

# PIN Power Inductor RCH-664



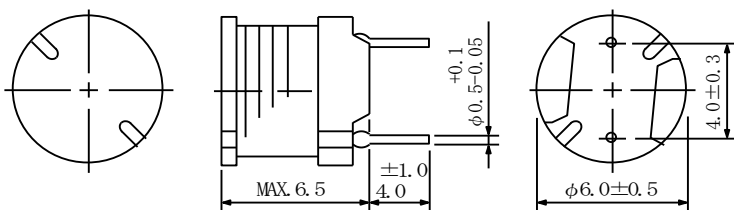
## Description

- 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.

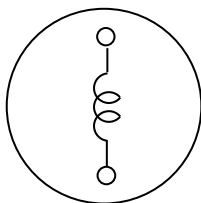
## Environmental Data

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

## Dimension - [mm]



## Schematics - [mm]

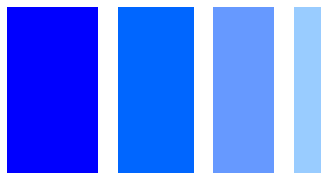


## Packaging

- Box packaging.

## Applications

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



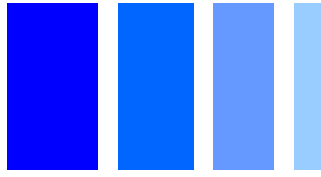
### Electrical Characteristics

| Part Name                                       | Stamp                | Inductance (μH)<br>[ Within ] ※1 | D.C.R.<br>(Ω) [Max.]<br>at 20°C | Rated<br>Current<br>(A)※2 |
|---|----------------------|----------------------------------|---------------------------------|---------------------------|
| RCH664NP-1R0M<br>RCH664NP-1R3M                  | 1R0M<br>1R3M         | 1.0±20%<br>1.3±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±20%<br>2.2±20%<br>2.7±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±20%<br>3.9±20%<br>4.7±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±20%<br>6.3±20%<br>7.2±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±20%<br>9.1±20%<br>10±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±15%<br>12±15%<br>13±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±15%<br>15±15%<br>16±15%       | 70.1m<br>74.4m<br>78.8m         | 1.44<br>1.40<br>1.33      |
| RCH664NP-180L                                   | 180L                 | 18±15%                           | 83.9m                           | 1.30                      |
| RCH664NP-220K<br>RCH664NP-270K                  | 220K<br>270K         | 22±10%<br>27±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±10%<br>39±10%<br>47±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±10%<br>68±10%<br>82±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±10%<br>120±10%<br>150±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±10%<br>220±10%<br>270±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±10%<br>390±10%<br>470±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±10%<br>680±10%<br>820±10%    | 2.31<br>2.67<br>3.10            | 250m<br>230m<br>210m      |
| RCH664NP-102K                                   | 102K                 | 1000±10%                         | 4.45                            | 190m                      |

※1: Inductance measuring condition: 1.0μH ~ 10μH at 7.96 MHz  
 11μH ~ 82μH at 2.52 MHz  
 100μH ~ 1.0mH at 1 kHz

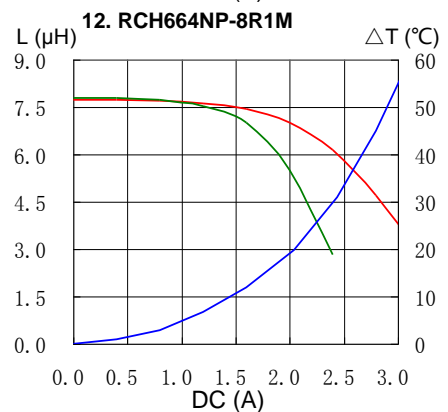
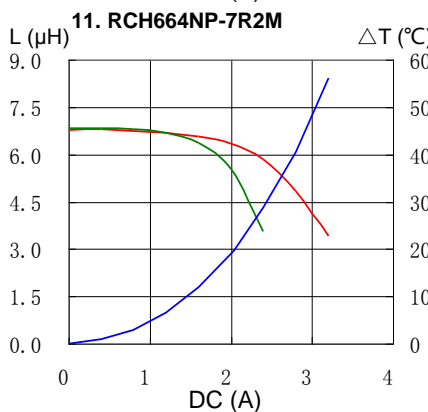
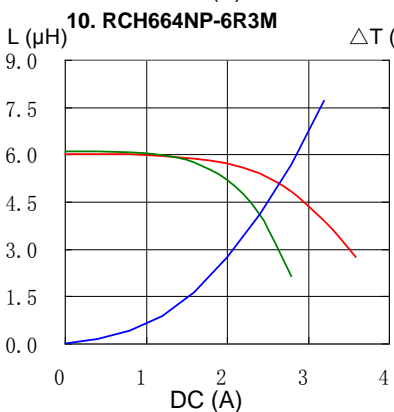
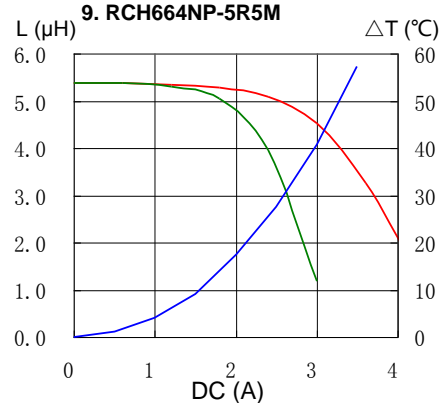
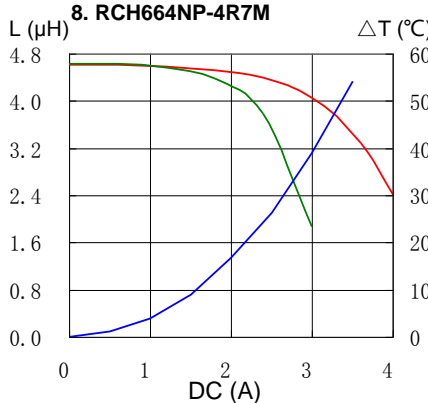
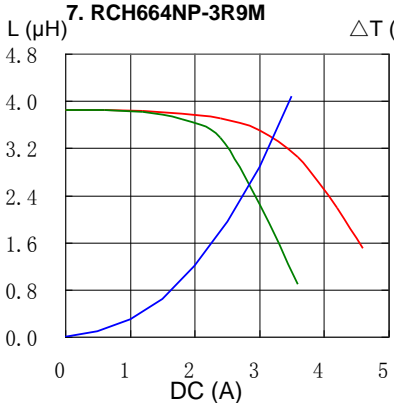
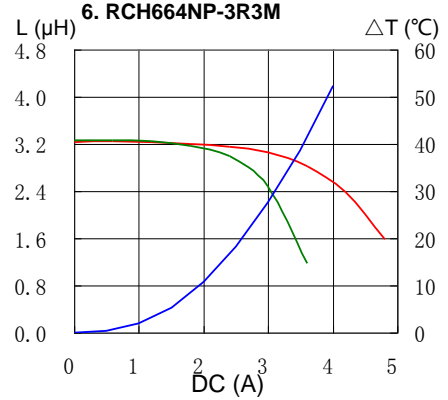
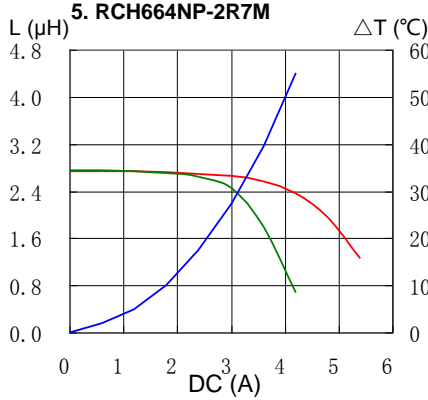
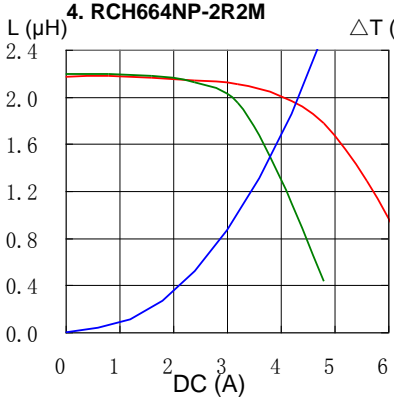
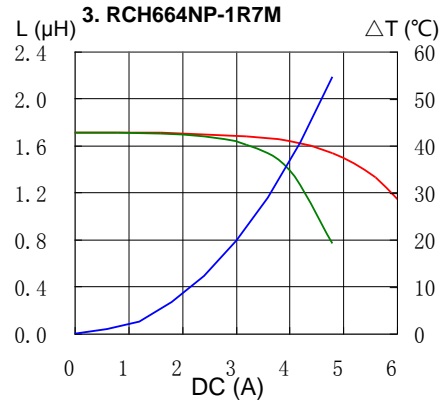
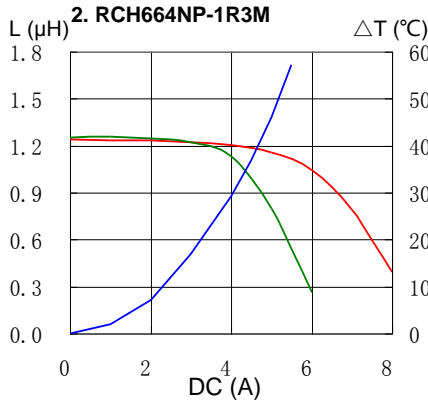
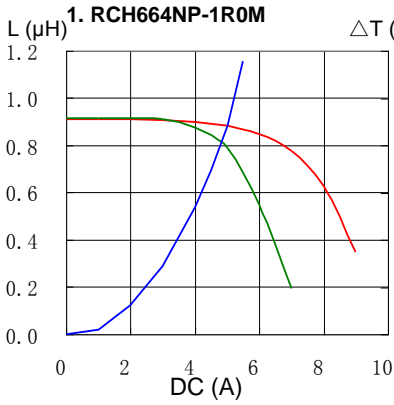
※2: The rated current indicates the lower value of current when the inductance is 10% lower than its initial value at D.C. superposition or the temperature of coil rises 40°C with D.C. current passing. (Ta=20°C)

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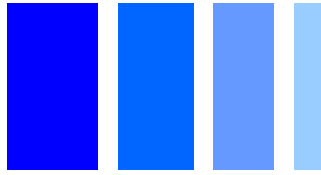


## Saturation Current & Temperature Rise Graph

— L (20°C) — L (100°C) —  $\Delta T$

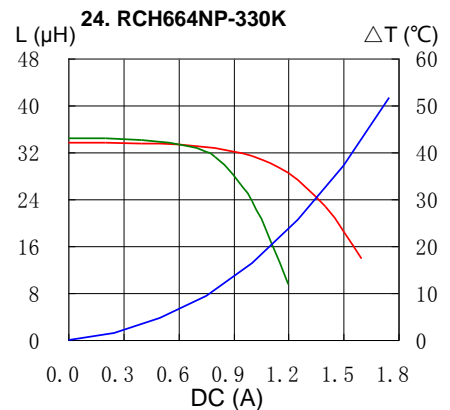
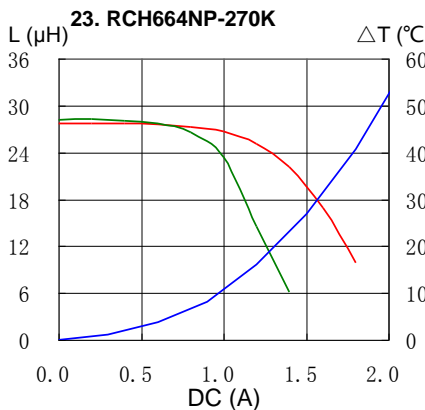
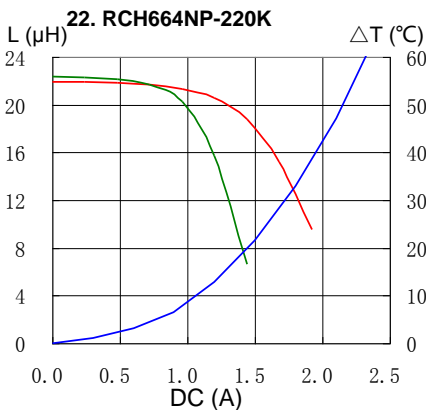
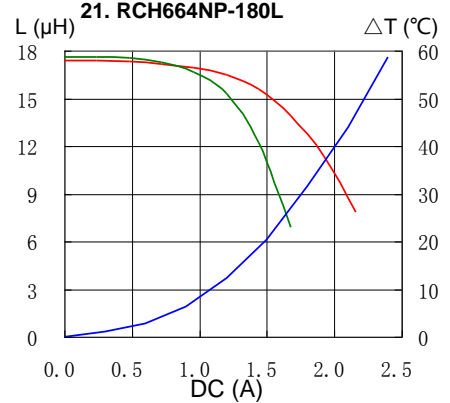
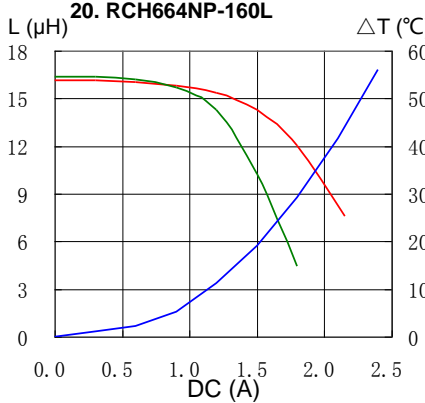
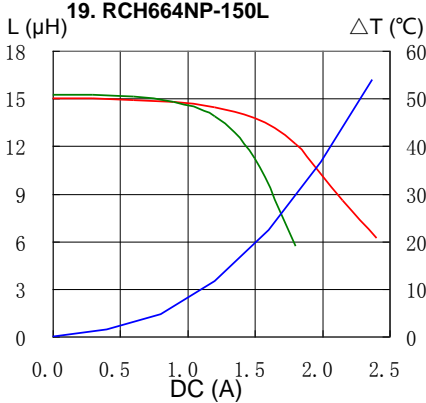
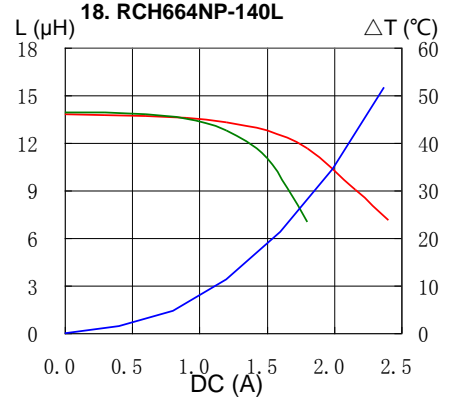
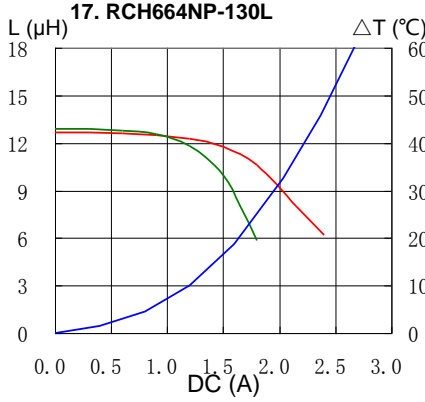
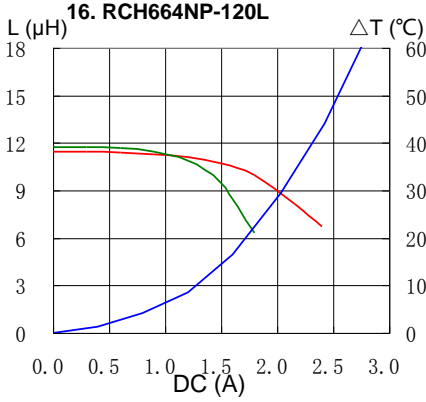
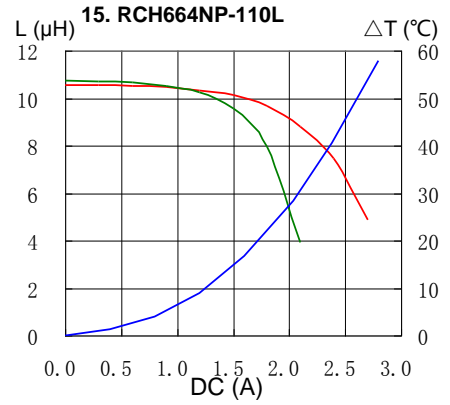
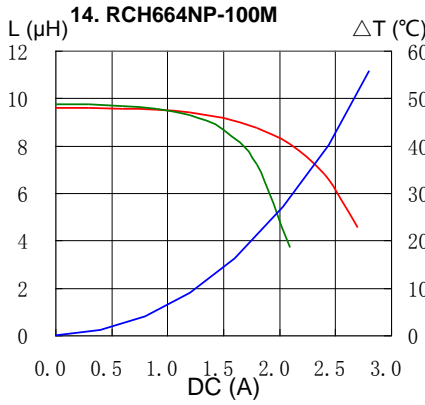
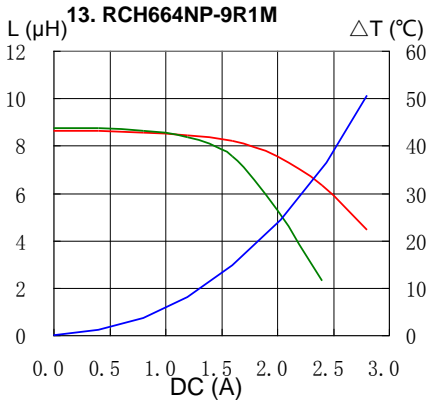


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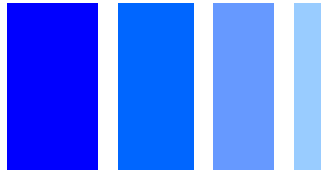


## Saturation Current & Temperature Rise Graph

— L (20°C) — L (100°C) —  $\Delta T$

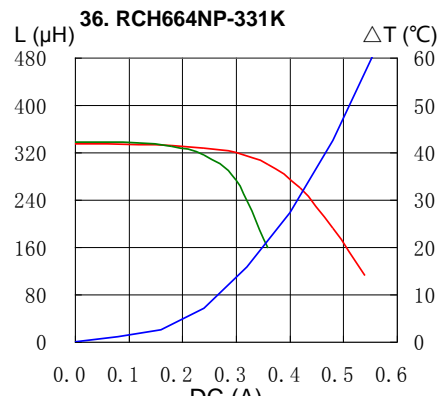
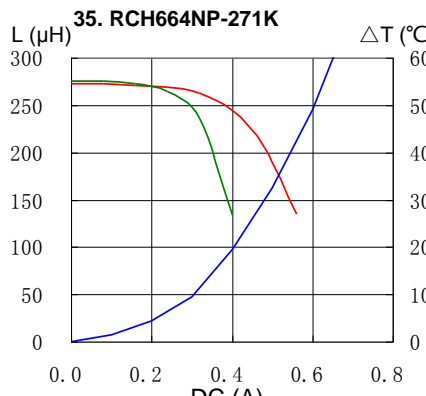
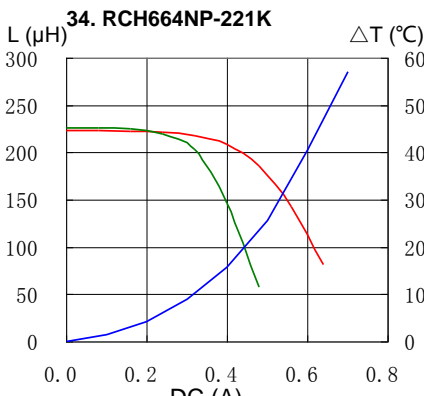
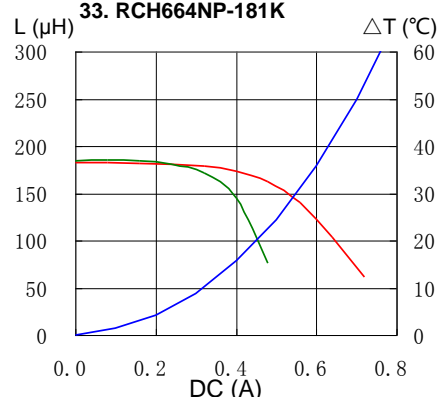
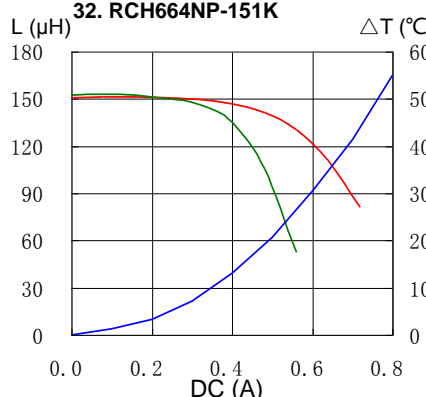
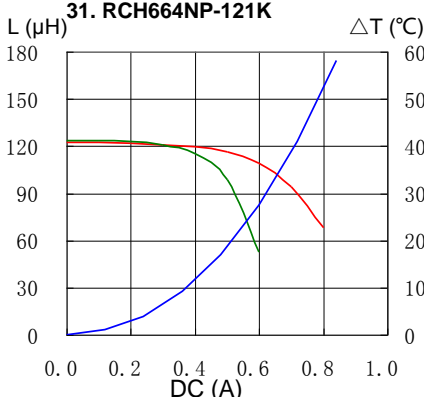
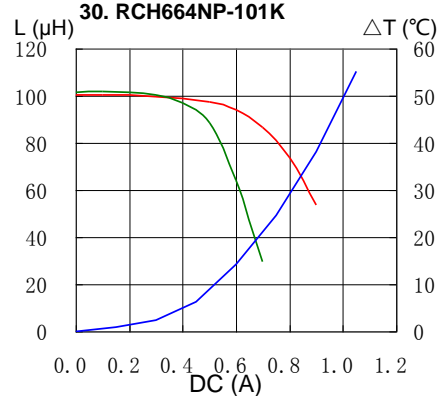
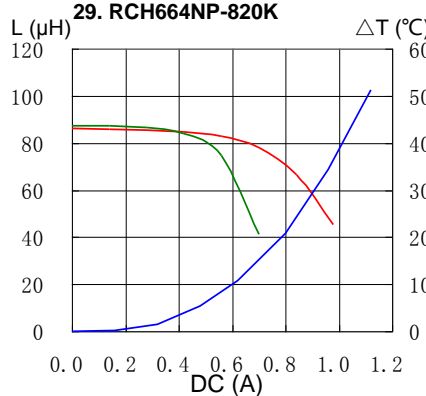
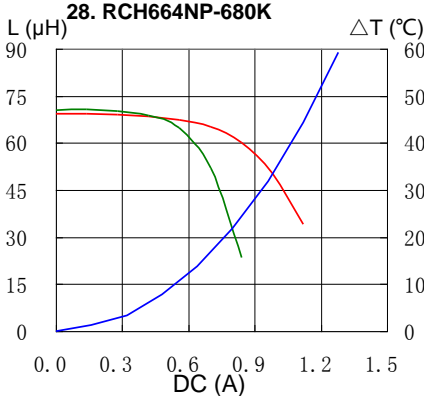
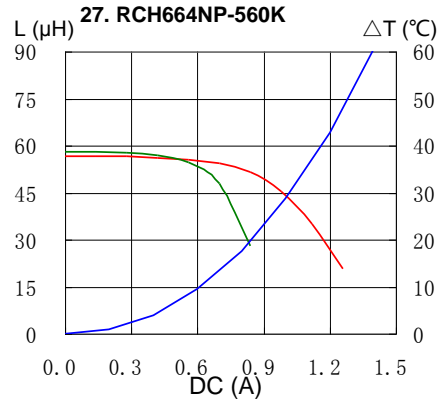
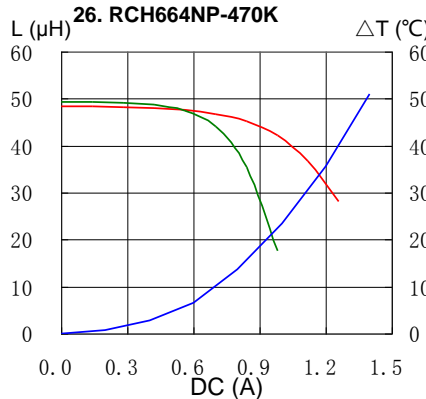
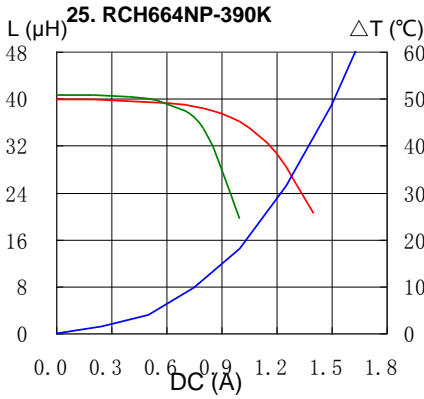


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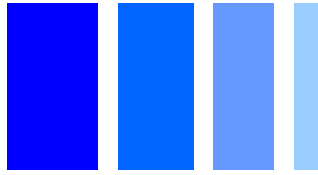


## Saturation Current & Temperature Rise Graph

— L (20°C) — L (100°C) —  $\Delta T$

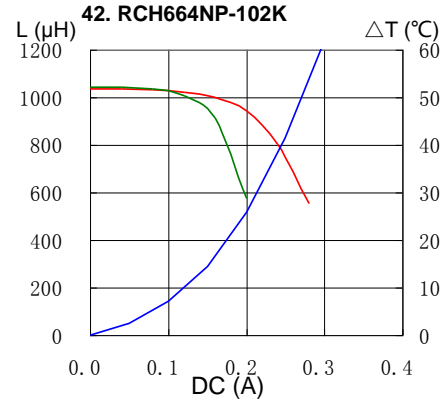
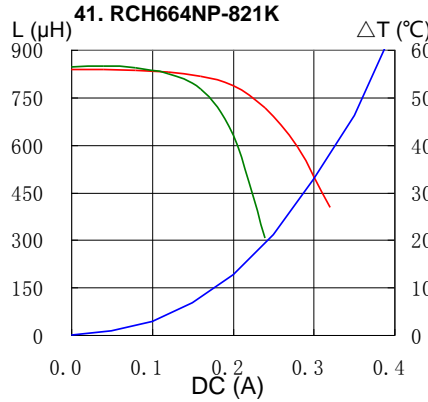
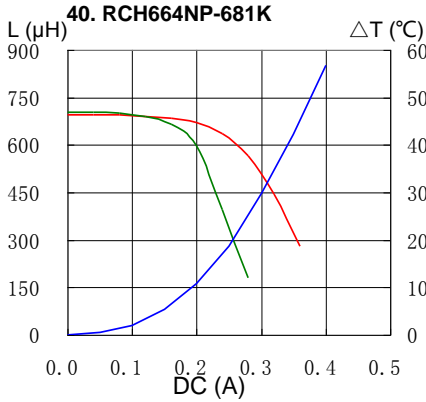
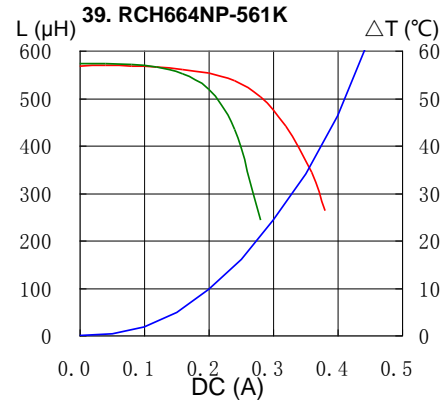
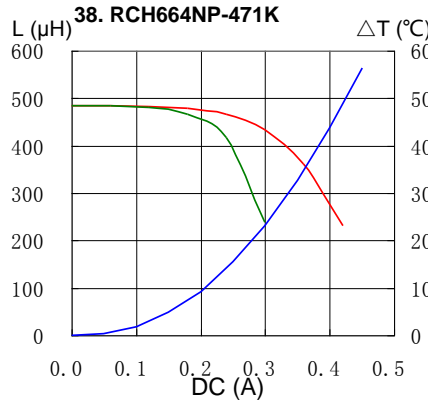
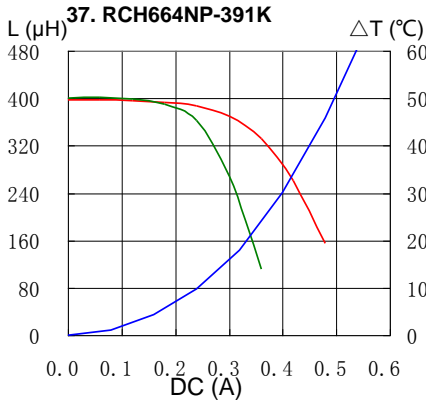


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## Saturation Current & Temperature Rise Graph

— L (20°C) — L (100°C) —  $\Delta T$



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