

# SMD Power Inductor CDRH5D28R



## Description

- Ferrite drum core construction.
- Magnetically shielded.
- L × W × H: 6.3 × 6.2 × 3.0 mm Max.
- Product weight: 0.4g(Ref.)
- Moisture Sensitivity Level: 1
- RoHS compliance.

## Environmental Data

- Operating temperature range: -40°C ~ +100°C (including coil's self temperature rise)
- Storage temperature range: -40°C ~ +100°C
- Solder reflow temperature: 260 °C peak.

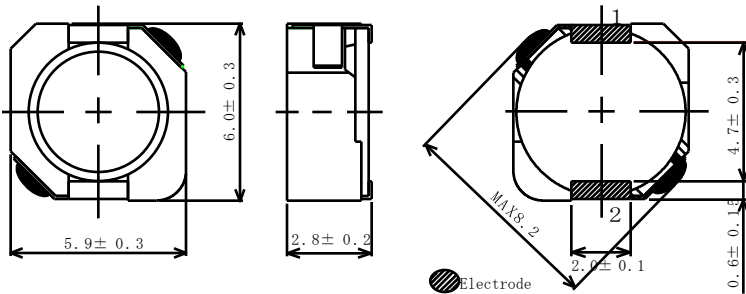
## Packaging

- Carrier tape and reel packaging
- 13.0" diameter reel
- 2000pcs per reel

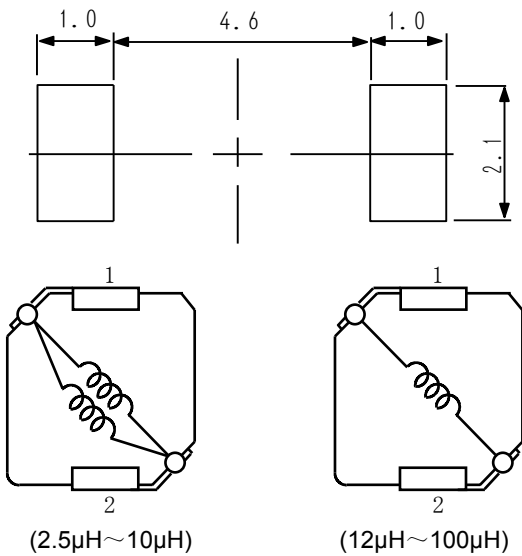
## Applications

- Ideally used in Notebook PC, HDD, DSC/DVC, LCD TV, Game machine etc. as converter inductors.

## Dimension - [mm]



## Land pattern and Schematics - [mm]



# SMD Power Inductor

## CDRH5D28R



### Electrical Characteristics

Part Name	Stamp	Inductance ( $\mu\text{H}$ ) [ within ] ※1	D.C.R. (m $\Omega$ ) [Max.] (Typ.) (at 20°C)	Rated Current (A) ※2
CDRH5D28RNP-2R5NC	2R5	2.5 $\pm$ 30%	17.6(13)	2.60
CDRH5D28RNP-3R3NC	3R3	3.3 $\pm$ 30%	20.3(15)	2.30
CDRH5D28RNP-4R0NC	4R0	4.0 $\pm$ 30%	27.0(20)	2.10
CDRH5D28RNP-5R0NC	5R0	5.0 $\pm$ 30%	31.1(23)	1.85
CDRH5D28RNP-6R0NC	6R0	6.0 $\pm$ 30%	41.9(31)	1.70
CDRH5D28RNP-8R0NC	8R0	8.0 $\pm$ 30%	49.9(37)	1.50
CDRH5D28RNP-100NC	100	10 $\pm$ 30%	54.0(40)	1.30
CDRH5D28RNP-120NC	120	12 $\pm$ 30%	71.6(53)	1.20
CDRH5D28RNP-150NC	150	15 $\pm$ 30%	82.4(61)	1.10
CDRH5D28RNP-180NC	180	18 $\pm$ 30%	101.5(75)	1.05
CDRH5D28RNP-220NC	220	22 $\pm$ 30%	119.0(88)	0.95
CDRH5D28RNP-270NC	270	27 $\pm$ 30%	146.0(108)	0.85
CDRH5D28RNP-330NC	330	33 $\pm$ 30%	182.5(135)	0.76
CDRH5D28RNP-390NC	390	39 $\pm$ 30%	209.5(155)	0.68
CDRH5D28RNP-470NC	470	47 $\pm$ 30%	229.5(170)	0.60
CDRH5D28RNP-560NC	560	56 $\pm$ 30%	305.0(226)	0.55
CDRH5D28RNP-680NC	680	68 $\pm$ 30%	351.0(260)	0.48
CDRH5D28RNP-820NC	820	82 $\pm$ 30%	418.5(310)	0.45
CDRH5D28RNP-101NC	101	100 $\pm$ 30%	520.0(385)	0.40

※1. Inductance measuring condition: at 100kHz.

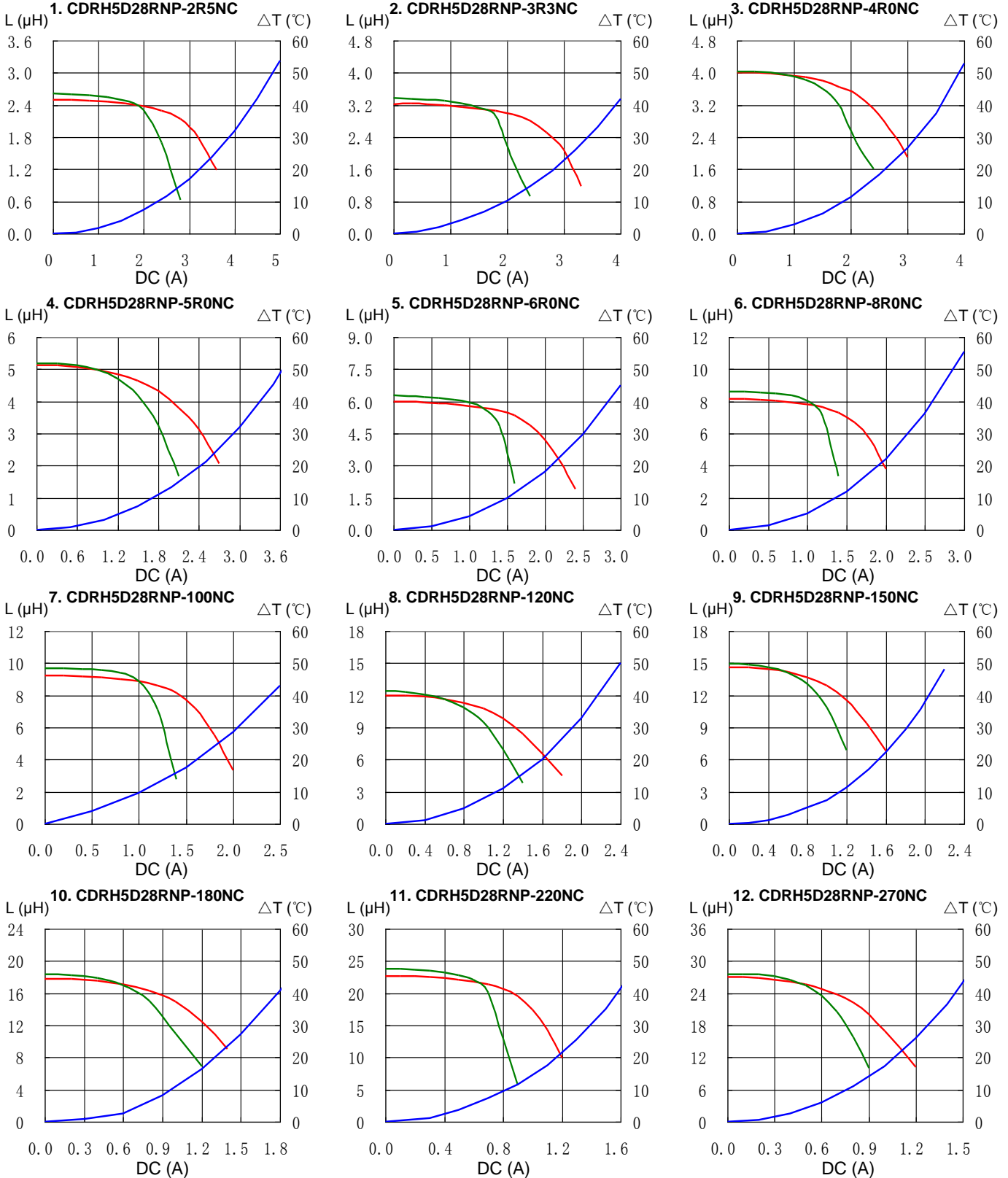
※2. Rated current: The DC current at which the inductance decreases to 65% of it's nominal value or when  $\Delta t=30^\circ\text{C}$ , whichever is lower ( $T_a=20^\circ\text{C}$ ).

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## Saturation Current & Temperature Rise Graph

— L (20°C) — L (105°C) —  $\Delta T$

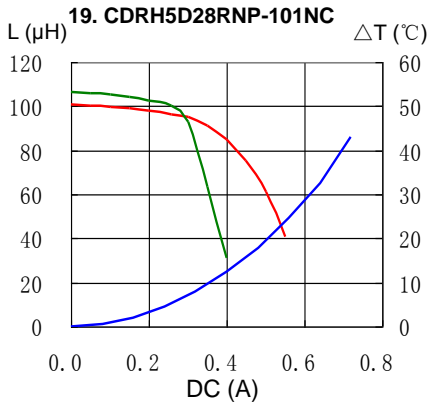
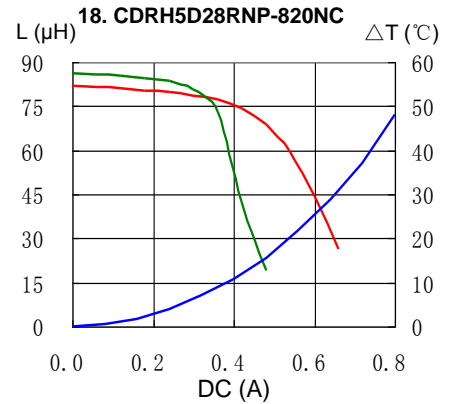
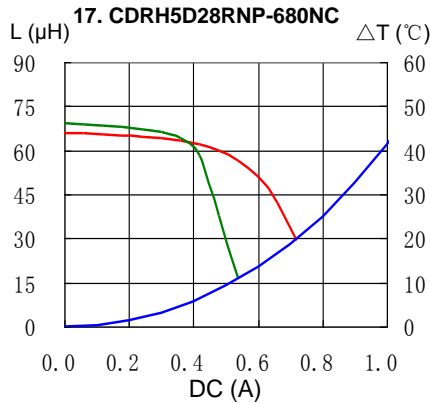
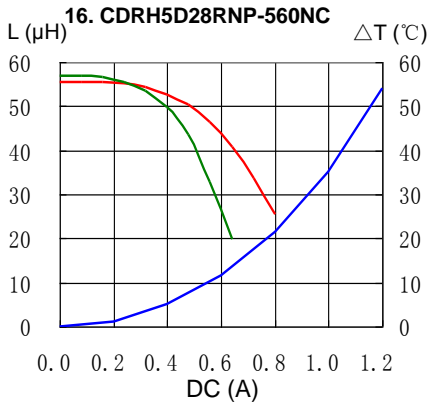
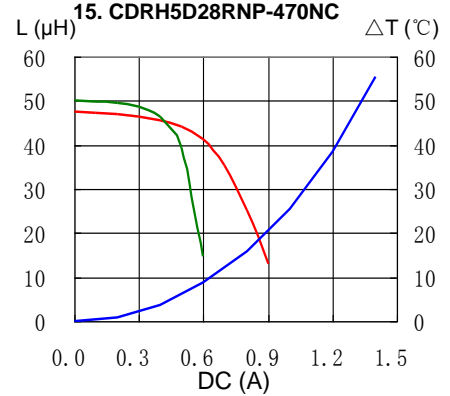
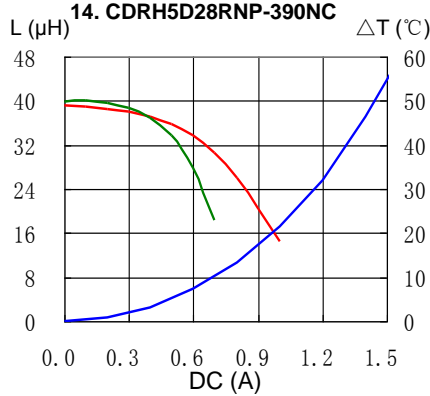
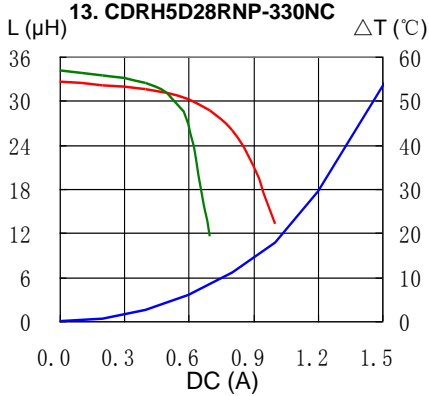


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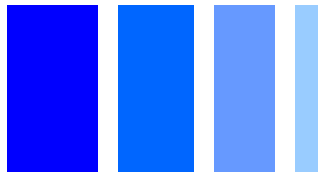


## Saturation Current & Temperature Rise Graph

— L (20°C) — L (105°C) —  $\Delta T$



# SMD Power Inductor CDRH5D28R



## Solder Reflow Condition

Heat Endurance



Temperature Chart



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