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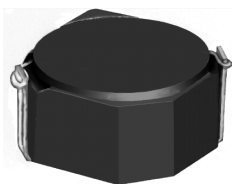
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# SMD Power Inductor CDRH3D28



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

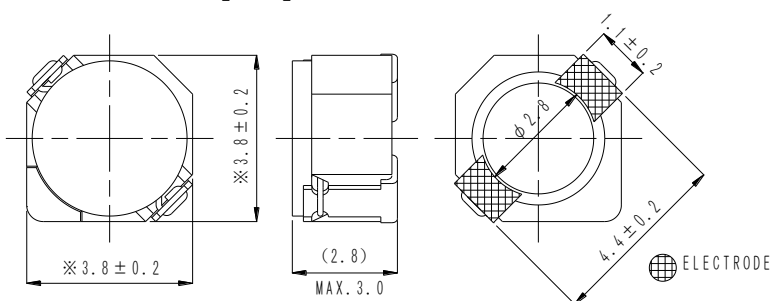
## Packaging

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

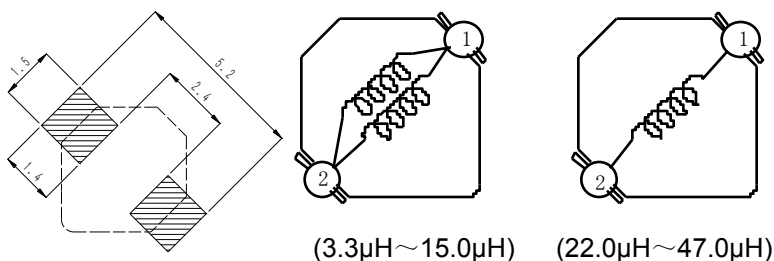
## Applications

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

$\times 1$ . Inductance measuring condition: at 100kHz.

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

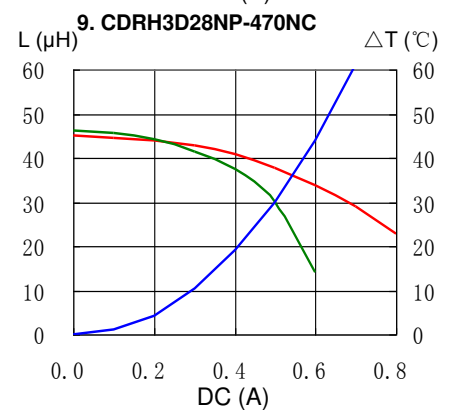
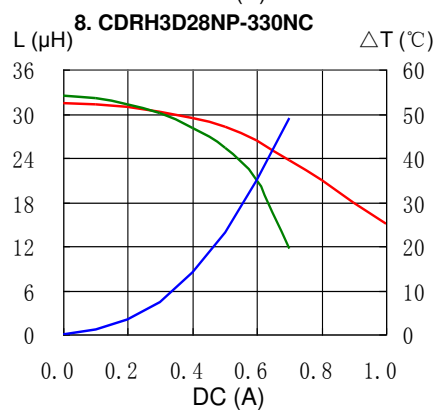
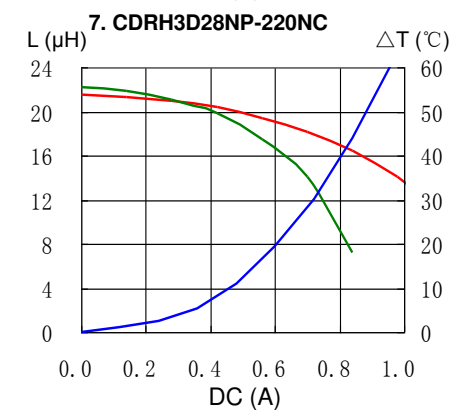
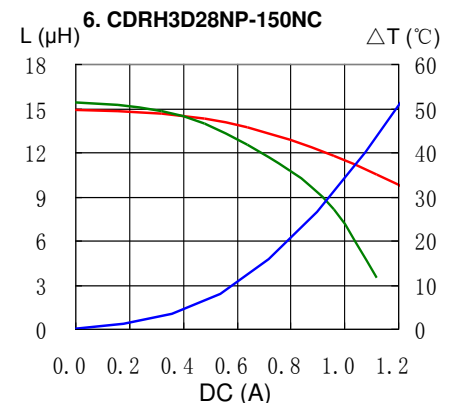
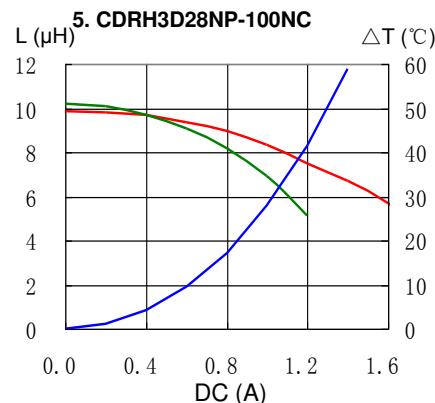
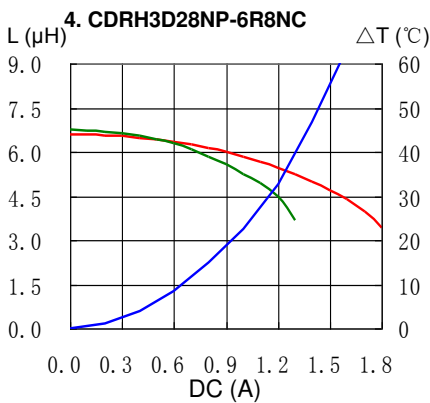
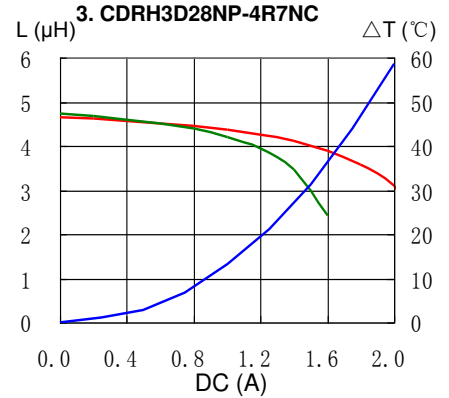
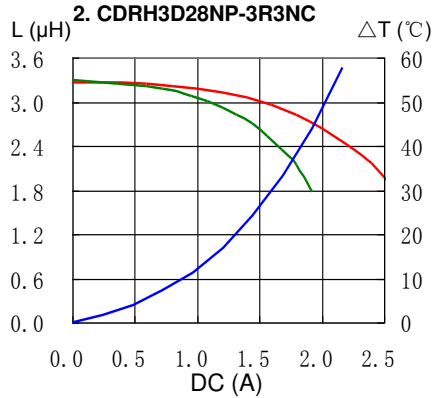
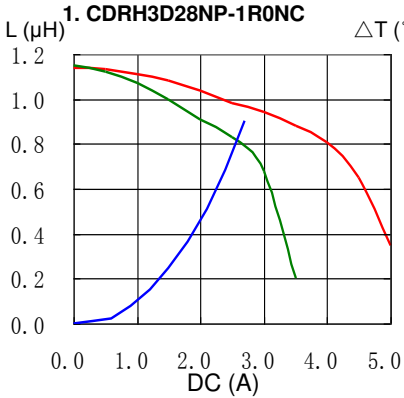
$\times 3$ . Temperature rise current: The value of D.C. current when the temperature rise is  $\Delta t = 40^\circ\text{C}$  ( $T_a = 20^\circ\text{C}$ ).

# SMD Power Inductor CDRH3D28

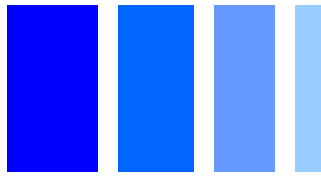


## Saturation Current & Temperature Rise Graph

— L (20°C) — L (100°C) —  $\Delta T$

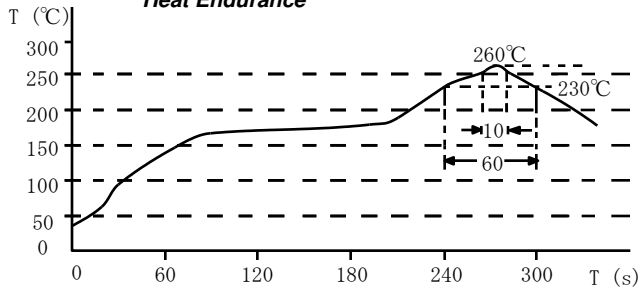


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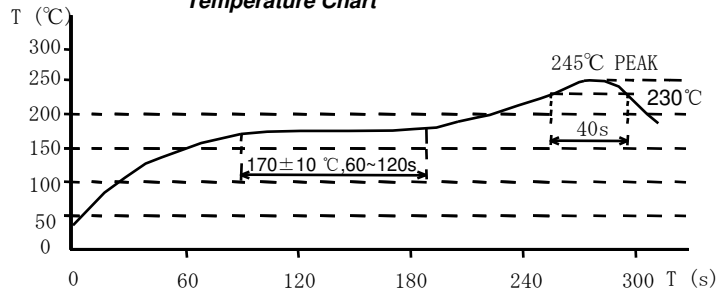


## Solder Reflow Condition

Heat Endurance



Temperature Chart



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

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