

# PIN Power Inductor RCR-110D



## Description

- Ferrite drum core construction.
- Magnetically shielded.
- L × W × H: 10.5 × 10.5 × 10.5mm Max.
- Product weight: 2.7 g(Ref.)
- Moisture Sensitivity Level: 1
- RoHS compliance.

## Environmental Data

- Operating temperature range: -40°C~+85°C  
(including coil's self temperature rise)
- Storage temperature range: -40°C~+85°C

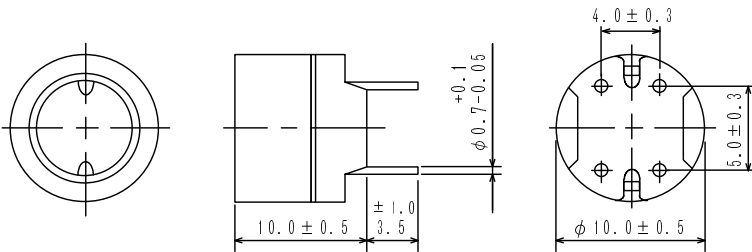
## Packaging

- Box packaging.

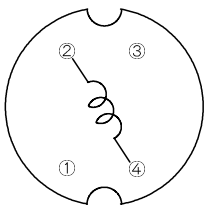
## Applications

- Ideally used in Printers, LCD TV, DVD, Copy Machine, Mainboard of the compounding machines etc. as DC-DC Converter inductors.

## Dimension - [mm]



## Schematics - [mm]



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## Electrical Characteristics

| Part Name      | Stamp | Inductance<br>( $\mu$ H)<br>[ within ] ※1 | D.C.R. ( $\Omega$ )<br>[Max.]<br>(at 20°C) | Rated<br>Current<br>( A )※2 |
|----------------|-------|---|--|-----------------------------|
| RCR110DNP-100M | 100M  | 10 $\mu$ H $\pm$ 20%                      | 0.023                                      | 3.51                        |
| RCR110DNP-120M | 120M  | 12 $\mu$ H $\pm$ 20%                      | 0.024                                      | 3.24                        |
| RCR110DNP-150M | 150M  | 15 $\mu$ H $\pm$ 20%                      | 0.036                                      | 2.88                        |
| RCR110DNP-180M | 180M  | 18 $\mu$ H $\pm$ 20%                      | 0.039                                      | 2.61                        |
| RCR110DNP-220M | 220M  | 22 $\mu$ H $\pm$ 20%                      | 0.042                                      | 2.34                        |
| RCR110DNP-270M | 270M  | 27 $\mu$ H $\pm$ 20%                      | 0.045                                      | 2.16                        |
| RCR110DNP-330L | 330L  | 33 $\mu$ H $\pm$ 15%                      | 0.057                                      | 1.89                        |
| RCR110DNP-390L | 390L  | 39 $\mu$ H $\pm$ 15%                      | 0.076                                      | 1.80                        |
| RCR110DNP-470L | 470L  | 47 $\mu$ H $\pm$ 15%                      | 0.10                                       | 1.62                        |
| RCR110DNP-560L | 560L  | 56 $\mu$ H $\pm$ 15%                      | 0.11                                       | 1.44                        |
| RCR110DNP-680L | 680L  | 68 $\mu$ H $\pm$ 15%                      | 0.15                                       | 1.35                        |
| RCR110DNP-820L | 820L  | 82 $\mu$ H $\pm$ 15%                      | 0.16                                       | 1.26                        |
| RCR110DNP-101L | 101L  | 100 $\mu$ H $\pm$ 15%                     | 0.19                                       | 1.08                        |
| RCR110DNP-121L | 121L  | 120 $\mu$ H $\pm$ 15%                     | 0.21                                       | 0.99                        |
| RCR110DNP-151L | 151L  | 150 $\mu$ H $\pm$ 15%                     | 0.23                                       | 0.90                        |
| RCR110DNP-181L | 181L  | 180 $\mu$ H $\pm$ 15%                     | 0.26                                       | 0.82                        |
| RCR110DNP-221L | 221L  | 220 $\mu$ H $\pm$ 15%                     | 0.29                                       | 0.74                        |
| RCR110DNP-271L | 271L  | 270 $\mu$ H $\pm$ 15%                     | 0.36                                       | 0.67                        |
| RCR110DNP-331L | 331L  | 330 $\mu$ H $\pm$ 15%                     | 0.51                                       | 0.61                        |
| RCR110DNP-391L | 391L  | 390 $\mu$ H $\pm$ 15%                     | 0.69                                       | 0.55                        |
| RCR110DNP-471L | 471L  | 470 $\mu$ H $\pm$ 15%                     | 0.98                                       | 0.51                        |
| RCR110DNP-561L | 561L  | 560 $\mu$ H $\pm$ 15%                     | 1.1  | 0.46                        |
| RCR110DNP-681L | 681L  | 680 $\mu$ H $\pm$ 15%                     | 1.2  | 0.42                        |
| RCR110DNP-821L | 821L  | 820 $\mu$ H $\pm$ 15%                     | 1.3  | 0.38                        |
| RCR110DNP-102L | 102L  | 1.0mH $\pm$ 15%                           | 1.5  | 0.35                        |

※1 Inductance Measuring condition at 1kHz .

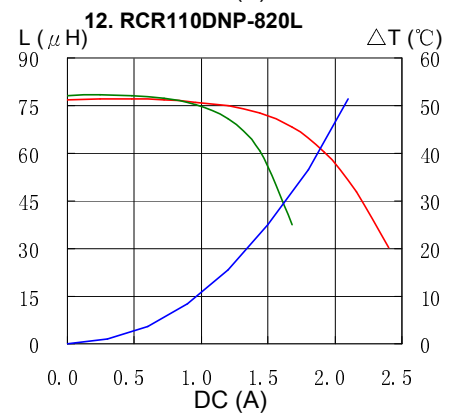
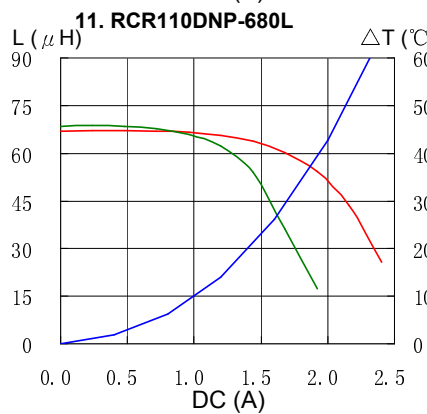
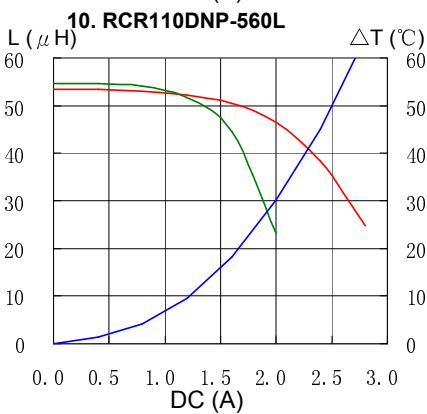
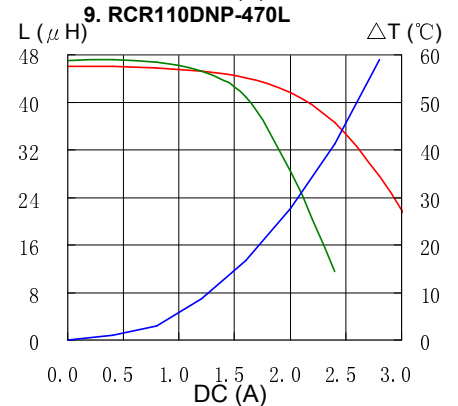
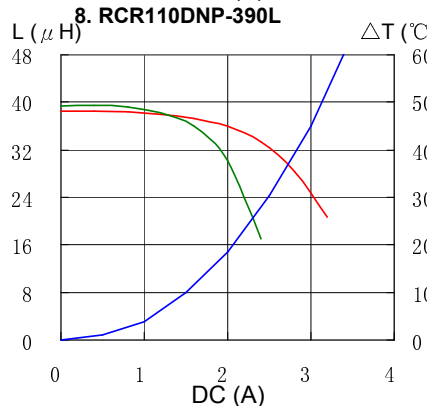
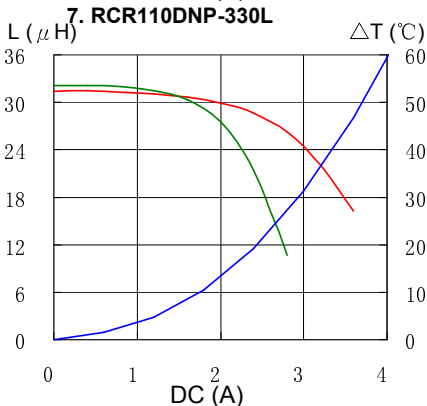
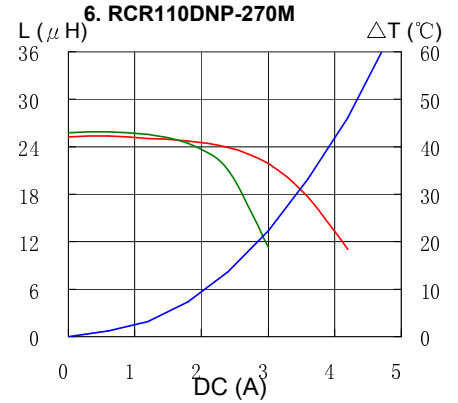
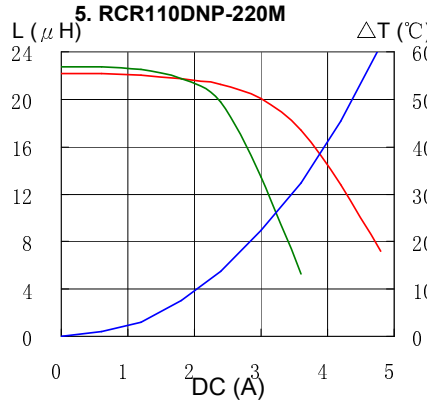
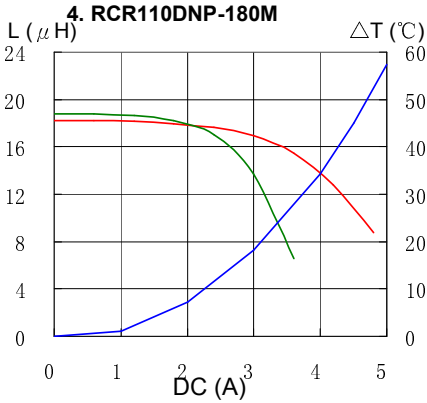
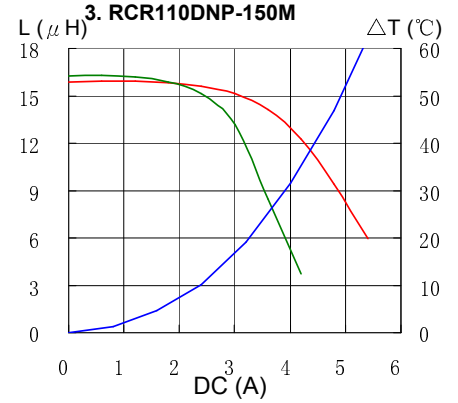
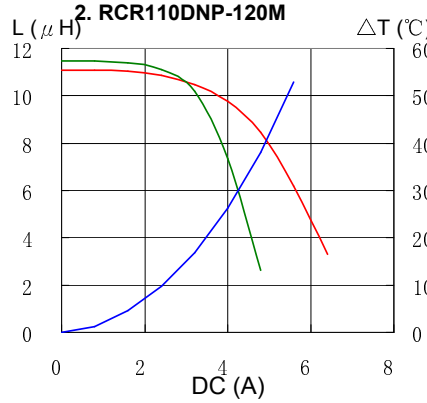
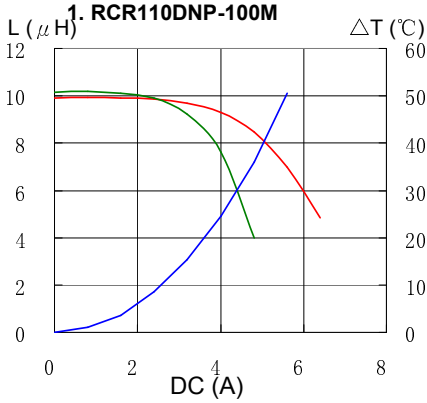
※2 Rated current: The DC current at which the inductance decreases 90% of it's initial value or when  $\Delta t=40^{\circ}\text{C}$  whichever is lower ( $T_a=20^{\circ}\text{C}$ ).

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## Saturation Current & Temperature Rise Graph

— L (20°C) — L (100°C) —  $\Delta T$

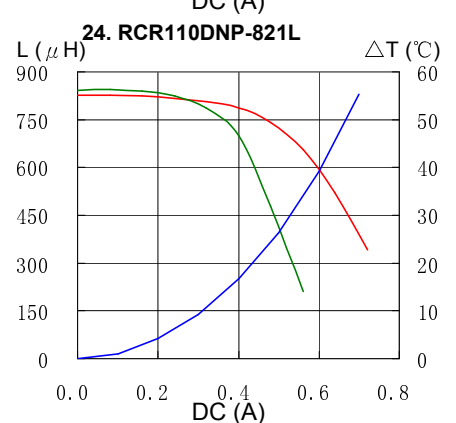
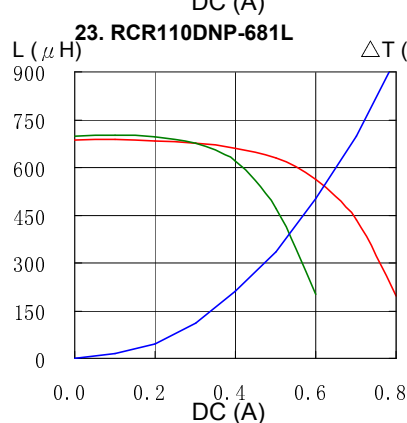
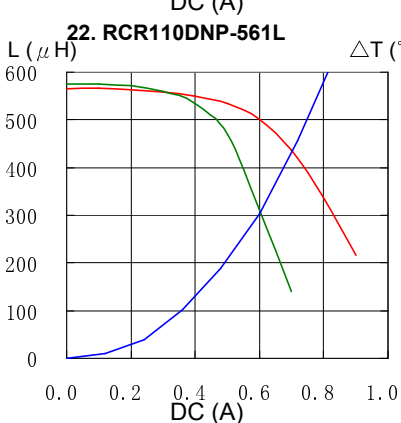
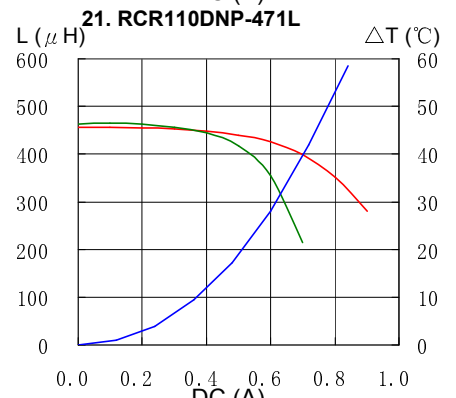
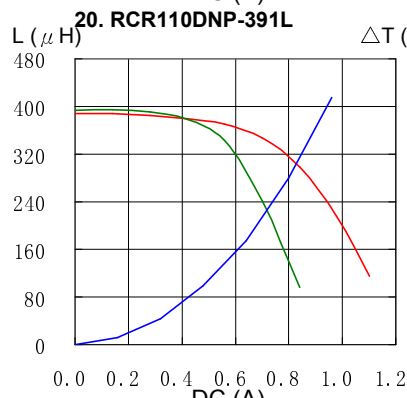
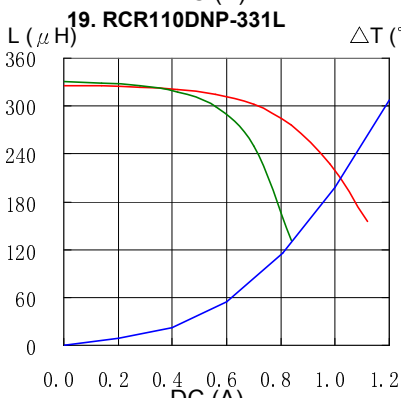
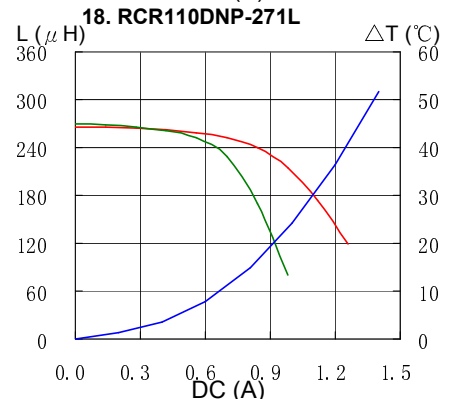
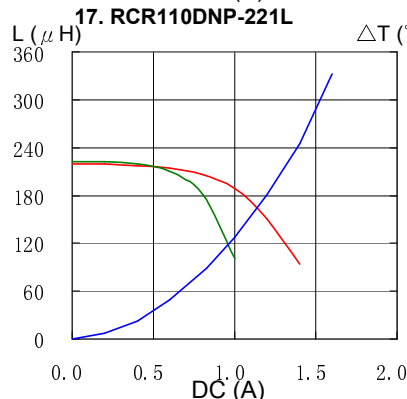
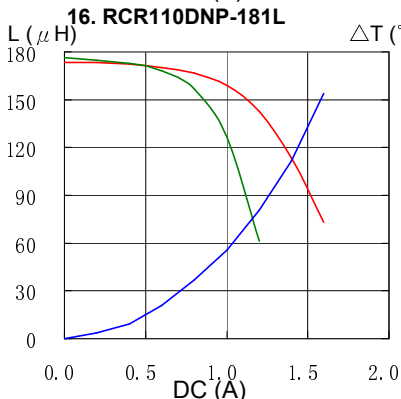
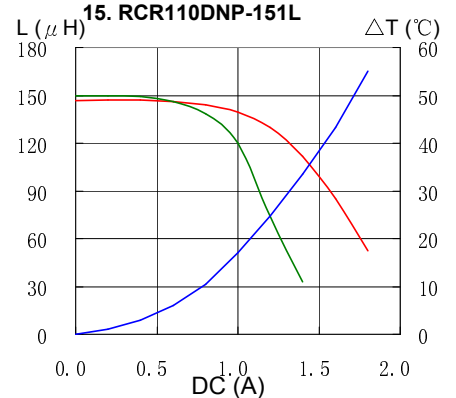
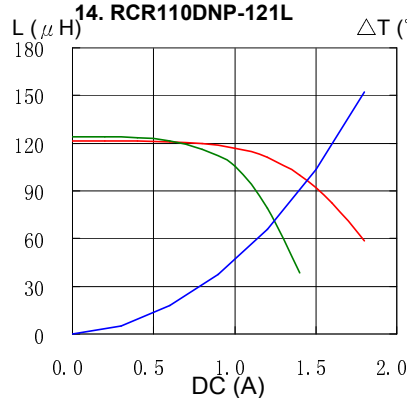
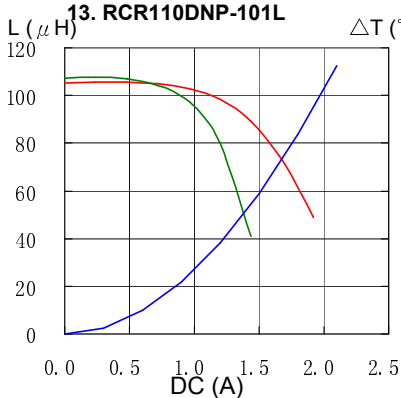


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## Saturation Current & Temperature Rise Graph

— L (20°C) — L (100°C) —  $\Delta T$

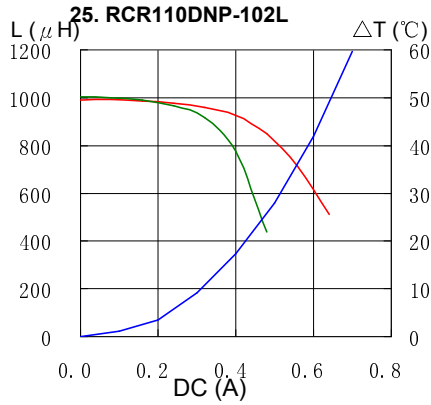


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## Saturation Current & Temperature Rise Graph

— L (20°C) — L (100°C) —  $\Delta T$



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