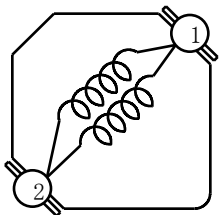




- Ferrite drum core construction.
- Magnetically shielded.
- L × W × H: 3.2 × 3.2 × 1.55mm Max.
- Product weight: 46mg(Ref.)
- Moisture Sensitivity Level: 1
- RoHS compliance.

Technical drawing of the E-1000 electrode showing three views: front, side, and top. The front view is a square with rounded corners, 3.0±0.2 mm wide and high. The side view shows a maximum height of 1.55 mm and a width of 1.4 mm. The top view shows a square with rounded corners, 3.3±0.2 mm wide, with two 1.0±0.1 mm wide slots. A hatched area is labeled "ELECTRODE".



A schematic diagram of a spring in a closed circuit. The spring is represented by a coiled line connecting two terminals, labeled 1 and 2. Terminal 1 is at the top right, and terminal 2 is at the bottom left. The circuit is completed by straight lines forming a rectangular loop with a diagonal branch containing the spring.

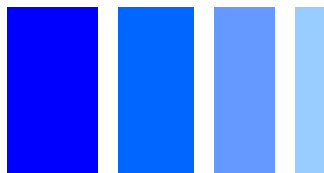
- Operating temperature range: -40℃~+100℃ (including coil's self temperature rise)
- Storage temperature range: -40℃~+100℃
- Solder reflow temperature: 260℃ peak.

- Carrier tape and reel packaging
- 7.0" diameter reel
- 1000pcs per reel

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

# SMD Power Inductor

## CDRH2D14



### Electrical Characteristics

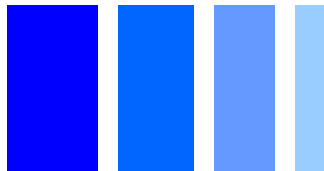
| Part Name        | Stamp | Inductance<br>( $\mu$ H)<br>[ within ] ※1 | D.C.R. (m $\Omega$ )<br>Max. (Typ.)<br>(at 20°C) | Saturation Current<br>(A) ※2 |          | Temperature<br>Rise Current<br>(A) ※3 |
|------------------|-------|-------------------------------------------|--------------------------------------------------|------------------------------|----------|---------------------------------------|
|                  |       |                                           |                                                  | at 20°C                      | at 100°C |                                       |
| CDRH2D14NP-R21NC | N     | 0.21 $\pm$ 35%                            | 21(16)                                           | 3.80                         | 2.70     | 4.74                                  |
| CDRH2D14NP-R36NC | P     | 0.36 $\pm$ 35%                            | 26(20)                                           | 3.25                         | 2.55     | 4.10                                  |
| CDRH2D14NP-R60NC | Q     | 0.60 $\pm$ 35%                            | 33(25)                                           | 2.20                         | 1.75     | 3.45                                  |
| CDRH2D14NP-R82NC | R     | 0.82 $\pm$ 35%                            | 39(30)                                           | 2.10                         | 1.68     | 2.85                                  |
| CDRH2D14NP-1R2NC | S     | 1.2 $\pm$ 30%                             | 49(38)                                           | 1.95                         | 1.35     | 2.75                                  |
| CDRH2D14NP-1R5NC | A     | 1.5 $\pm$ 30%                             | 63(50)                                           | 1.80                         | 1.20     | 2.00                                  |
| CDRH2D14NP-1R8NC | B     | 1.8 $\pm$ 30%                             | 75(60)                                           | 1.65                         | 1.10     | 1.80                                  |
| CDRH2D14NP-2R2NC | C     | 2.2 $\pm$ 30%                             | 94(75)                                           | 1.50                         | 1.00     | 1.60                                  |
| CDRH2D14NP-2R7NC | D     | 2.7 $\pm$ 30%                             | 106(85)                                          | 1.35                         | 0.90     | 1.40                                  |
| CDRH2D14NP-3R3NC | E     | 3.3 $\pm$ 30%                             | 125(100)                                         | 1.20                         | 0.82     | 1.24                                  |
| CDRH2D14NP-3R9NC | F     | 3.9 $\pm$ 30%                             | 138(110)                                         | 1.10                         | 0.75     | 1.12                                  |
| CDRH2D14NP-4R7NC | G     | 4.7 $\pm$ 30%                             | 169(135)                                         | 1.00                         | 0.68     | 1.00                                  |
| CDRH2D14NP-5R6NC | H     | 5.6 $\pm$ 30%                             | 188(150)                                         | 0.95                         | 0.60     | 0.98                                  |
| CDRH2D14NP-6R8NC | J     | 6.8 $\pm$ 30%                             | 213(170)                                         | 0.85                         | 0.56     | 0.92                                  |
| CDRH2D14NP-8R2NC | K     | 8.2 $\pm$ 30%                             | 281(225)                                         | 0.80                         | 0.51     | 0.80                                  |
| CDRH2D14NP-100NC | L     | 10 $\pm$ 30%                              | 294(235)                                         | 0.70                         | 0.46     | 0.76                                  |
| CDRH2D14NP-120NC | M     | 12 $\pm$ 30%                              | 394(315)                                         | 0.62                         | 0.42     | 0.64                                  |

※1 Inductance measuring condition: at 100 kHz.

※2 Saturation current: The DC current at which the inductance decreases to 65% of it's nominal value.

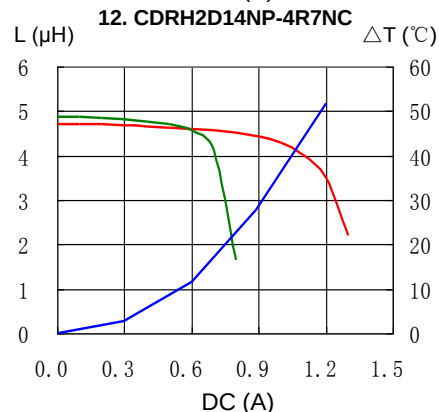
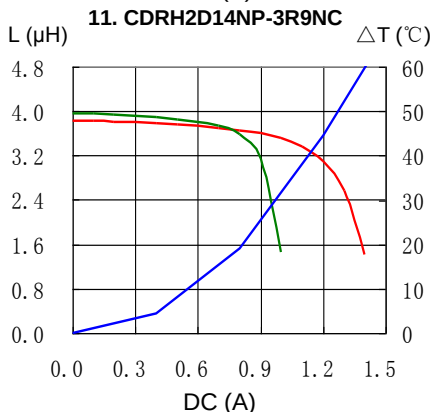
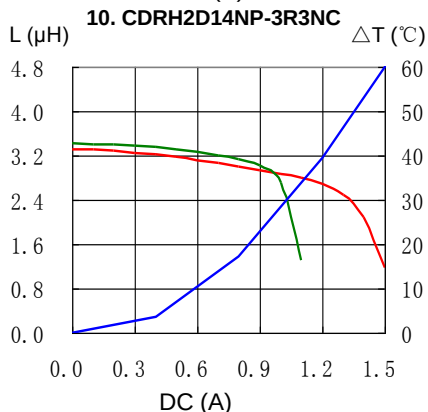
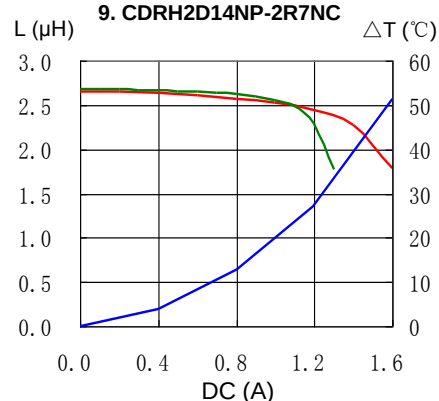
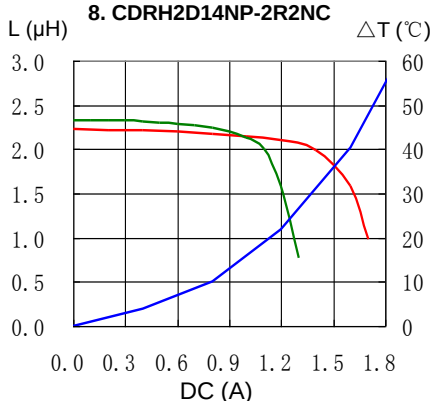
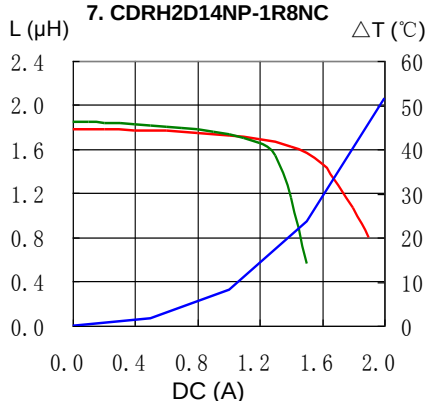
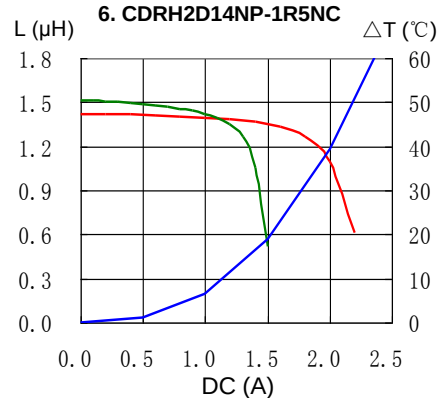
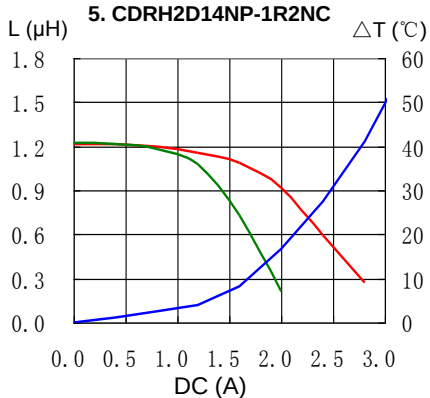
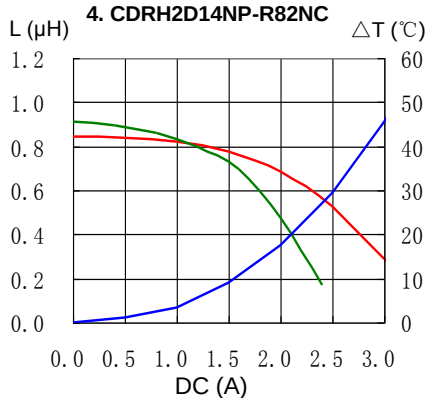
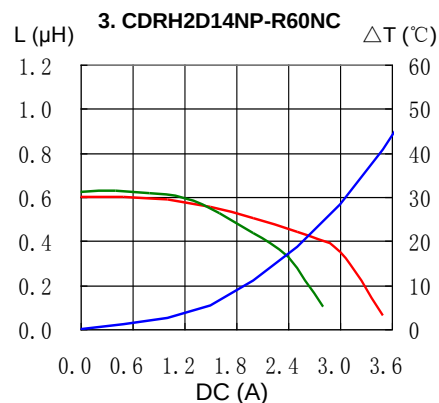
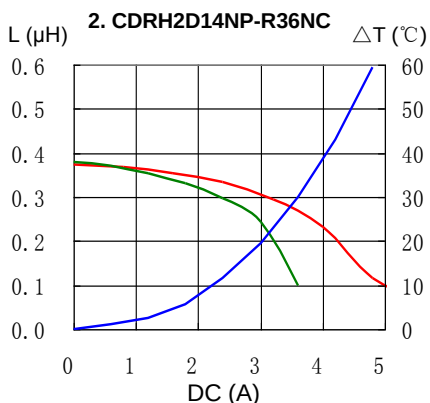
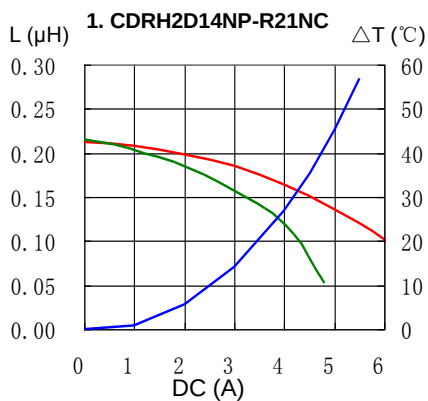
※3 Temperature rise current: The DC current at which the temperature rise is  $\Delta T=40^{\circ}\text{C}$ . ( $T_a=20^{\circ}\text{C}$ )

# SMD Power Inductor CDRH2D14



## Saturation Current & Temperature Rise Graph

— L (20°C) — L (100°C) —  $\Delta T$

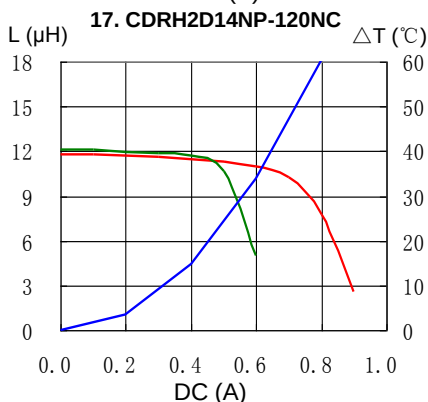
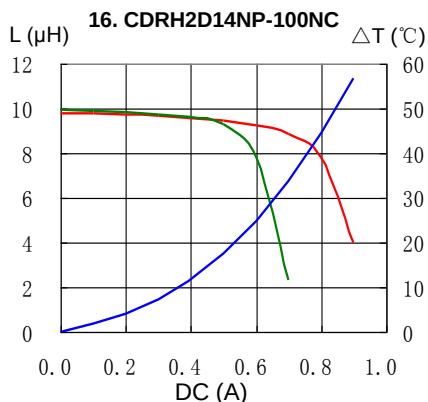
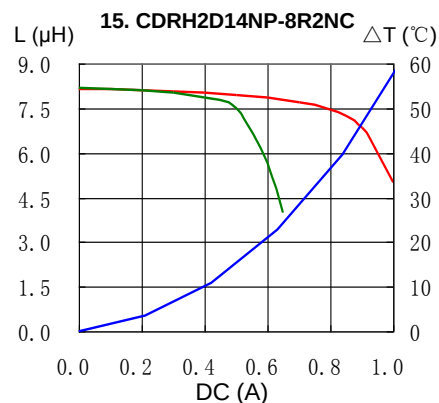
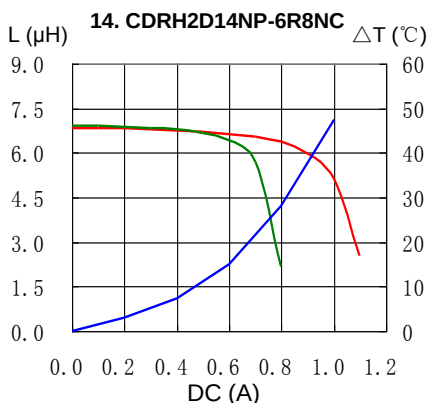
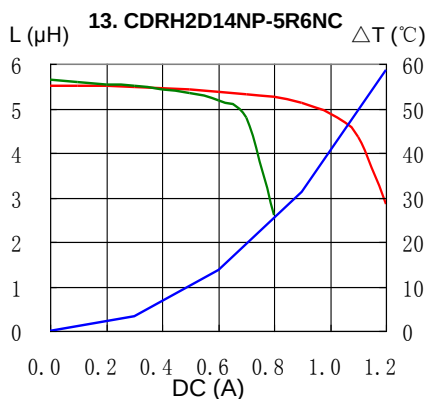


# SMD Power Inductor CDRH2D14



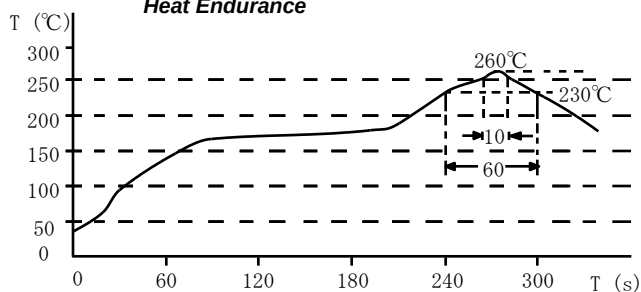
## Saturation Current & Temperature Rise Graph

— L (20°C) — L (100°C) —  $\Delta T$

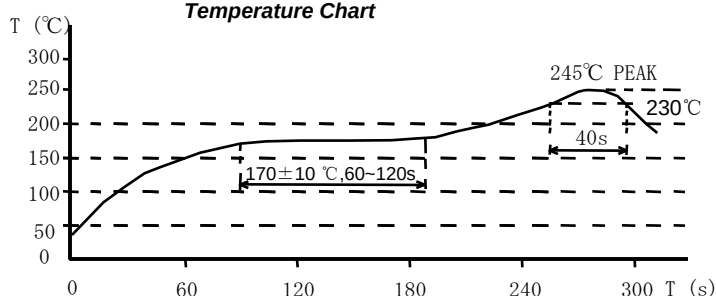


## Solder Reflow Condition

### Heat Endurance



### Temperature Chart



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