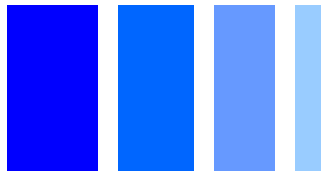


# PIN Power Inductor RCH-654



## Description

- Ferrite drum core construction.
- Magnetically unshielded.
- L × W × H: 6.5 × 6.5 × 5.0mm Max.
- Product weight: 0.5 g(Ref.)
- Moisture Sensitivity Level: 1
- RoHS compliance.

## Environmental Data

- Operating temperature range: -40°C ~ +85°C (including coil's self temperature rise)
- Storage temperature range: -40°C ~ +85°C

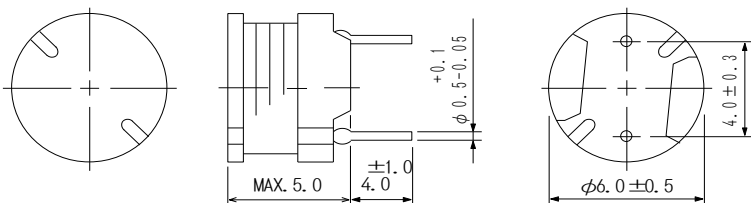
## Packaging

- Box packaging.

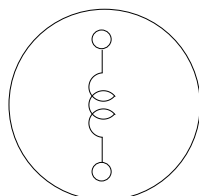
## Applications

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

## Dimension - [mm]



## Schematics - [mm]





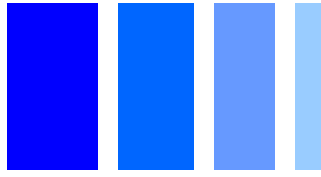
### Electrical Characteristics

PART NO.	STAMP	INDUCTANCE [WITHIN] ※1	D. C. R. ( $\Omega$ ) [MAX. ] at 20°C	RATED CURRENT (mA) ※2
RCH654NP-1R0M	1R0M	1.0 $\mu$ H $\pm$ 20%	29m	3000
RCH654NP-1R5M	1R5M	1.5 $\mu$ H $\pm$ 20%	34m	2850
RCH654NP-2R0M	2R0M	2.0 $\mu$ H $\pm$ 20%	39m	2480
RCH654NP-2R5M	2R5M	2.5 $\mu$ H $\pm$ 20%	43m	2210
RCH654NP-3R3M	3R3M	3.3 $\mu$ H $\pm$ 20%	48m	1980
RCH654NP-3R9M	3R9M	3.9 $\mu$ H $\pm$ 20%	55m	1830
RCH654NP-4R7M	4R7M	4.7 $\mu$ H $\pm$ 20%	60m	1740
RCH654NP-5R6M	5R6M	5.6 $\mu$ H $\pm$ 20%	66m	1530
RCH654NP-6R2M	6R2M	6.2 $\mu$ H $\pm$ 20%	72m	1440
RCH654NP-7R2M	7R2M	7.2 $\mu$ H $\pm$ 20%	78m	1350
RCH654NP-8R2M	8R2M	8.2 $\mu$ H $\pm$ 20%	85m	1260
RCH654NP-100M	100M	10 $\mu$ H $\pm$ 20%	91m	1200
RCH654NP-120K	120K	12 $\mu$ H $\pm$ 10%	0.10	1050
RCH654NP-150K	150K	15 $\mu$ H $\pm$ 10%	0.12	980
RCH654NP-180K	180K	18 $\mu$ H $\pm$ 10%	0.13	930
RCH654NP-220K	220K	22 $\mu$ H $\pm$ 10%	0.18	900
RCH654NP-270K	270K	27 $\mu$ H $\pm$ 10%	0.21	810
RCH654NP-330K	330K	33 $\mu$ H $\pm$ 10%	0.27	740
RCH654NP-390K	390K	39 $\mu$ H $\pm$ 10%	0.29	680
RCH654NP-470K	470K	47 $\mu$ H $\pm$ 10%	0.34	620
RCH654NP-560K	560K	56 $\mu$ H $\pm$ 10%	0.42	570
RCH654NP-680K	680K	68 $\mu$ H $\pm$ 10%	0.48	510
RCH654NP-820K	820K	82 $\mu$ H $\pm$ 10%	0.55	470
RCH654NP-101K	101K	100 $\mu$ H $\pm$ 10%	0.68	420
RCH654NP-121K	121K	120 $\mu$ H $\pm$ 10%	0.77	390
RCH654NP-151K	151K	150 $\mu$ H $\pm$ 10%	0.95	350
RCH654NP-181K	181K	180 $\mu$ H $\pm$ 10%	1.15	320
RCH654NP-221K	221K	220 $\mu$ H $\pm$ 10%	1.30	290
RCH654NP-271K	271K	270 $\mu$ H $\pm$ 10%	1.55	260
RCH654NP-331K	331K	330 $\mu$ H $\pm$ 10%	2.18	230
RCH654NP-391K	391K	390 $\mu$ H $\pm$ 10%	2.47	210
RCH654NP-471K	471K	470 $\mu$ H $\pm$ 10%	2.92	200
RCH654NP-561K	561K	560 $\mu$ H $\pm$ 10%	3.97	180
RCH654NP-681K	681K	680 $\mu$ H $\pm$ 10%	4.57	160
RCH654NP-821K	821K	820 $\mu$ H $\pm$ 10%	5.28	150
RCH654NP-102K	102K	1.0 mH $\pm$ 10%	7.06	130

※1: Inductance measuring condition: 1.0 $\mu$ H ~ 8.2 $\mu$ H at 7.96MHz  
 10 $\mu$ H ~ 82 $\mu$ H at 2.52MHz  
 100 $\mu$ H ~ 1.0mH at 1 kHz

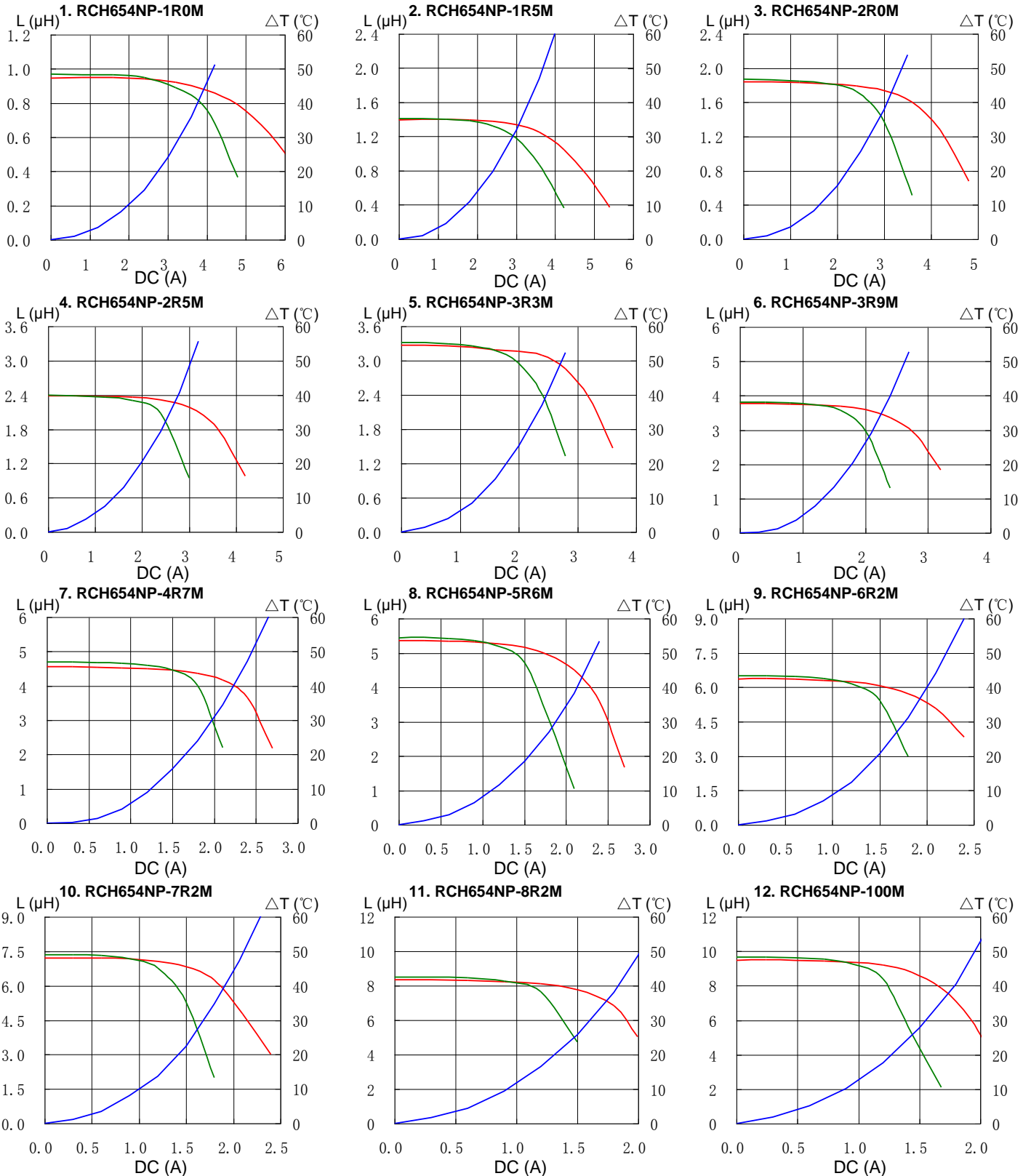
※2: The rated current indicates the lower value of current when the inductance is 10% lower than its initial value at D.C. superposition or the temperature of coil rises 40°C with D.C. current passing. (Ta=20°C)

# PIN Power Inductor RCH-654

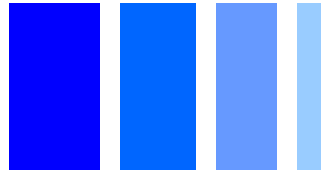


## Saturation Current & Temperature Rise Graph

— L (20°C) — L (100°C) —  $\Delta T$

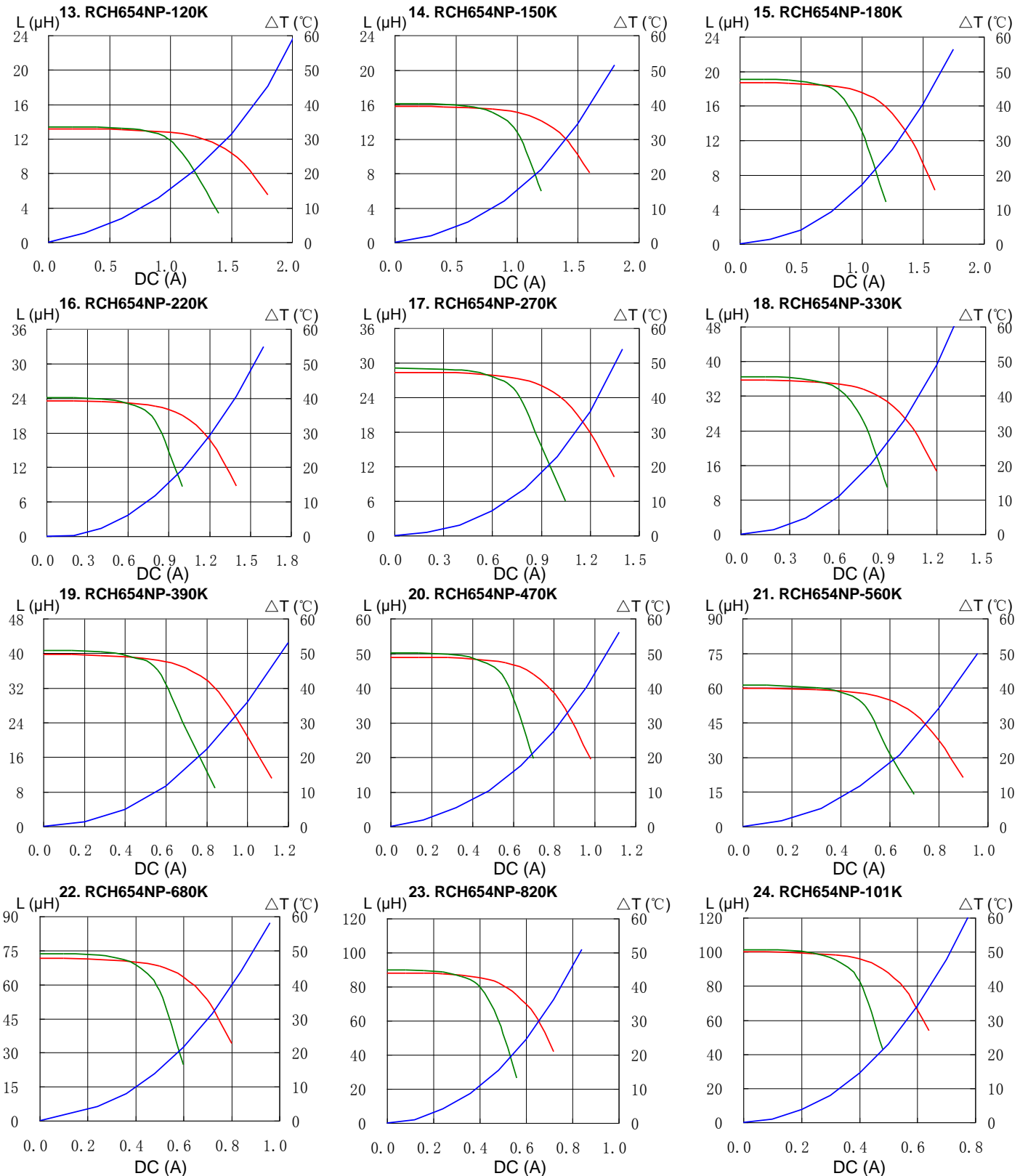


# PIN Power Inductor RCH-654

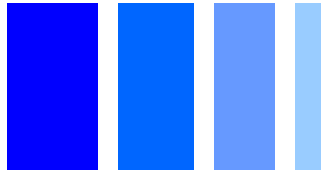


## Saturation Current & Temperature Rise Graph

— L (20°C) — L (100°C) —  $\Delta T$

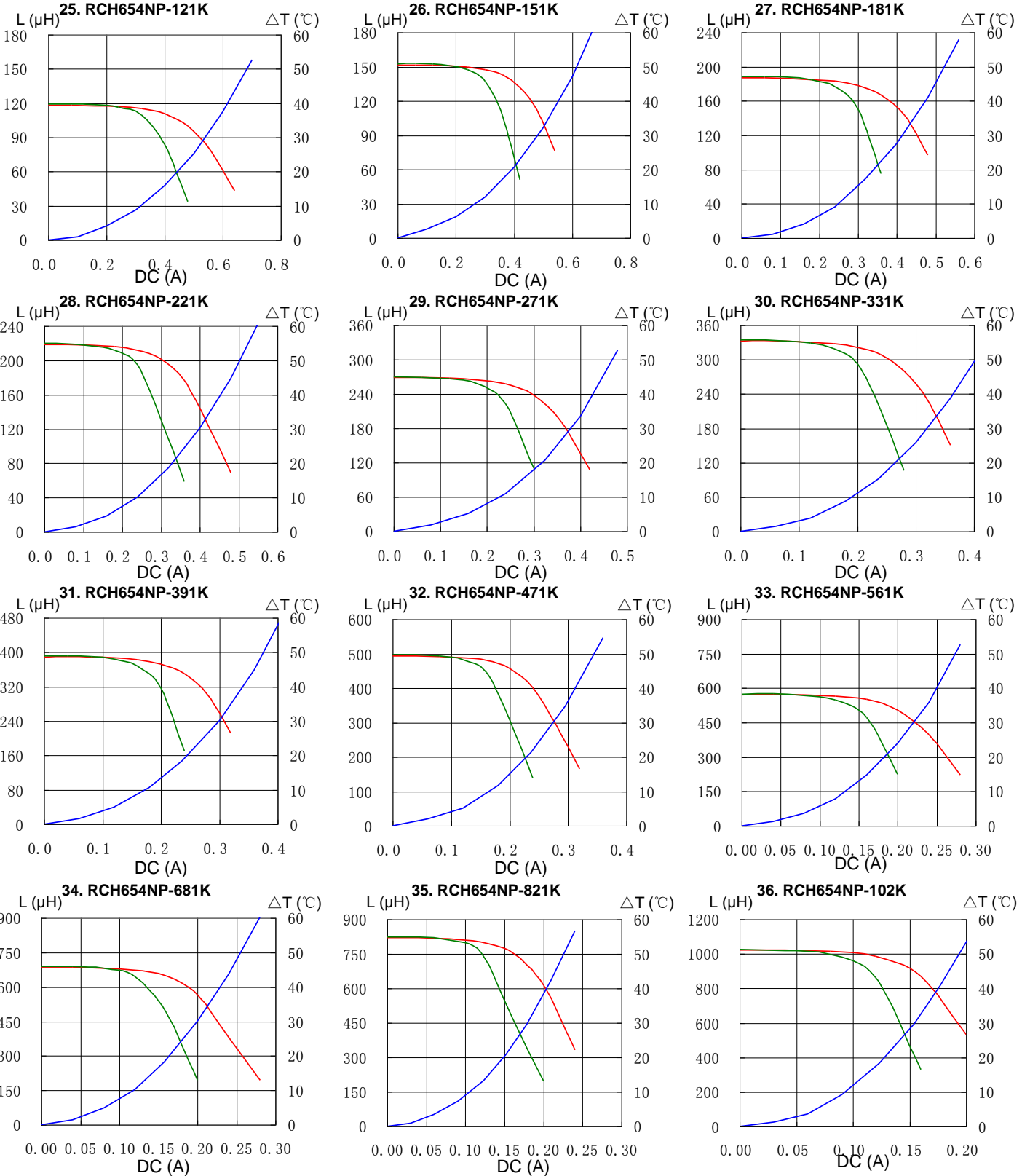


# PIN Power Inductor RCH-654



## Saturation Current & Temperature Rise Graph

— L (20°C) — L (100°C) —  $\Delta T$



# PIN Power Inductor RCH-654



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)