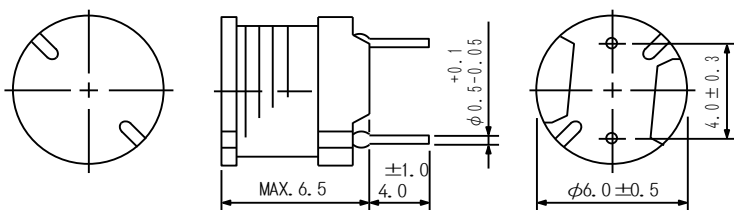


# PIN Power Inductor

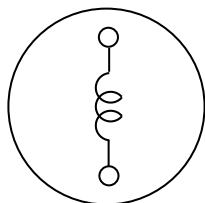
## RCH-664



### Dimension - [mm]



### Schematics - [mm]



### Description

- Ferrite drum core construction.
- Magnetically unshielded.
- L × W × H: 6.5 × 6.5 × 6.5mm Max.
- Product weight: 0.7 g(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.

# PIN Power Inductor

## RCH-664



### Electrical Characteristics

| Part Name                                       | Stamp                | Inductance<br>( $\mu$ H)<br>[ Within ] ※1       | D.C.R.<br>( $\Omega$ ) [Max.]<br>at 20°C | Rated<br>Current<br>(A) ※2 |
|-------------------------------------------------|----------------------|-------------------------------------------------|------------------------------------------|----------------------------|
| RCH664NP-1R0M<br>RCH664NP-1R3M                  | 1R0M<br>1R3M         | 1.0 $\pm$ 20%<br>1.3 $\pm$ 20%                  | 18.3m<br>20.6m                           | 4.00<br>3.70               |
| RCH664NP-1R7M<br>RCH664NP-2R2M<br>RCH664NP-2R7M | 1R7M<br>2R2M<br>2R7M | 1.7 $\pm$ 20%<br>2.2 $\pm$ 20%<br>2.7 $\pm$ 20% | 22.8m<br>25.5m<br>28.2m                  | 3.52<br>3.20<br>3.00       |
| RCH664NP-3R3M<br>RCH664NP-3R9M<br>RCH664NP-4R7M | 3R3M<br>3R9M<br>4R7M | 3.3 $\pm$ 20%<br>3.9 $\pm$ 20%<br>4.7 $\pm$ 20% | 30.8m<br>33.4m<br>36.4m                  | 2.83<br>2.63<br>2.43       |
| RCH664NP-5R5M<br>RCH664NP-6R3M<br>RCH664NP-7R2M | 5R5M<br>6R3M<br>7R2M | 5.5 $\pm$ 20%<br>6.3 $\pm$ 20%<br>7.2 $\pm$ 20% | 39.5m<br>43.0m<br>46.2m                  | 2.30<br>2.14<br>2.09       |
| RCH664NP-8R1M<br>RCH664NP-9R1M<br>RCH664NP-100M | 8R1M<br>9R1M<br>100M | 8.1 $\pm$ 20%<br>9.1 $\pm$ 20%<br>10 $\pm$ 20%  | 49.8m<br>53.2m<br>56.6m                  | 1.99<br>1.86<br>1.75       |
| RCH664NP-110L<br>RCH664NP-120L<br>RCH664NP-130L | 110L<br>120L<br>130L | 11 $\pm$ 15%<br>12 $\pm$ 15%<br>13 $\pm$ 15%    | 59.6m<br>63.0m<br>66.7m                  | 1.64<br>1.52<br>1.48       |
| RCH664NP-140L<br>RCH664NP-150L<br>RCH664NP-160L | 140L<br>150L<br>160L | 14 $\pm$ 15%<br>15 $\pm$ 15%<br>16 $\pm$ 15%    | 70.1m<br>74.4m<br>78.8m                  | 1.44<br>1.40<br>1.33       |
| RCH664NP-180L                                   | 180L                 | 18 $\pm$ 15%                                    | 83.9m                                    | 1.30                       |
| RCH664NP-220K<br>RCH664NP-270K                  | 220K<br>270K         | 22 $\pm$ 10%<br>27 $\pm$ 10%                    | 0.11<br>0.14                             | 1.27<br>1.14               |
| RCH664NP-330K<br>RCH664NP-390K<br>RCH664NP-470K | 330K<br>390K<br>470K | 33 $\pm$ 10%<br>39 $\pm$ 10%<br>47 $\pm$ 10%    | 0.17<br>0.19<br>0.23                     | 1.03<br>950m<br>870m       |
| RCH664NP-560K<br>RCH664NP-680K<br>RCH664NP-820K | 560K<br>680K<br>820K | 56 $\pm$ 10%<br>68 $\pm$ 10%<br>82 $\pm$ 10%    | 0.26<br>0.28<br>0.39                     | 800m<br>720m<br>660m       |
| RCH664NP-101K<br>RCH664NP-121K<br>RCH664NP-151K | 101K<br>121K<br>151K | 100 $\pm$ 10%<br>120 $\pm$ 10%<br>150 $\pm$ 10% | 0.43<br>0.54<br>0.64                     | 590m<br>540m<br>480m       |
| RCH664NP-181K<br>RCH664NP-221K<br>RCH664NP-271K | 181K<br>221K<br>271K | 180 $\pm$ 10%<br>220 $\pm$ 10%<br>270 $\pm$ 10% | 0.74<br>0.96<br>1.12                     | 440m<br>400m<br>360m       |
| RCH664NP-331K<br>RCH664NP-391K<br>RCH664NP-471K | 331K<br>391K<br>471K | 330 $\pm$ 10%<br>390 $\pm$ 10%<br>470 $\pm$ 10% | 1.48<br>1.66<br>1.91                     | 330m<br>300m<br>270m       |
| RCH664NP-561K<br>RCH664NP-681K<br>RCH664NP-821K | 561K<br>681K<br>821K | 560 $\pm$ 10%<br>680 $\pm$ 10%<br>820 $\pm$ 10% | 2.31<br>2.67<br>3.10                     | 250m<br>230m<br>210m       |
| RCH664NP-102K                                   | 102K                 | 1000 $\pm$ 10%                                  | 4.45                                     | 190m                       |

※1: Inductance measuring condition: 1.0 $\mu$ H  $\sim$  10 $\mu$ H at 7.96 MHz  
 11 $\mu$ H  $\sim$  82 $\mu$ H at 2.52 MHz  
 100 $\mu$ H  $\sim$  1.0mH at 1 kHz

※2: The rated current indicates the lower value of current when the inductance is 10% lower than its initial value at D.C. superposition or the temperature of coil rises 40°C with D.C. current passing. (Ta=20°C)

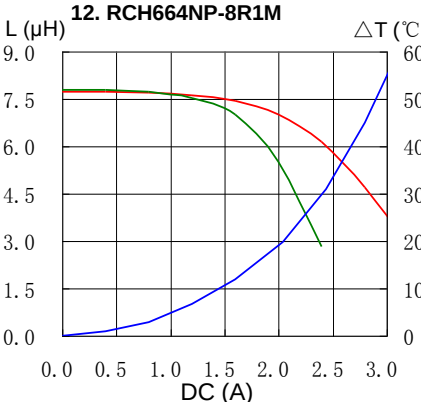
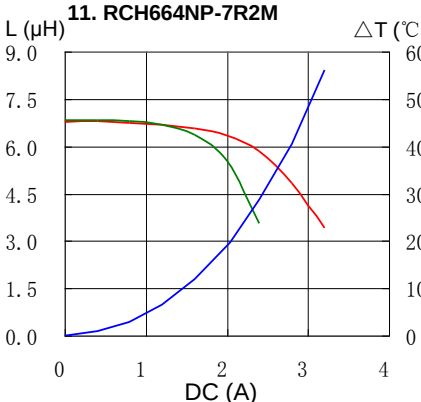
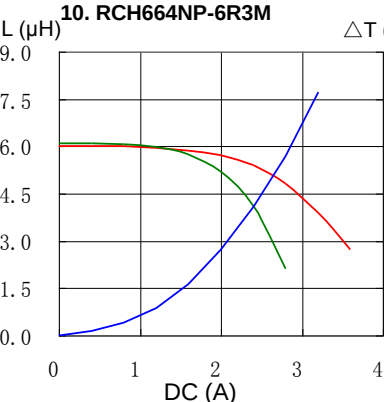
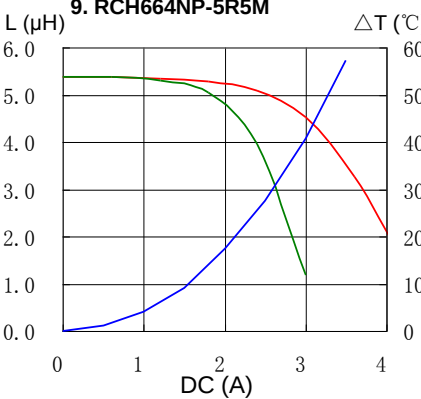
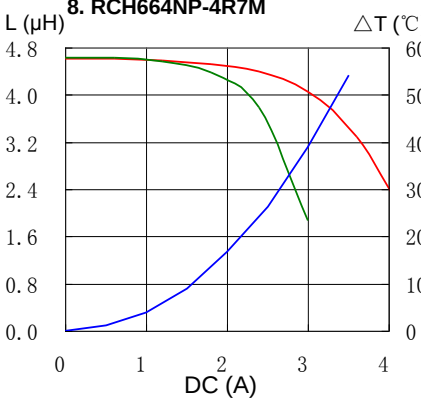
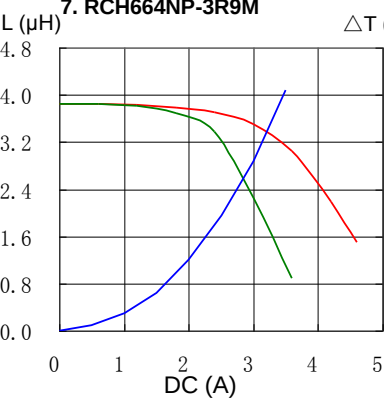
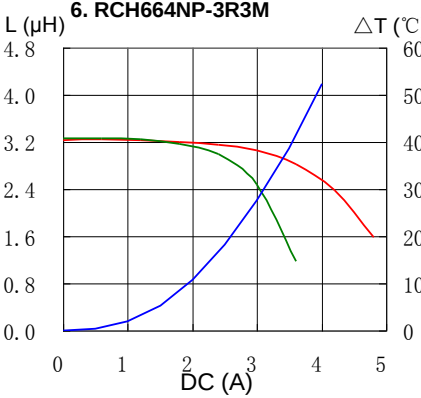
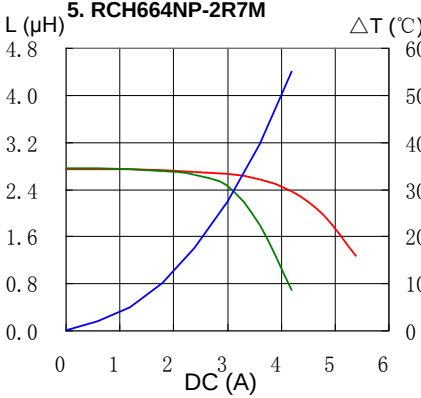
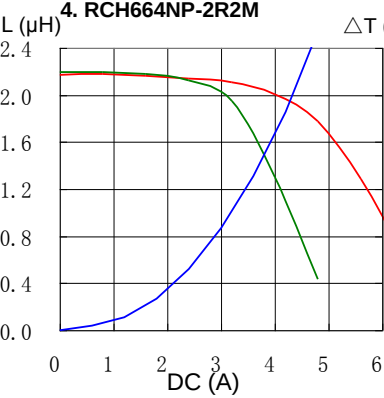
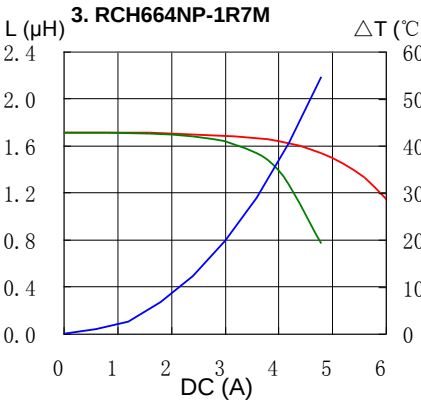
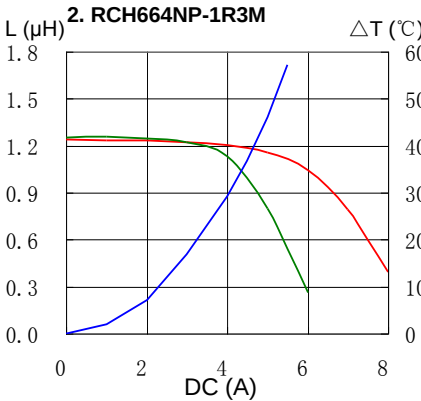
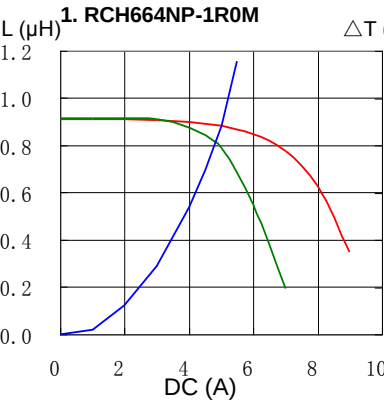
# PIN Power Inductor

## RCH-664



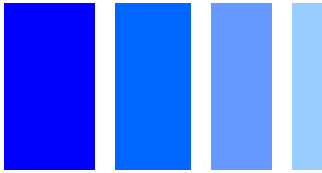
### Saturation Current & Temperature Rise Graph

— L (20°C) — L (100°C) —  $\Delta T$



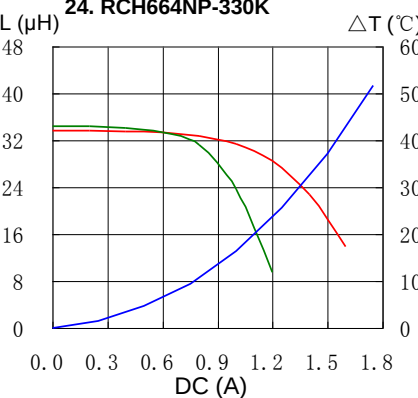
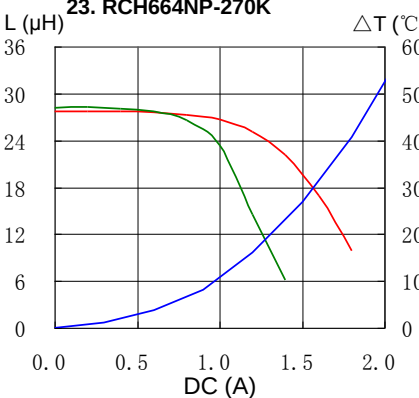
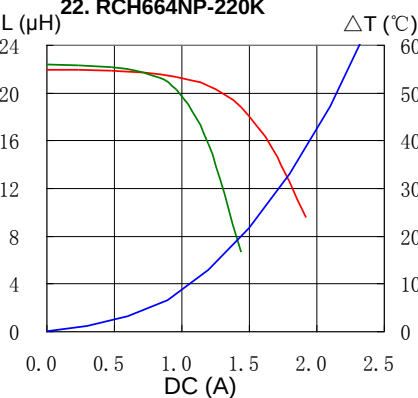
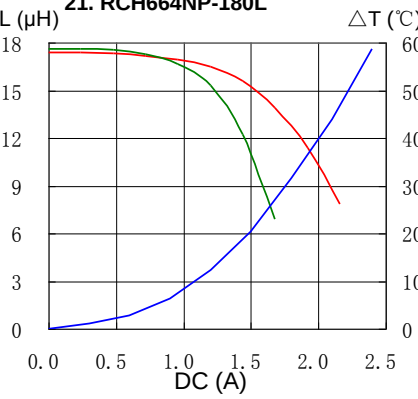
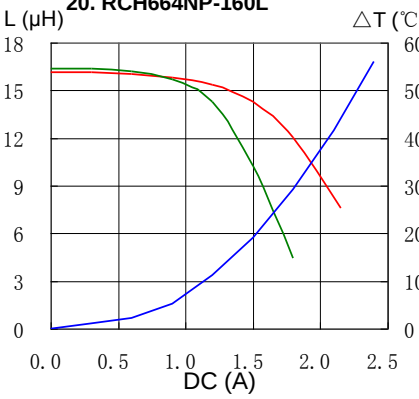
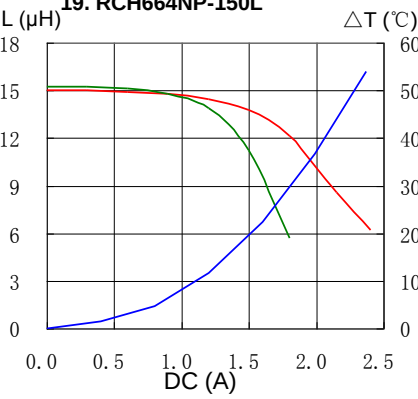
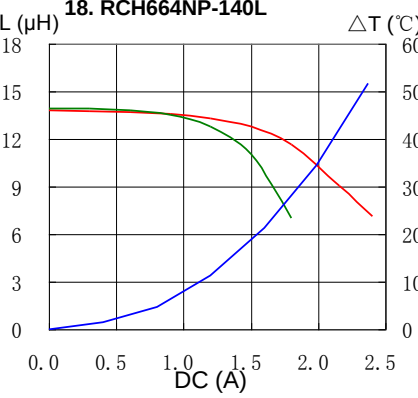
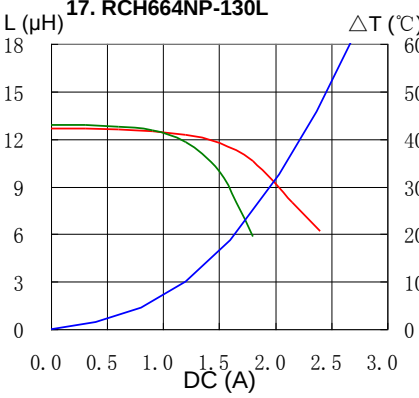
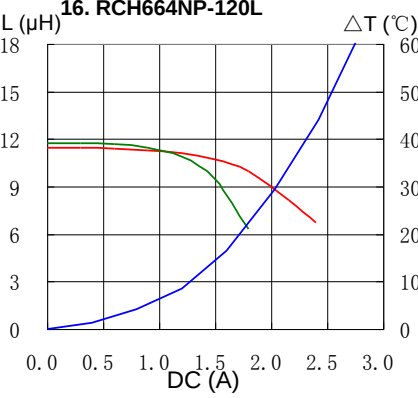
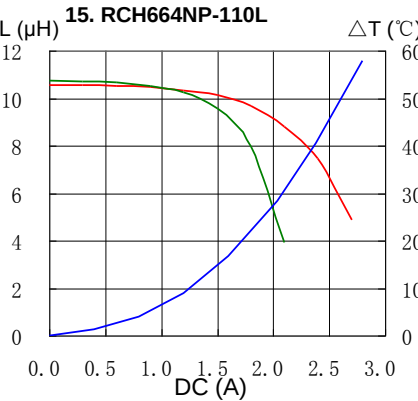
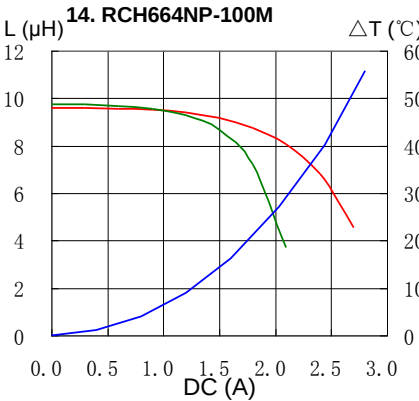
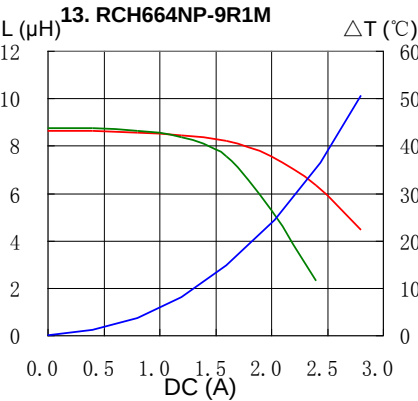
# PIN Power Inductor

## RCH-664



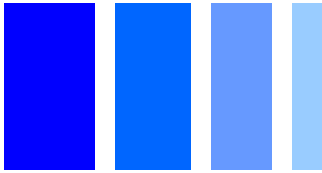
### Saturation Current & Temperature Rise Graph

— L (20°C) — L (100°C) —  $\Delta T$



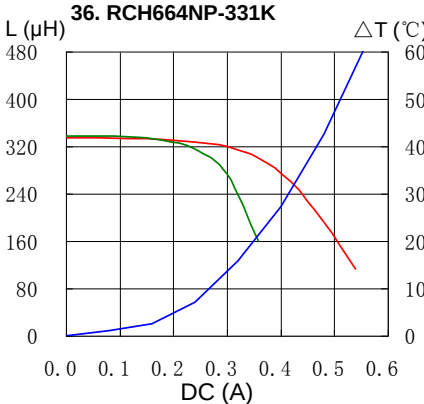
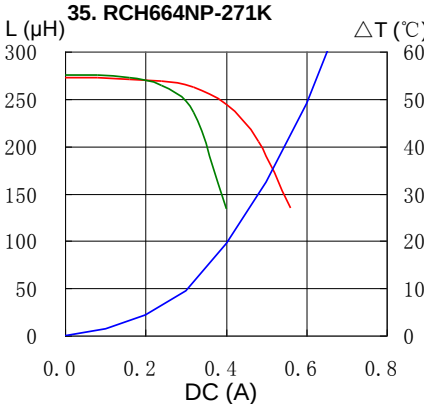
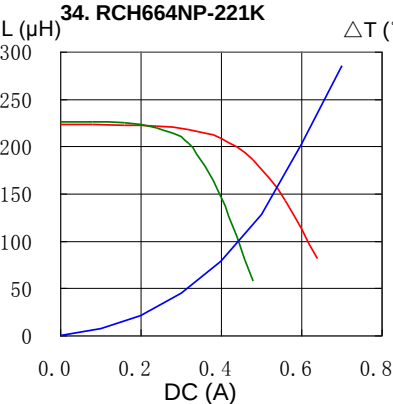
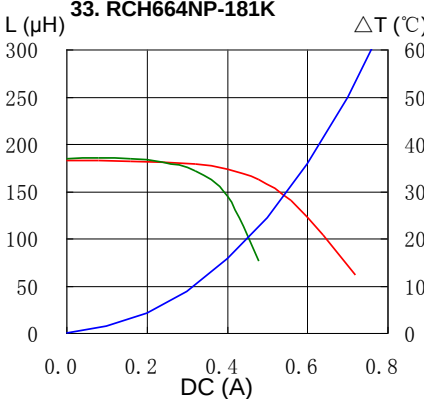
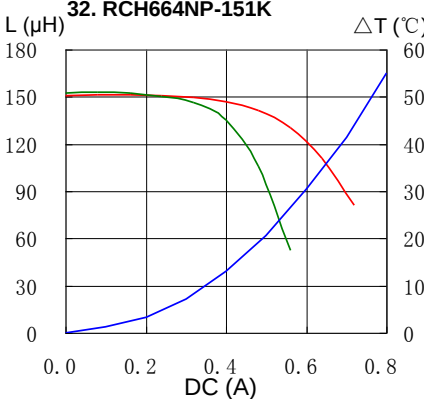
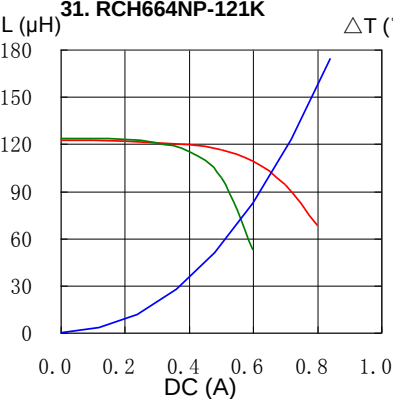
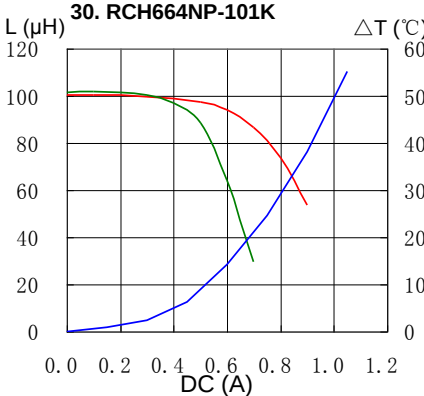
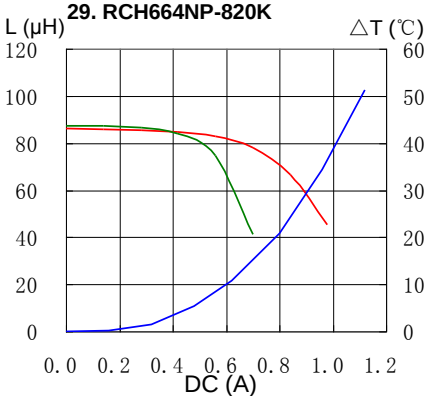
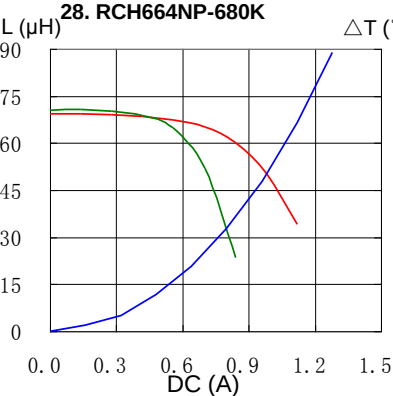
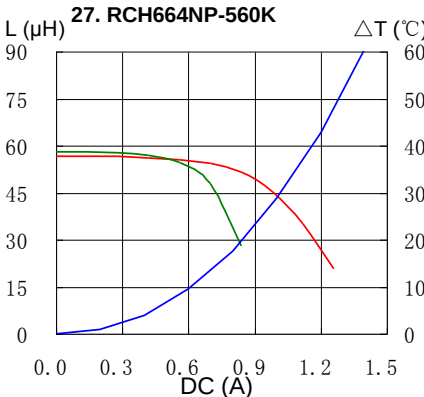
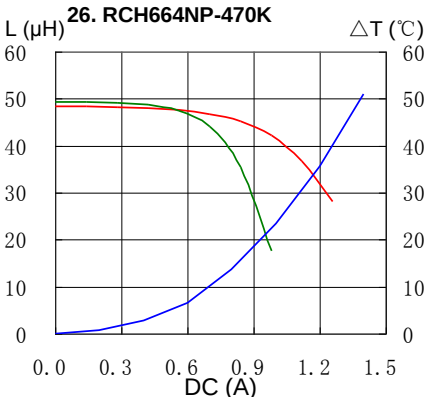
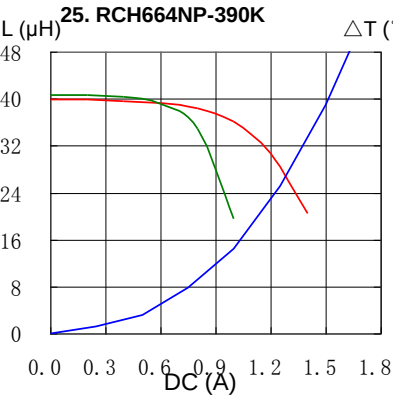
# PIN Power Inductor

## RCH-664



### Saturation Current & Temperature Rise Graph

— L (20°C) — L (100°C) —  $\Delta T$

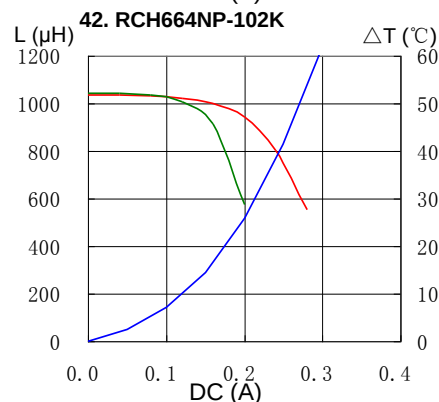
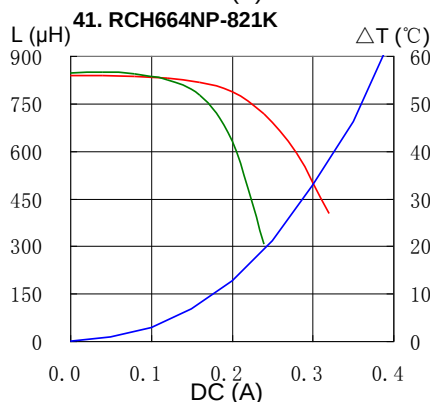
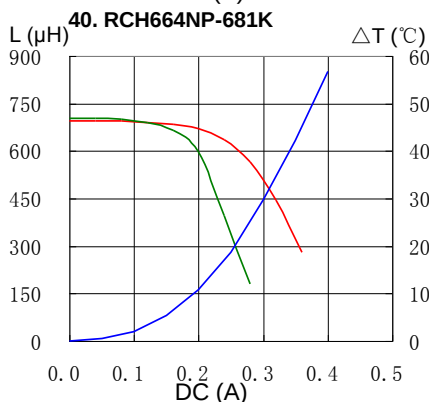
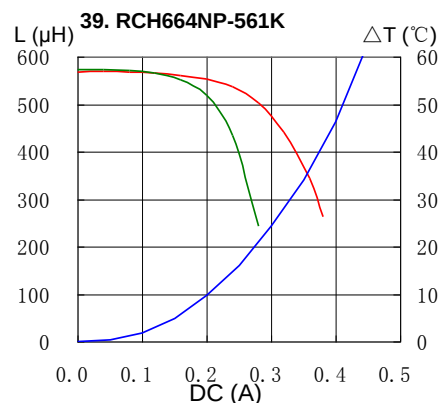
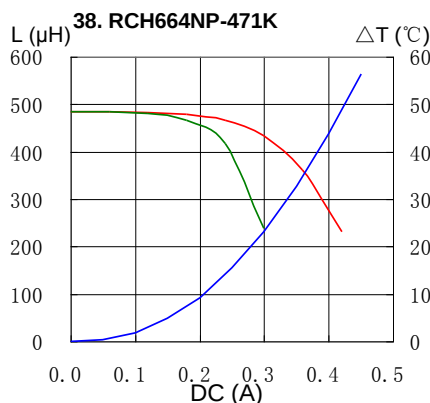
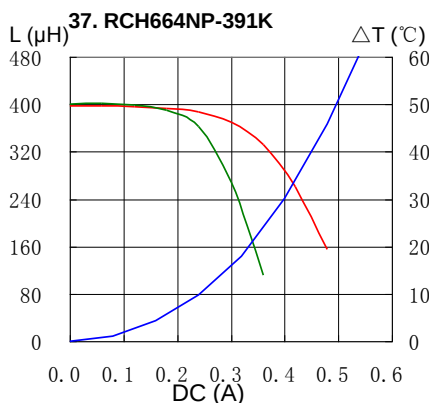


# PIN Power Inductor RCH-664



## Saturation Current & Temperature Rise Graph

— L (20°C) — L (100°C) —  $\Delta T$



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