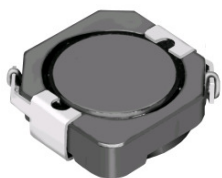


# SMD Power Inductor CDRH103R



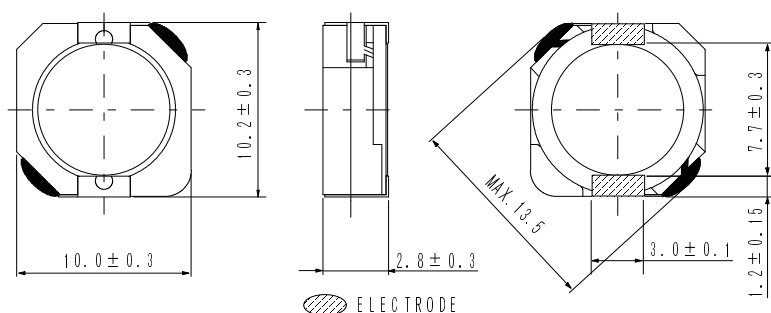
Halogen  
Free



## Description

- Ferrite drum core construction.
- Magnetically shielded.
- L × W × H: 10.5 × 10.3 × 3.1mm Max.
- Product weight: 1.0g(Ref.)
- Moisture Sensitivity Level: 1
- RoHS compliance.
- Halogen Free available.

## Dimension - [mm]



## Environmental Data

- Operating temperature range: -40°C ~ +100°C (including coil's self temperature rise)
- Storage temperature range: -40°C ~ +100°C
- Solder reflow temperature: 260 °C peak.

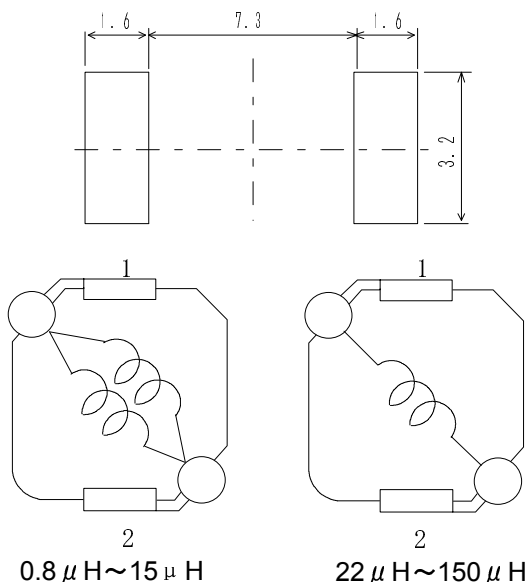
## Packaging

- Carrier tape and reel packaging.
- 12.9" diameter reel.
- 1000pcs per reel.

## Applications

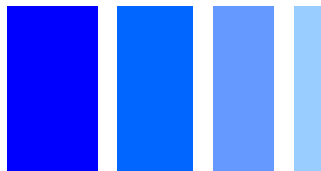
- Ideally used in Notebook PC, LCD TV, DVD, Game machine, STB, Projector etc as DC-DC converter inductors.

## Land pattern and Schematics - [mm]



# SMD Power Inductor

## CDRH103R



### Electrical Characteristics

| Part Name          | Stamp | Inductance<br>( $\mu$ H)<br>[ within ] ※1 | D.C.R. (m $\Omega$ )<br>Max. (Typ.)<br>(at 20°C) | Saturation<br>Current<br>(A) ※2 | Temperature<br>Rise Current<br>(A) ※3 |
|--------------------|-------|-------------------------------------------|--------------------------------------------------|---------------------------------|---------------------------------------|
| CDRH103RNP-0R8NC-B | 0R8   | 0.8 $\pm$ 30%                             | 5.7(4.4)                                         | 11.2                            | 8.30                                  |
| CDRH103RNP-1R5NC-B | 1R5   | 1.5 $\pm$ 30%                             | 11.0(8.5)                                        | 8.0                             | 5.80                                  |
| CDRH103RNP-2R2NC-B | 2R2   | 2.2 $\pm$ 30%                             | 16.9(13)                                         | 6.7                             | 5.10                                  |
| CDRH103RNP-3R3NC-B | 3R3   | 3.3 $\pm$ 30%                             | 21.0(16)                                         | 5.56                            | 4.70                                  |
| CDRH103RNP-4R7NC-B | 4R7   | 4.7 $\pm$ 30%                             | 30.0(23)                                         | 4.65                            | 4.00                                  |
| CDRH103RNP-6R8NC-B | 6R8   | 6.8 $\pm$ 30%                             | 35.0(27)                                         | 3.84                            | 3.60                                  |
| CDRH103RNP-8R2NC-B | 8R2   | 8.2 $\pm$ 30%                             | 50.0(38)                                         | 3.54                            | 3.00                                  |
| CDRH103RNP-100NC-B | 100   | 10 $\pm$ 30%                              | 59.0(45)                                         | 3.18                            | 2.80                                  |
| CDRH103RNP-150NC-B | 150   | 15 $\pm$ 30%                              | 91.0(70)                                         | 2.60                            | 2.05                                  |
| CDRH103RNP-220NC-B | 220   | 22 $\pm$ 30%                              | 143(110)                                         | 2.16                            | 1.60                                  |
| CDRH103RNP-330NC-B | 330   | 33 $\pm$ 30%                              | 202(155)                                         | 1.74                            | 1.35                                  |
| CDRH103RNP-470NC-B | 470   | 47 $\pm$ 30%                              | 299(230)                                         | 1.43                            | 1.20                                  |
| CDRH103RNP-560NC-B | 560   | 56 $\pm$ 30%                              | 325(250)                                         | 1.36                            | 1.15                                  |
| CDRH103RNP-680NC-B | 680   | 68 $\pm$ 30%                              | 429(330)                                         | 1.22                            | 0.95                                  |
| CDRH103RNP-820NC-B | 820   | 82 $\pm$ 30%                              | 494(380)                                         | 1.14                            | 0.80                                  |
| CDRH103RNP-101NC-B | 101   | 100 $\pm$ 30%                             | 683(525)                                         | 1.02                            | 0.70                                  |
| CDRH103RNP-121NC-B | 121   | 120 $\pm$ 30%                             | 754(580)                                         | 0.89                            | 0.65                                  |
| CDRH103RNP-151NC-B | 151   | 150 $\pm$ 30%                             | 871(670)                                         | 0.84                            | 0.51                                  |

※1 Inductance measuring condition: at 100kHz.

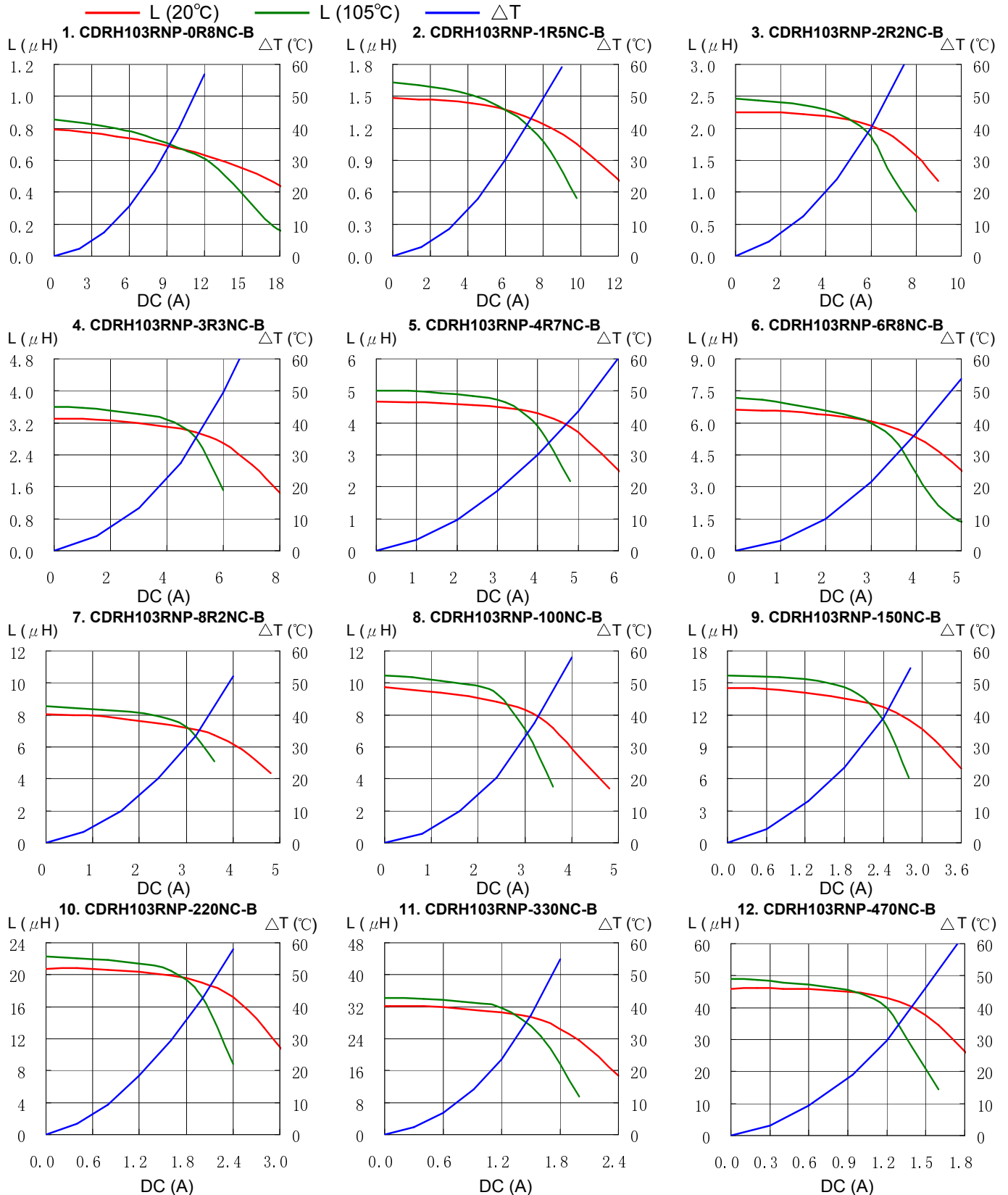
※2 The saturation current: This indicates the value of DC current when the inductance decreases to 65% of it's nominal.

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

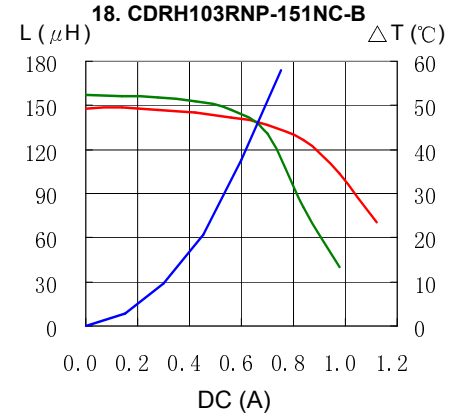
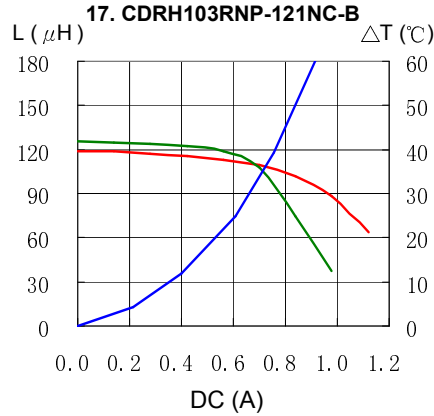
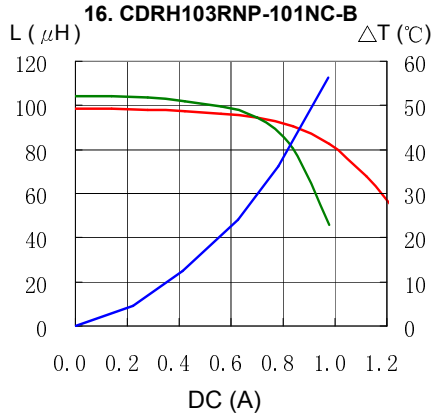
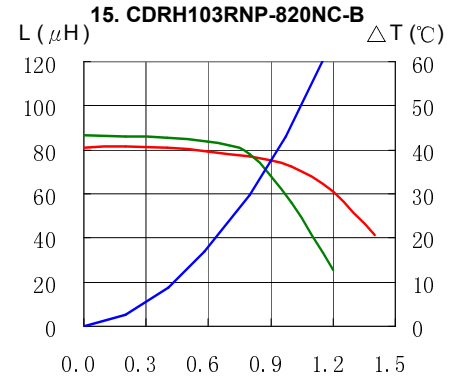
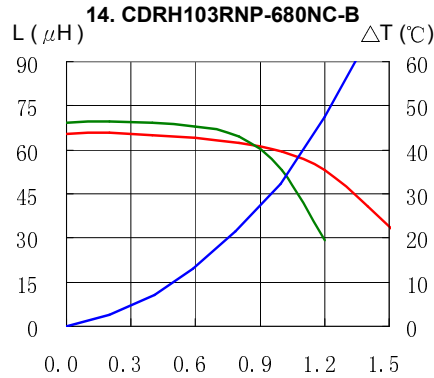
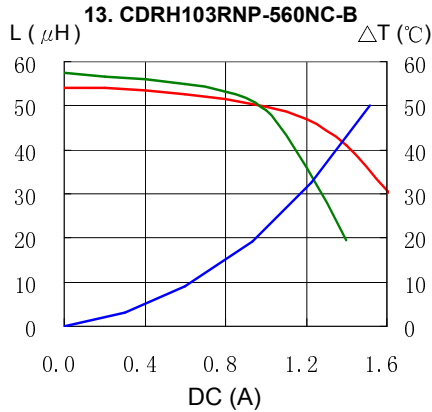
# SMD Power Inductor CDRH103R



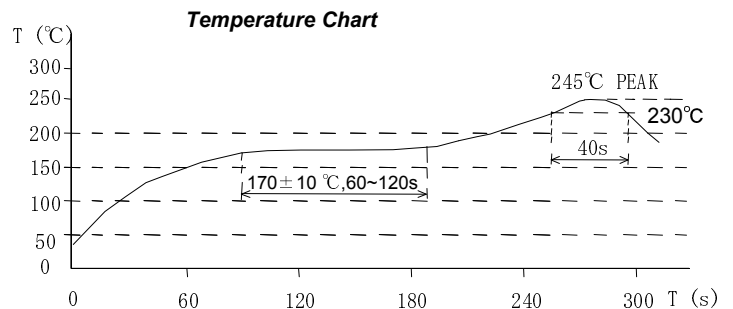
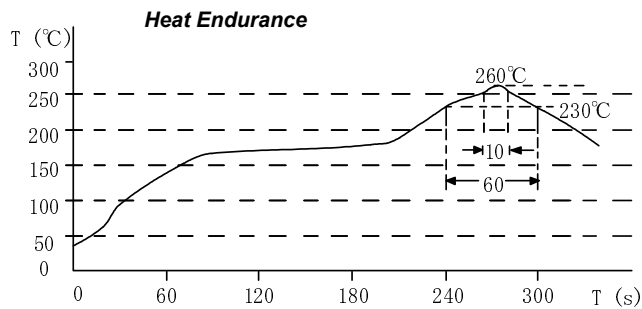
## Saturation Current & Temperature Rise Graph



# SMD Power Inductor CDRH103R



## Solder Reflow Condition



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

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