

SMD Power Inductor CDR6D28MN



Description

- Ferrite drum core construction.
- Magnetically shielded.
- L × W × H: 6.8 × 6.8 × 3.0 mm Max.
- Product weight: 0.35 g(Ref.)
- Moisture Sensitivity Level: 1
- RoHS compliance.

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.

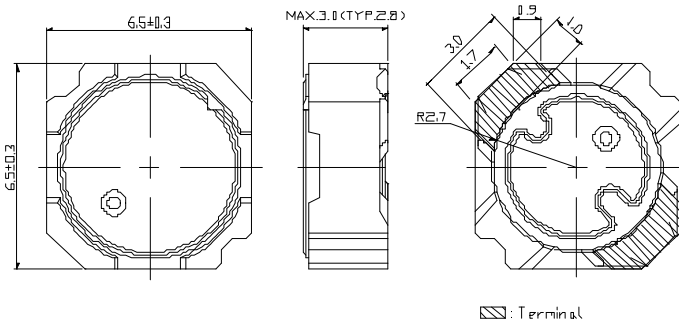
Packaging

- Carrier tape and reel packaging
- 12.9" diameter reel
- 1500pcs per reel

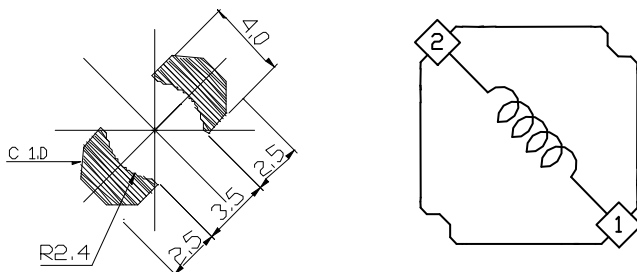
Applications

- Ideally used in LCD driver, DSC/DVC , Notebook PC or the other portable equipment

Dimension - [mm]



Land pattern and Schematics - [mm]



SMD Power Inductor CDR6D28MN



Electrical Characteristics

| Part Name | Stamp | Inductance (μ H) [within] ※1 | D.C.R. (m Ω) Max. (Typ.) (at 20°C) | Saturation Current (A) ※2 | | Temperature Rise Current (A) ※3 |
|-------------------|-------|---|--|------------------------------|------------|---------------------------------------|
| | | | | (at 20°C) | (at 105°C) | |
| CDR6D28MNNP-1R5NC | 1R5 | 1.5 μ H \pm 25% | 31.5(25) | 5.90 | 4.55 | 3.0 |
| CDR6D28MNNP-2R0NC | 2R0 | 2.0 μ H \pm 25% | 37.5(30) | 4.75 | 3.90 | 2.9 |
| CDR6D28MNNP-2R7NC | 2R7 | 2.7 μ H \pm 25% | 43.8(35) | 4.30 | 3.45 | 2.7 |
| CDR6D28MNNP-3R6NC | 3R6 | 3.6 μ H \pm 25% | 50.0(40) | 3.90 | 3.05 | 2.5 |
| CDR6D28MNNP-4R5NC | 4R5 | 4.5 μ H \pm 25% | 57.5(46) | 3.55 | 2.75 | 2.4 |
| CDR6D28MNNP-5R5NC | 5R5 | 5.5 μ H \pm 25% | 63.8(51) | 3.15 | 2.50 | 2.2 |
| CDR6D28MNNP-6R5NC | 6R5 | 6.5 μ H \pm 25% | 70.0(56) | 3.05 | 2.40 | 2.1 |
| CDR6D28MNNP-7R7NC | 7R7 | 7.7 μ H \pm 25% | 76.3(61) | 2.85 | 2.30 | 2.0 |
| CDR6D28MNNP-9R0NC | 9R0 | 9.0 μ H \pm 25% | 82.5(66) | 2.60 | 2.10 | 1.9 |
| CDR6D28MNNP-100NC | 100 | 10 μ H \pm 25% | 88.8(71) | 2.50 | 2.00 | 1.8 |
| CDR6D28MNNP-120NC | 120 | 12 μ H \pm 25% | 120.0(96) | 2.30 | 1.75 | 1.5 |
| CDR6D28MNNP-150NC | 150 | 15 μ H \pm 25% | 135.0(108) | 2.10 | 1.55 | 1.4 |
| CDR6D28MNNP-180NC | 180 | 18 μ H \pm 25% | 150.0(121) | 1.75 | 1.45 | 1.3 |
| CDR6D28MNNP-220NC | 220 | 22 μ H \pm 25% | 198.8(159) | 1.65 | 1.25 | 1.1 |
| CDR6D28MNNP-270NC | 270 | 27 μ H \pm 25% | 231.2(185) | 1.45 | 1.15 | 0.98 |
| CDR6D28MNNP-330NC | 330 | 33 μ H \pm 25% | 308.8(247) | 1.25 | 1.05 | 0.94 |
| CDR6D28MNNP-390NC | 390 | 39 μ H \pm 25% | 335.0(268) | 1.15 | 0.95 | 0.90 |
| CDR6D28MNNP-470NC | 470 | 47 μ H \pm 25% | 458.8(367) | 1.05 | 0.90 | 0.72 |
| CDR6D28MNNP-560NC | 560 | 56 μ H \pm 25% | 501.3(401) | 1.00 | 0.80 | 0.68 |
| CDR6D28MNNP-680NC | 680 | 68 μ H \pm 25% | 561.3(449) | 0.90 | 0.75 | 0.65 |
| CDR6D28MNNP-820NC | 820 | 82 μ H \pm 25% | 837.5(670) | 0.80 | 0.65 | 0.53 |
| CDR6D28MNNP-101NC | 101 | 100 μ H \pm 25% | 936.3(749) | 0.75 | 0.60 | 0.50 |
| CDR6D28MNNP-121NC | 121 | 120 μ H \pm 25% | 1028.8(823) | 0.70 | 0.55 | 0.46 |

※1. Inductance measuring condition: at 100kHz.

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

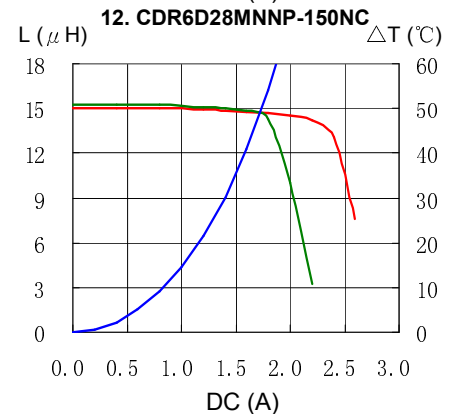
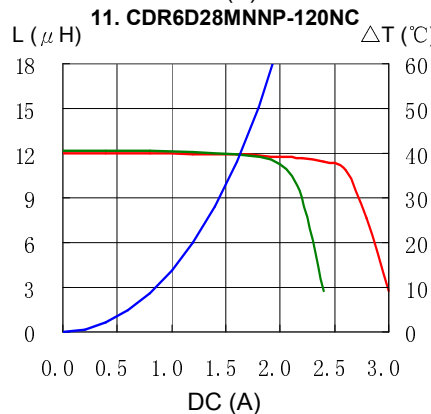
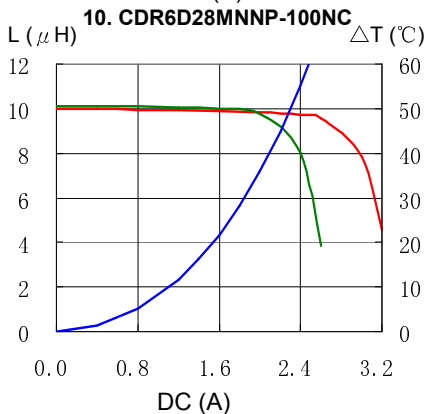
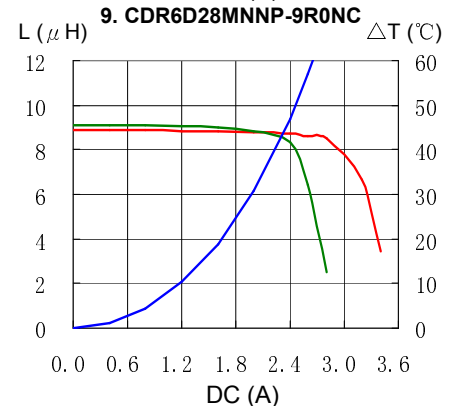
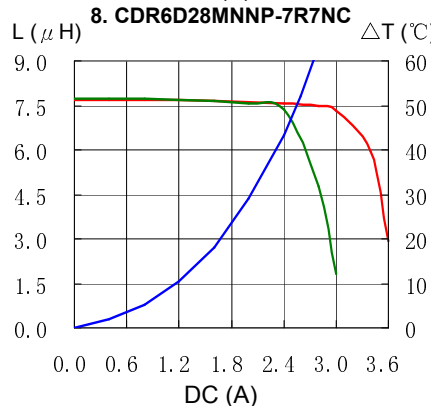
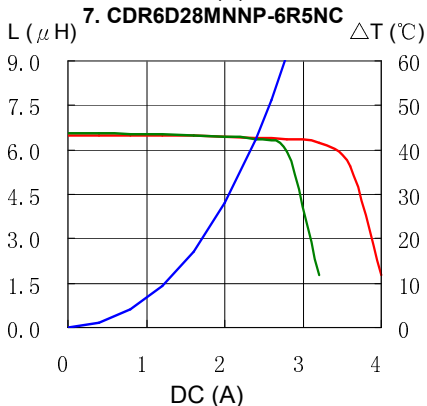
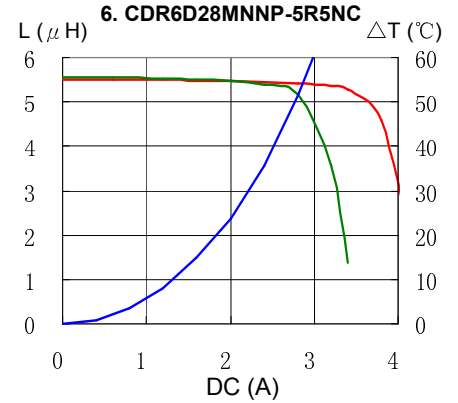
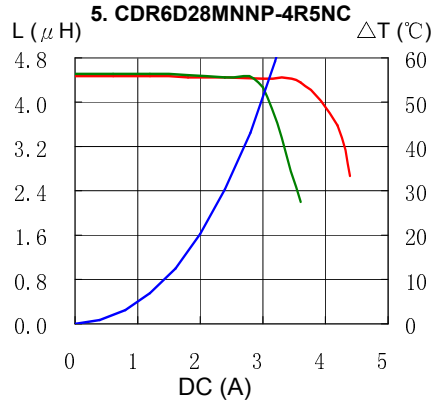
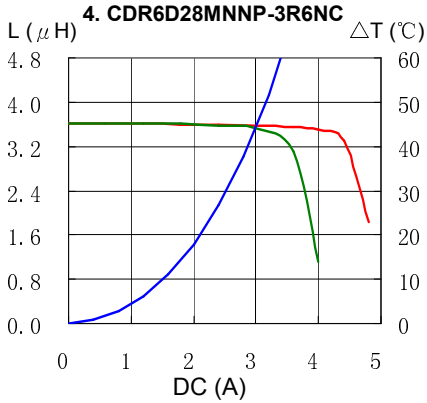
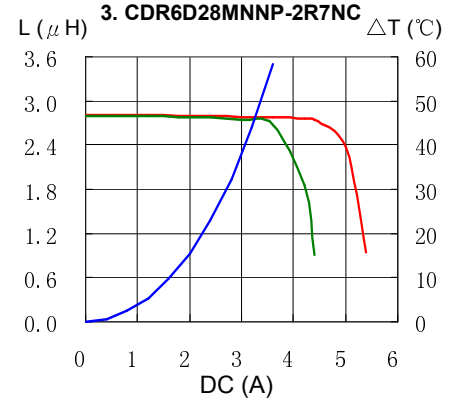
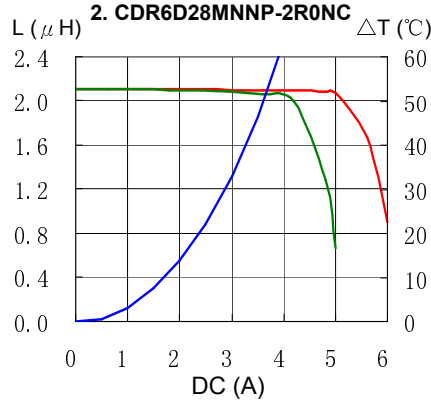
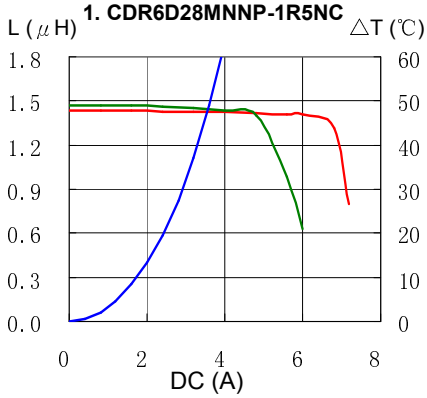
※3. Temperature rise current: The value of D.C. current when the temperature rise is $\Delta t=40^{\circ}\text{C}$ ($T_a=20^{\circ}\text{C}$).

SMD Power Inductor CDR6D28MN



Saturation Current & Temperature Rise Graph

— L (20°C) — L (100°C) — ΔT

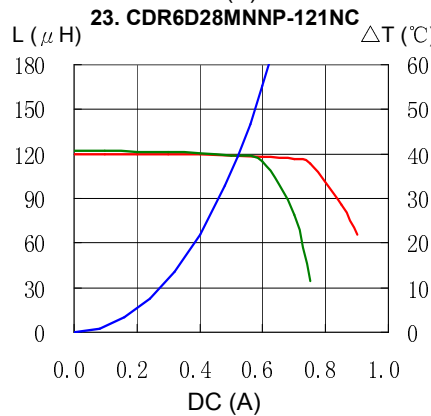
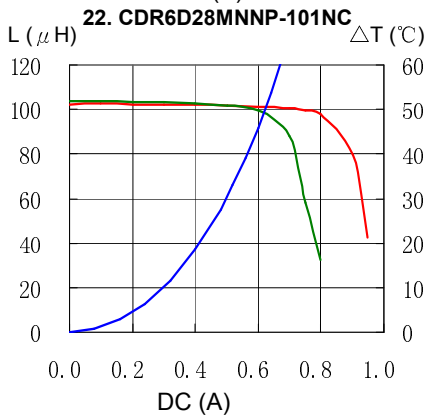
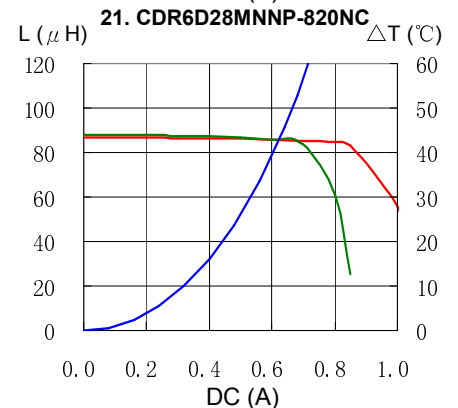
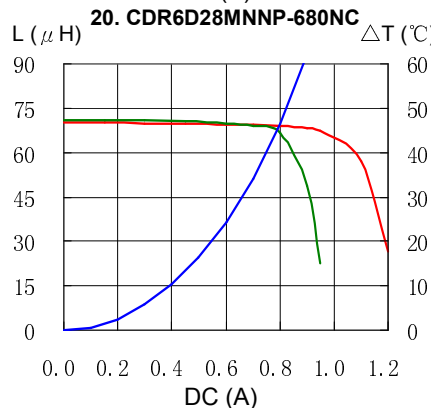
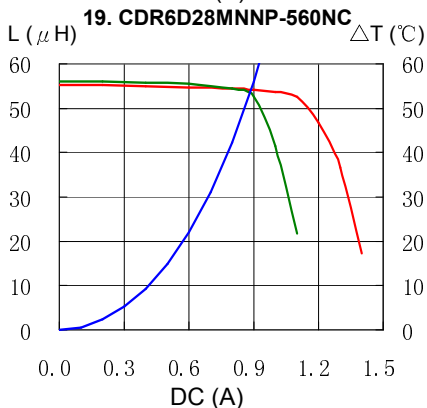
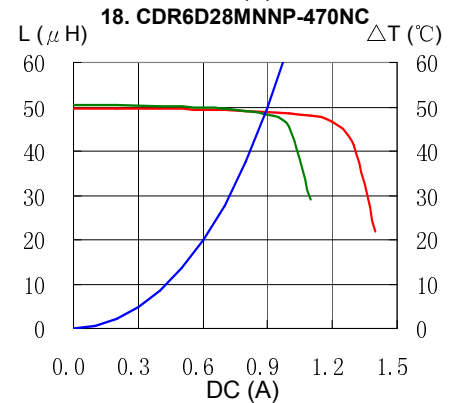
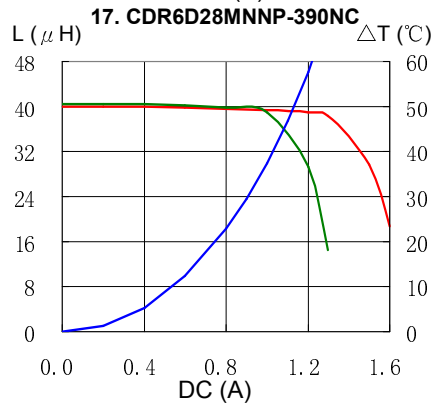
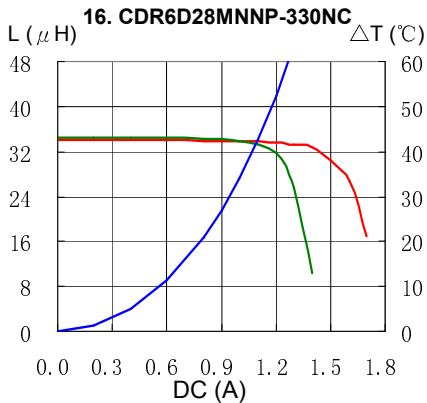
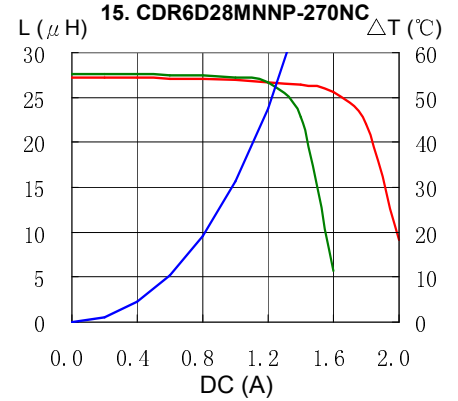
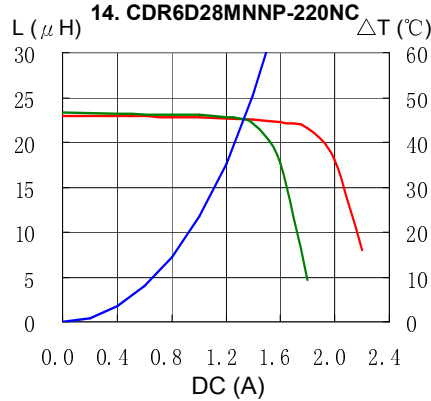
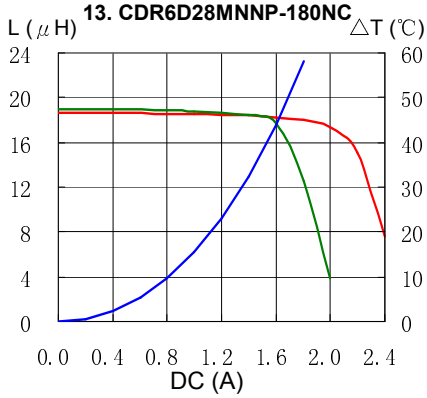


SMD Power Inductor CDR6D28MN



Saturation Current & Temperature Rise Graph

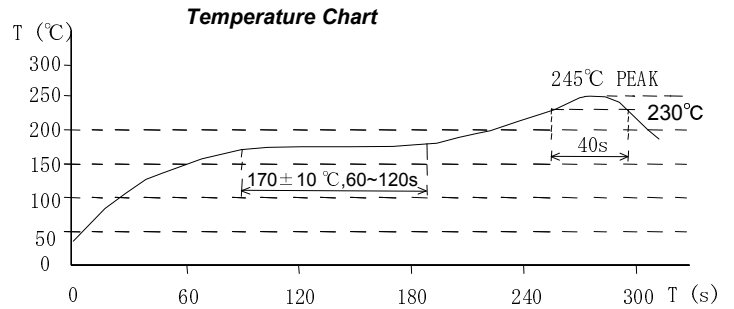
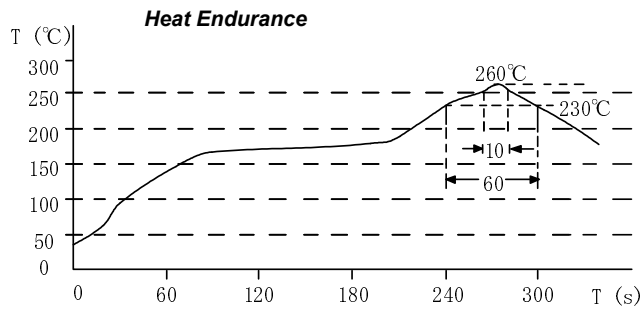
— L (20°C) — L (100°C) — ΔT



SMD Power Inductor CDR6D28MN



Solder Reflow Condition



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

Hong Kong

Tel.+852-2880-6781
FAX.+852-2565-9600
sales@hk.sumida.com

Saitama(Japan)

Tel.+81-48-691-7300
FAX.+81-48-691-7340
sales@jp.sumida.com

Chicago

Tel.+1-847-545-6700
FAX. +1-847-545-6720
sales@us.sumida.com

Shanghai

Tel.+86-21-5836-3299
FAX.+86-21-5836-3266
shanghai.sales@cn.sumida.com

Seoul

Tel.+82-2-6237-0777
FAX.+82-2-6237-0778
sales@kr.sumida.com

Oberzell

Tel.+49-8591-937-0
FAX. +49-8591-937-103
contact@eu.sumida.com

Shenzhen

Tel.+86-755-8291-0228
FAX.+86-755-8291-0338
shenzhen.sales@cn.sumida.com

Singapore

Tel.+65-6296-3388
FAX.+65-6841-4426
sales@sg.sumida.com

Neumarkt

Tel.+49-9181-4509-110
FAX. +49-9181-4509-310
infocomp@eu.sumida.com

Taipei

Tel.+886-2-8751-2737
FAX.+886-2-8751-2738
sales@tw.sumida.com

San Jose

Tel.+1-408-321-9660
FAX.+1-408-321-9308
sales@us.sumida.com