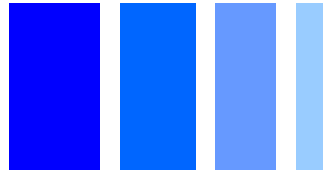


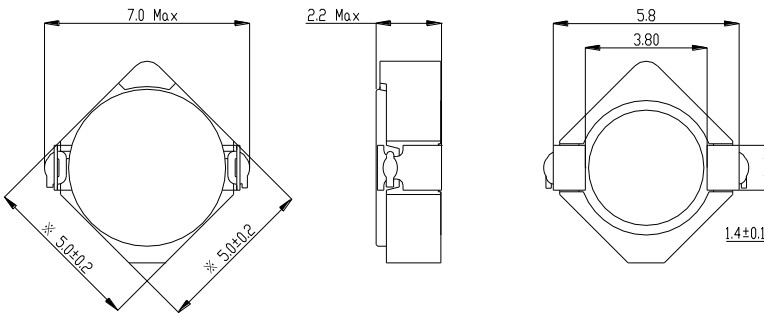
# SMD Power Inductor CDRH50D20/T150



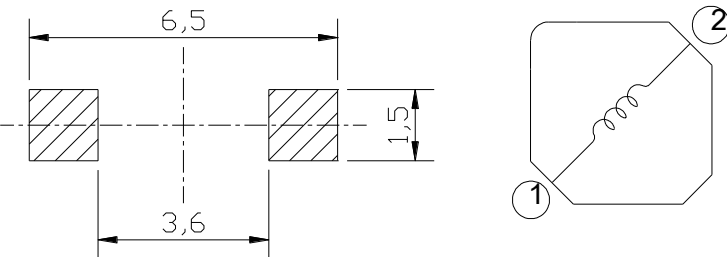
## Description

- Ferrite drum core construction.
- Magnetically shielded.
- L × W × H: 5.2 × 5.2 × 2.2 mm Max.
- Product weight: 0.2g (Ref.)
- Moisture Sensitivity Level: 1
- RoHS compliance.
- Qualification to AEC-Q200.

## Dimension - [mm]



## Land pattern and Schematics - [mm]



## Environmental Data

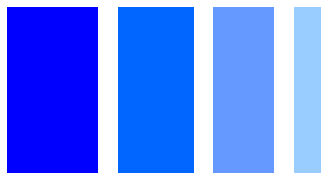
- Operating temperature range: -40°C ~ +150°C
- (including coil's self temperature rise)
- Storage temperature range: -40°C ~ +150°C
- Solder reflow temperature: 260 °C peak.

## Packaging

- Carrier tape and reel packaging

## Applications

- Automotive and other high temperature, high reliability application.



### Electrical Characteristics

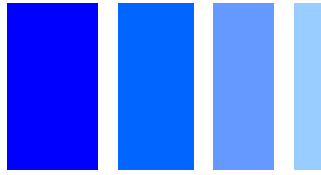
| Part No.              | Stamp | Inductance<br>[Within]<br>[ $\mu$ H]<br>※1 | D. C. R.<br>( $m\Omega$ )<br>[Max.]<br>(at 20°C) | Saturation<br>Current (A)<br>(at 20°C)<br>※2 | Temperature Rise<br>Current (A)<br>typ.<br>※3 |
|-----------------------|-------|--|--|--|---|
| CDRH50D20T150NP-1R2NC | 1R2   | 1.2 $\pm$ 30%                              | 30 (24)  | 4.00   | 3.40  |
| CDRH50D20T150NP-1R8NC | 1R8   | 1.8 $\pm$ 30%                              | 36 (29)  | 3.40   | 3.12  |
| CDRH50D20T150NP-2R2NC | 2R2   | 2.2 $\pm$ 30%                              | 40 (33)  | 3.06   | 2.88  |
| CDRH50D20T150NP-3R3NC | 3R3   | 3.3 $\pm$ 30%                              | 50 (41)  | 2.51   | 2.52  |
| CDRH50D20T150NP-4R7NC | 4R7   | 4.7 $\pm$ 30%                              | 74 (62)  | 2.04   | 2.08  |
| CDRH50D20T150NP-6R8NC | 6R8   | 6.8 $\pm$ 30%                              | 110 (91)   | 1.73   | 1.75  |
| CDRH50D20T150NP-100MC | 100   | 10.0 $\pm$ 20%                             | 144 (120)  | 1.41   | 1.51  |
| CDRH50D20T150NP-150MC | 150   | 15.0 $\pm$ 20%                             | 240 (200)  | 1.15   | 1.08  |
| CDRH50D20T150NP-220MC | 220   | 22.0 $\pm$ 20%                             | 320 (265)  | 0.97   | 0.98  |
| CDRH50D20T150NP-330MC | 330   | 33.0 $\pm$ 20%                             | 440 (365)  | 0.78   | 0.83  |
| CDRH50D20T150NP-470MC | 470   | 47.0 $\pm$ 20%                             | 690 (575)  | 0.66   | 0.61  |
| CDRH50D20T150NP-101MC | 101   | 100 $\pm$ 20%                              | 1280 (1100)                                      | 0.45   | 0.52  |

※1. Measuring condition: at 100 kHz.

※2. Saturation current: The value of D.C. current when the inductance decreases to 70% of its nominal value.

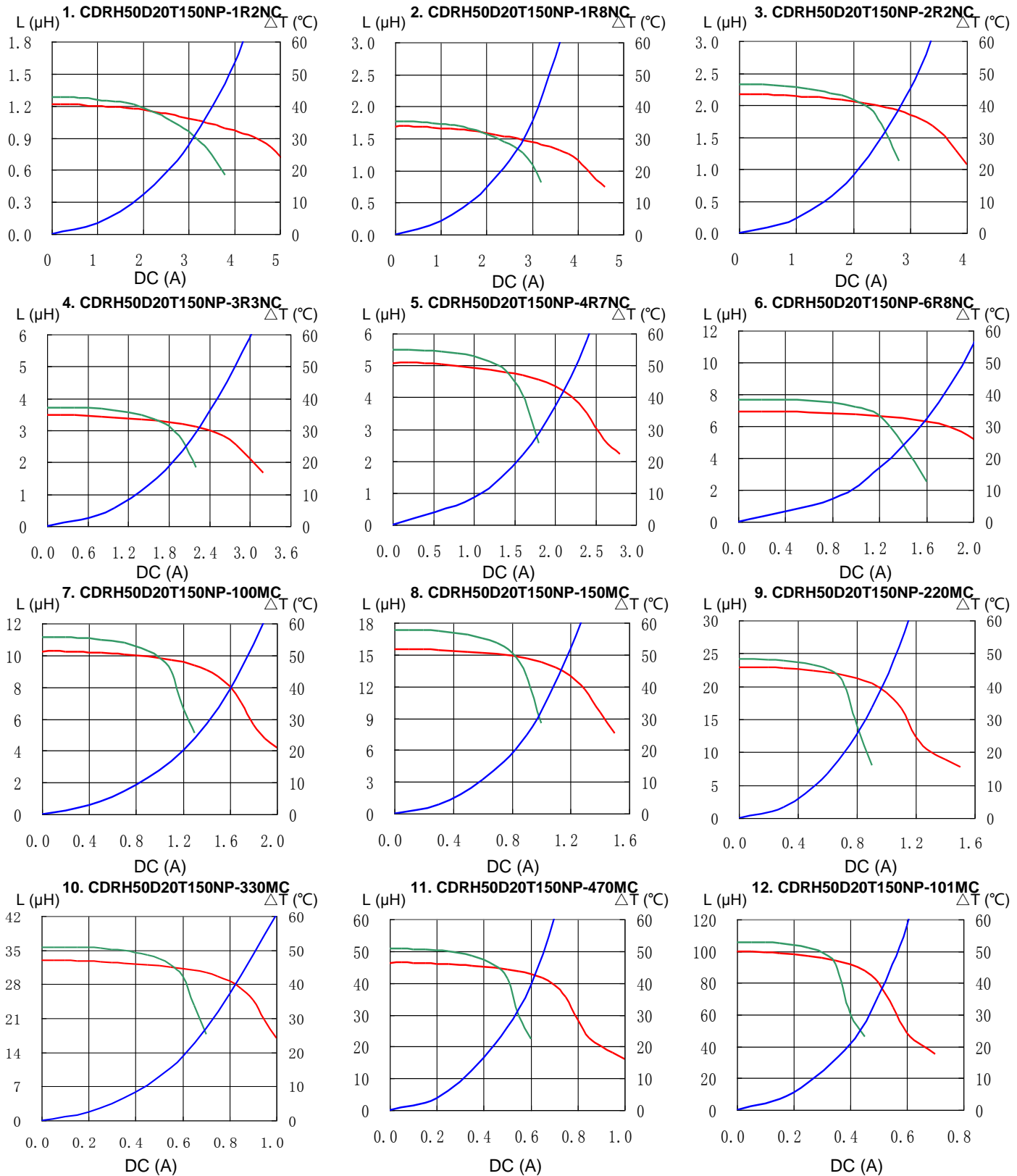
※3. Temperature rise current: The actual value of DC current when the top surface temperature of test sample rise is  $\Delta T = 40^\circ\text{C}$  ( $T_a = 25^\circ\text{C}$ ).

# SMD Power Inductor CDRH50D20/T150

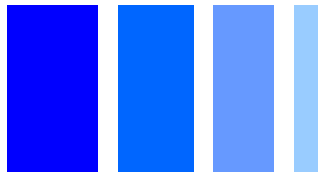


## Saturation Current & Temperature Rise Graph

— L (25°C) — L (150°C) —  $\Delta T$

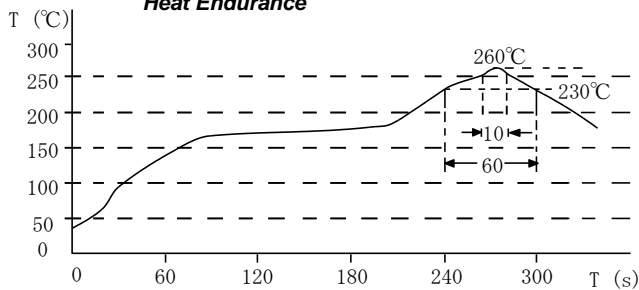


# SMD Power Inductor CDRH50D20/T150

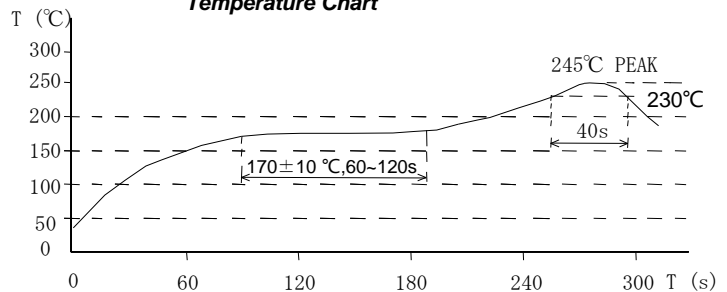


## Solder Reflow Condition

Heat Endurance



Temperature Chart



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