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Stocking Distributor

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[RCH110BNP-100M](#)

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# PIN Power Inductor RCH110B



### Description

- Ferrite drum core construction.
- Magnetically unshielded.
- L × W × H: 10.5 × 10.5 × 10.5mm Max.
- Product weight: 2.2 g(Ref.)
- Moisture Sensitivity Level: 1
- RoHS compliance.

### Environmental Data

- Operating temperature range: -30°C~+85°C (including coil's self temperature rise)
- Storage temperature range: -30°C~+85°C

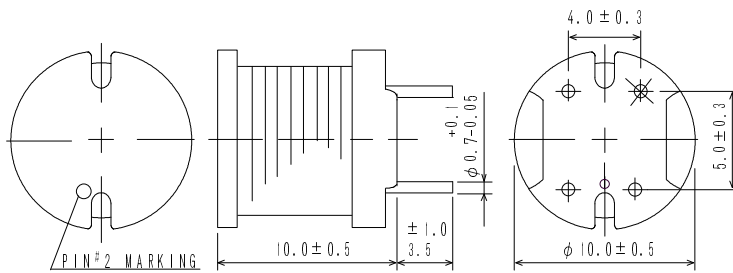
### Packaging

- Box packaging.

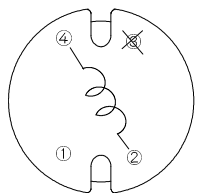
### Applications

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

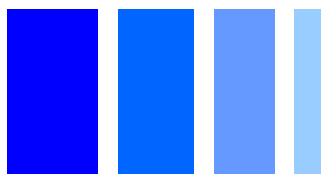
### Dimension - [mm]



### Schematics - [mm]



# PIN Power Inductor RCH110B



## Electrical Characteristics

| PART NO.       | STAMP | INDUCTANCE<br>[WITHIN]<br>※1 | D.C.R.<br>(Ω)<br>[MAX.]<br>(at 20°C) | DC SUPERPOSITION<br>CURRENT(A)※2 |            | TEMPERATURE<br>RISE CURRENT<br>(A)<br>※3<br>ΔT=40°C |
|----------------|-------|------------------------------|--------------------------------------|----------------------------------|------------|---|
|                |       |                              |                                      | (at 20°C)                        | (at 105°C) |   |
| RCH110BNP-100M | 100M  | 10 μH ± 20%                  | 30m(24m)                             | 4.3                              | 3.6        | 4.3   |
| RCH110BNP-120M | 120M  | 12 μH ± 20%                  | 33m(26m)                             | 4.1                              | 3.2        | 4.2   |
| RCH110BNP-150M | 150M  | 15 μH ± 20%                  | 36m(29m)                             | 3.7                              | 3.0        | 3.7   |
| RCH110BNP-180M | 180M  | 18 μH ± 20%                  | 38m(31m)                             | 3.4                              | 2.8        | 3.6   |
| RCH110BNP-220M | 220M  | 22 μH ± 20%                  | 47m(37m)                             | 3.0                              | 2.5        | 3.5   |
| RCH110BNP-270M | 270M  | 27 μH ± 20%                  | 51m(41m)                             | 2.9                              | 2.3        | 3.4   |
| RCH110BNP-330K | 330K  | 33 μH ± 10%                  | 58m(46m)                             | 2.6                              | 2.1        | 3.2   |
| RCH110BNP-390K | 390K  | 39 μH ± 10%                  | 63m(50m)                             | 2.4                              | 1.9        | 3.1   |
| RCH110BNP-470K | 470K  | 47 μH ± 10%                  | 71m(57m)                             | 2.2                              | 1.8        | 2.8   |
| RCH110BNP-560K | 560K  | 56 μH ± 10%                  | 78m(63m)                             | 2.0                              | 1.6        | 2.7   |
| RCH110BNP-680K | 680K  | 68 μH ± 10%                  | 105m(84m)                            | 1.8                              | 1.4        | 2.2   |
| RCH110BNP-820K | 820K  | 82 μH ± 10%                  | 120m(95m)                            | 1.6                              | 1.3        | 2.1   |
| RCH110BNP-101K | 101K  | 100 μH ± 10%                 | 150m(107m)                           | 1.5                              | 1.2        | 2.0   |
| RCH110BNP-121K | 121K  | 120 μH ± 10%                 | 180m(140m)                           | 1.3                              | 1.0        | 1.7   |
| RCH110BNP-151K | 151K  | 150 μH ± 10%                 | 200m(160m)                           | 1.2                              | 0.99       | 1.6   |
| RCH110BNP-181K | 181K  | 180 μH ± 10%                 | 280m(220m)                           | 1.1                              | 0.87       | 1.4   |
| RCH110BNP-221K | 221K  | 220 μH ± 10%                 | 0.31(242m)                           | 0.99                             | 0.79       | 1.3   |
| RCH110BNP-271K | 271K  | 270 μH ± 10%                 | 0.36(286m)                           | 0.87                             | 0.70       | 1.2   |
| RCH110BNP-331K | 331K  | 330 μH ± 10%                 | 0.46(0.37)                           | 0.78                             | 0.61       | 1.0   |
| RCH110BNP-391K | 391K  | 390 μH ± 10%                 | 0.58(0.46)                           | 0.72                             | 0.59       | 0.92  |
| RCH110BNP-471K | 471K  | 470 μH ± 10%                 | 0.65(0.52)                           | 0.67                             | 0.50       | 0.89  |
| RCH110BNP-561K | 561K  | 560 μH ± 10%                 | 0.89(0.71)                           | 0.59                             | 0.48       | 0.75  |
| RCH110BNP-681K | 681K  | 680 μH ± 10%                 | 1.10(0.81)                           | 0.54                             | 0.45       | 0.69  |
| RCH110BNP-821K | 821K  | 820 μH ± 10%                 | 1.31(0.92)                           | 0.52                             | 0.41       | 0.66  |
| RCH110BNP-102K | 102K  | 1.0mH ± 10%                  | 1.71(1.2)                            | 0.45                             | 0.37       | 0.55  |

※1. Inductance measuring frequency at 1kHz.

※2. DC superposition current: The value of D.C. current when the inductance decreases to 90% of its nominal value.

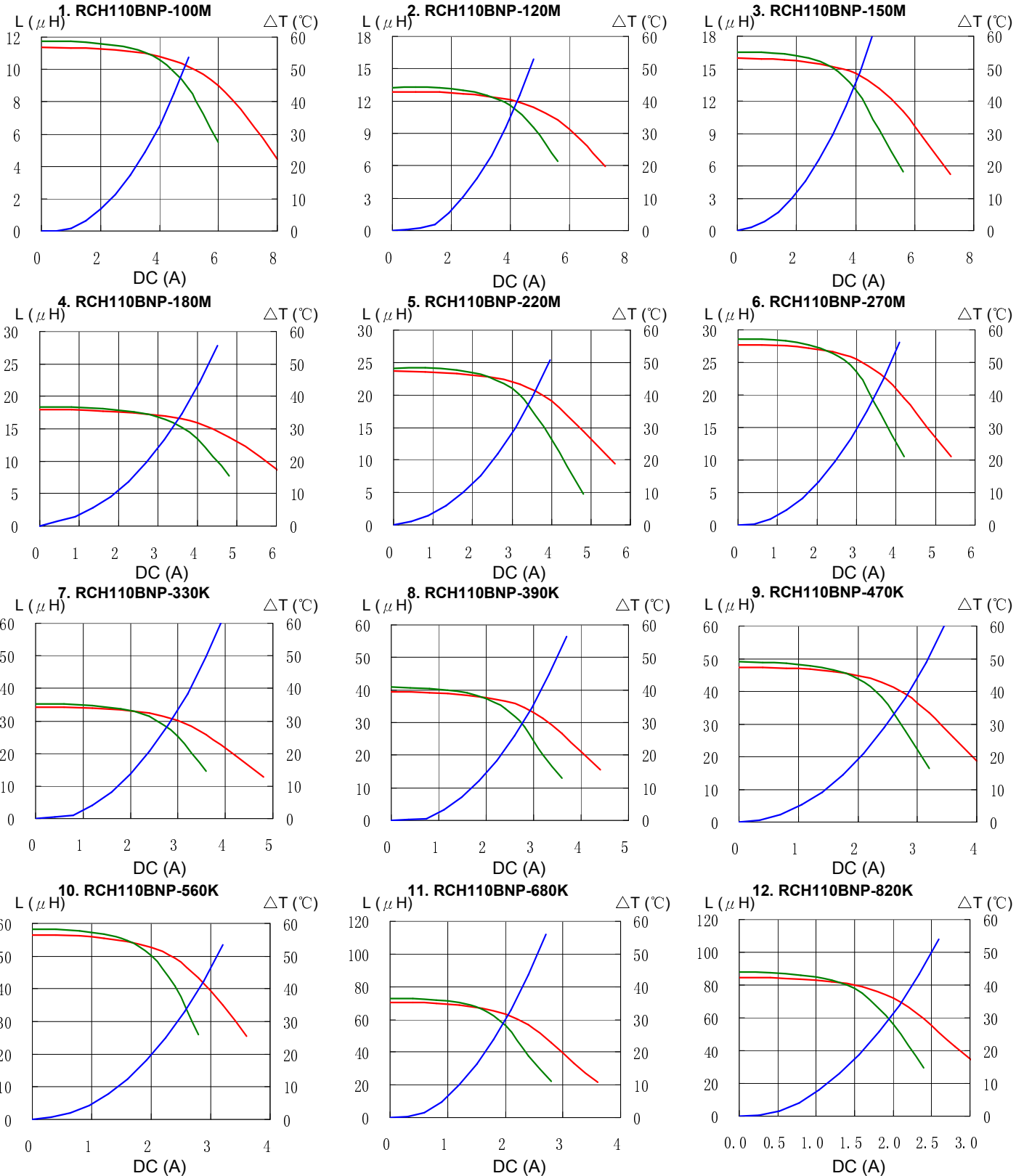
※3. Temperature rise current: The value of D.C. current when the temperature rise is Δt=40°C (Ta=20°C).

# PIN Power Inductor RCH110B

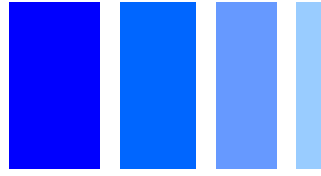


## Saturation Current & Temperature Rise Graph

— L (20°C) — L (105°C) —  $\Delta T$

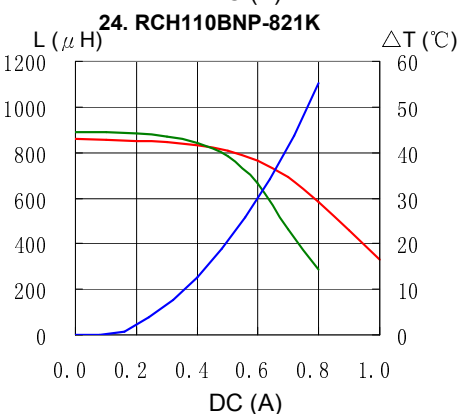
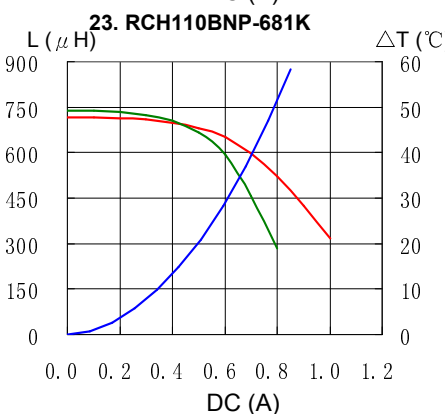
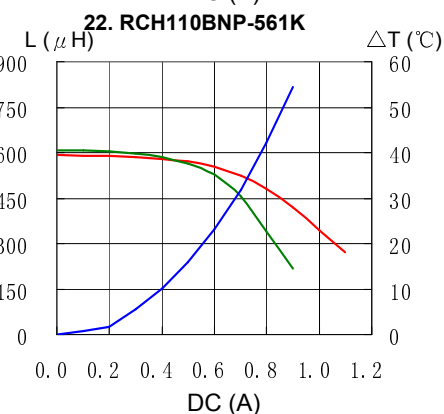
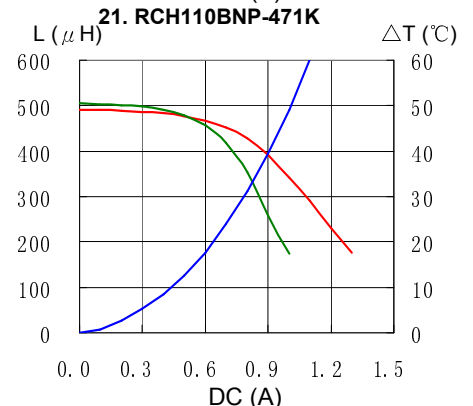
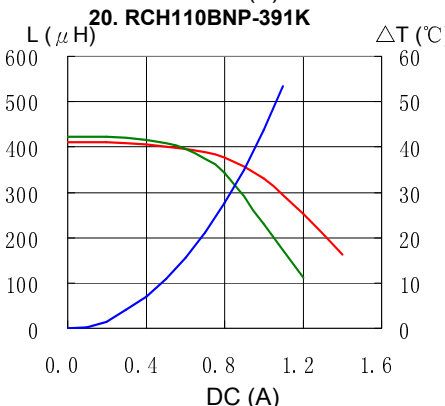
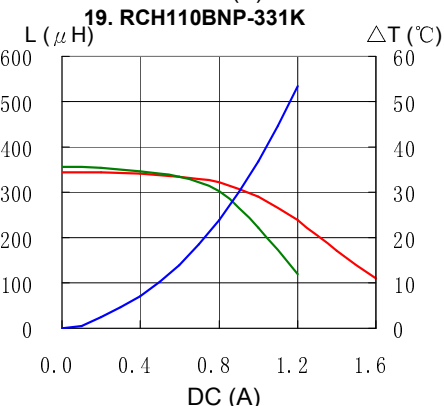
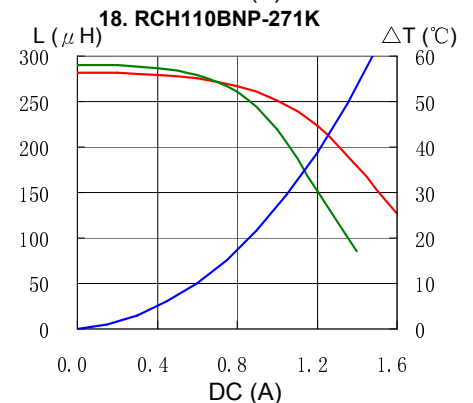
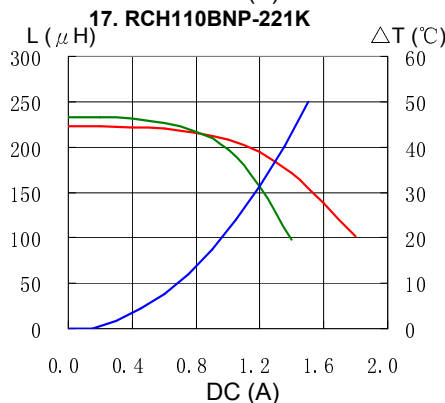
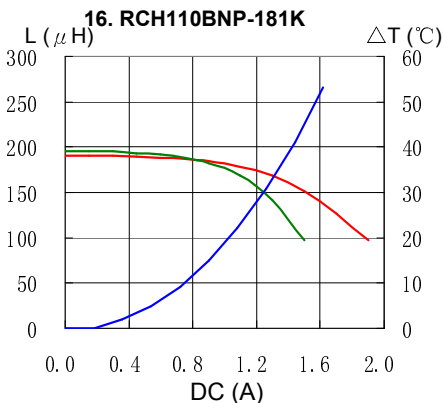
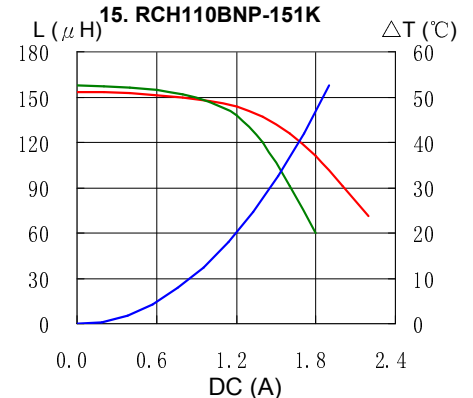
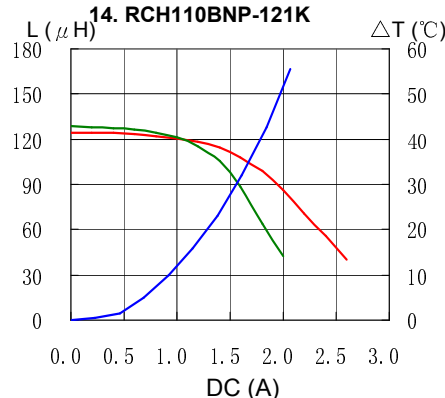
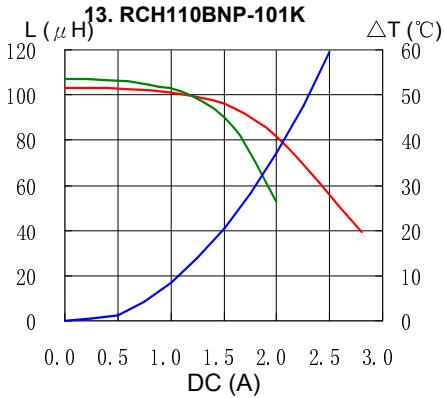


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## Saturation Current & Temperature Rise Graph

— L (20°C) — L (105°C) —  $\Delta T$

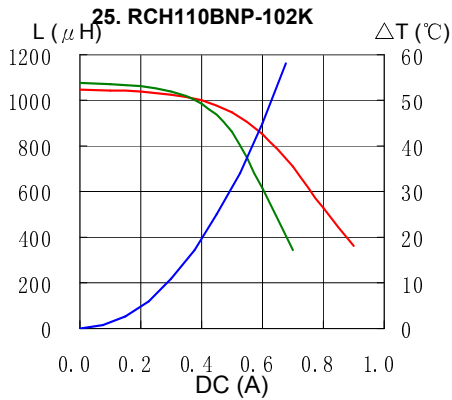


# PIN Power Inductor RCH110B



## Saturation Current & Temperature Rise Graph

— L (20°C) — L (105°C) —  $\Delta T$



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