



**THE DATASHEET OF  
CDRH104RNP-7R0NC**



# SMD Power Inductor CDRH104R



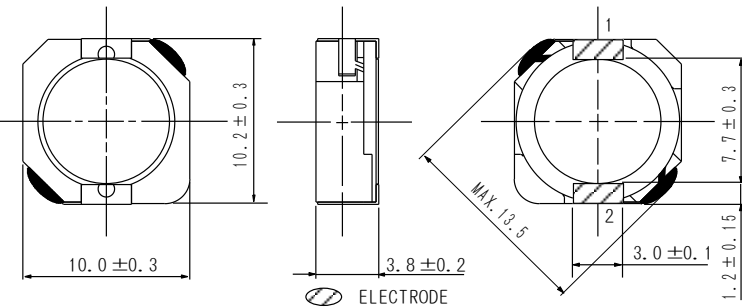
**Halogen  
Free**



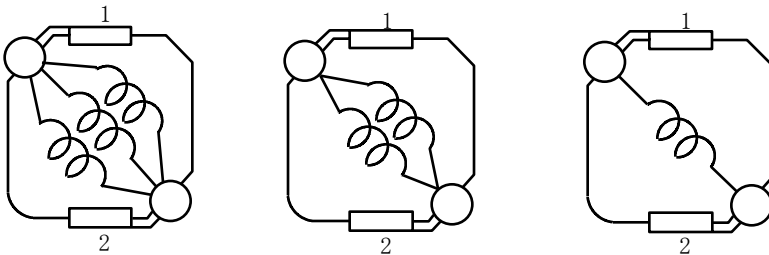
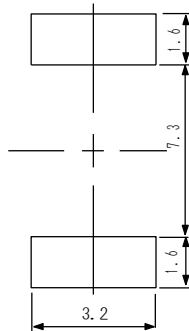
## Description

- Ferrite drum core construction.
- Magnetically shielded.
- L × W × H: 10.5 × 10.3 × 4.0mm Max.
- Product weight: 1.5g(Ref.)
- Moisture Sensitivity Level: 1
- RoHS compliance.
- Halogen Free available.

## Dimension - [mm]



## Land pattern and Schematics - [mm]



(1.5μH~5.2μH, 10μH) (7.0μH、 12μH~33μH) (39μH~330μH)

## Environmental Data

- Operating temperature range:  $-40^{\circ}\text{C} \sim +100^{\circ}\text{C}$  (including coil's self temperature rise)
- Storage temperature range:  $-40^{\circ}\text{C} \sim +100^{\circ}\text{C}$
- Solder reflow temperature:  $260^{\circ}\text{C}$  peak.

## Packaging

- Carrier tape and reel packaging.
- 13" diameter reel.
- 1000pcs per reel.

## Applications

- Ideally used in Notebook PC, LCD TV, DVD, Game machine, STB, Projector etc as DC-DC converter inductors.



### Electrical Characteristics

PART NO.	STAMP	INDUCTANCE [WITHIN] ※1	D. C. R. (mΩ) [MAX. ] (TYP.) (at 20°C)	SATURATION CURRENT (A) MAX. (TYP.) ※2	TEMPERATURE RISE CURRENT (A) ※3
CDRH104RNP-1R5NC	1R5	1.5 μH ± 30%	8.1 (6.0)	10.0 (12.5)	8.50
CDRH104RNP-2R5NC	2R5	2.5 μH ± 30%	10.5 (7.8)	7.90 (9.90)	7.70
CDRH104RNP-3R8NC	3R8	3.8 μH ± 30%	13.0 (9.6)	7.00 (8.80)	7.40
CDRH104RNP-5R2NC	5R2	5.2 μH ± 30%	22 (16)	5.60 (7.00)	6.00
CDRH104RNP-7R0NC	7R0	7.0 μH ± 30%	27 (20)	5.25 (6.60)	5.30
CDRH104RNP-100NC	100	10 μH ± 30%	35 (26)	4.48 (5.60)	4.50
CDRH104RNP-120NC	120	12 μH ± 30%	46 (34)	4.00 (5.00)	3.80
CDRH104RNP-150NC	150	15 μH ± 30%	50 (37)	3.50 (4.40)	3.70
CDRH104RNP-180NC	180	18 μH ± 30%	69 (51)	3.25 (4.10)	3.10
CDRH104RNP-220NC	220	22 μH ± 30%	73 (54)	2.85 (3.60)	2.80
CDRH104RNP-270NC	270	27 μH ± 30%	88 (65)	2.60 (3.28)	2.70
CDRH104RNP-330NC	330	33 μH ± 30%	93 (69)	2.30 (2.90)	2.60
CDRH104RNP-390NC	390	39 μH ± 30%	127 (94)	2.10 (2.62)	2.40
CDRH104RNP-470NC	470	47 μH ± 30%	128 (95)	1.95 (2.44)	2.30
CDRH104RNP-560NC	560	56 μH ± 30%	188 (139)	1.74 (2.18)	1.75
CDRH104RNP-680NC	680	68 μH ± 30%	213 (158)	1.66 (2.08)	1.68
CDRH104RNP-820NC	820	82 μH ± 30%	283 (218)	1.50 (1.88)	1.48
CDRH104RNP-101NC	101	100 μH ± 30%	304 (225)	1.33 (1.66)	1.42
CDRH104RNP-121NC	121	120 μH ± 30%	375 (278)	1.25 (1.56)	1.20
CDRH104RNP-151NC	151	150 μH ± 30%	506 (375)	1.12 (1.40)	1.15
CDRH104RNP-181NC	181	180 μH ± 30%	568 (421)	0.99 (1.24)	1.00
CDRH104RNP-221NC	221	220 μH ± 30%	756 (560)	0.95 (1.19)	0.88
CDRH104RNP-271NC	271	270 μH ± 30%	853 (632)	0.85 (1.06)	0.68
CDRH104RNP-331NC	331	330 μH ± 30%	1090 (810)	0.74 (0.92)	0.66

※1 Measuring frequency at 100kHz

※2 Saturation current: this indicates the value of D.C. current when the inductance becomes 35% lower than its initial value. (Ta=20°C)

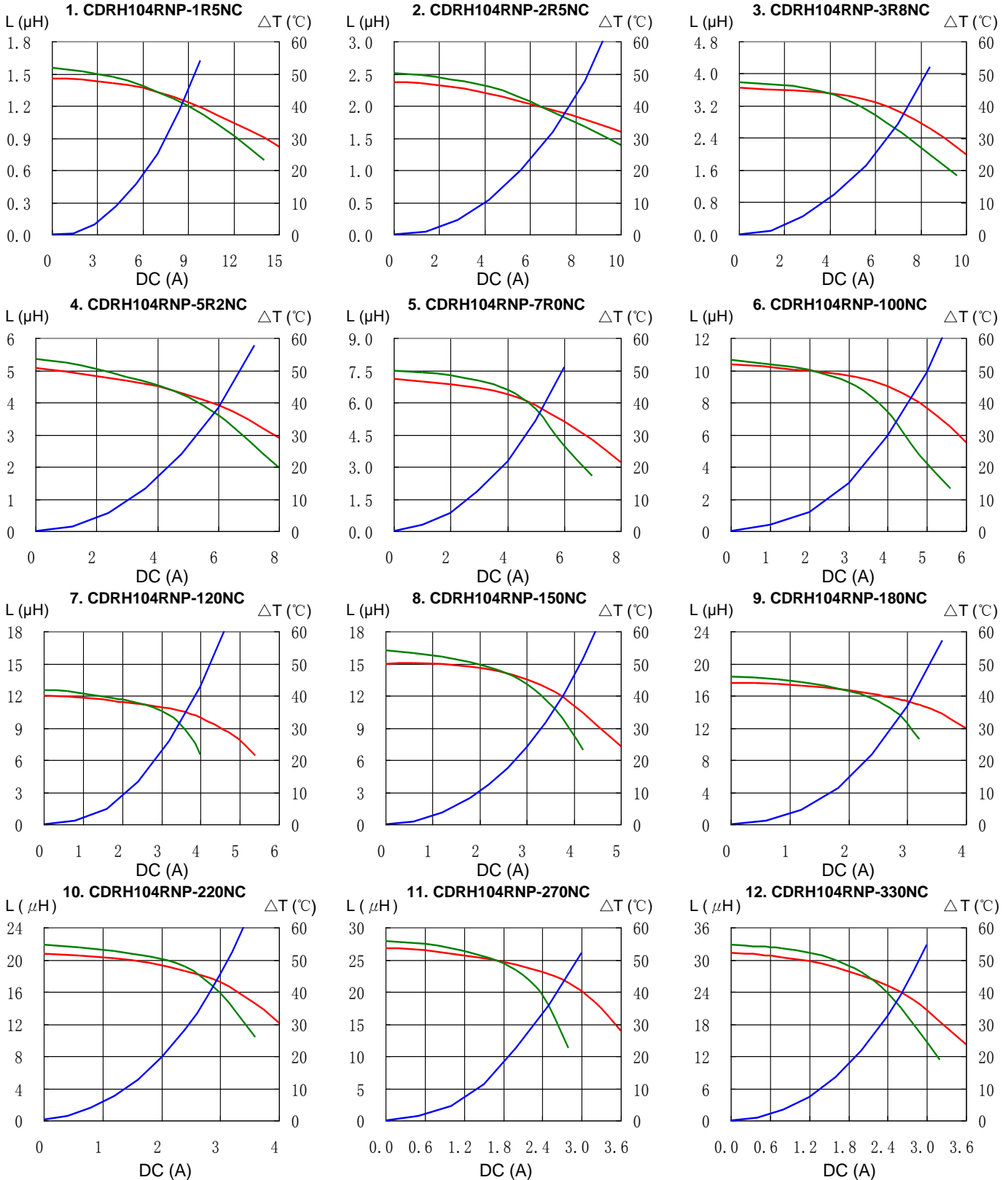
※3 Temperature rise current: the actual value of D.C. current when the temperature of coil becomes ΔT=40°C (Ta=20°C).

# SMD Power Inductor CDRH104R



## Saturation Current & Temperature Rise Graph

— L (20°C) — L (105°C) —  $\Delta T$

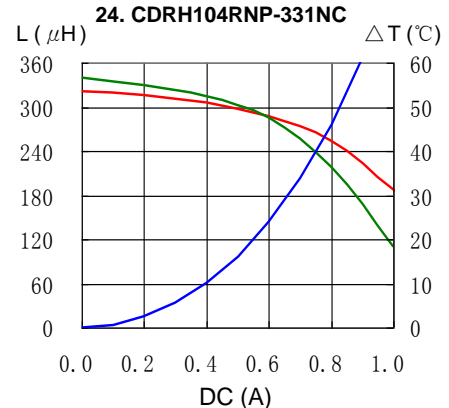
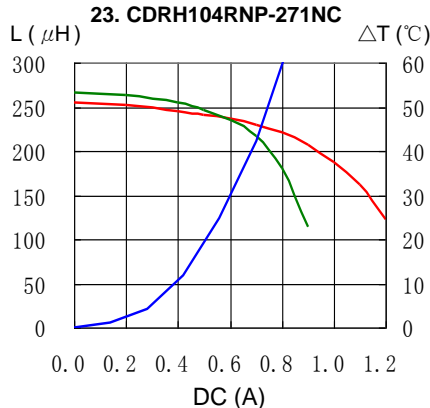
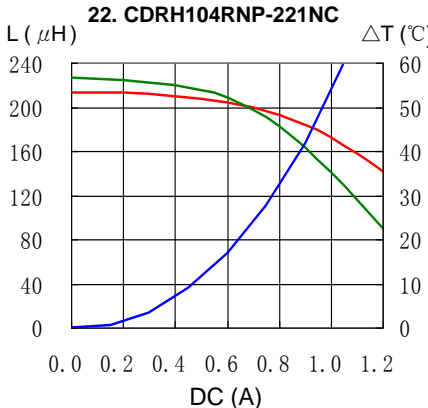
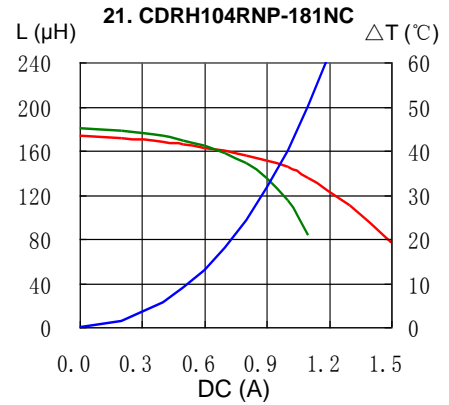
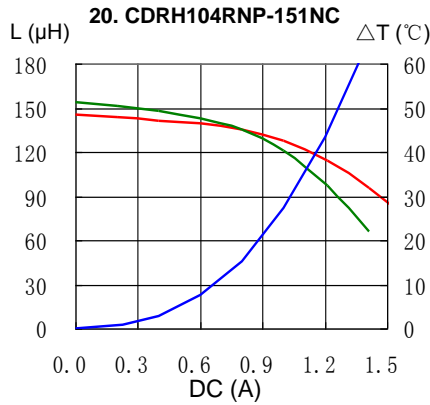
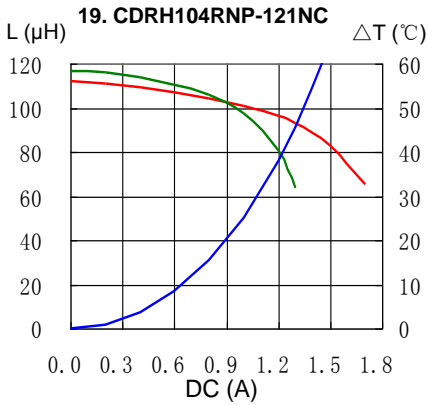
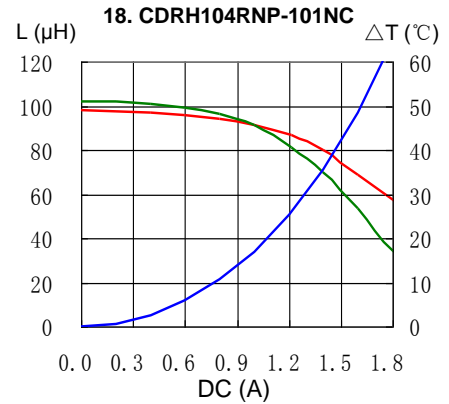
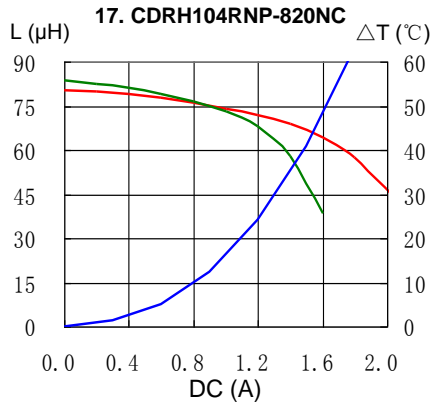
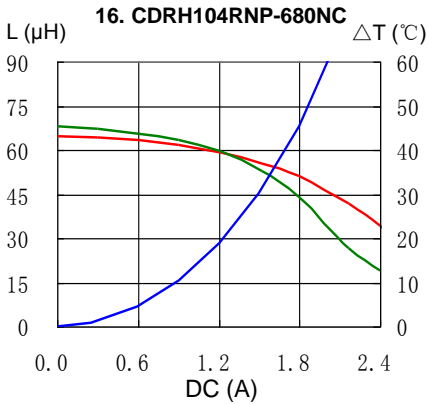
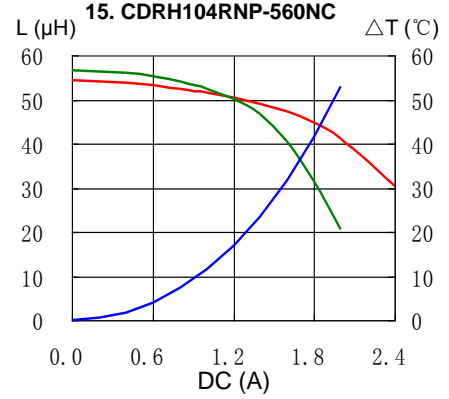
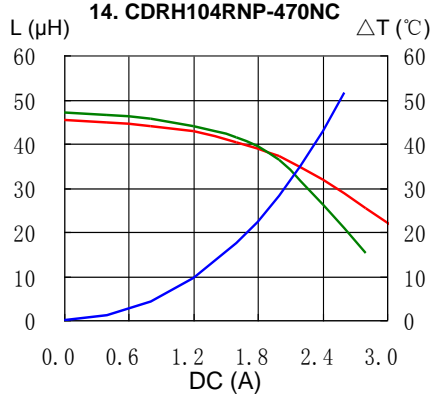
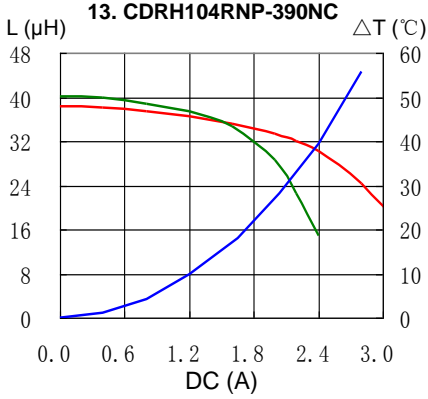


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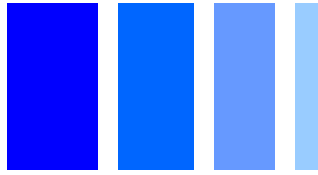


## Saturation Current & Temperature Rise Graph

— L (20°C)    — L (105°C)    — ΔT

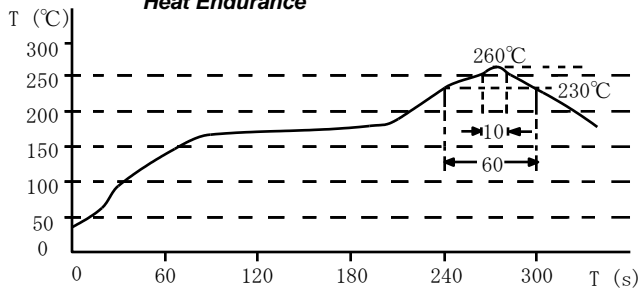


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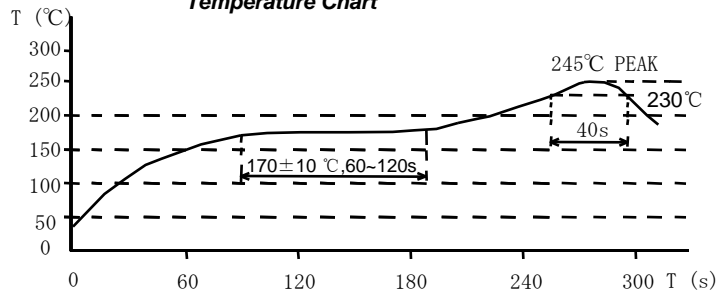


## Solder Reflow Condition

Heat Endurance



Temperature Chart



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