# SMD Power Inductor
## CDR6D23MN

RoHS

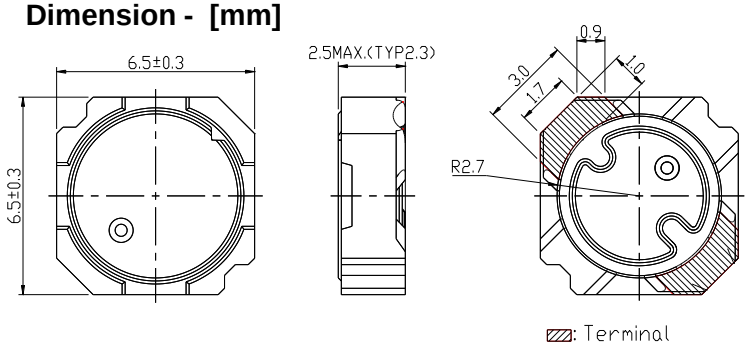
### Description
- Ferrite drum core construction.
- Magnetically shielded.
- L × W × H: 6.8 × 6.8 × 2.5 mm Max.
- Product weight: 0.27g(Ref.)
- Moisture Sensitivity Level: 1
- RoHS compliance.

### Environmental Data
- Operating temperature range: -40℃～+105℃ (including coil's self temperature rise)
- Storage temperature range: -40℃～+105℃
- Solder reflow temperature: 260 ℃ peak.

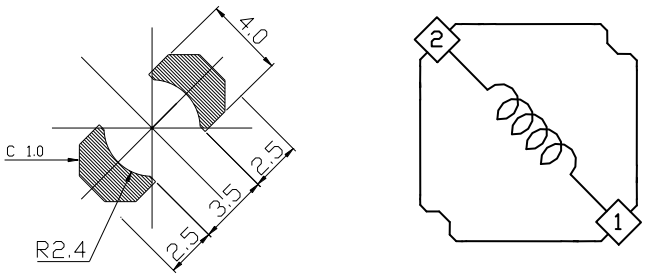
### Packaging
- Carrier tape and reel packaging
- 11.8"diameter reel
- 1500pcs per reel

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

### Dimension - [mm]




### Land pattern and Schematics - [mm]






Revised: 6-Jan-17

## Electrical Characteristics

| Part Name | Stamp | Inductance ( μH ) ［Within］※1 | D.C.R. (mΩ) Max. (Typ.) (at 20℃) | Saturation Current (A) ※2 | | Temperature Rise Current (A)※3 |
|---|---|---|---|---|---|---|
| | | | | (at 20℃) | (at 105℃) | |
| CDR6D23MNNP-0R6NC | 0R6 | 0.6μH±25% | 20.0(16) | 6.55 | 4.95 | 4.60 |
| CDR6D23MNNP-1R0NC | 1R0 | 1.0μH±25% | 25.0(20) | 5.15 | 4.00 | 3.90 |
| CDR6D23MNNP-1R5NC | 1R5 | 1.5μH±25% | 28.0(22) | 4.40 | 3.55 | 3.30 |
| CDR6D23MNNP-2R0NC | 2R0 | 2.0μH±25% | 36.3(29) | 3.85 | 3.05 | 2.60 |
| CDR6D23MNNP-2R7NC | 2R7 | 2.7μH±25% | 40.0(32) | 3.30 | 2.60 | 2.38 |
| CDR6D23MNNP-3R3NC | 3R3 | 3.3μH±25% | 46.3(37) | 2.95 | 2.30 | 2.25 |
| CDR6D23MNNP-4R2NC | 4R2 | 4.2μH±25% | 52.5(42) | 2.60 | 2.10 | 2.05 |
| CDR6D23MNNP-5R1NC | 5R1 | 5.1μH±25% | 60.0(48) | 2.45 | 1.95 | 1.90 |
| CDR6D23MNNP-6R1NC | 6R1 | 6.1μH±25% | 66.3(53) | 2.30 | 1.75 | 1.80 |
| CDR6D23MNNP-7R2NC | 7R2 | 7.2μH±25% | 72.5(58) | 2.10 | 1.60 | 1.70 |
| CDR6D23MNNP-8R3NC | 8R3 | 8.3μH±25% | 80.0(64) | 1.95 | 1.50 | 1.50 |
| CDR6D23MNNP-100NC | 100 | 10μH±25% | 103.8(83) | 1.75 | 1.40 | 1.30 |
| CDR6D23MNNP-120NC | 120 | 12μH±25% | 117.5(94) | 1.55 | 1.25 | 1.25 |
| CDR6D23MNNP-150NC | 150 | 15μH±25% | 133.8(107) | 1.40 | 1.15 | 1.10 |
| CDR6D23MNNP-180NC | 180 | 18μH±25% | 158.8(127) | 1.30 | 1.05 | 1.00 |
| CDR6D23MNNP-220NC | 220 | 22μH±25% | 187.5(150) | 1.20 | 0.95 | 0.80 |
| CDR6D23MNNP-270NC | 270 | 27μH±25% | 255.0(204) | 1.05 | 0.85 | 0.75 |
| CDR6D23MNNP-330NC | 330 | 33μH±25% | 275.0(220) | 0.95 | 0.75 | 0.70 |
| CDR6D23MNNP-390NC | 390 | 39μH±25% | 393.8(315) | 0.90 | 0.70 | 0.58 |
| CDR6D23MNNP-470NC | 470 | 47μH±25% | 456.3(365) | 0.80 | 0.60 | 0.54 |
| CDR6D23MNNP-560NC | 560 | 56μH±25% | 481.2(385) | 0.75 | 0.58 | 0.51 |
| CDR6D23MNNP-680NC | 680 | 68μH±25% | 751.3(601) | 0.65 | 0.53 | 0.45 |
| CDR6D23MNNP-820NC | 820 | 82μH±25% | 803.8(643) | 0.60 | 0.47 | 0.43 |
| CDR6D23MNNP-101NC | 101 | 100μH±25% | 903.8(723) | 0.55 | 0.44 | 0.41 |

※1. Inductance measuring condition: at 100kHz.

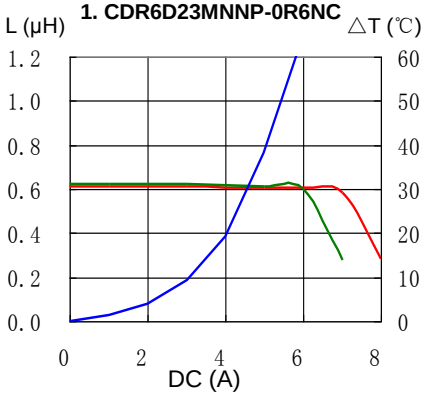
※2. Saturation current: The value of D.C. current when the inductance decreases to 65% of it's nominal value.

※3. Temperature rise current: The value of D.C. current when the temperature rise is △t＝40℃(Ta＝20℃).

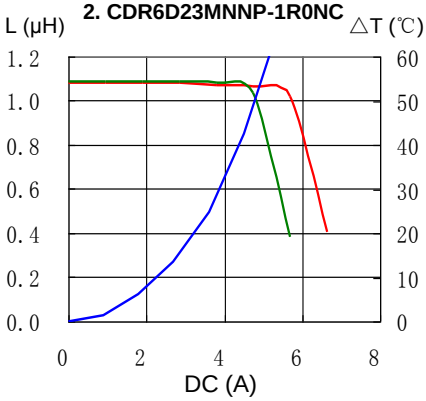
## Saturation Current & Temperature Rise Graph

L (20℃) L (105℃) △T

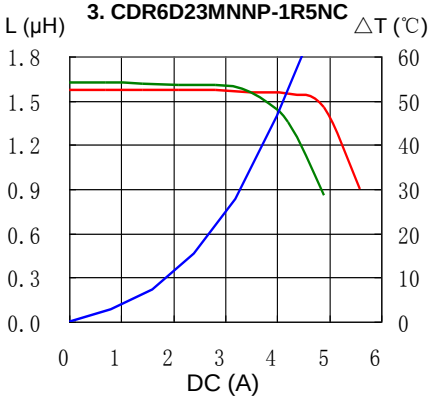
1. CDR6D23MNNP-0R6NC



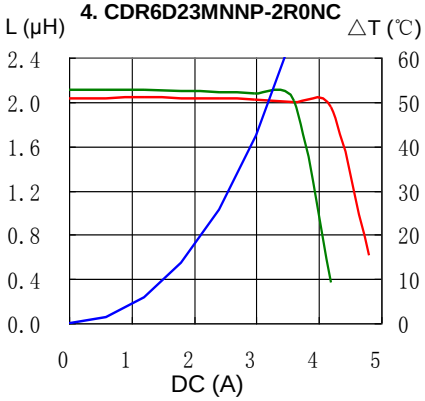

2. CDR6D23MNNP-1R0NC



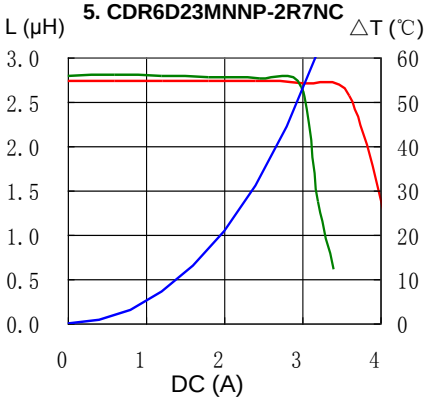

3. CDR6D23MNNP-1R5NC



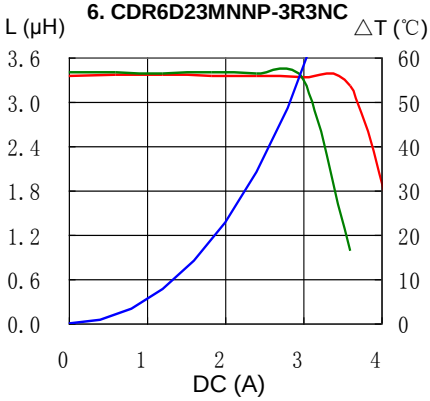

4. CDR6D23MNNP-2R0NC



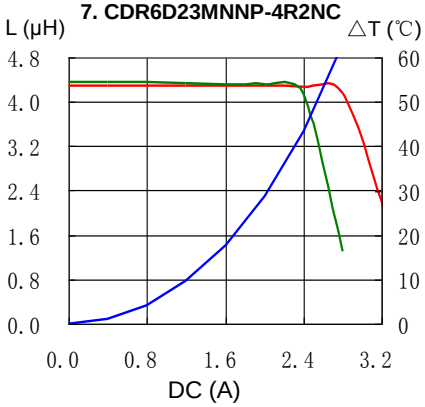

5. CDR6D23MNNP-2R7NC



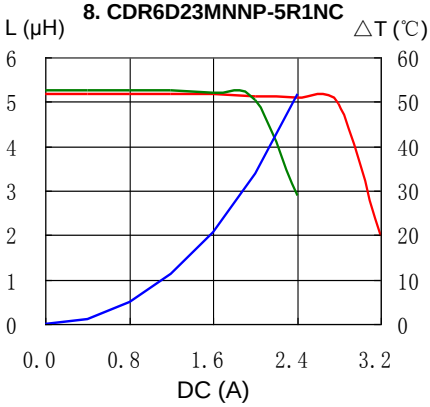

6. CDR6D23MNNP-3R3NC



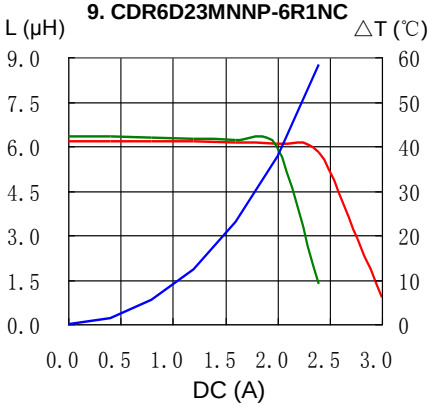

7. CDR6D23MNNP-4R2NC



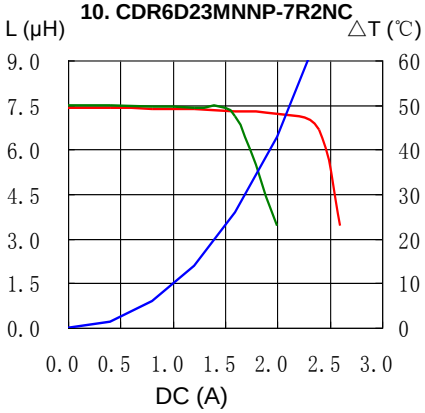

8. CDR6D23MNNP-5R1NC



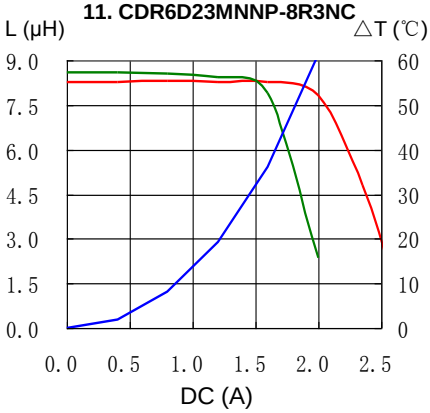

9. CDR6D23MNNP-6R1NC



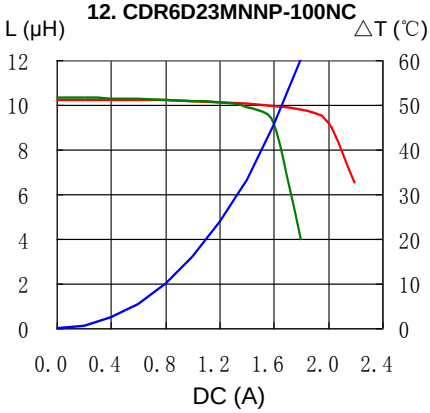

10. CDR6D23MNNP-7R2NC




11. CDR6D23MNNP-8R3NC



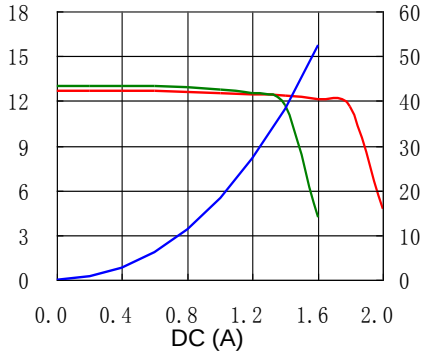

12. CDR6D23MNNP-100NC



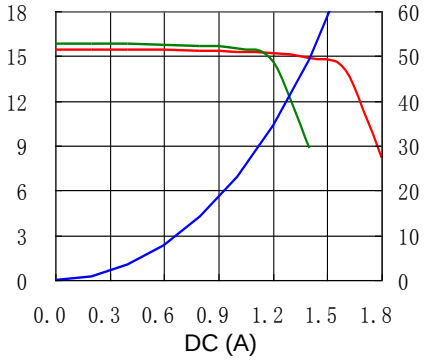
## Saturation Current & Temperature Rise Graph

L (20℃) L (105℃) △T

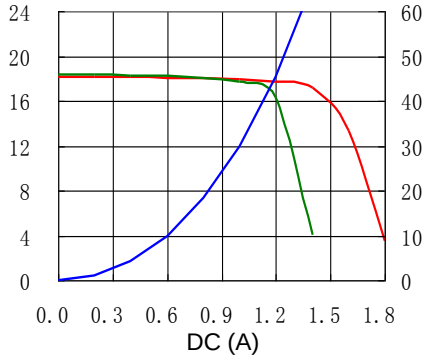
13. CDR6D23MNNP-120NC



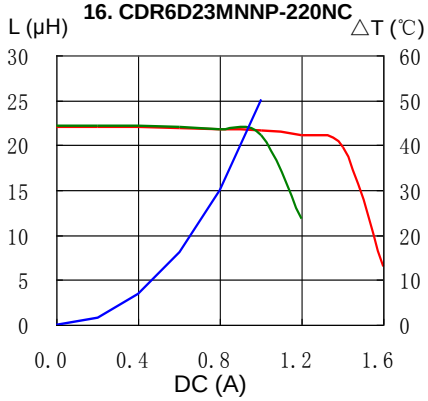

14. CDR6D23MNNP-150NC



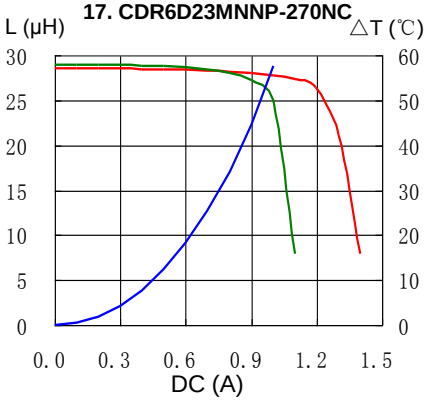

15. CDR6D23MNNP-180NC



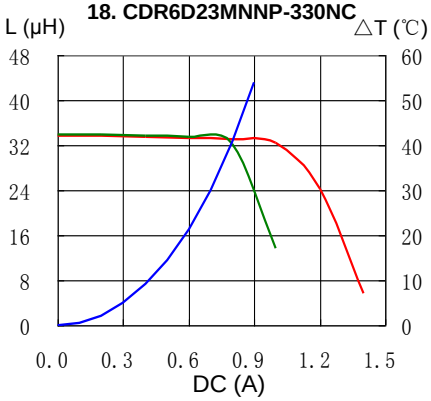

16. CDR6D23MNNP-220NC



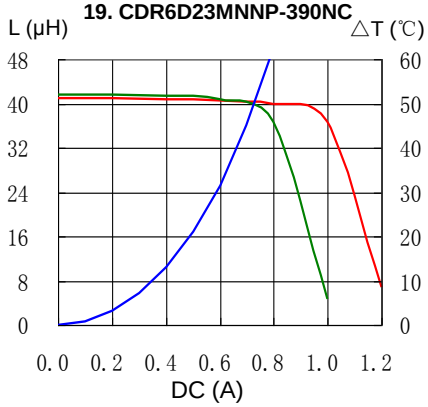

17. CDR6D23MNNP-270NC



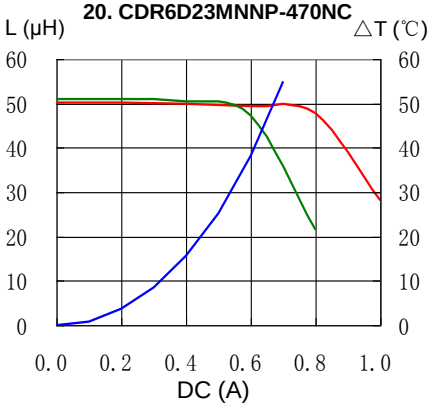

18. CDR6D23MNNP-330NC



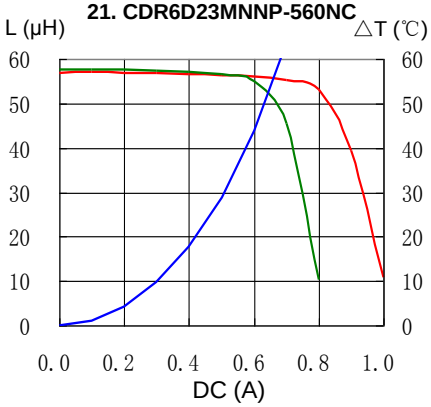

19. CDR6D23MNNP-390NC



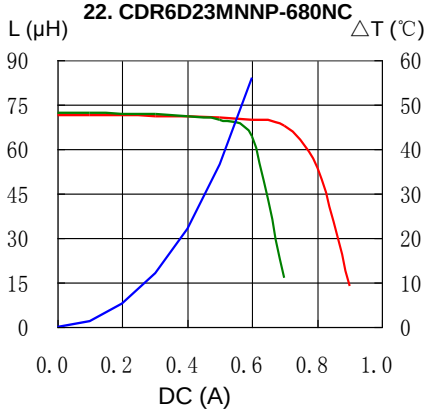

20. CDR6D23MNNP-470NC



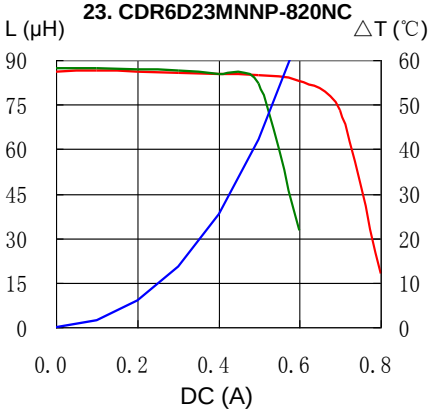

21. CDR6D23MNNP-560NC



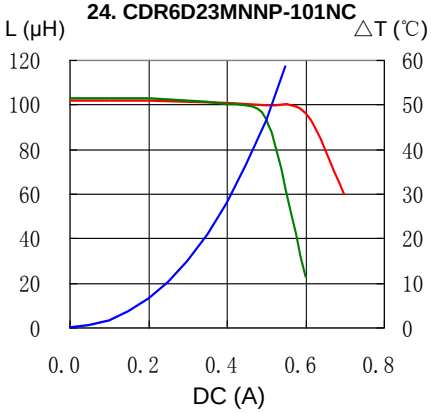

22. CDR6D23MNNP-680NC




23. CDR6D23MNNP-820NC

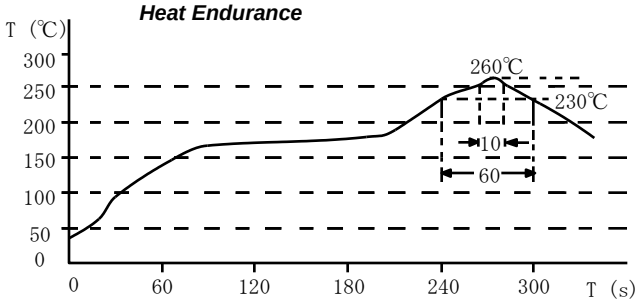



24. CDR6D23MNNP-101NC

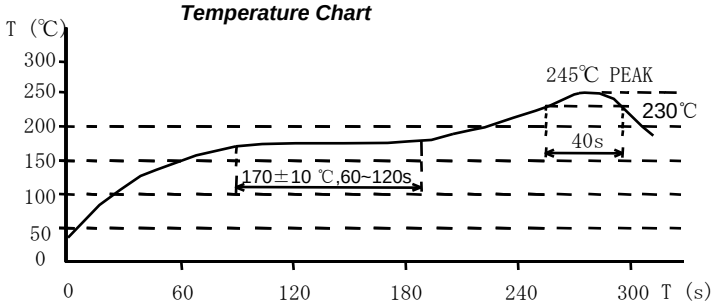


## Solder Reflow Condition

***Heat Endurance***




***Temperature Chart***

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