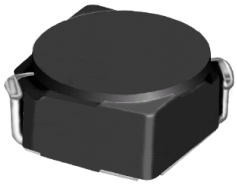
# THE DATASHEET OF

# CDRH5D28NP-180NC

# SMD Power Inductor
## CDRH5D28

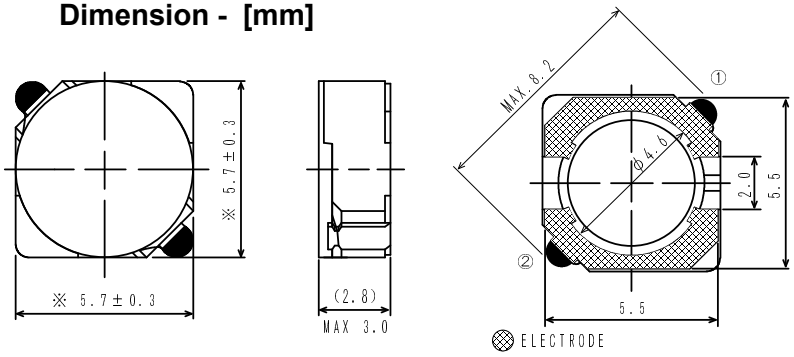
RoHS

Halogen Free

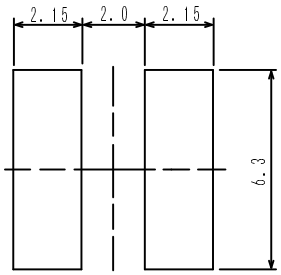


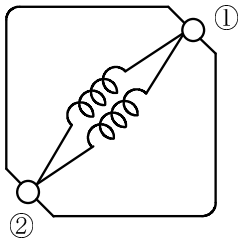
### Description
- Ferrite drum core construction.
- Magnetically shielded.
- L × W × H:6.0 × 6.0 × 3.0 mm Max.
- Product weight: 0.4g(Ref.)
- Moisture Sensitivity Level: 1
- RoHS compliance.
- Halogen Free available.

### Dimension - [mm]

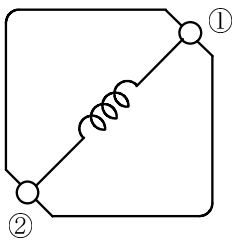



### Land pattern and Schematics - [mm]




(2.5μH～8.2μH)




(10μH～100μH)

### Environmental Data
- Operating temperature range: -40℃~+100℃ (including coil's self temperature rise)
- Storage temperature range: -40℃～+100℃
- Solder reflow temperature: 260 ℃ 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.



Revised: 7-Jan-14

## Electrical Characteristics

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

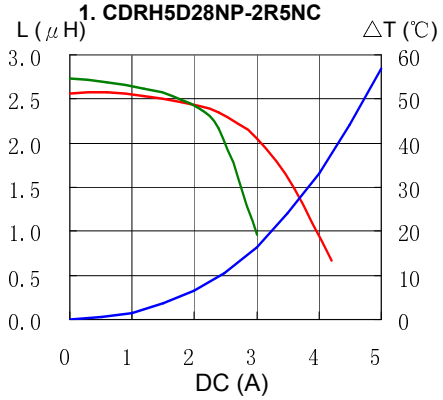
※1. Inductance measuring condition:  at 100kHz.

※2. Rated current: The DC current at which the inductance decreases to 65% of it's nominal value orwhen△t=30℃,whichever is lower (Ta=20℃).

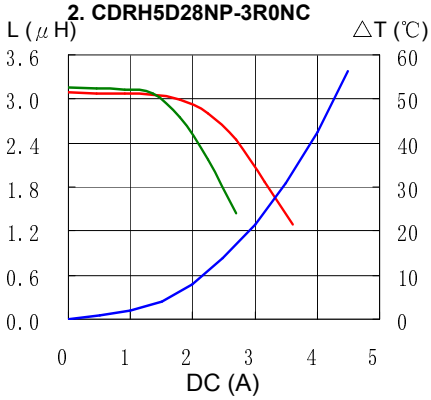
## Saturation Current & Temperature Rise Graph

L (20℃) L (105℃) △T

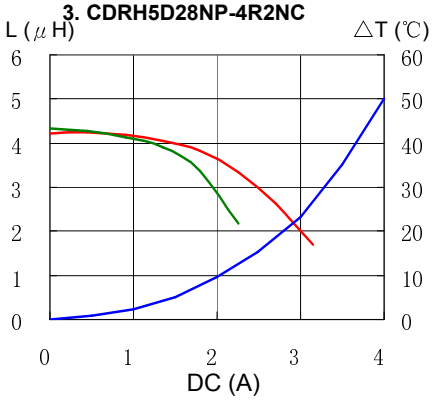
1. CDRH5D28NP-2R5NC



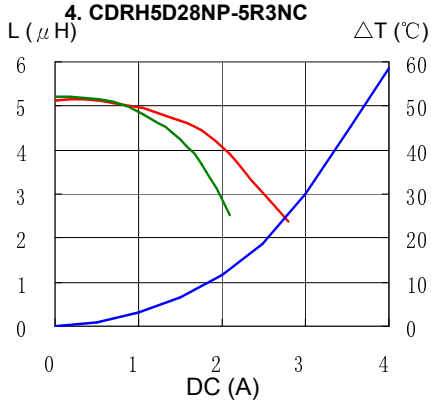

2. CDRH5D28NP-3R0NC



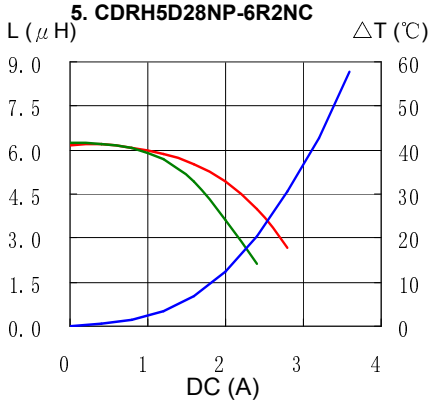

3. CDRH5D28NP-4R2NC



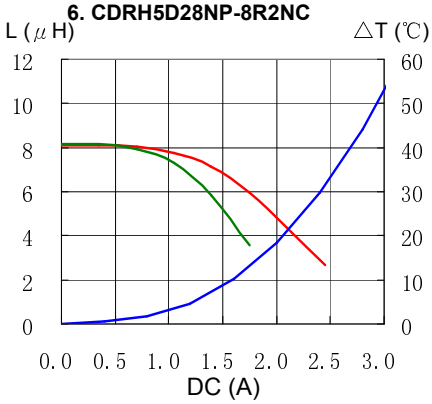

4. CDRH5D28NP-5R3NC



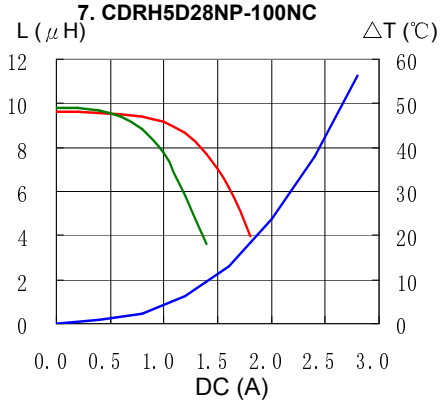

5. CDRH5D28NP-6R2NC



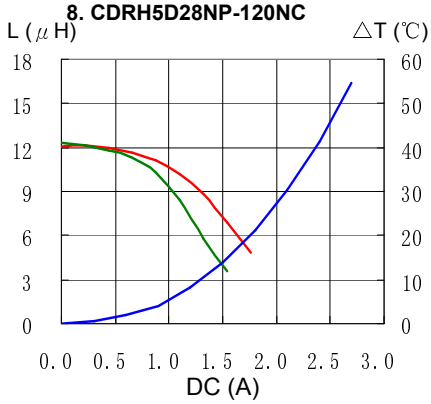

6. CDRH5D28NP-8R2NC



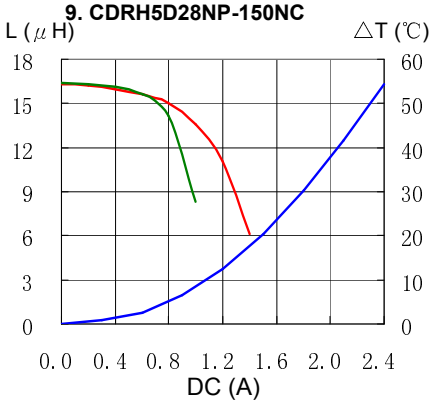

7. CDRH5D28NP-100NC



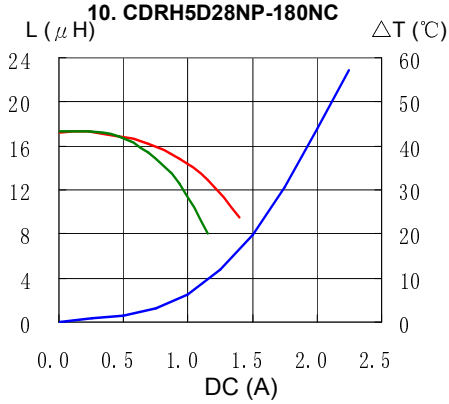

8. CDRH5D28NP-120NC



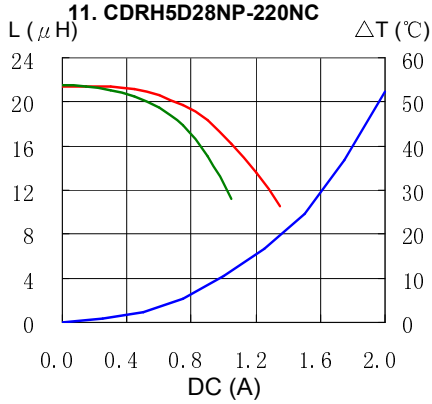

9. CDRH5D28NP-150NC



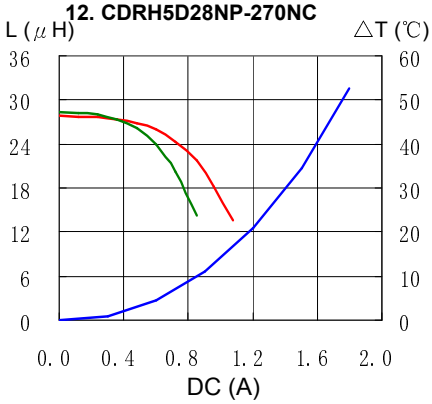

10. CDRH5D28NP-180NC




11. CDRH5D28NP-220NC



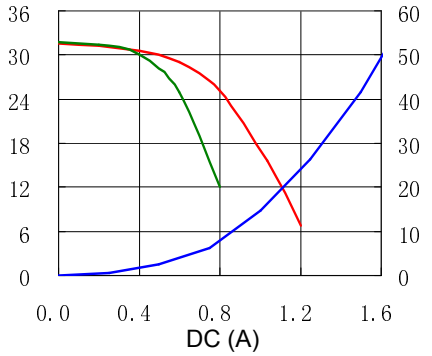

12. CDRH5D28NP-270NC



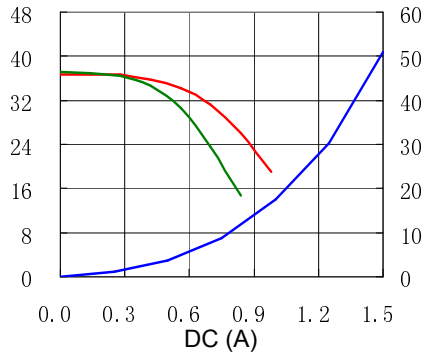
## Saturation Current & Temperature Rise Graph

L (20℃) L (105℃) △T

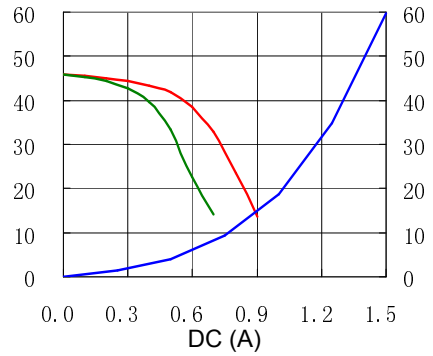
13. CDRH5D28NP-330NC



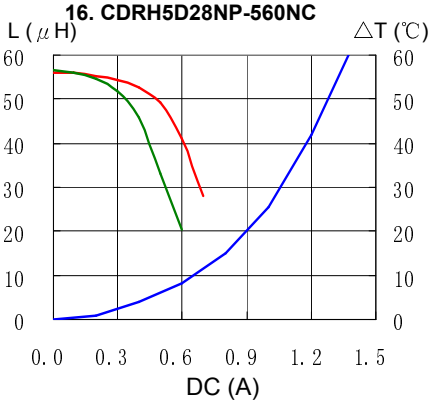

14. CDRH5D28NP-390NC



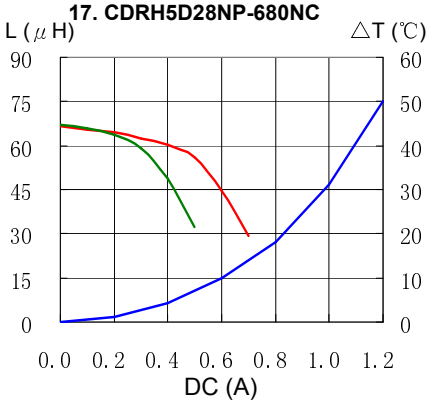

15. CDRH5D28NP-470NC



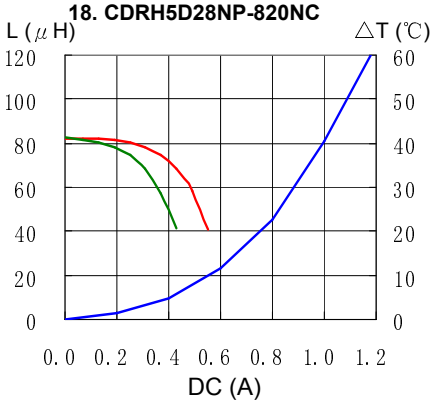

16. CDRH5D28NP-560NC



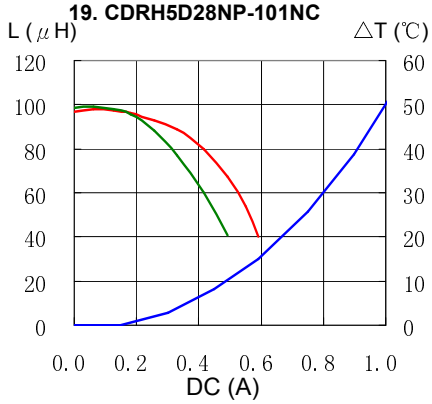

17. CDRH5D28NP-680NC




18. CDRH5D28NP-820NC

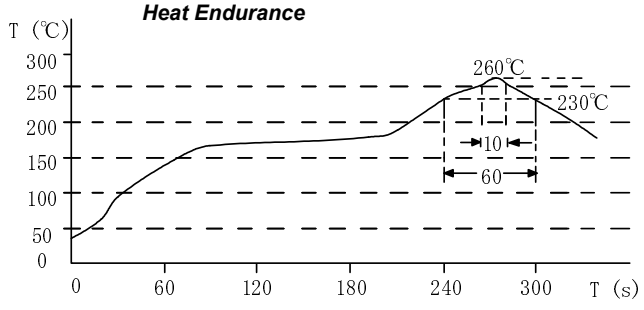



19. CDRH5D28NP-101NC

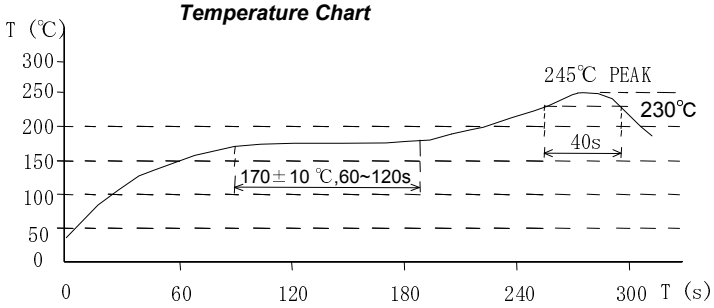


## Solder Reflow Condition

***Heat Endurance***




***Temperature Chart***

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