

# 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

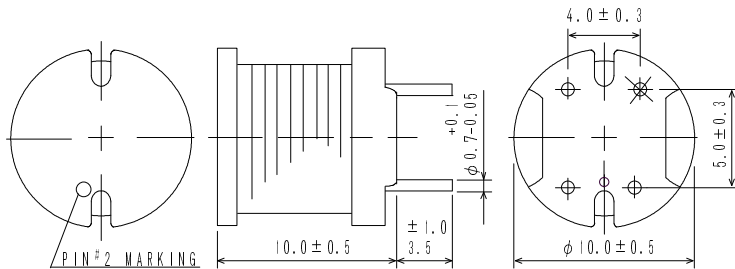
## Packaging

- Box packaging.

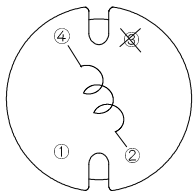
## Applications

- 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 [WITHIN] ※1	D.C.R. ( $\Omega$ ) [MAX.] (at 20°C)	DC SUPERPOSITION CURRENT(A)※2		TEMPERATURE RISE CURRENT (A) ※3 $\Delta T=40^\circ\text{C}$
				(at 20°C)	(at 105°C)	
RCH110BNP-100M	100M	10 $\mu$ H $\pm$ 20%	30m(24m)	4.3	3.6	4.3
RCH110BNP-120M	120M	12 $\mu$ H $\pm$ 20%	33m(26m)	4.1	3.2	4.2
RCH110BNP-150M	150M	15 $\mu$ H $\pm$ 20%	36m(29m)	3.7	3.0	3.7
RCH110BNP-180M	180M	18 $\mu$ H $\pm$ 20%	38m(31m)	3.4	2.8	3.6
RCH110BNP-220M	220M	22 $\mu$ H $\pm$ 20%	47m(37m)	3.0	2.5	3.5
RCH110BNP-270M	270M	27 $\mu$ H $\pm$ 20%	51m(41m)	2.9	2.3	3.4
RCH110BNP-330K	330K	33 $\mu$ H $\pm$ 10%	58m(46m)	2.6	2.1	3.2
RCH110BNP-390K	390K	39 $\mu$ H $\pm$ 10%	63m(50m)	2.4	1.9	3.1
RCH110BNP-470K	470K	47 $\mu$ H $\pm$ 10%	71m(57m)	2.2	1.8	2.8
RCH110BNP-560K	560K	56 $\mu$ H $\pm$ 10%	78m(63m)	2.0	1.6	2.7
RCH110BNP-680K	680K	68 $\mu$ H $\pm$ 10%	105m(84m)	1.8	1.4	2.2
RCH110BNP-820K	820K	82 $\mu$ H $\pm$ 10%	120m(95m)	1.6	1.3	2.1
RCH110BNP-101K	101K	100 $\mu$ H $\pm$ 10%	150m(107m)	1.5	1.2	2.0
RCH110BNP-121K	121K	120 $\mu$ H $\pm$ 10%	180m(140m)	1.3	1.0	1.7
RCH110BNP-151K	151K	150 $\mu$ H $\pm$ 10%	200m(160m)	1.2	0.99	1.6
RCH110BNP-181K	181K	180 $\mu$ H $\pm$ 10%	280m(220m)	1.1	0.87	1.4
RCH110BNP-221K	221K	220 $\mu$ H $\pm$ 10%	0.31(242m)	0.99	0.79	1.3
RCH110BNP-271K	271K	270 $\mu$ H $\pm$ 10%	0.36(286m)	0.87	0.70	1.2
RCH110BNP-331K	331K	330 $\mu$ H $\pm$ 10%	0.46(0.37)	0.78	0.61	1.0
RCH110BNP-391K	391K	390 $\mu$ H $\pm$ 10%	0.58(0.46)	0.72	0.59	0.92
RCH110BNP-471K	471K	470 $\mu$ H $\pm$ 10%	0.65(0.52)	0.67	0.50	0.89
RCH110BNP-561K	561K	560 $\mu$ H $\pm$ 10%	0.89(0.71)	0.59	0.48	0.75
RCH110BNP-681K	681K	680 $\mu$ H $\pm$ 10%	1.10(0.81)	0.54	0.45	0.69
RCH110BNP-821K	821K	820 $\mu$ H $\pm$ 10%	1.31(0.92)	0.52	0.41	0.66
RCH110BNP-102K	102K	1.0mH $\pm$ 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 it's nominal value.

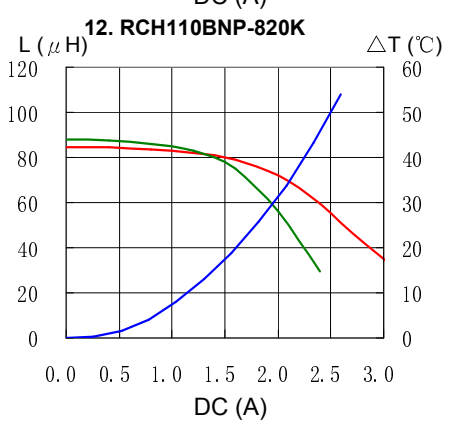
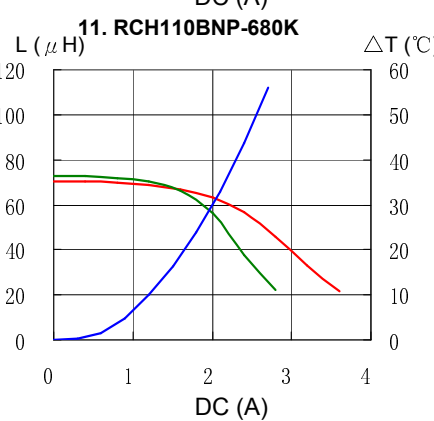
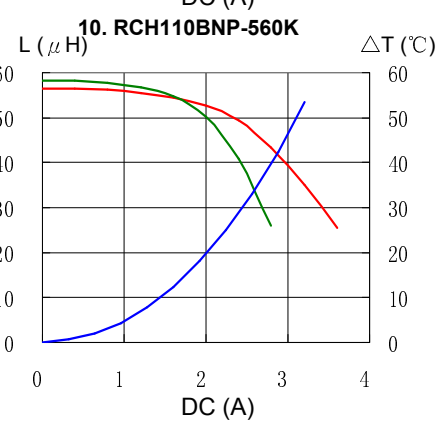
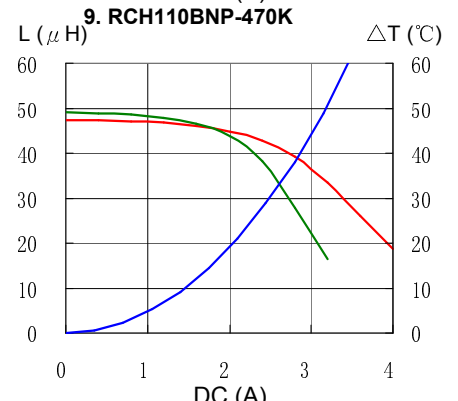
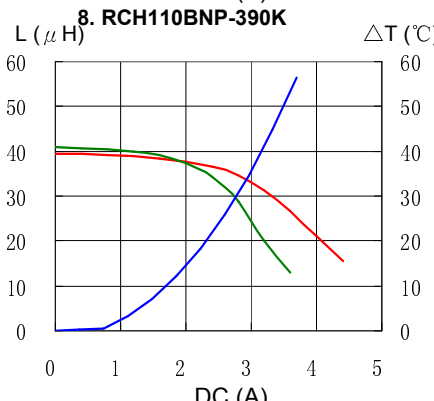
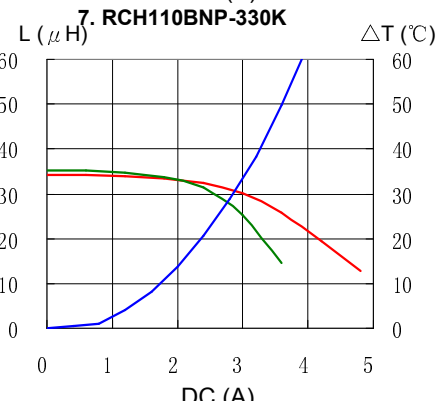
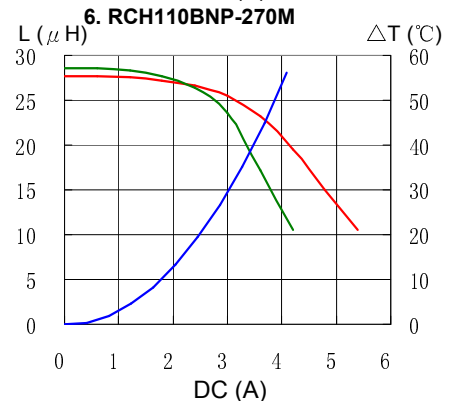
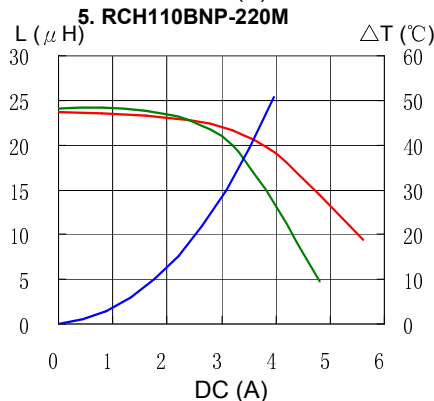
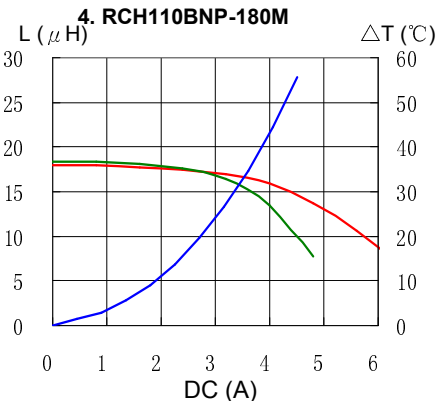
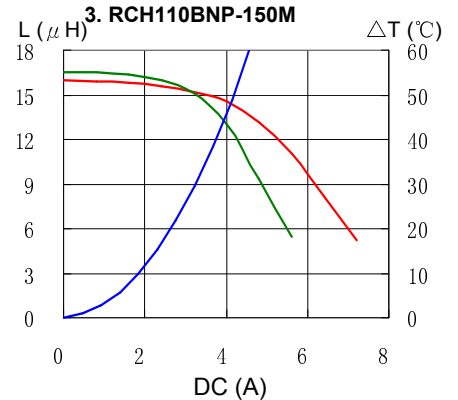
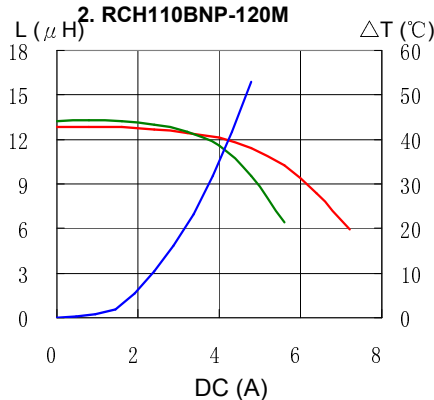
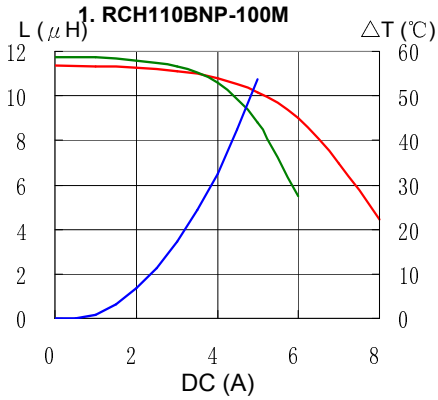
※3. Temperature rise current: The value of D.C. current when the temperature rise is  $\Delta t=40^\circ\text{C}$  ( $T_a=20^\circ\text{C}$ ).

# PIN Power Inductor RCH110B



## Saturation Current & Temperature Rise Graph

— L (20°C) — L (105°C) —  $\Delta T$



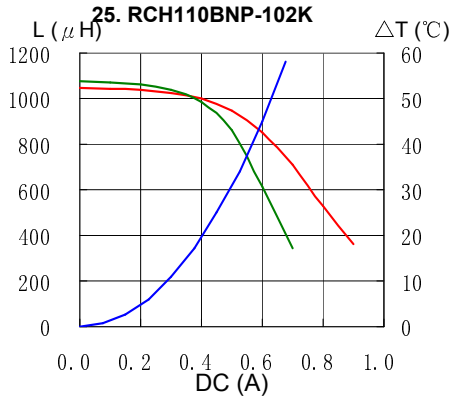


# PIN Power Inductor RCH110B



## Saturation Current & Temperature Rise Graph

— L (20°C) — L (105°C) —  $\Delta T$



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)

### Oberzell

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)

# Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

## Sumida:

[RCH110BNP-390K](#) [RCH110BNP-121K](#) [RCH110BNP-680K](#) [RCH110BNP-681K](#) [RCH110BNP-391K](#) [RCH110BNP-221K](#) [RCH110BNP-270M](#) [RCH110BNP-150M](#) [RCH110BNP-821K](#) [RCH110BNP-471K](#) [RCH110BNP-181K](#) [RCH110BNP-101K](#) [RCH110BNP-220M](#) [RCH110BNP-331K](#) [RCH110BNP-100M](#) [RCH110BNP-561K](#) [RCH110BNP-180M](#) [RCH110BNP-330K](#) [RCH110BNP-560K](#) [RCH110BNP-470K](#) [RCH110BNP-151K](#) [RCH110BNP-820K](#) [RCH110BNP-271K](#) [RCH110BNP-120M](#) [RCH110BNP-102K](#)