

# PIN Power Inductor RCH1216B



## Description

- Ferrite drum core construction.
- Magnetically unshielded.
- L × W × H: 12.5 × 12.5 × 16.0mm Max.
- Product weight: 5.2g(Ref.)
- Moisture Sensitivity Level: 1
- RoHS compliance.

## Environmental Data

- Operating temperature range: -30°C~+100°C (including coil's self temperature rise)
- Storage temperature range: -30°C~+100°C

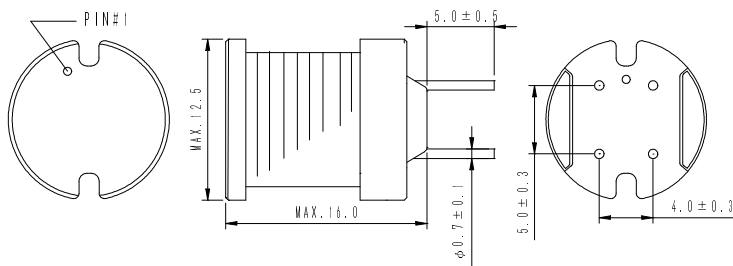
## Packaging

- Box packaging.

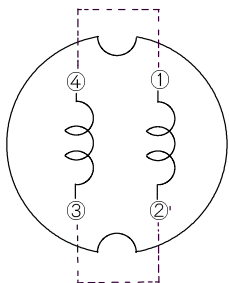
## Applications

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

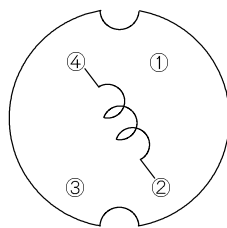
## Dimension - [mm]



## Schematics - [mm]



(10 μH ~ 47 μH)



(56 μH ~ 2.2mH)

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## Electrical Characteristics

PART NO.	STAMP	INDUCTANCE [WITHIN] ※1	D.C.R. [MAX.]( $\Omega$ ) at 20°C	DC SUPERPOSITION PERMISSION CURRENT (A)※2		TEMPERATURE RISE CURRENT (A) ※3
				at 20°C	at 100°C	
RCH1216BNP-100M	100M	10 $\mu$ H $\pm$ 20%	24m(19m)	9.00	8.00	5.00
RCH1216BNP-120M	120M	12 $\mu$ H $\pm$ 20%	26m(21m)	7.80	7.00	4.60
RCH1216BNP-150M	150M	15 $\mu$ H $\pm$ 20%	29m(23m)	7.20	6.20	4.40
RCH1216BNP-180M	180M	18 $\mu$ H $\pm$ 20%	33m(26m)	6.75	5.80	4.20
RCH1216BNP-220M	220M	22 $\mu$ H $\pm$ 20%	37m(29m)	6.00	5.30	4.00
RCH1216BNP-270M	270M	27 $\mu$ H $\pm$ 20%	41m(32m)	5.50	4.80	3.80
RCH1216BNP-330M	330M	33 $\mu$ H $\pm$ 20%	46m(36m)	5.00	4.50	3.60
RCH1216BNP-390M	390M	39 $\mu$ H $\pm$ 20%	49m(39m)	4.70	4.10	3.30
RCH1216BNP-470M	470M	47 $\mu$ H $\pm$ 20%	56m(44m)	4.30	3.80	3.20
RCH1216BNP-560K	560K	56 $\mu$ H $\pm$ 10%	87m(69m)	4.10	3.70	2.70
RCH1216BNP-680K	680K	68 $\mu$ H $\pm$ 10%	98m(78m)	3.80	3.30	2.40
RCH1216BNP-820K	820K	82 $\mu$ H $\pm$ 10%	107m(85m)	3.20	2.90	2.25
RCH1216BNP-101K	101K	100 $\mu$ H $\pm$ 10%	121m(96m)	3.00	2.70	2.15
RCH1216BNP-121K	121K	120 $\mu$ H $\pm$ 10%	134m(107m)	2.85	2.60	2.05
RCH1216BNP-151K	151K	150 $\mu$ H $\pm$ 10%	156m(124m)	2.55	2.35	1.90
RCH1216BNP-181K	181K	180 $\mu$ H $\pm$ 10%	206m(164m)	2.20	2.05	1.65
RCH1216BNP-221K	221K	220 $\mu$ H $\pm$ 10%	236m(188m)	2.00	1.85	1.55
RCH1216BNP-271K	271K	270 $\mu$ H $\pm$ 10%	0.32(0.25)	1.85	1.70	1.40
RCH1216BNP-331K	331K	330 $\mu$ H $\pm$ 10%	0.37(0.29)	1.65	1.53	1.30
RCH1216BNP-391K	391K	390 $\mu$ H $\pm$ 10%	0.48(0.38)	1.55	1.35	1.05
RCH1216BNP-471K	471K	470 $\mu$ H $\pm$ 10%	0.55(0.44)	1.45	1.25	1.00
RCH1216BNP-561K	561K	560 $\mu$ H $\pm$ 10%	0.62(0.49)	1.36	1.18	0.95
RCH1216BNP-681K	681K	680 $\mu$ H $\pm$ 10%	0.79(0.63)	1.20	1.06	0.82
RCH1216BNP-821K	821K	820 $\mu$ H $\pm$ 10%	0.88(0.70)	1.14	0.97	0.75
RCH1216BNP-102K	102K	1.0mH $\pm$ 10%	1.13(0.90)	1.00	0.80	0.65
RCH1216BNP-122K	122K	1.2mH $\pm$ 10%	1.25(1.00)	0.89	0.76	0.61
RCH1216BNP-152K	152K	1.5mH $\pm$ 10%	1.52(1.26)	0.85	0.70	0.54
RCH1216BNP-182K	182K	1.8mH $\pm$ 10%	1.93(1.60)	0.76	0.63	0.46
RCH1216BNP-222K	222K	2.2mH $\pm$ 10%	2.52(2.10)	0.65	0.57	0.41

※1. Inductance measuring condition: at 1kHz.

※2. Saturation current: The value of D.C. current when the inductance decreases to 90% of it's nominal value.

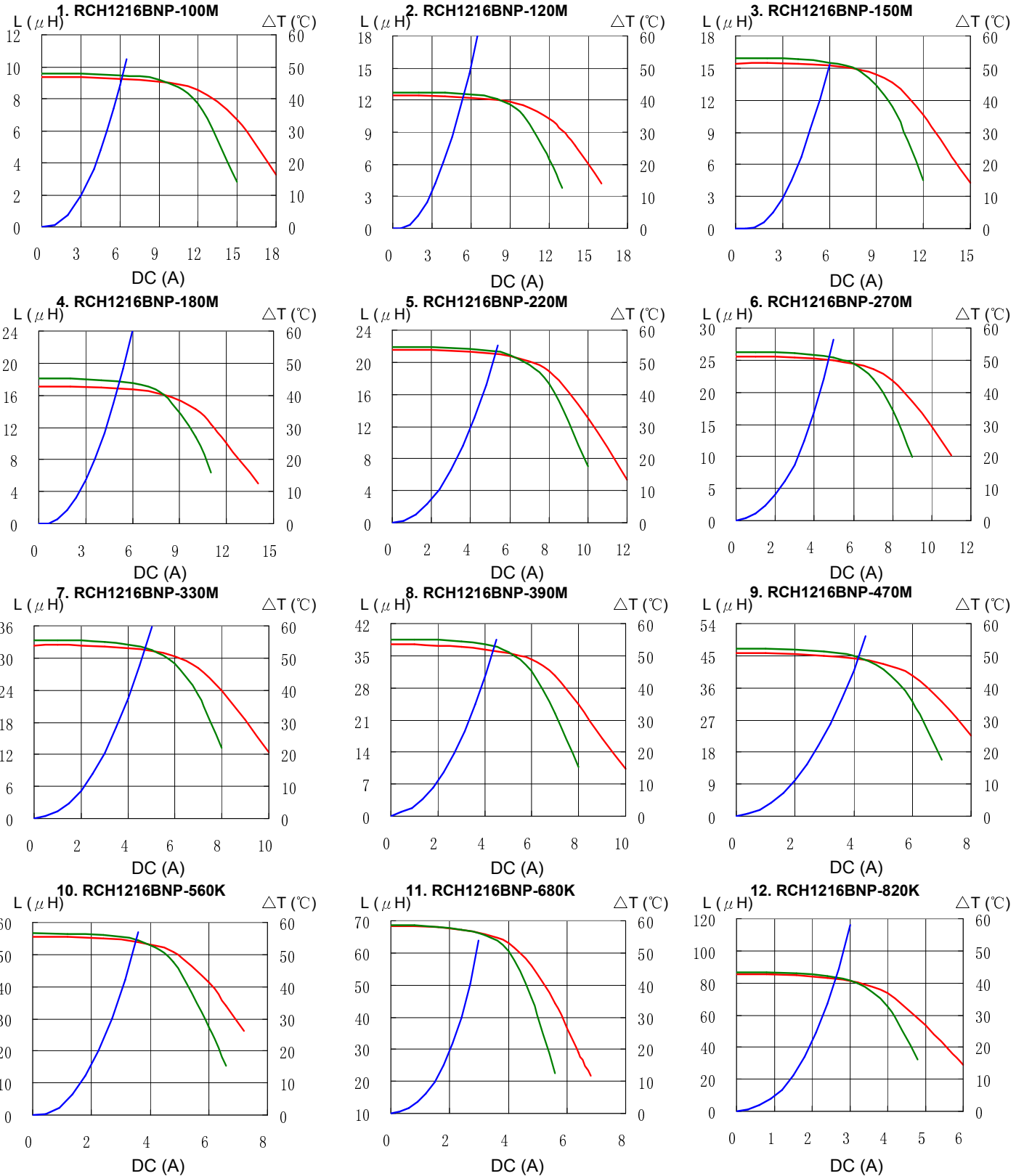
※3. Temperature rise current: The value of D.C. current when the temperature rise is  $\Delta t=40^{\circ}\text{C}$  ( $T_a=20^{\circ}\text{C}$ ).

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## Saturation Current & Temperature Rise Graph

— L (20°C) — L (105°C) —  $\Delta T$

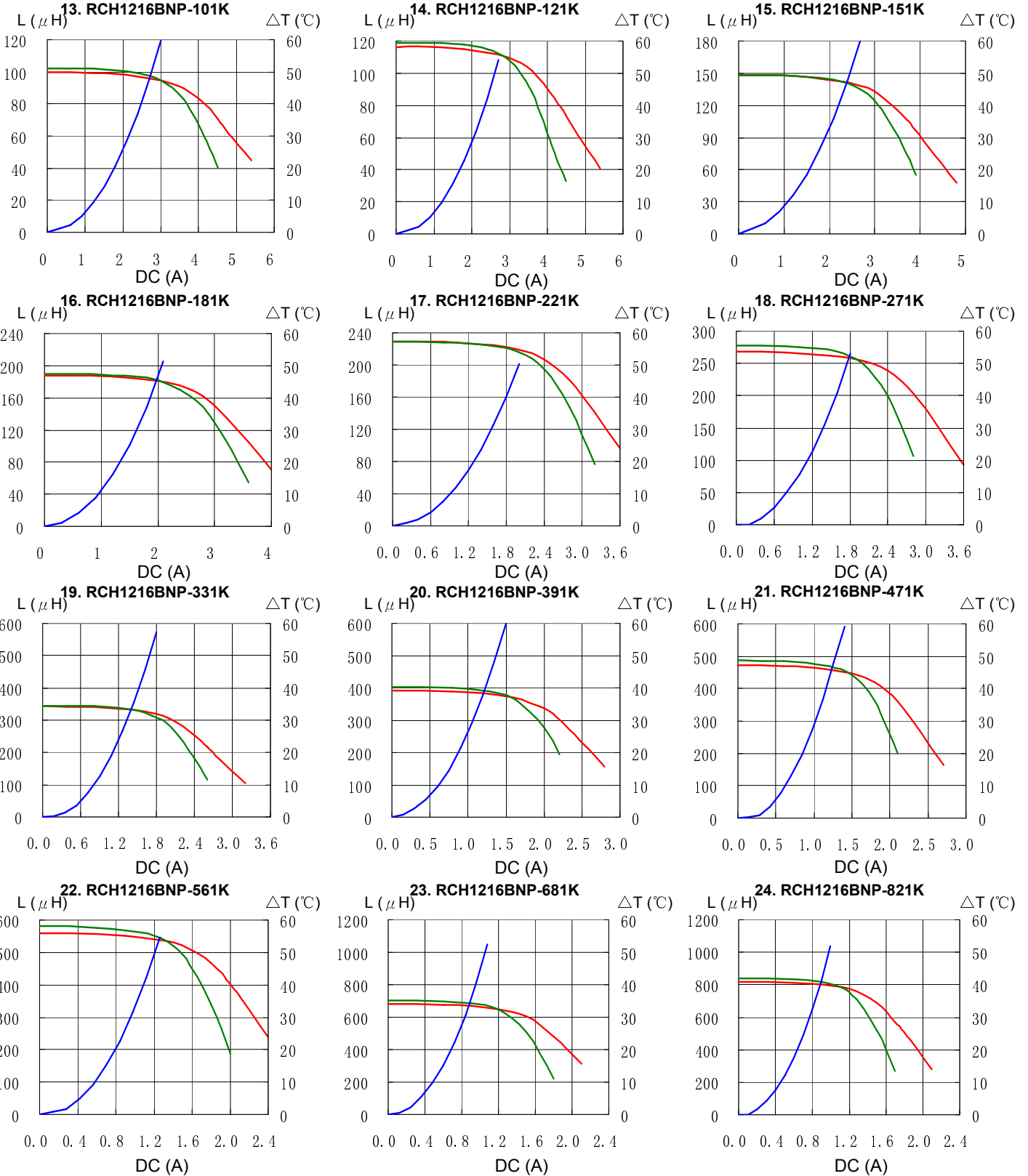


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## Saturation Current & Temperature Rise Graph

— L (20°C) — L (105°C) —  $\Delta T$

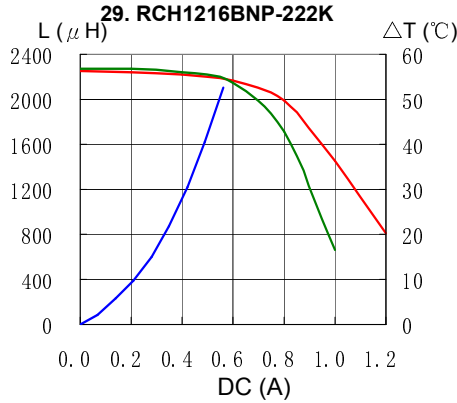
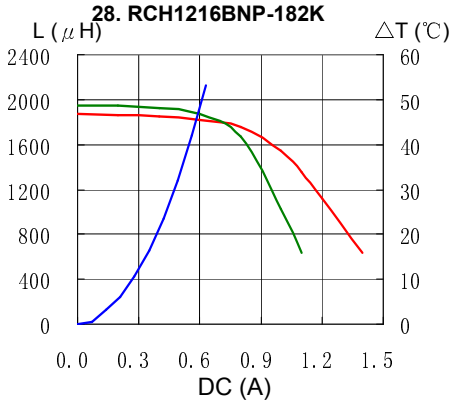
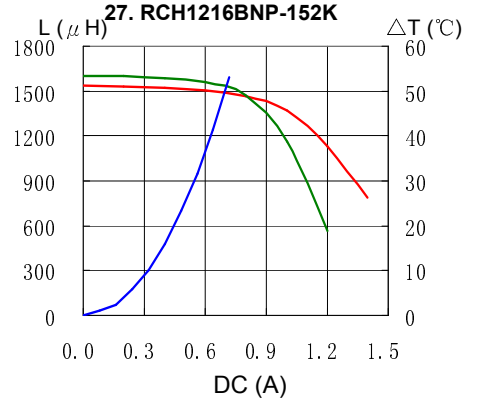
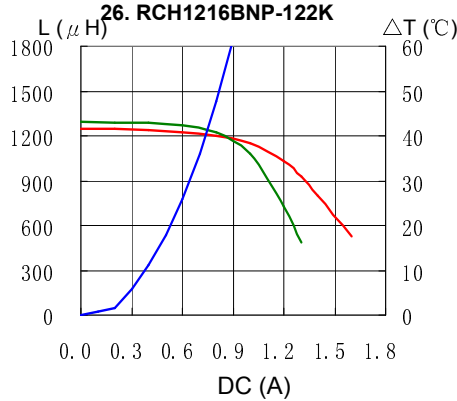
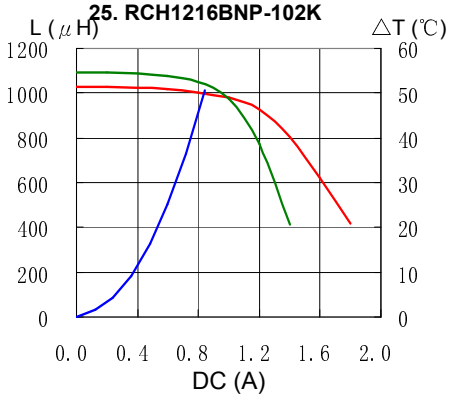


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## Saturation Current & Temperature Rise Graph

— L (20°C) — L (105°C) —  $\Delta T$



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