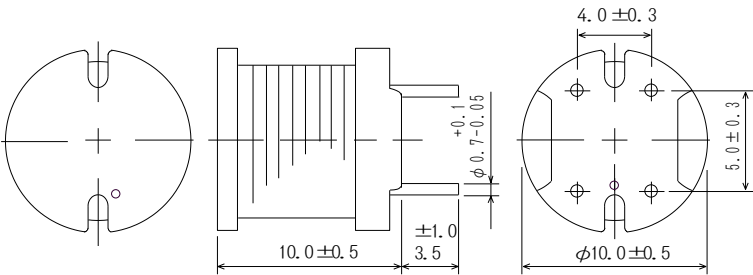


# PIN Power Inductor

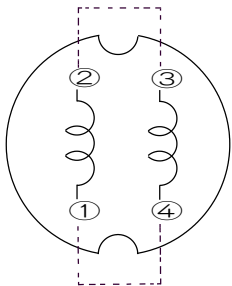
## RCH-110



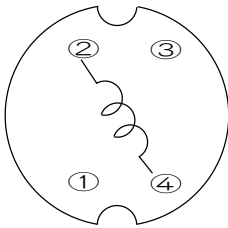
### Dimension - [mm]



### Schematics - [mm]



(10  $\mu$ H ~ 33  $\mu$ H)



(39  $\mu$ H ~ 1mH)

### Description

- Ferrite drum core construction.
- Magnetically unshielded.
- L × W × H: 10.5 × 10.5 × 10.5mm Max.
- Product weight: 3.1g(Ref.)
- Moisture Sensitivity Level: 1
- RoHS compliance.

### Environmental Data

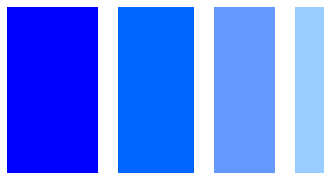
- Operating temperature range: -40°C ~ +100°C (including coil's self temperature rise)
- Storage temperature range: -40°C ~ +100°C

### Packaging

- Box packaging.

### Applications

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



### Electrical Characteristics

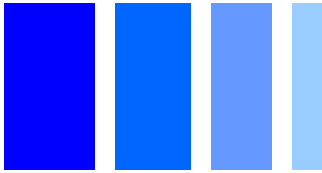
| PART NO.      | STAMP | INDUCTANCE<br>[WITHIN] ※1 | D.C.R.<br>(Ω)<br>[MAX.]<br>(at20℃) | RATED<br>CURRENT<br>(A)※2 | S.R.F.<br>(MHz)<br>TYP. |
|---------------|-------|---------------------------|------------------------------------|---------------------------|-------------------------|
| RCH110NP-100M | 100M  | 10μH ± 20%                | 0.022                              | 5.3                       | 14                      |
| RCH110NP-120M | 120M  | 12μH ± 20%                | 0.023                              | 4.9                       | 11                      |
| RCH110NP-150M | 150M  | 15μH ± 20%                | 0.026                              | 4.4                       | 7.7                     |
| RCH110NP-180M | 180M  | 18μH ± 20%                | 0.033                              | 4.0                       | 7.1                     |
| RCH110NP-220M | 220M  | 22μH ± 20%                | 0.037                              | 3.6                       | 6.8                     |
| RCH110NP-270M | 270M  | 27μH ± 20%                | 0.048                              | 3.3                       | 6.1                     |
| RCH110NP-330K | 330K  | 33μH ± 10%                | 0.055                              | 2.9                       | 6.0                     |
| RCH110NP-390K | 390K  | 39μH ± 10%                | 0.073                              | 2.7                       | 8.6                     |
| RCH110NP-470K | 470K  | 47μH ± 10%                | 0.083                              | 2.5                       | 8.1                     |
| RCH110NP-560K | 560K  | 56μH ± 10%                | 0.092                              | 2.3                       | 7.6                     |
| RCH110NP-680K | 680K  | 68μH ± 10%                | 0.12                               | 2.1                       | 6.3                     |
| RCH110NP-820K | 820K  | 82μH ± 10%                | 0.14                               | 1.9                       | 6.0                     |
| RCH110NP-101K | 101K  | 100μH ± 10%               | 0.16                               | 1.7                       | 5.7                     |
| RCH110NP-121K | 121K  | 120μH ± 10%               | 0.20                               | 1.5                       | 4.8                     |
| RCH110NP-151K | 151K  | 150μH ± 10%               | 0.23                               | 1.4                       | 4.2                     |
| RCH110NP-181K | 181K  | 180μH ± 10%               | 0.31                               | 1.3                       | 3.9                     |
| RCH110NP-221K | 221K  | 220μH ± 10%               | 0.34                               | 1.1                       | 3.8                     |
| RCH110NP-271K | 271K  | 270μH ± 10%               | 0.40                               | 1.0                       | 3.4                     |
| RCH110NP-331K | 331K  | 330μH ± 10%               | 0.52                               | 0.93                      | 2.8                     |
| RCH110NP-391K | 391K  | 390μH ± 10%               | 0.65                               | 0.86                      | 2.7                     |
| RCH110NP-471K | 471K  | 470μH ± 10%               | 0.71                               | 0.78                      | 2.5                     |
| RCH110NP-561K | 561K  | 560μH ± 10%               | 1.0                                | 0.71                      | 2.2                     |
| RCH110NP-681K | 681K  | 680μH ± 10%               | 1.1                                | 0.65                      | 2.1                     |
| RCH110NP-821K | 821K  | 820μH ± 10%               | 1.3                                | 0.59                      | 2.0                     |
| RCH110NP-102K | 102K  | 1.0 mH ± 10%              | 1.7                                | 0.53                      | 1.7                     |

※1. Inductance measuring condition : at 1.0kHz

※2. This indicates the value of current when the inductance 10% lower than its initial value or D.C current when  $\Delta T=40^{\circ}\text{C}$ , whichever is lower ( $T_a=20^{\circ}\text{C}$ ).

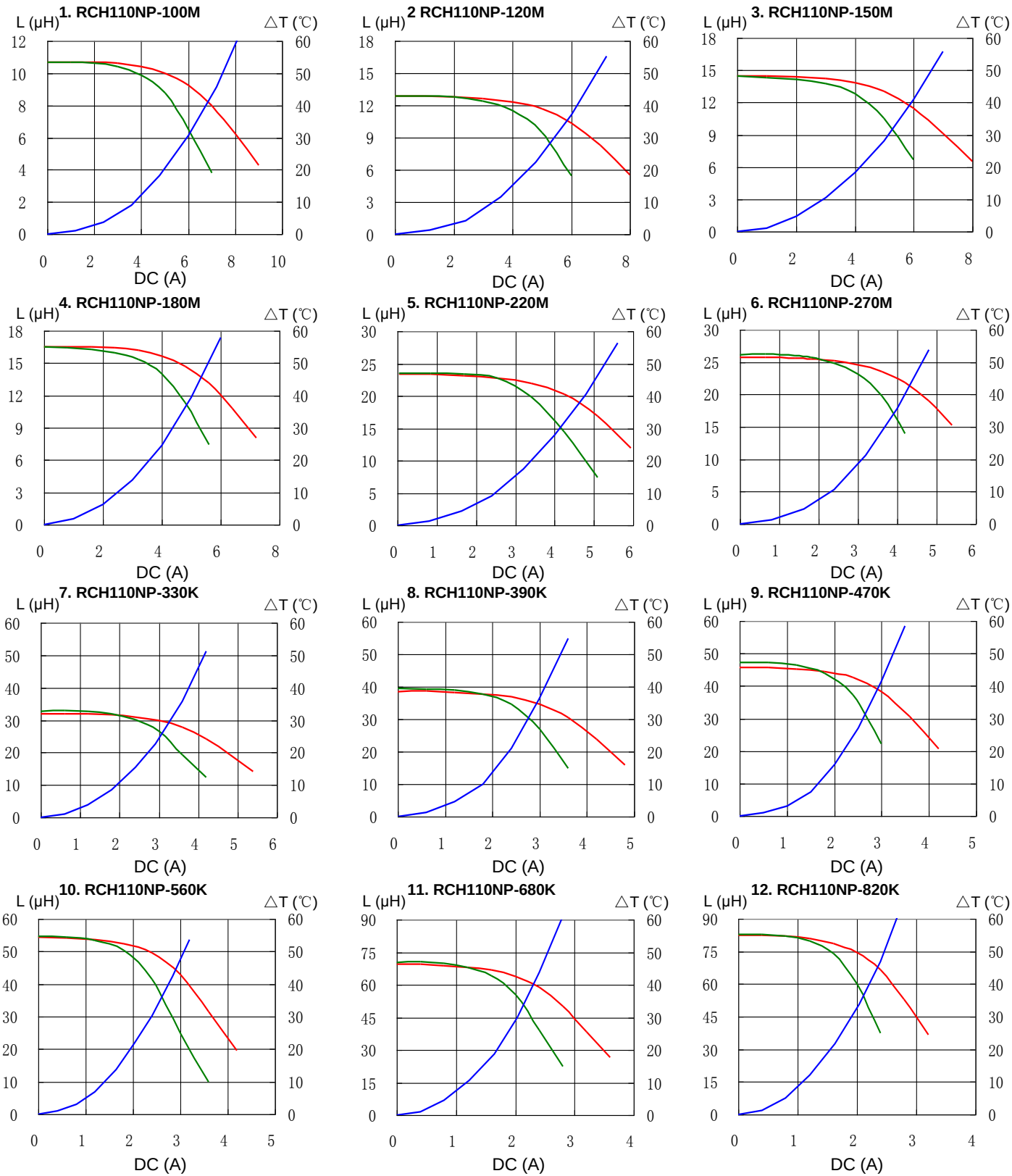
# PIN Power Inductor

## RCH-110



### Saturation Current & Temperature Rise Graph

— L (20°C) — L (100°C) —  $\Delta T$



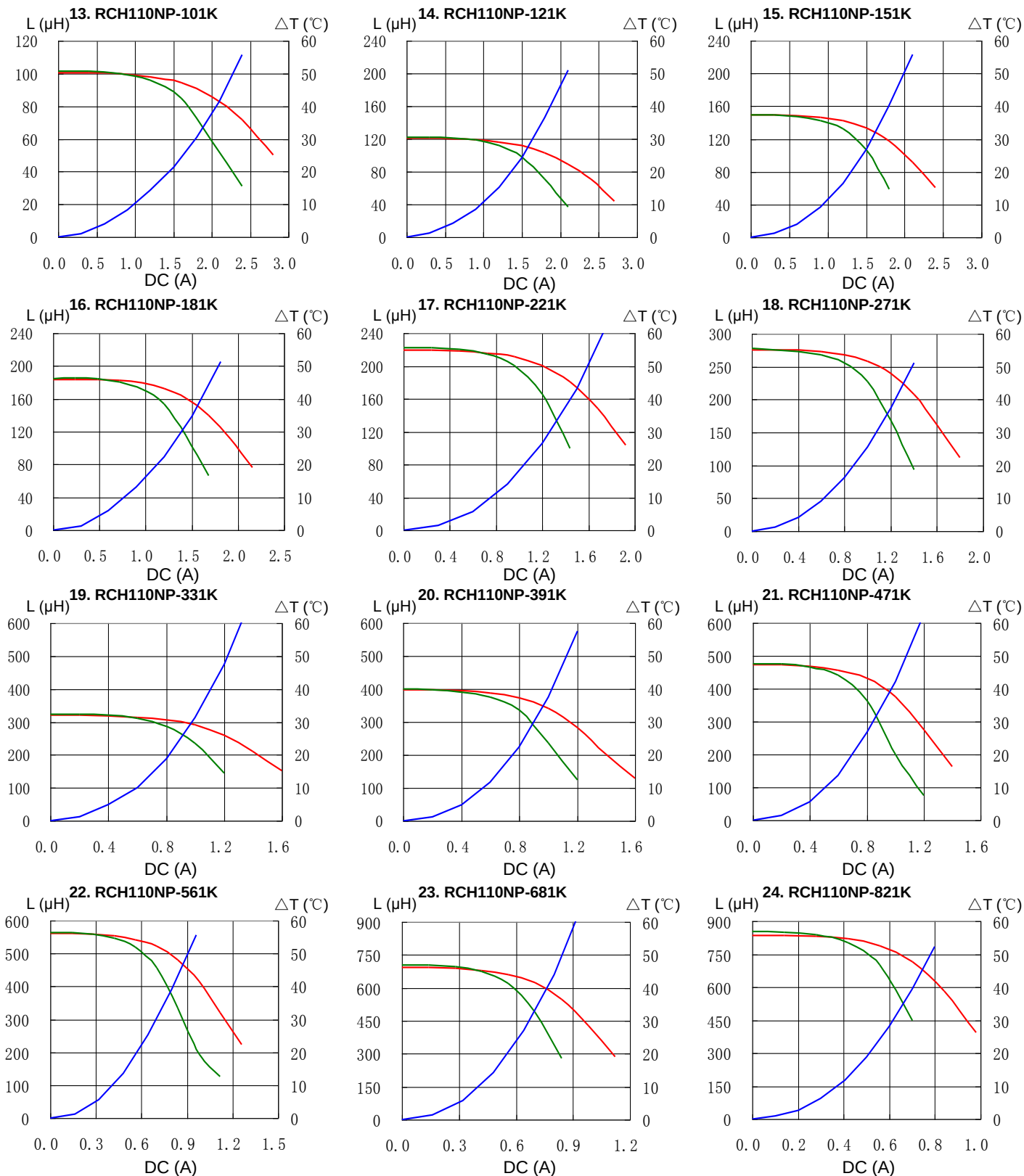
# PIN Power Inductor

## RCH-110



### Saturation Current & Temperature Rise Graph

— L (20°C) — L (100°C) —  $\Delta T$

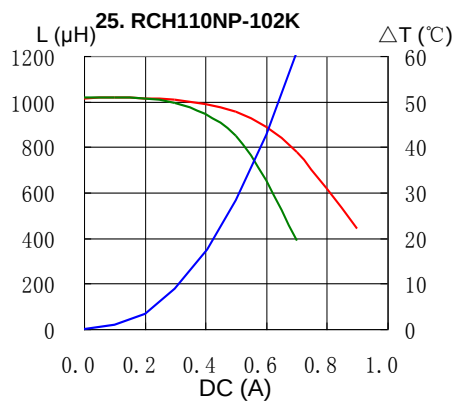


# PIN Power Inductor RCH-110



## Saturation Current & Temperature Rise Graph

— L (20°C) — L (100°C) —  $\Delta T$



Please refer to the sales offices on our website - <http://www.sumida.com>

### Hong Kong

Tel.+852-2880-6781  
FAX.+852-2565-9600  
[sales@hk.sumida.com](mailto:sales@hk.sumida.com)

### Saitama(Japan)

Tel.+81-48-691-7300  
FAX.+81-48-691-7340  
[sales@jp.sumida.com](mailto:sales@jp.sumida.com)

### Chicago

Tel.+1-847-545-6700  
FAX. +1-847-545-6720  
[sales@us.sumida.com](mailto:sales@us.sumida.com)

### Shanghai

Tel.+86-21-5836-3299  
FAX.+86-21-5836-3266  
[shanghai.sales@cn.sumida.com](mailto:shanghai.sales@cn.sumida.com)

### Seoul

Tel.+82-2-6237-0777  
FAX.+82-2-6237-0778  
[sales@kr.sumida.com](mailto:sales@kr.sumida.com)

### Obernzell

Tel.+49-8591-937-0  
FAX. +49-8591-937-103  
[contact@eu.sumida.com](mailto:contact@eu.sumida.com)

### Shenzhen

Tel.+86-755-8291-0228  
FAX.+86-755-8291-0338  
[shenzhen.sales@cn.sumida.com](mailto:shenzhen.sales@cn.sumida.com)

### Singapore

Tel.+65-6296-3388  
FAX.+65-6841-4426  
[sales@sg.sumida.com](mailto:sales@sg.sumida.com)

### Neumarkt

Tel.+49-9181-4509-110  
FAX. +49-9181-4509-310  
[infocomp@eu.sumida.com](mailto:infocomp@eu.sumida.com)

### Taipei

Tel.+886-2-8751-2737  
FAX.+886-2-8751-2738  
[sales@tw.sumida.com](mailto:sales@tw.sumida.com)

### San Jose

Tel.+1-408-321-9660  
FAX.+1-408-321-9308  
[sales@us.sumida.com](mailto:sales@us.sumida.com)