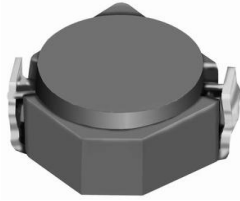


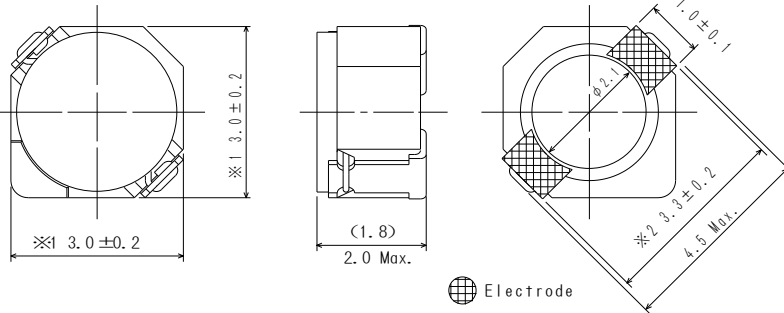
# SMD Power Inductor CDRH2D18/HP



## Description

- Ferrite drum core construction.
- Magnetically shielded.
- L × W × H: 3.2 × 3.2 × 2.0 mm Max.
- Product weight: 65mg(Ref.)
- Moisture Sensitivity Level: 1
- RoHS compliance.

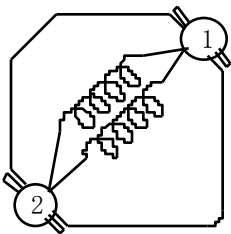
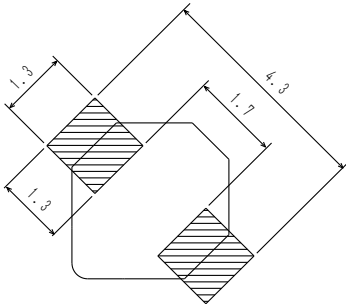
## Dimension - [mm]



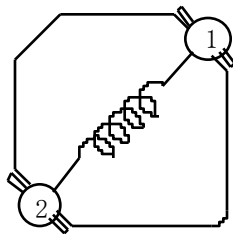
※1 Not including terminal dimension.

※2 Electrode dimension

## Land pattern and Schematics - [mm]



(0.20µH ~ 3.3µH)



(4.7µH ~ 15µH)

## 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
- 1000pcs per reel

## Applications

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



## Electrical Characteristics

| Part Name           | Stamp | Inductance<br>( $\mu\text{H}$ )<br>[within] ※1 | D.C.R. (m $\Omega$ )<br>Max. (Typ.)<br>(at 20°C) | Saturation Current<br>(A) ※2 |          | Temperature<br>Rise Current<br>(A) ※3 |
|---------------------|-------|--|--|------------------------------|----------|---------------------------------------|
|                     |       |  |  | at 20°C                      | at 100°C |                                       |
| CDRH2D18/HPNP-R20NC | N     | 0.20 $\pm$ 35%                                 | 22(17)   | 5.35                         | 3.55     | 4.70                                  |
| CDRH2D18/HPNP-R36NC | P     | 0.36 $\pm$ 35%                                 | 29(22)   | 4.62                         | 3.00     | 4.10                                  |
| CDRH2D18/HPNP-R56NC | Q     | 0.56 $\pm$ 35%                                 | 33(25)   | 3.75                         | 2.76     | 3.60                                  |
| CDRH2D18/HPNP-R82NC | R     | 0.82 $\pm$ 35%                                 | 39(30)   | 2.91                         | 2.20     | 3.30                                  |
| CDRH2D18/HPNP-1R1NC | S     | 1.10 $\pm$ 35%                                 | 43(33)   | 2.50                         | 1.90     | 2.90                                  |
| CDRH2D18/HPNP-1R7NC | A     | 1.70 $\pm$ 30%                                 | 44(35)   | 1.85                         | 1.36     | 2.20                                  |
| CDRH2D18/HPNP-2R2NC | C     | 2.20 $\pm$ 30%                                 | 60(48)   | 1.60                         | 1.15     | 1.90                                  |
| CDRH2D18/HPNP-3R3NC | E     | 3.30 $\pm$ 30%                                 | 86(69)   | 1.45                         | 1.10     | 1.55                                  |
| CDRH2D18/HPNP-4R7NC | G     | 4.70 $\pm$ 30%                                 | 140(110)   | 1.20                         | 0.90     | 1.20                                  |
| CDRH2D18/HPNP-6R3NC | I     | 6.30 $\pm$ 30%                                 | 160(128)   | 1.05                         | 0.78     | 1.15                                  |
| CDRH2D18/HPNP-100NC | K     | 10.0 $\pm$ 30%                                 | 245(195)   | 0.85                         | 0.65     | 0.90                                  |
| CDRH2D18/HPNP-150NC | M     | 15.0 $\pm$ 30%                                 | 345(275)   | 0.70                         | 0.53     | 0.64                                  |

※1. Inductance measuring condition: 0.20 $\mu\text{H}$ ~1.10 $\mu\text{H}$  at 7.96MHz ; 1.70 $\mu\text{H}$ ~15.0 $\mu\text{H}$  at 100kHz

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

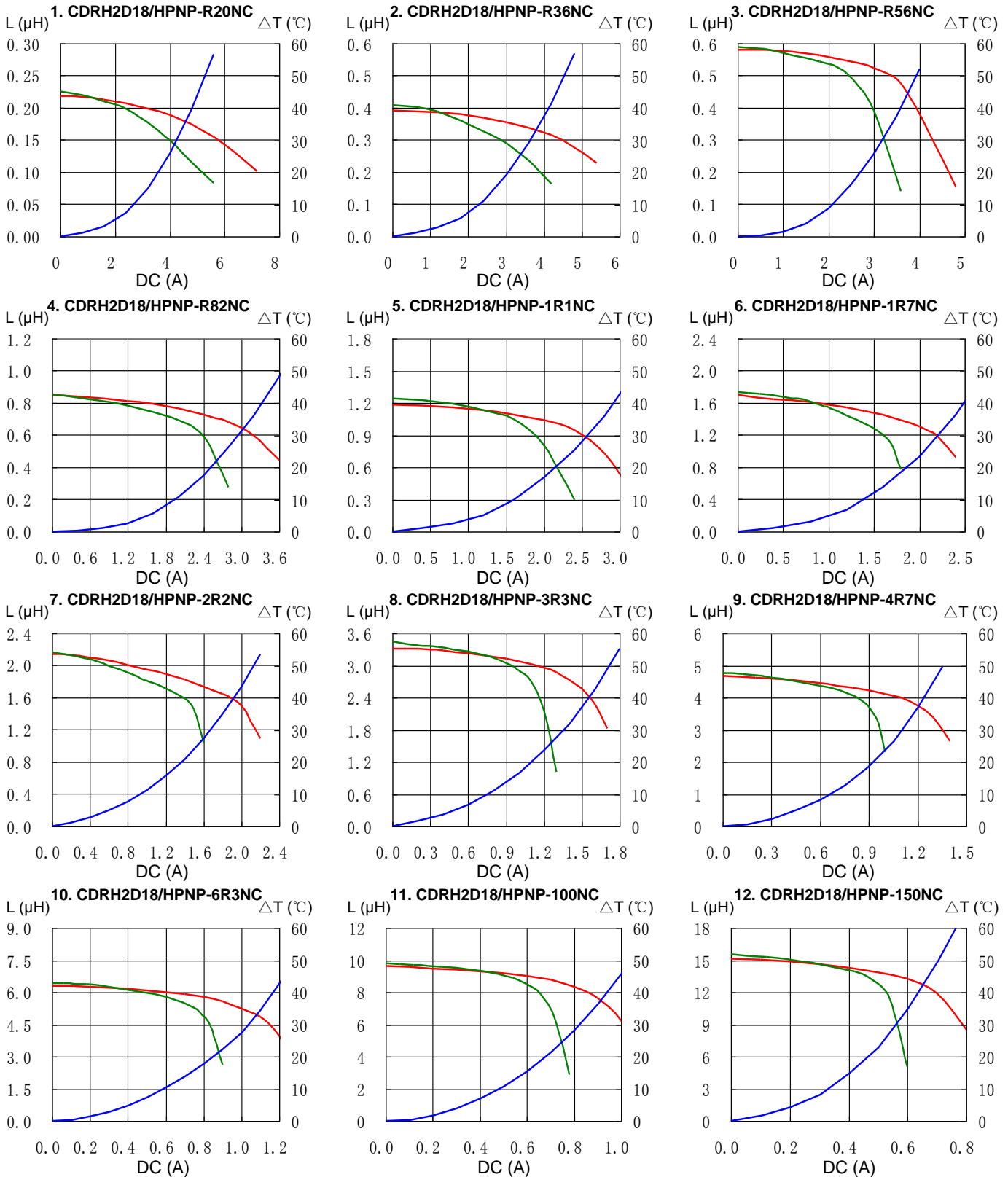
※3. Temperature rise current: The value of D.C. current when the temperature rise is  $\Delta t=40^\circ\text{C}$  ( $T_a=20^\circ\text{C}$ ).

# SMD Power Inductor CDRH2D18/HP

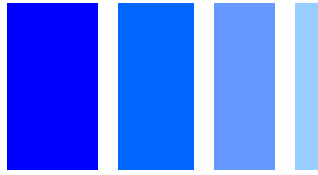


## Saturation Current & Temperature Rise Graph

— L (20°C) — L (100°C) —  $\Delta T$

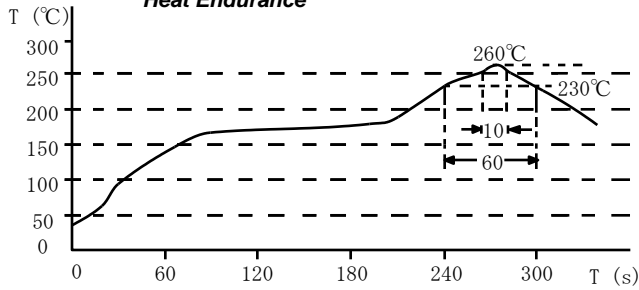


# SMD Power Inductor CDRH2D18/HP

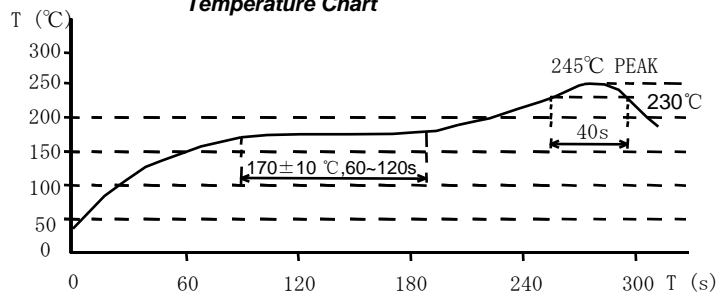


## Solder Reflow Condition

Heat Endurance



Temperature Chart



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