

# PIN Power Inductor RCH-106



Halogen Free



### Description

- Ferrite drum core construction.
- Magnetically unshielded.
- L × W × H: 10.5 × 10.5 × 6.5mm Max.
- Product weight: 1.7 g(Ref.)
- Moisture Sensitivity Level: 1
- RoHS compliance.
- Halogen Free available.

### Environmental Data

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

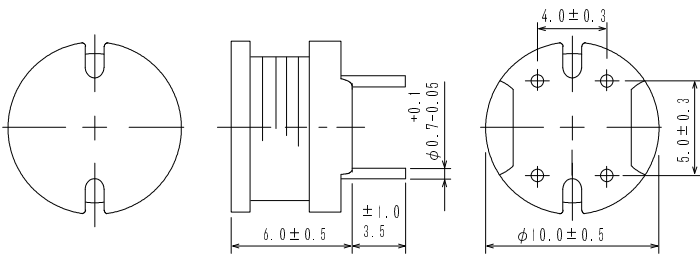
### Packaging

- Box packaging.

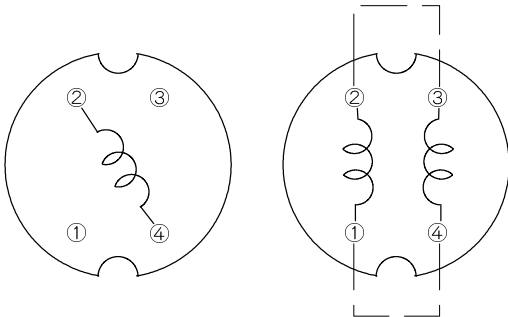
### Applications

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

### Dimension - [mm]



### Schematics - [mm]



(100M ~ 102K)

(1R0N ~ 7R8M)

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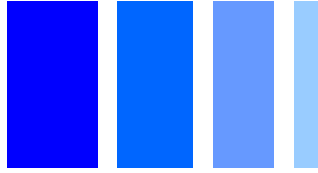
## Electrical Characteristics

PART NO	STAMP	INDUCTANCE [WITHIN] ※1	D.C.R. ( $\Omega$ ) [MAX.] (at 20°C)	RATED CURRENT (A) ※2
RCH106NP-1R0N	1R0N	1.0 $\mu$ H $\pm$ 30 %	5.0m	9.3
RCH106NP-1R2N	1R2N	1.2 $\mu$ H $\pm$ 30 %	6.9m	8.0
RCH106NP-1R8M	1R8M	1.8 $\mu$ H $\pm$ 20 %	8.0m	7.4
RCH106NP-2R8M	2R8M	2.8 $\mu$ H $\pm$ 20 %	11.8m	6.0
RCH106NP-3R6M	3R6M	3.6 $\mu$ H $\pm$ 20 %	13.8m	5.7
RCH106NP-5R1M	5R1M	5.1 $\mu$ H $\pm$ 20 %	19.6m	4.6
RCH106NP-6R3M	6R3M	6.3 $\mu$ H $\pm$ 20 %	23.1m	4.2
RCH106NP-7R8M	7R8M	7.8 $\mu$ H $\pm$ 20 %	24.8m	3.9
RCH106NP-100M	100M	10 $\mu$ H $\pm$ 20 %	0.040	3.6
RCH106NP-120M	120M	12 $\mu$ H $\pm$ 20 %	0.044	3.3
RCH106NP-150M	150M	15 $\mu$ H $\pm$ 20 %	0.058	2.9
RCH106NP-180M	180M	18 $\mu$ H $\pm$ 20 %	0.064	2.7
RCH106NP-220M	220M	22 $\mu$ H $\pm$ 20 %	0.088	2.4
RCH106NP-270M	270M	27 $\mu$ H $\pm$ 20 %	0.10	2.2
RCH106NP-330K	330K	33 $\mu$ H $\pm$ 10 %	0.11	2.0
RCH106NP-390K	390K	39 $\mu$ H $\pm$ 10 %	0.14	1.8
RCH106NP-470K	470K	47 $\mu$ H $\pm$ 10 %	0.16	1.7
RCH106NP-560K	560K	56 $\mu$ H $\pm$ 10 %	0.19	1.5
RCH106NP-680K	680K	68 $\mu$ H $\pm$ 10 %	0.22	1.4
RCH106NP-820K	820K	82 $\mu$ H $\pm$ 10 %	0.29	1.3
RCH106NP-101K	101K	100 $\mu$ H $\pm$ 10 %	0.32	1.3
RCH106NP-121K	121K	120 $\mu$ H $\pm$ 10 %	0.38	1.2
RCH106NP-151K	151K	150 $\mu$ H $\pm$ 10 %	0.50	1.0
RCH106NP-181K	181K	180 $\mu$ H $\pm$ 10 %	0.56	0.84
RCH106NP-221K	221K	220 $\mu$ H $\pm$ 10 %	0.78	0.76
RCH106NP-271K	271K	270 $\mu$ H $\pm$ 10 %	0.92	0.69
RCH106NP-331K	331K	330 $\mu$ H $\pm$ 10 %	1.1	0.62
RCH106NP-391K	391K	390 $\mu$ H $\pm$ 10 %	1.3	0.57
RCH106NP-471K	471K	470 $\mu$ H $\pm$ 10 %	1.5	0.52
RCH106NP-561K	561K	560 $\mu$ H $\pm$ 10 %	1.9	0.48
RCH106NP-681K	681K	680 $\mu$ H $\pm$ 10 %	2.2	0.43
RCH106NP-821K	821K	820 $\mu$ H $\pm$ 10 %	2.6	0.40
RCH106NP-102K	102K	1.0 mH $\pm$ 10 %	3.2	0.36

※1: Inductance measuring condition: 1.0  $\mu$  H ~ 7.8  $\mu$  H at 7.96MHz  
 10  $\mu$  H ~ 1.0mH at 1kHz

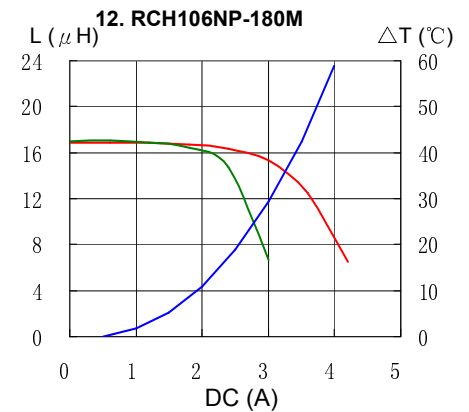
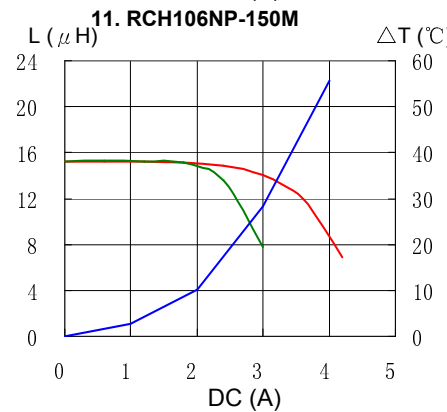
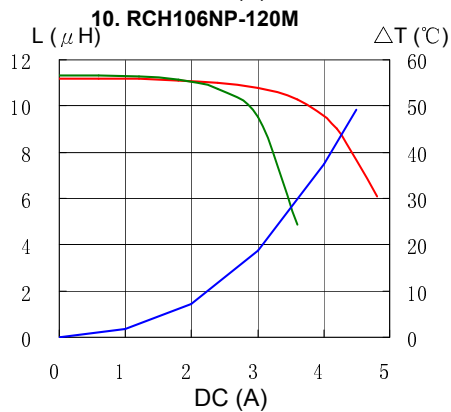
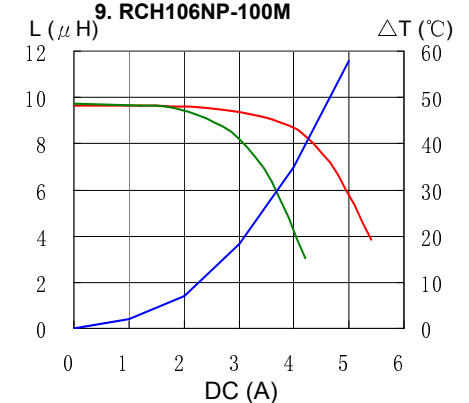
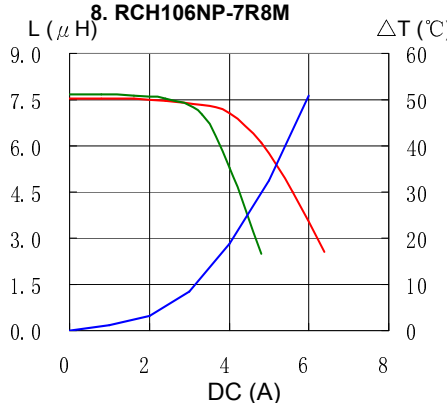
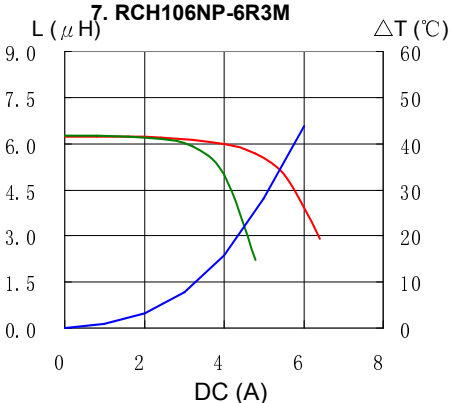
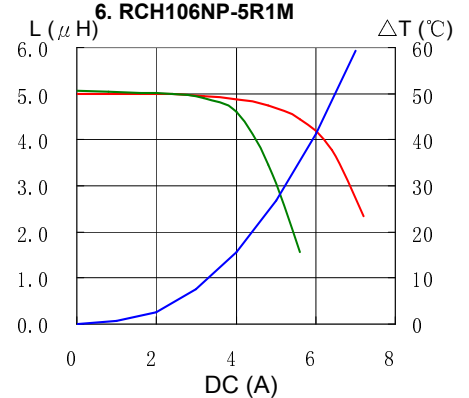
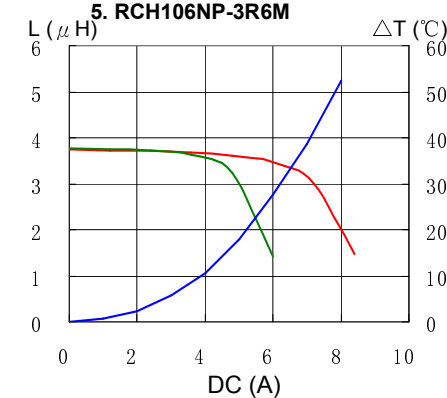
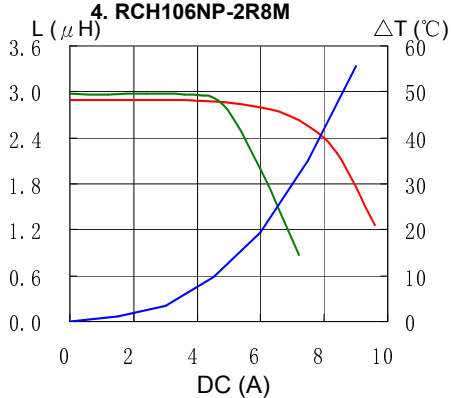
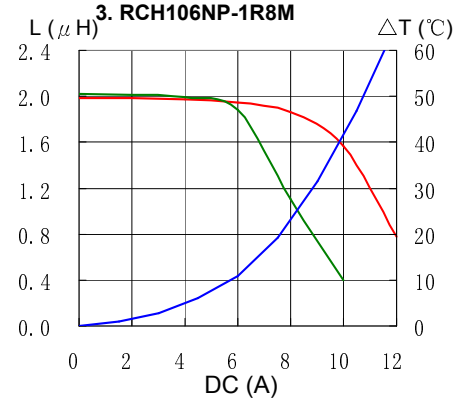
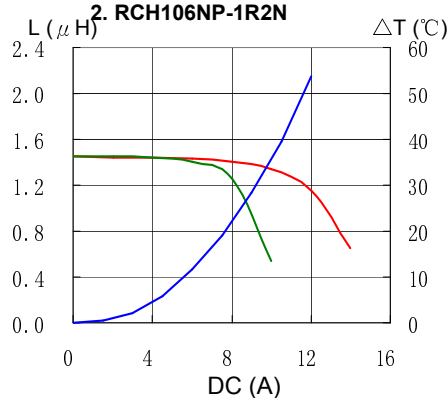
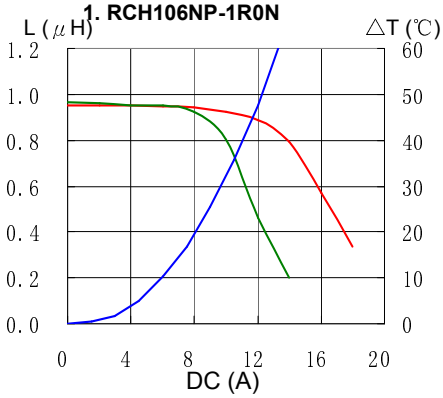
※2: The rated current indicates the lower value of current when the inductance is 10% lower than its initial value at D.C. superposition or the temperature of coil rises 40°C with D.C. current passing. (Ta=20°C)

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## Saturation Current & Temperature Rise Graph

— L (20°C) — L (100°C) —  $\Delta T$



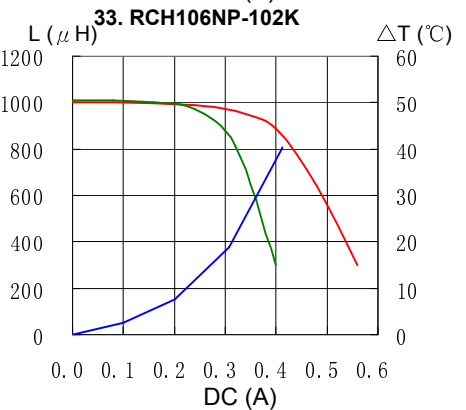
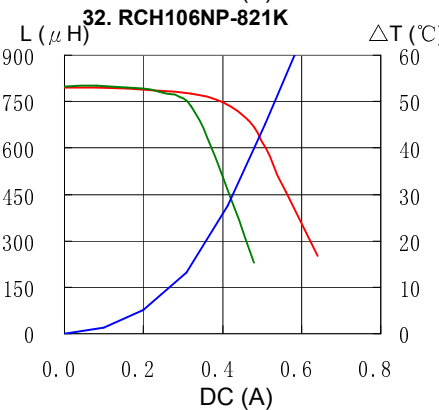
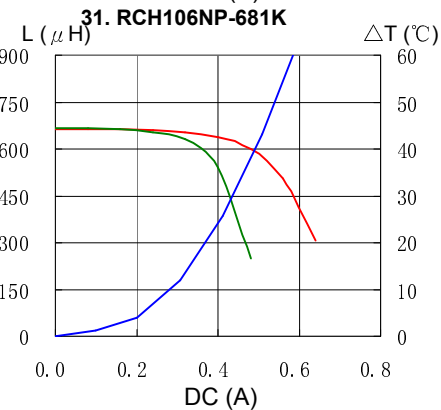
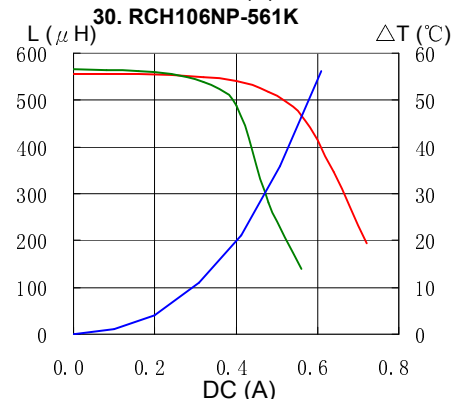
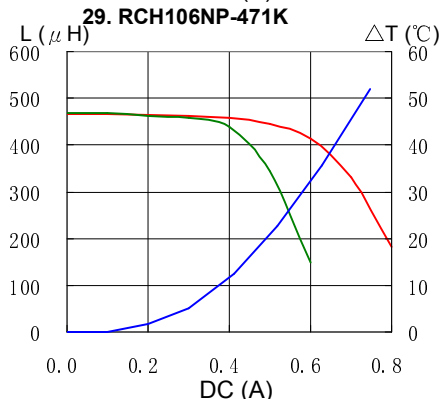
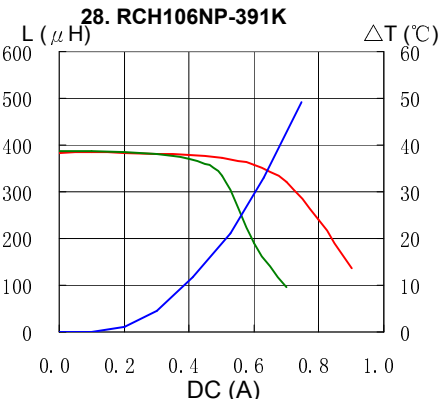
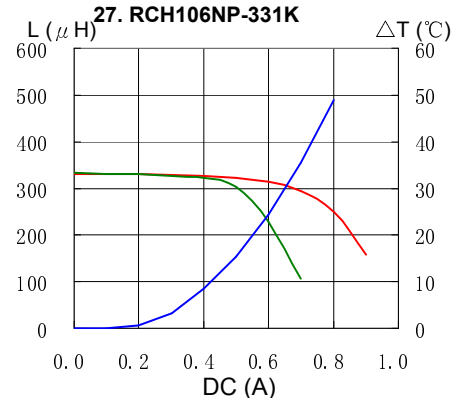
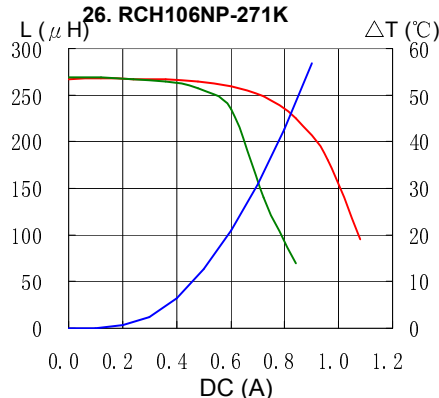
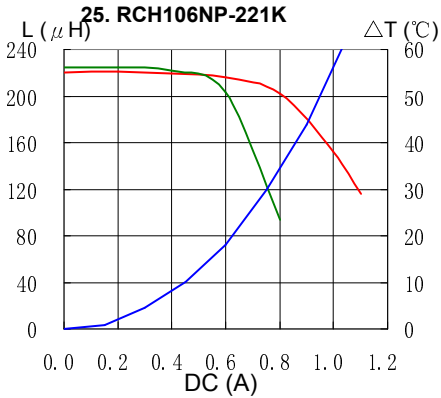


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