

# SMD Power Inductor CDC4D20



## Description

- Ferrite drum core construction.
- Magnetically unshielded.
- L × W × H: 5.0 × 5.0 × 2.0 mm Max.
- Product weight: 106mg(Ref.)
- Moisture Sensitivity Level: 1
- RoHS compliance.

## Environmental Data

- Operating temperature range: -40°C~+85°C (including coil's self temperature rise)
- Storage temperature range: -40°C~+85°C
- Solder reflow temperature: 260 °C peak.

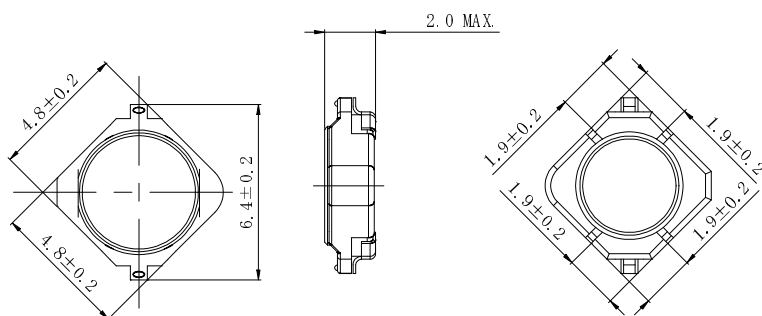
## Packaging

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

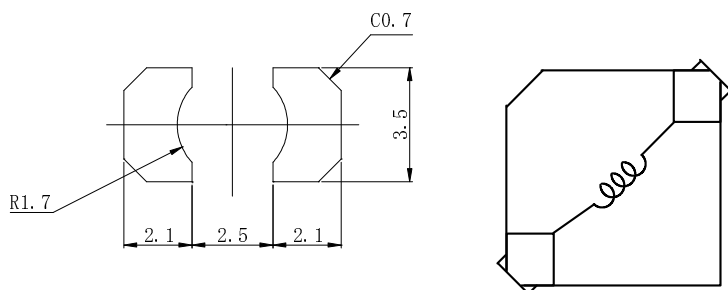
## Applications

- Ideally used in EL drive as EL lamp inverter inductors.

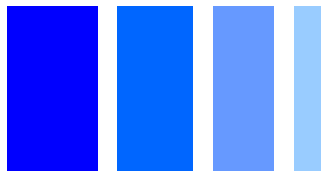
## Dimension - [mm]



## Land pattern and Schematics - [mm]



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## Electrical Characteristics

| Part Name       | Stamp | Inductance<br>[Within] ※1 | D.C.R.( $\Omega$ )<br>Max. (Typ.)<br>(at 20°C) | Saturation<br>Current<br>(mA) ※2 | Temperature<br>Rise Current<br>(mA) ※3 |
|-----------------|-------|---------------------------|------------------------------------------------|----------------------------------|----------------------------------------|
| CDC4D20NP-101KC | A     | 100 $\mu$ H $\pm$ 10%     | 1.77 (1.48)                                    | 275                              | 230                                    |
| CDC4D20NP-121KC | B     | 120 $\mu$ H $\pm$ 10%     | 1.97(1.65)                                     | 250                              | 220                                    |
| CDC4D20NP-151KC | C     | 150 $\mu$ H $\pm$ 10%     | 2.61(2.18)                                     | 230                              | 195                                    |
| CDC4D20NP-181KC | D     | 180 $\mu$ H $\pm$ 10%     | 2.73(2.28)                                     | 210                              | 190                                    |
| CDC4D20NP-221KC | E     | 220 $\mu$ H $\pm$ 10%     | 3.20(2.67)                                     | 190                              | 180                                    |
| CDC4D20NP-271KC | F     | 270 $\mu$ H $\pm$ 10%     | 3.66(3.05)                                     | 170                              | 160                                    |
| CDC4D20NP-331KC | G     | 330 $\mu$ H $\pm$ 10%     | 5.16(4.30)                                     | 160                              | 135                                    |
| CDC4D20NP-391KC | H     | 390 $\mu$ H $\pm$ 10%     | 5.66(4.72)                                     | 140                              | 130                                    |
| CDC4D20NP-471KC | J     | 470 $\mu$ H $\pm$ 10%     | 7.30(6.08)                                     | 130                              | 110                                    |
| CDC4D20NP-561KC | K     | 560 $\mu$ H $\pm$ 10%     | 8.40(6.99)                                     | 120                              | 105                                    |
| CDC4D20NP-681KC | L     | 680 $\mu$ H $\pm$ 10%     | 9.60(8.00)                                     | 110                              | 90                                     |
| CDC4D20NP-821KC | M     | 820 $\mu$ H $\pm$ 10%     | 14.1(11.7)                                     | 100                              | 75                                     |
| CDC4D20NP-102KC | N     | 1.0mH $\pm$ 10%           | 16.2(13.5)                                     | 90                               | 70                                     |
| CDC4D20NP-122KC | P     | 1.2mH $\pm$ 10%           | 18.6(15.5)                                     | 80                               | 65                                     |
| CDC4D20NP-152KC | Q     | 1.5mH $\pm$ 10%           | 23.8(19.8)                                     | 75                               | 55                                     |
| CDC4D20NP-182KC | R     | 1.8mH $\pm$ 10%           | 27.1(22.6)                                     | 65                               | 55                                     |
| CDC4D20NP-222KC | S     | 2.2mH $\pm$ 10%           | 31.6(26.3)                                     | 60                               | 50                                     |
| CDC4D20NP-272KC | T     | 2.7mH $\pm$ 10%           | 38.9(32.4)                                     | 55                               | 45                                     |
| CDC4D20NP-332KC | U     | 3.3mH $\pm$ 10%           | 43.7(36.4)                                     | 50                               | 40                                     |
| CDC4D20NP-392KC | V     | 3.9mH $\pm$ 10%           | 50.9(42.4)                                     | 45                               | 38                                     |
| CDC4D20NP-472KC | W     | 4.7mH $\pm$ 10%           | 72.1(60.0)                                     | 40                               | 34                                     |

※1. Inductance measuring condition: at 1 kHz.

※2. Saturation current: The value of D.C. current when the inductance decreases to 90% of it's nominal value.

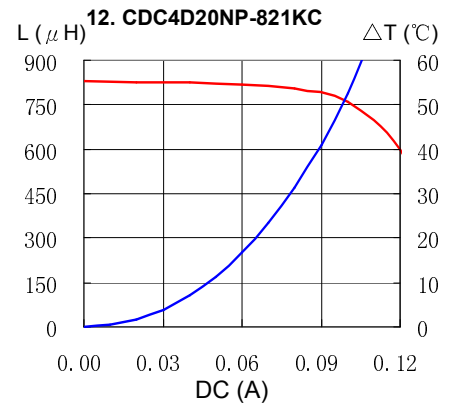
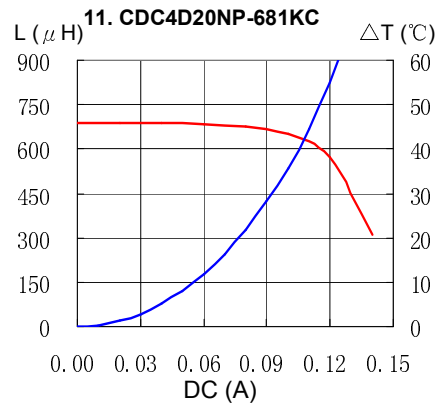
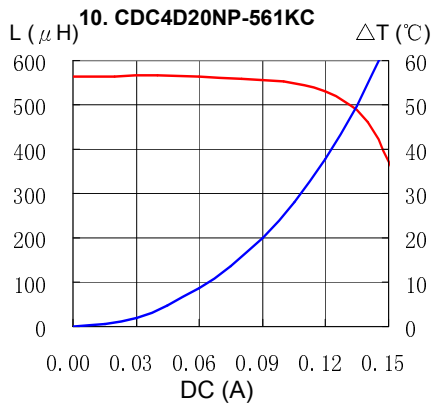
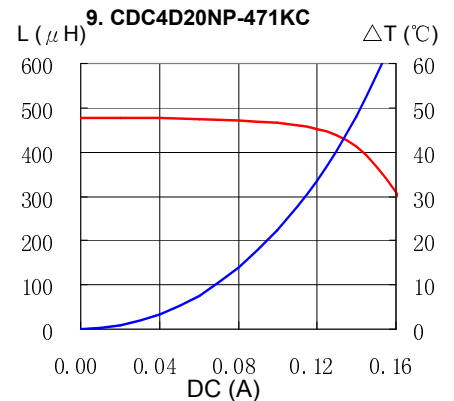
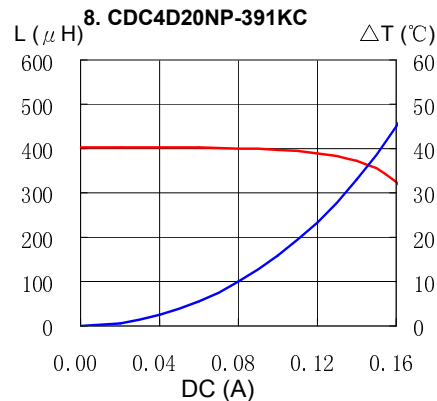
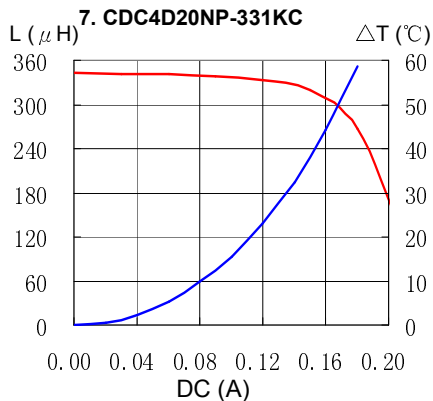
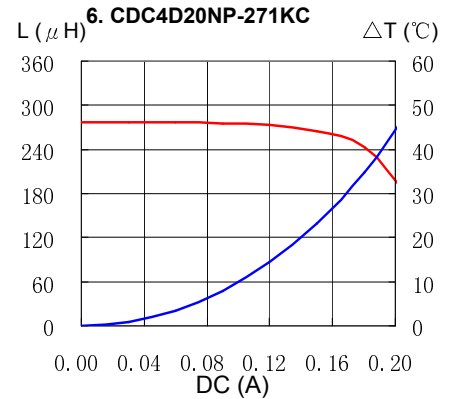
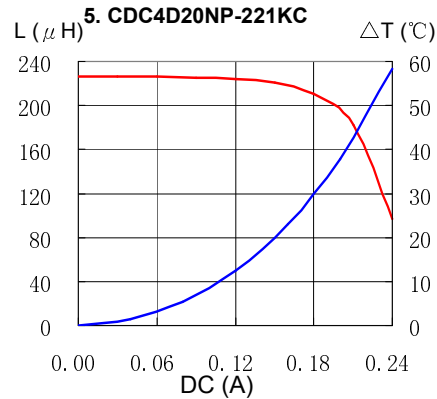
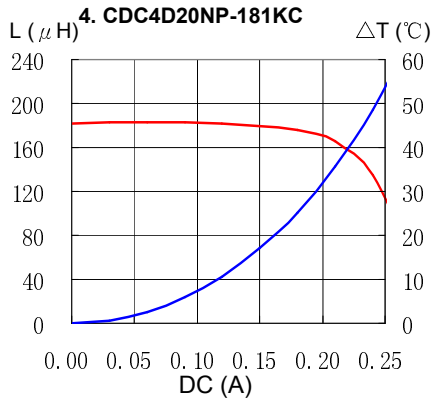
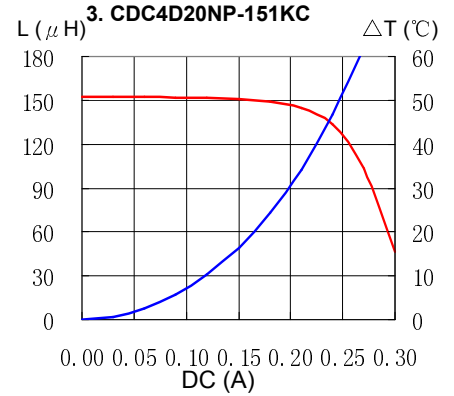
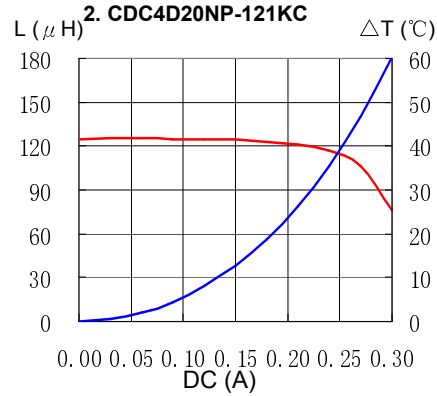
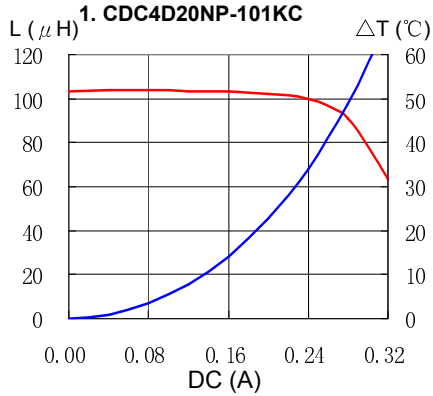
※3. Temperature rise current: The value of D.C. current when the temperature rise is  $\Delta t=40^{\circ}\text{C}$  ( $T_a=20^{\circ}\text{C}$ ).

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## Saturation Current & Temperature Rise Graph

— L (20°C) —  $\Delta T$

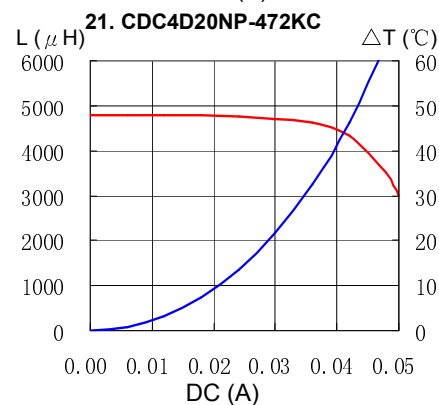
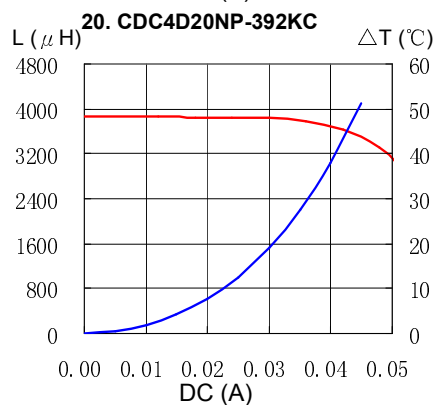
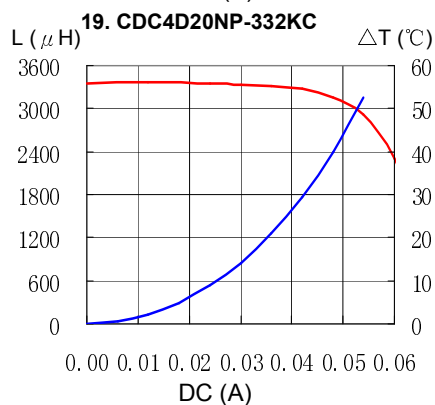
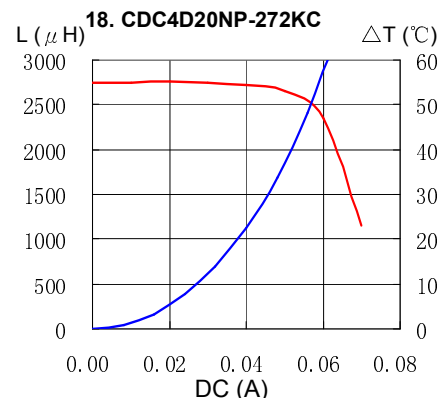
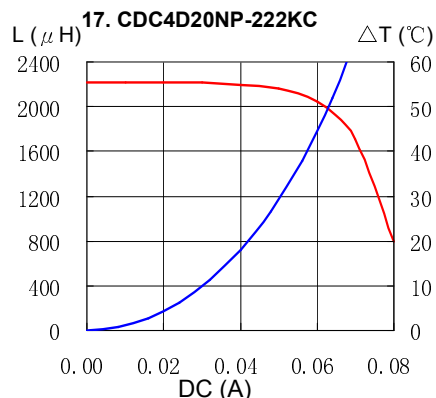
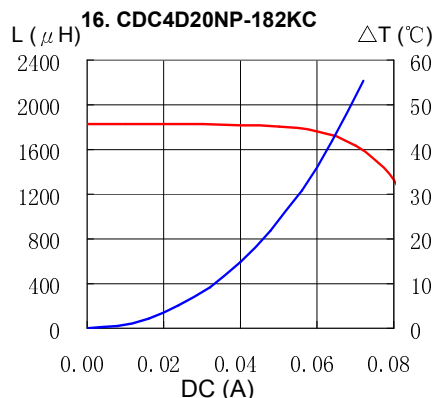
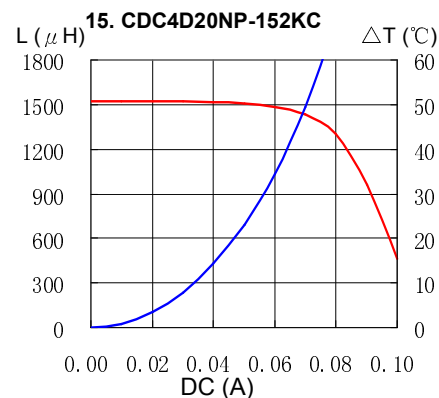
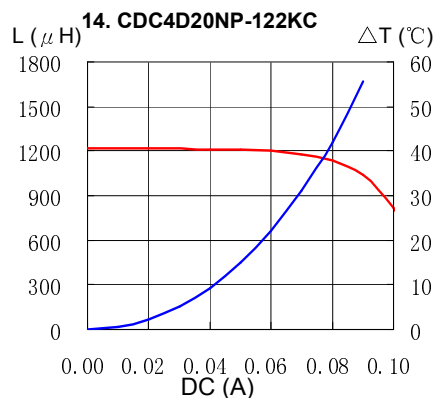
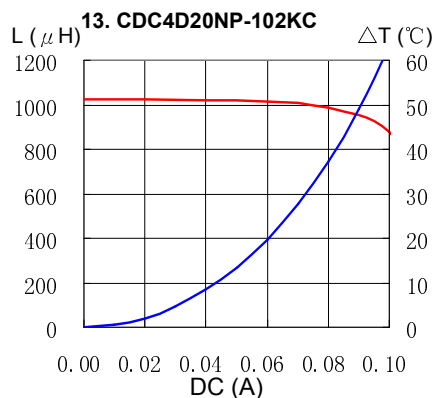


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## Saturation Current & Temperature Rise Graph

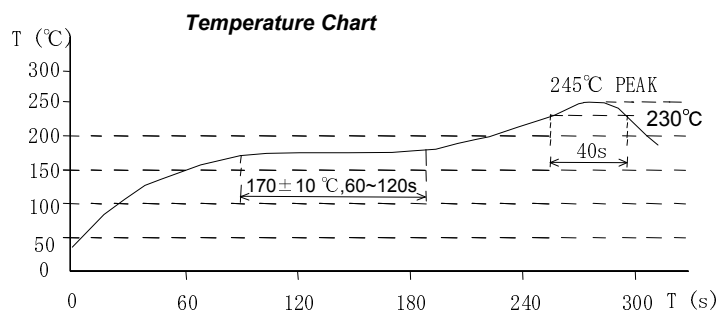
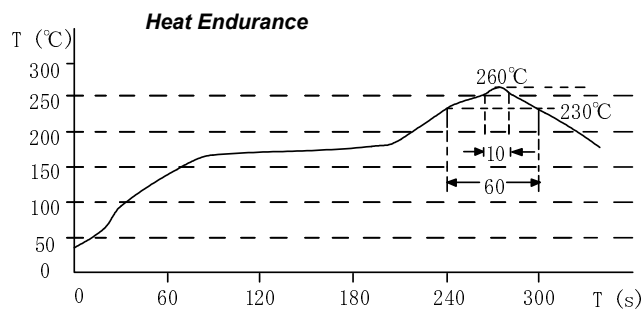
— L (20°C) —  $\Delta T$



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## Solder Reflow Condition



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

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