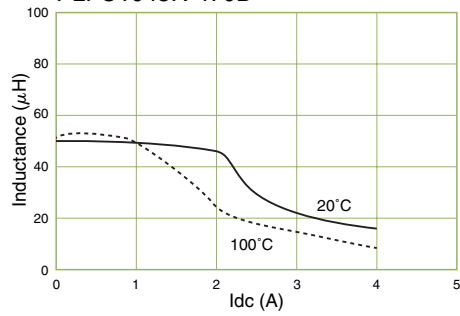
- ① Series
- ② Dimensions
- ③ Structure : R = Ring+Drum
- ④ Inductance
- ⑤ Core material

DC-Superposed Characteristics

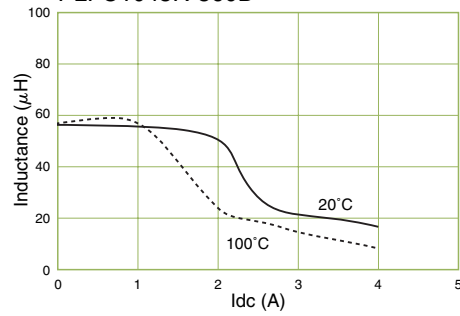


## DC-Superposed Characteristics

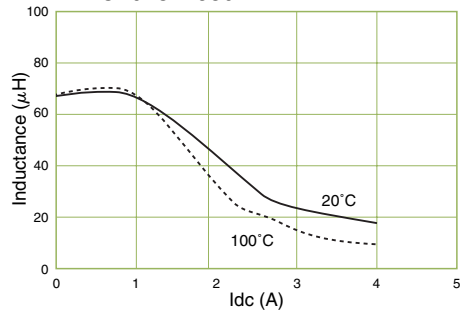
PLFC1045R-470D



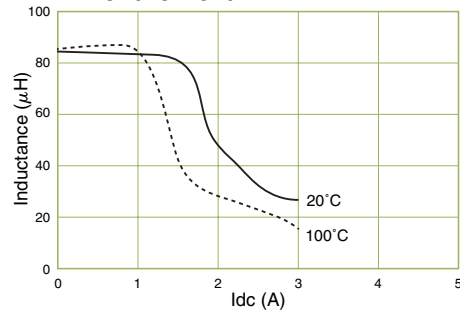
PLFC1045R-560D



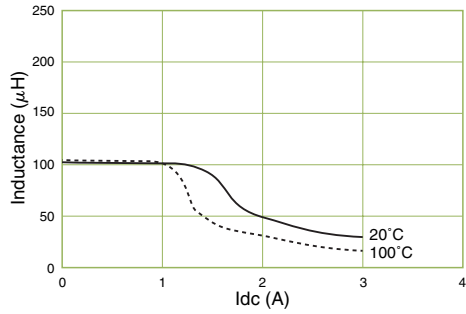
PLFC1045R-680D



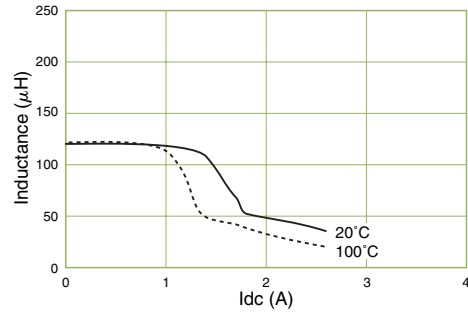
PLFC1045R-820D



PLFC1045R-101D



PLFC1045R-121D



PLFC1045R-151D

