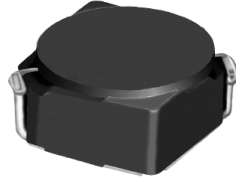


# SMD Power Inductor CDRH5D28



## 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.

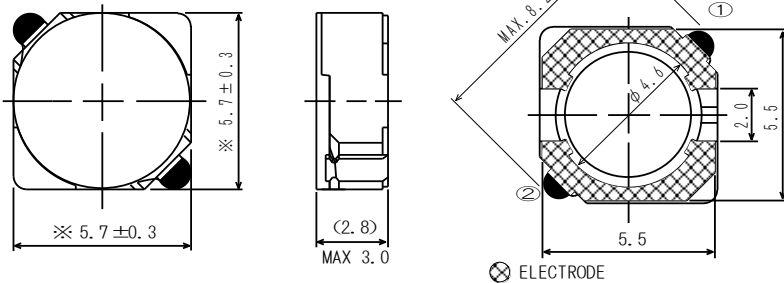
## Packaging

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

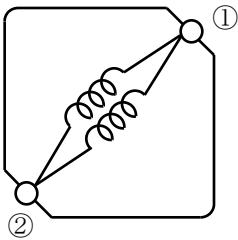
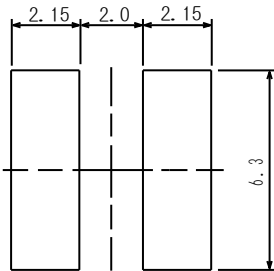
## Applications

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

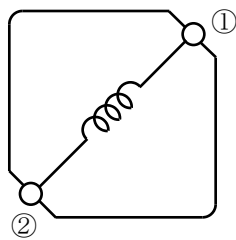
## Dimension - [mm]



## Land pattern and Schematics - [mm]



(2.5µH ~ 8.2µH)



(10µH ~ 100µH)



### Electrical Characteristics

| Part Name        | Stamp | Inductance<br>( $\mu\text{H}$ )<br>[within] ※1 | D.C.R. ( $\Omega$ )<br>[Max.] (Typ.)<br>(at 20°C) | Rated Current<br>(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.

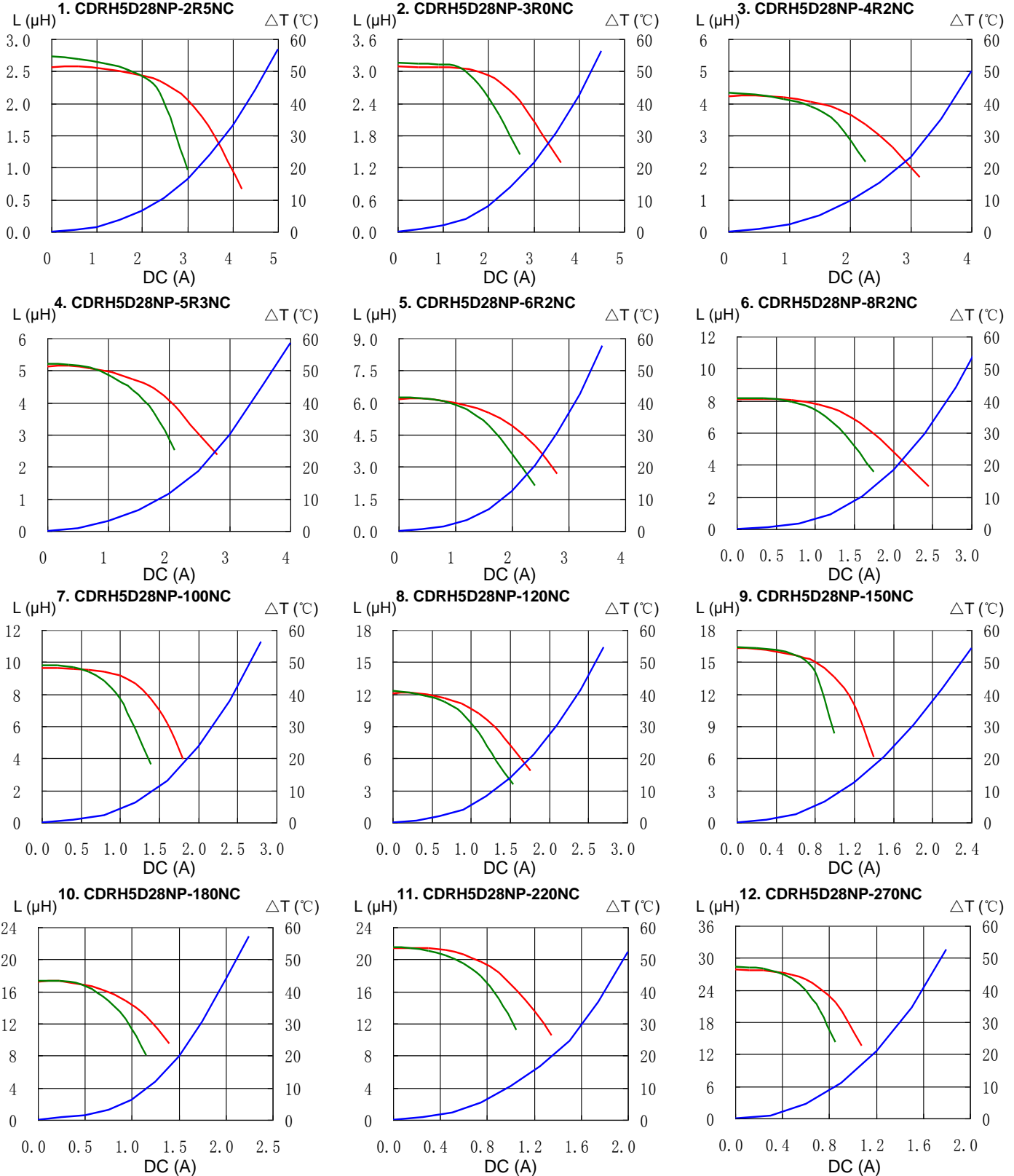
※2. Rated current: The DC current at which the inductance decreases to 65% of it's nominal value or when  $\Delta t = 30^\circ\text{C}$ , whichever is lower ( $T_a = 20^\circ\text{C}$ ).

# SMD Power Inductor CDRH5D28



## Saturation Current & Temperature Rise Graph

— L (20°C) — L (105°C) —  $\Delta T$

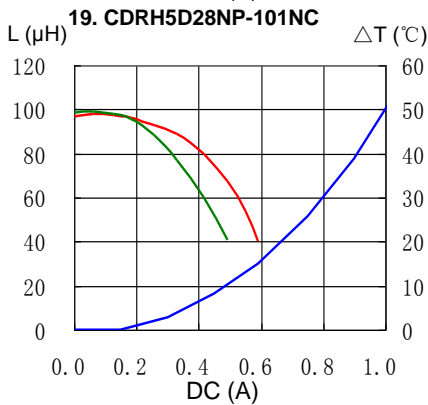
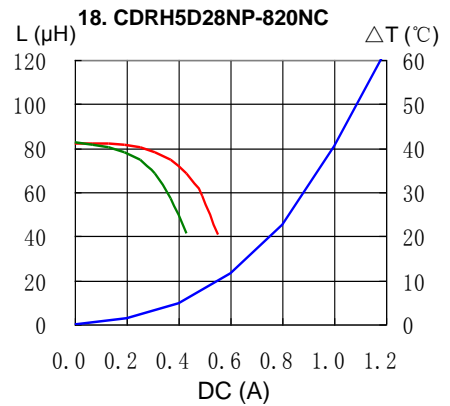
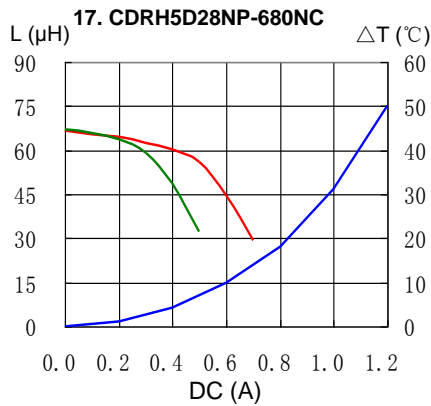
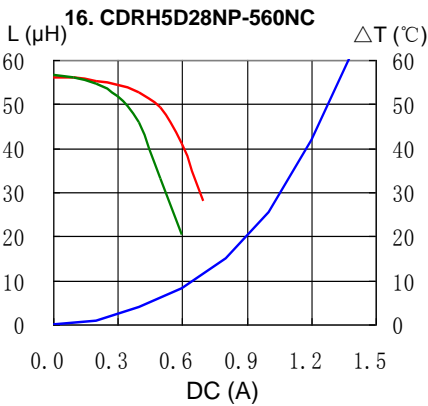
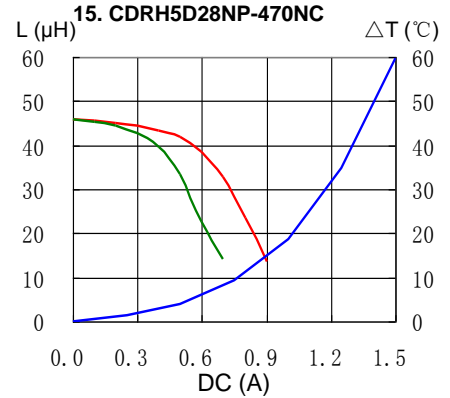
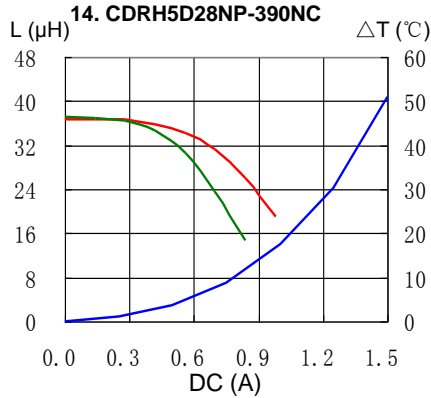
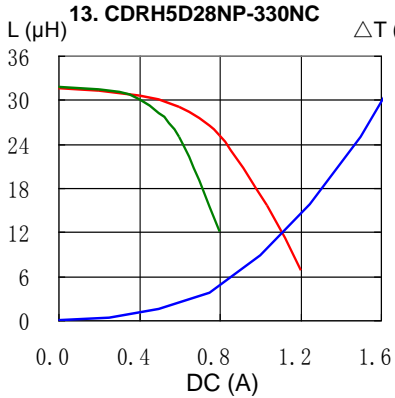


# SMD Power Inductor CDRH5D28



## 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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