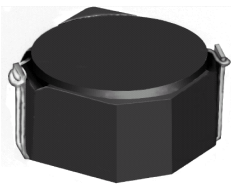


# SMD Power Inductor

## CDRH3D28



### Description

- Ferrite drum core construction.
- Magnetically shielded.
- L × W × H: 4.0 × 4.0 × 3.0 mm Max.
- Product weight: 130m g (Ref.)
- Moisture Sensitivity Level: 1
- RoHS compliance.

### Environmental Data

- Operating temperature range: -40℃~+105℃ (including coil's self temperature rise)
- Storage temperature range: -40℃~+105℃
- Solder reflow temperature: 260℃ peak.

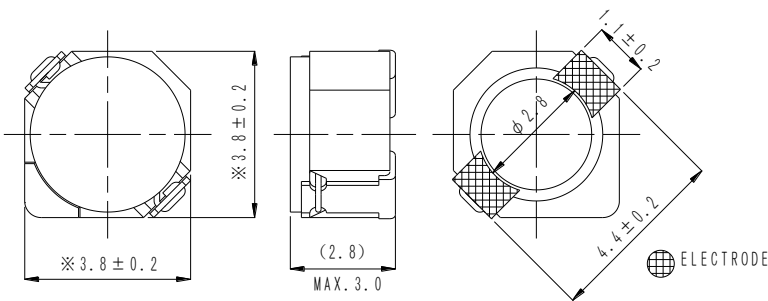
### Packaging

- Carrier tape and reel packaging
- 7.0" diameter reel
- 500pcs per reel

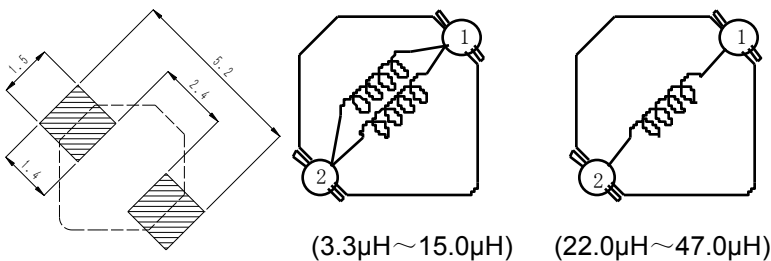
### Applications

- Ideally used in Mobilephone, PDA, MP3, DSC/DVC, Portable DVD, etc as DC-DC converter inductors.

### Dimension - [mm]



### Land pattern and Schematics - [mm]



### Electrical Characteristics

| Part Name        | Stamp | Inductance<br>(μH)<br>[within]※1 | D.C.R. (mΩ)<br>Max. (Typ.)<br>(at 20℃) | Saturation Current<br>(A) ※2 |         | Temperature<br>Rise Current<br>(A) ※3 |
|------------------|-------|----------------------------------|----------------------------------------|------------------------------|---------|---------------------------------------|
|                  |       |                                  |                                        | at 20℃                       | at 100℃ |                                       |
| CDRH3D28NP-1R0NC | L     | 1.0μH±30%                        | 37.5(30.0)                             | 3.00                         | 2.40    | 2.60                                  |
| CDRH3D28NP-3R3NC | A     | 3.3±30%                          | 72.1(57.7)                             | 2.00                         | 1.48    | 1.85                                  |
| CDRH3D28NP-4R7NC | B     | 4.7±30%                          | 88.3(70.6)                             | 1.65                         | 1.28    | 1.62                                  |
| CDRH3D28NP-6R8NC | C     | 6.8±30%                          | 119(95.0)                              | 1.24                         | 0.94    | 1.32                                  |
| CDRH3D28NP-100NC | D     | 10±30%                           | 145(116)                               | 1.05                         | 0.80    | 1.18                                  |
| CDRH3D28NP-150NC | E     | 15±30%                           | 213(170)                               | 0.90                         | 0.64    | 1.02                                  |
| CDRH3D28NP-220NC | F     | 22±30%                           | 335(268)                               | 0.76                         | 0.55    | 0.74                                  |
| CDRH3D28NP-330NC | G     | 33±30%                           | 481(385)                               | 0.58                         | 0.44    | 0.63                                  |
| CDRH3D28NP-470NC | H     | 47±30%                           | 599(479)                               | 0.48                         | 0.36    | 0.56                                  |

※1. Inductance measuring condition: at 100kHz.

※2. Saturation current: The value of D.C. current when the inductance decreases to 65% of it's nominal value.

※3. Temperature rise current: The value of D.C. current when the temperature rise is Δt=40℃(Ta=20℃).

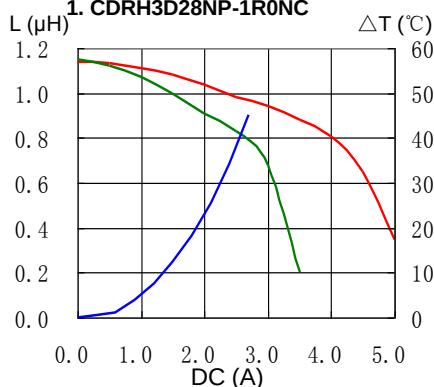
# SMD Power Inductor CDRH3D28



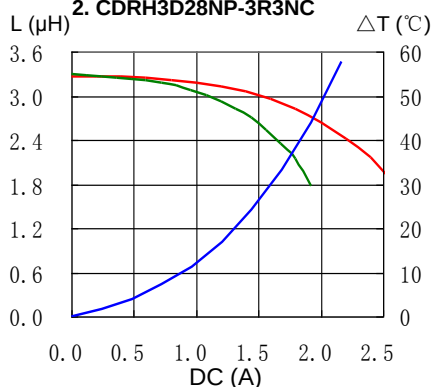
## Saturation Current & Temperature Rise Graph

— L (20°C) — L (100°C) —  $\Delta T$

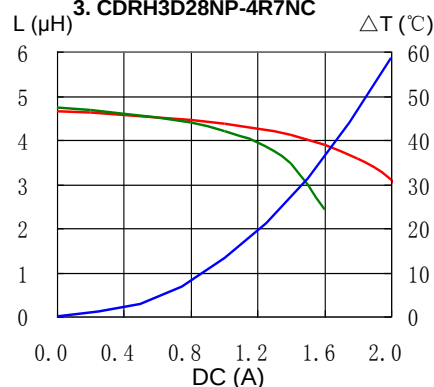
1. CDRH3D28NP-1R0NC



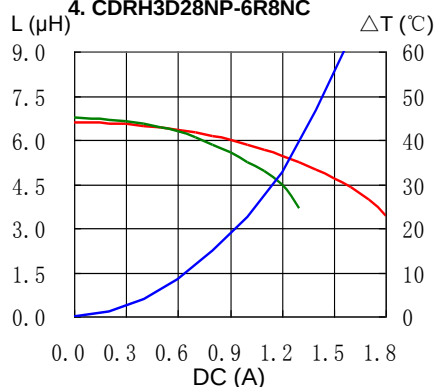
2. CDRH3D28NP-3R3NC



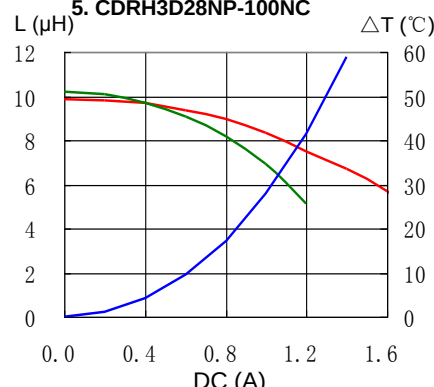
3. CDRH3D28NP-4R7NC



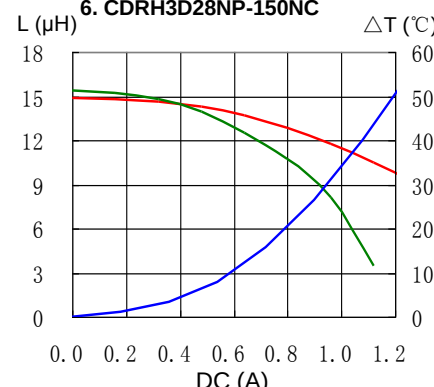
4. CDRH3D28NP-6R8NC



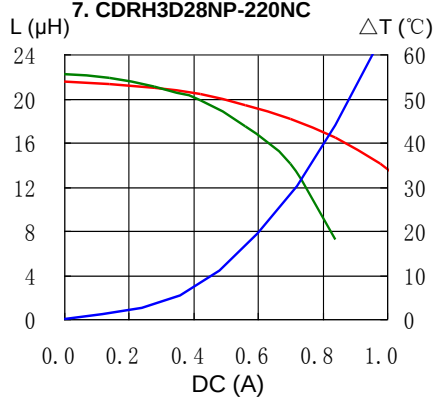
5. CDRH3D28NP-100NC



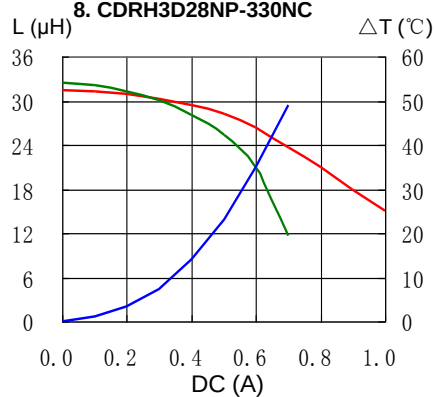
6. CDRH3D28NP-150NC



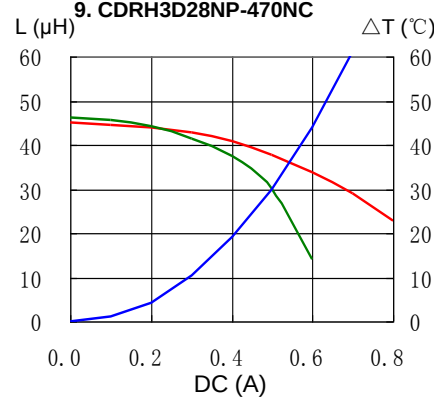
7. CDRH3D28NP-220NC



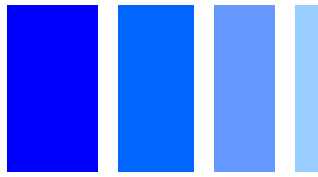
8. CDRH3D28NP-330NC



9. CDRH3D28NP-470NC

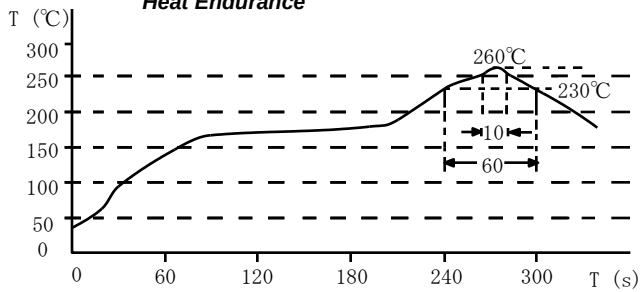


# SMD Power Inductor CDRH3D28

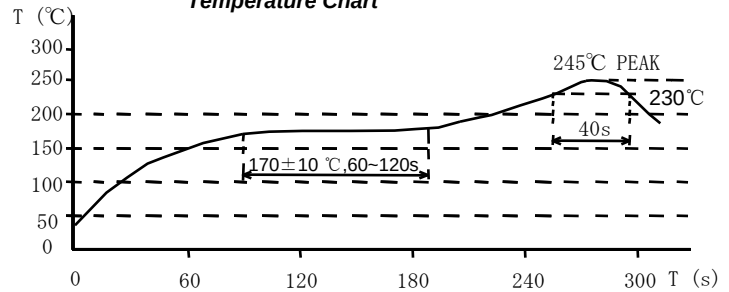


## Solder Reflow Condition

Heat Endurance



Temperature Chart



Please refer to the sales offices on our website - <http://www.sumida.com>

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