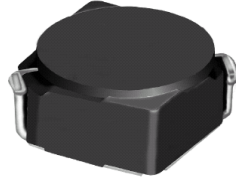




**THE DATASHEET OF  
CDRH5D28NP-120NC**



# SMD Power Inductor CDRH5D28



## Description

- Ferrite drum core construction.
- Magnetically shielded.
- L × W × H: 6.0 × 6.0 × 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.

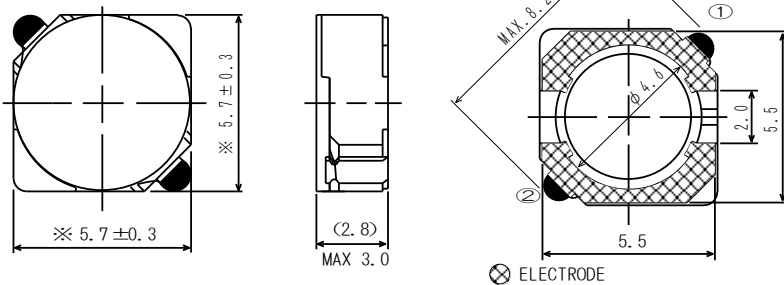
## Packaging

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

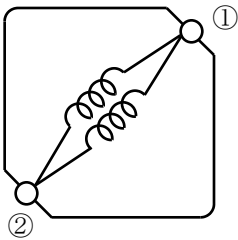
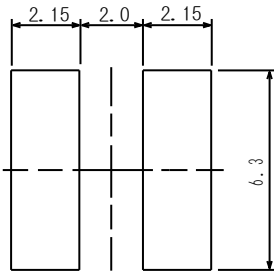
## Applications

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

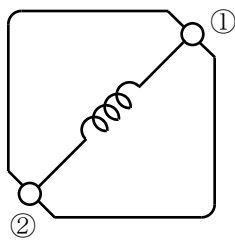
## Dimension - [mm]



## Land pattern and Schematics - [mm]



(2.5µH ~ 8.2µH)



(10µH ~ 100µH)



### Electrical Characteristics

Part Name	Stamp	Inductance ( $\mu\text{H}$ ) [within] ※1	D.C.R. ( $\Omega$ ) [Max.] (Typ.) (at 20°C)	Rated Current (A) ※2
CDRH5D28NP-2R5NC	2R5	$2.5 \pm 30\%$	18m (13m)	2.60
CDRH5D28NP-3R0NC	3R0	$3.0 \pm 30\%$	24m (18m)	2.40
CDRH5D28NP-4R2NC	4R2	$4.2 \pm 30\%$	31m (23m)	2.20
CDRH5D28NP-5R3NC	5R3	$5.3 \pm 30\%$	38m (28m)	1.90
CDRH5D28NP-6R2NC	6R2	$6.2 \pm 30\%$	45m (33m)	1.80
CDRH5D28NP-8R2NC	8R2	$8.2 \pm 30\%$	53m (39m)	1.60
CDRH5D28NP-100NC	100	$10 \pm 30\%$	65m (48m)	1.30
CDRH5D28NP-120NC	120	$12 \pm 30\%$	76m (56m)	1.20
CDRH5D28NP-150NC	150	$15 \pm 30\%$	103m (76m)	1.10
CDRH5D28NP-180NC	180	$18 \pm 30\%$	110m (82m)	1.00
CDRH5D28NP-220NC	220	$22 \pm 30\%$	122m (90m)	0.90
CDRH5D28NP-270NC	270	$27 \pm 30\%$	175m(130m)	0.85
CDRH5D28NP-330NC	330	$33 \pm 30\%$	189m(140m)	0.75
CDRH5D28NP-390NC	390	$39 \pm 30\%$	212m(157m)	0.70
CDRH5D28NP-470NC	470	$47 \pm 30\%$	250m(185m)	0.62
CDRH5D28NP-560NC	560	$56 \pm 30\%$	305m(226m)	0.58
CDRH5D28NP-680NC	680	$68 \pm 30\%$	355m(263m)	0.52
CDRH5D28NP-820NC	820	$82 \pm 30\%$	463m(343m)	0.46
CDRH5D28NP-101NC	101	$100 \pm 30\%$	520m(385m)	0.42

※1. Inductance measuring condition: at 100kHz.

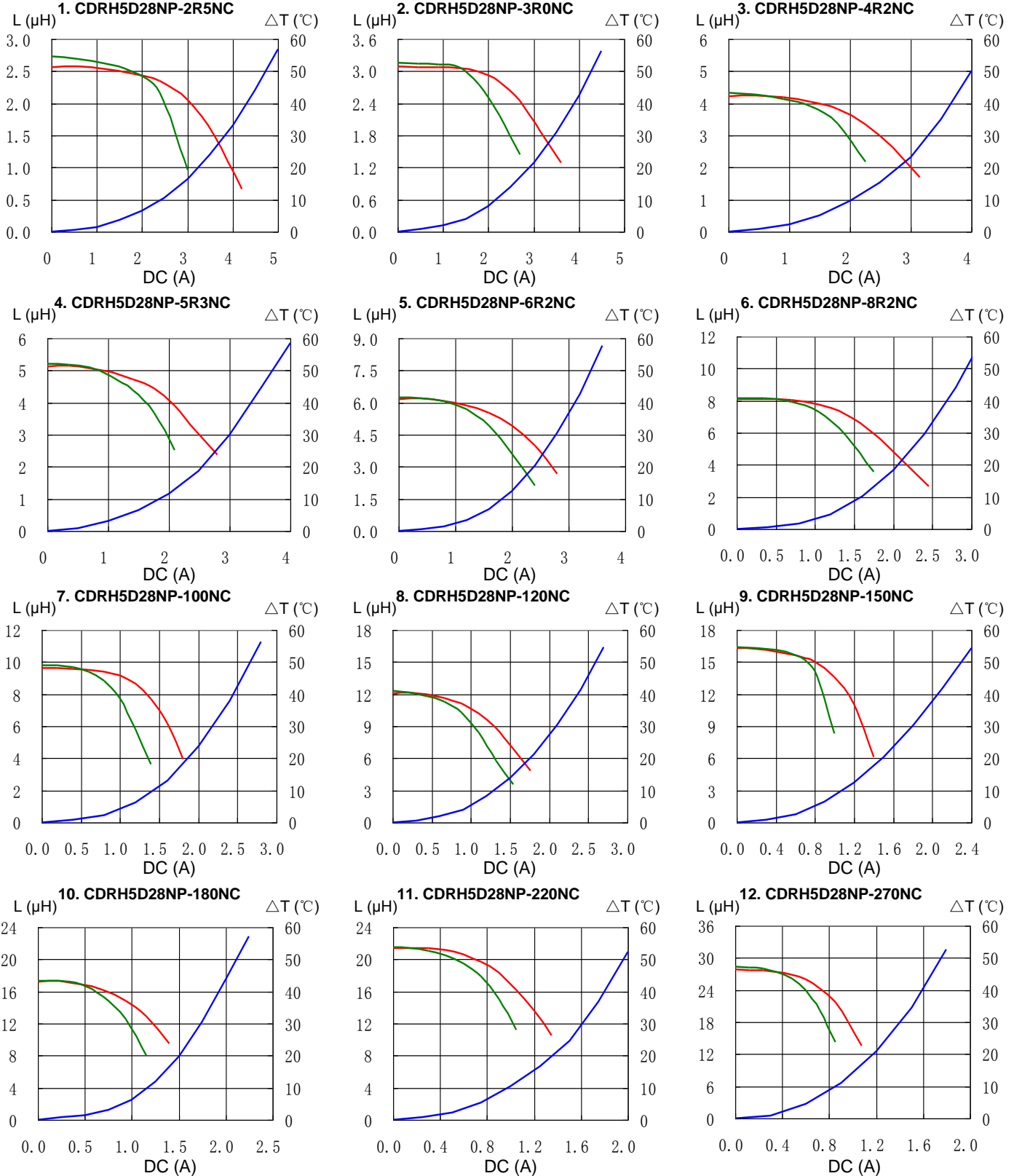
※2. Rated current: The DC current at which the inductance decreases to 65% of it's nominal value or when  $\Delta t = 30^\circ\text{C}$ , whichever is lower ( $T_a = 20^\circ\text{C}$ ).

# SMD Power Inductor CDRH5D28



## Saturation Current & Temperature Rise Graph

— L (20°C) — L (105°C) —  $\Delta T$

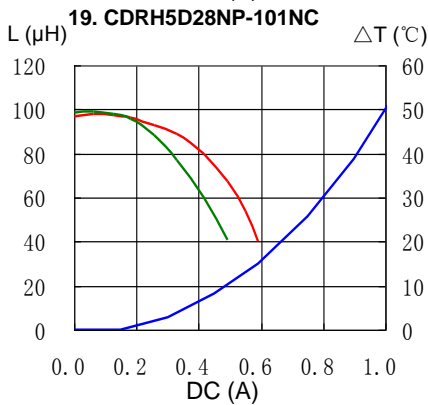
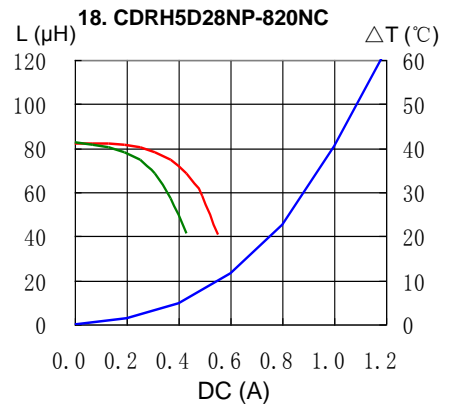
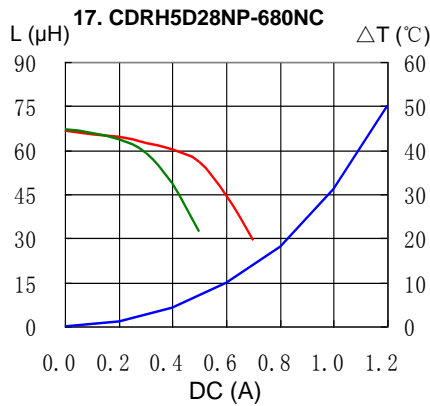
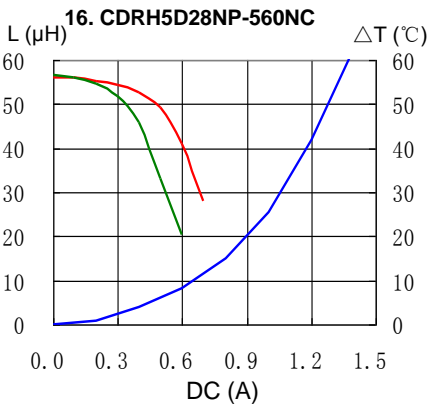
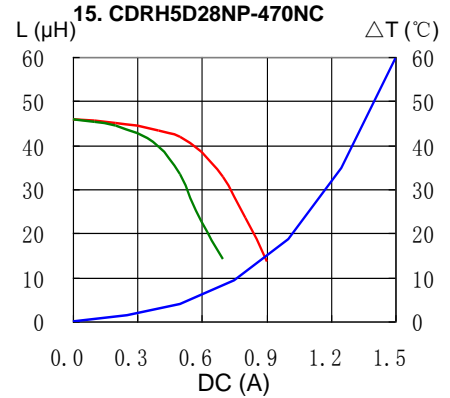
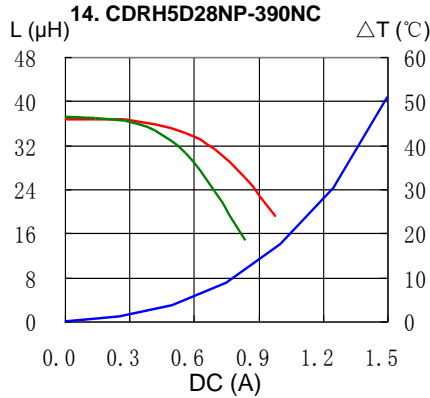
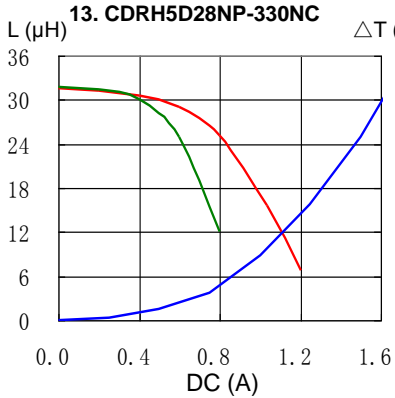


# SMD Power Inductor CDRH5D28



## Saturation Current & Temperature Rise Graph

— L (20°C) — L (105°C) —  $\Delta T$



# SMD Power Inductor CDRH5D28



## Solder Reflow Condition

Heat Endurance



Temperature Chart



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