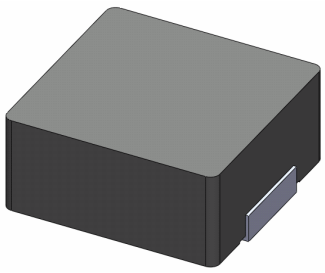
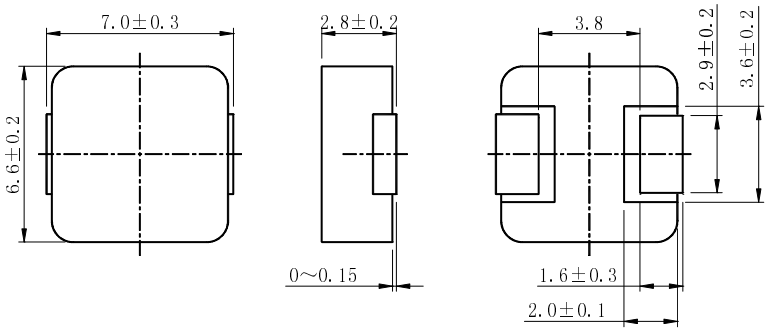
# SMD Power Inductor
# 0630CDMCC/DS

RoHS

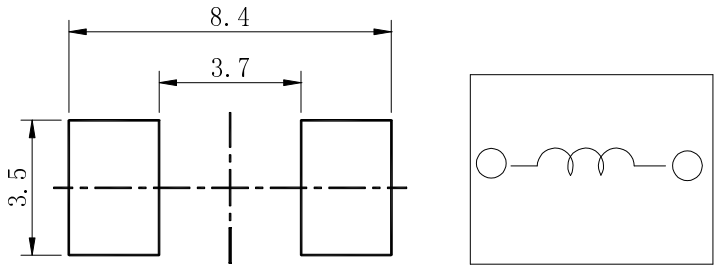
Halogen Free



## Dimension - [mm]




## Land pattern and Schematics - [mm]




## Description

- Metal compound molding type construction.
- Magnetically shielded.
- Low audible core noise.
- Suitable for large current.
- L × W × H: 7.3 × 6.8 × 3.0mm Max.
- Product weight:0.73g (Ref.)
- Moisture Sensitivity Level: 1
- RoHS compliance.
- Halogen Free available.

## Environmental Data

- Operating temperature range: -55℃～+125℃ (including coil's self temperature rise)
- Storage temperature range: -55℃～+125℃
- Solder reflow temperature: 260 ℃ peak.

## Packaging

- Carrier tape and reel packaging.
- 1500pcs/Reel.

## Applications

- Ideally used in notebook, ultrabook, tablet PC, LCD display, Server application.
- High current, POL converters.
- Low profile, high current power supplies.
- Battery powered devices.
- DC/DC converters in distributed power systems.



Revised: 17-Jul-15

## Electrical Characteristics

| Part No. | Stamp | Inductance [Within] (μH) ※1 | D.C.R (mΩ) Max.(Typ.) at 25℃ | Saturation Current (A) Max.(Typ.) (at 25℃) ※2 | Temperature rise current (A) (Typ.) ※3 |
|---|---|---|---|---|---|
| 0630CDMCCDS-R22MC | R22 | 0.22±20% | 3.0(2.5) | 32.3(38.0) | 24.0 |
| 0630CDMCCDS-R24MC | R24 | 0.24±20% | 3.1(2.6) | 31.0(36.6) | 23.0 |
| 0630CDMCCDS-R33MC | R33 | 0.33±20% | 3.5(3.0) | 27.5(32.3) | 21.0 |
| 0630CDMCCDS-R47MC | R47 | 0.47±20% | 4.1(3.5) | 20.6(24.2) | 20.0 |
| 0630CDMCCDS-R56MC | R56 | 0.56±20% | 4.5(3.9) | 17.5(20.5) | 18.8 |
| 0630CDMCCDS-R68MC | R68 | 0.68±20% | 5.3(4.8) | 17.0(20.0) | 16.5 |
| 0630CDMCCDS-R82MC | R82 | 0.82±20% | 6.0(5.4) | 16.5(19.5) | 14.8 |
| 0630CDMCCDS-1R0MC | 1R0 | 1.0±20% | 7.4(6.7) | 14.0(16.5) | 14.4 |
| 0630CDMCCDS-1R5MC | 1R5 | 1.5±20% | 12.1(10.6) | 12.9(15.2) | 10.2 |
| 0630CDMCCDS-2R2MC | 2R2 | 2.2±20% | 15.0(13.5) | 10.5(12.3) | 9.3 |
| 0630CDMCCDS-3R3MC | 3R3 | 3.3±20% | 22.0(18.0) | 9.7(11.4) | 8.4 |
| 0630CDMCCDS-4R7MC | 4R7 | 4.7±20% | 33.0(28.0) | 5.8(6.8) | 6.3 |
| 0630CDMCCDS-6R8MC | 6R8 | 6.8±20% | 48.0(42.5) | 5.3(6.3) | 5.0 |
| 0630CDMCCDS-8R2MC | 8R2 | 8.2±20% | 60.0(54.0) | 4.9(5.8) | 4.3 |
| 0630CDMCCDS-100MC | 100 | 10.0±20% | 67.0(62.0) | 4.6(5.5) | 4.0 |
| 0630CDMCCDS-150MC | 150 | 15.0±20% | 115.0(104.0) | 3.6(4.3) | 3.3 |
| 0630CDMCCDS-220MC | 220 | 22.0±20% | 200.0(180.0) | 3.4(4.0) | 2.3 |

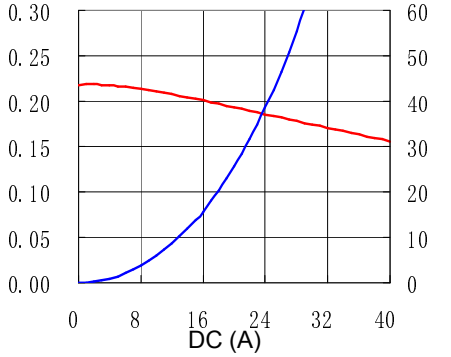
※1 Measuring frequency  Inductance at 100kHz ,1.0V
※2 Saturation current: The value of DC current when the inductance is over 70% of its initial value.
※3 Temperature rise current: The actual value of DC current when temperature of coil rise is △T=40℃(Ta=25℃) Board conditions: FR4, Copper=70μm,four-layer PWB, t=1.6mm.


Revised: 17-Jul-15

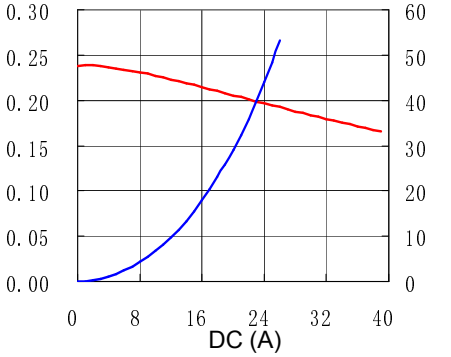
## Saturation Current & Temperature Rise Graph

L (20℃) △T

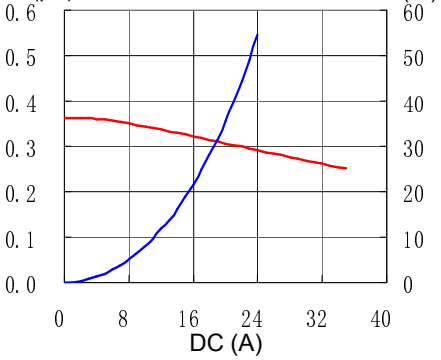
1. 0630CDMCCDS-R22MC



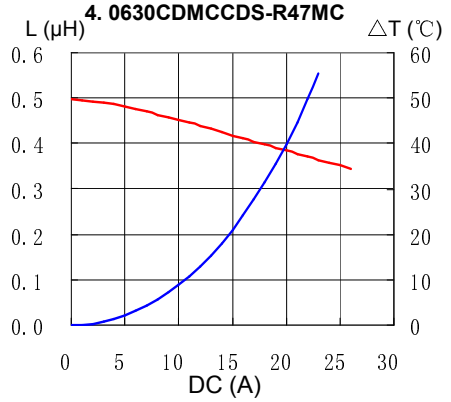

2. 0630CDMCCDS-R24MC



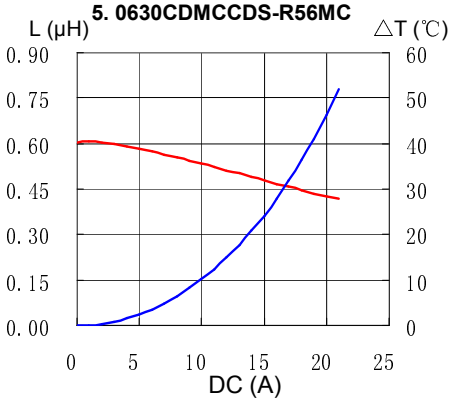

3. 0630CDMCCDS-R33MC



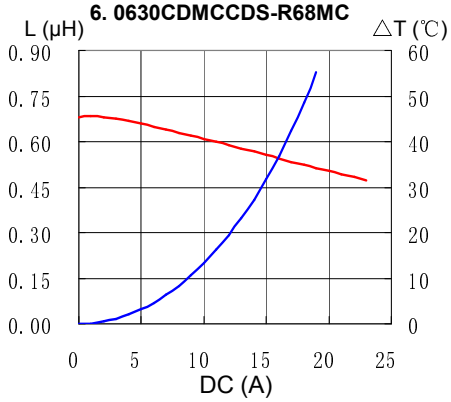

4. 0630CDMCCDS-R47MC



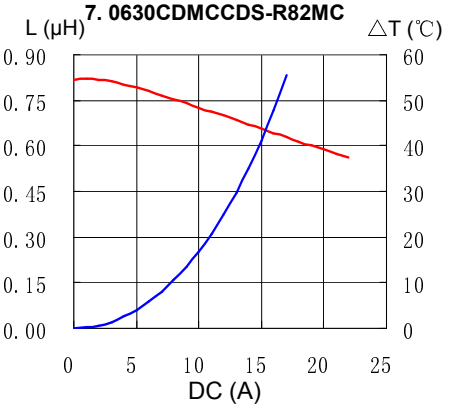

5. 0630CDMCCDS-R56MC



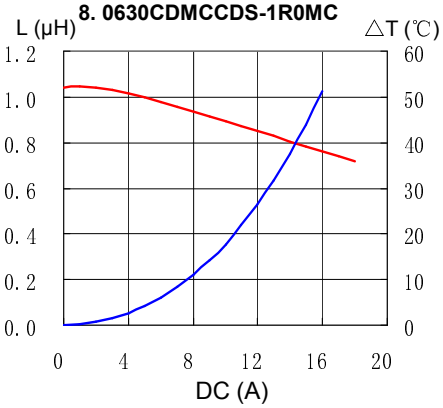

6. 0630CDMCCDS-R68MC



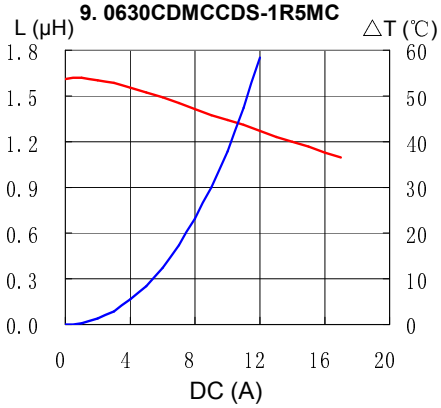

7. 0630CDMCCDS-R82MC



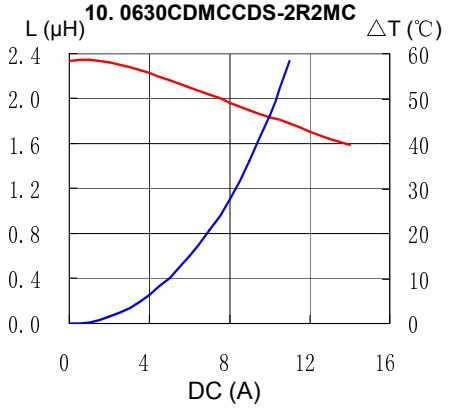

8. 0630CDMCCDS-1R0MC



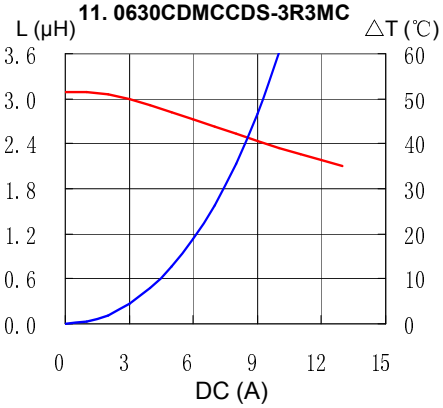

9. 0630CDMCCDS-1R5MC



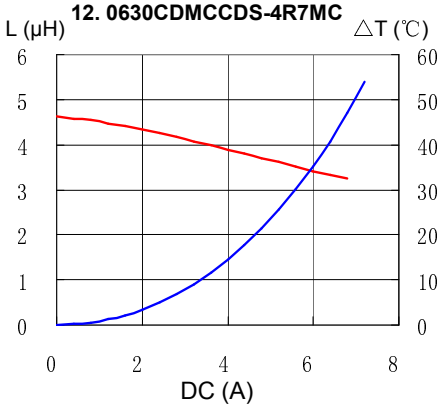

10. 0630CDMCCDS-2R2MC




11. 0630CDMCCDS-3R3MC

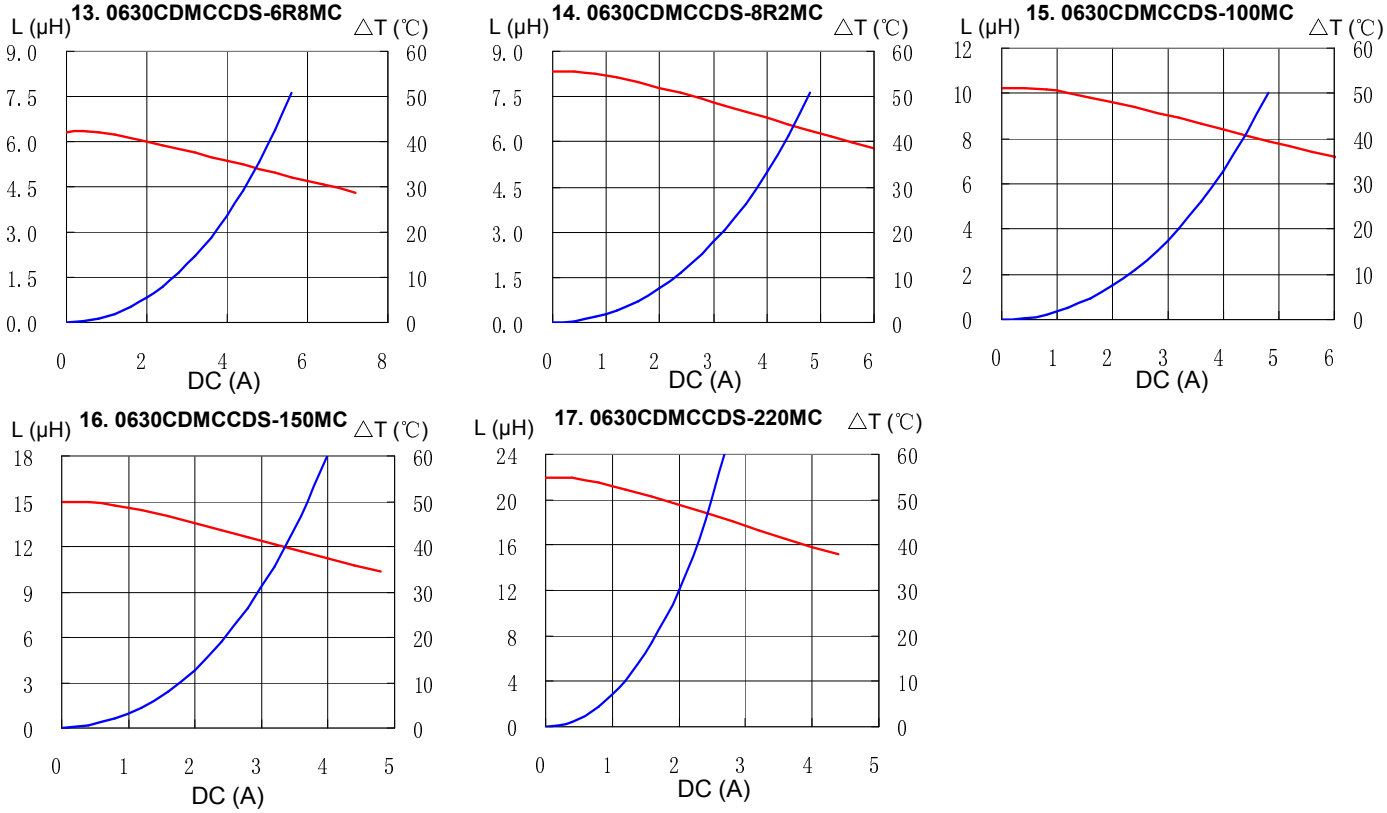



12. 0630CDMCCDS-4R7MC

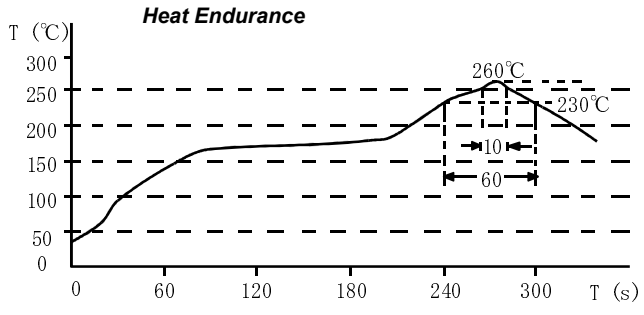


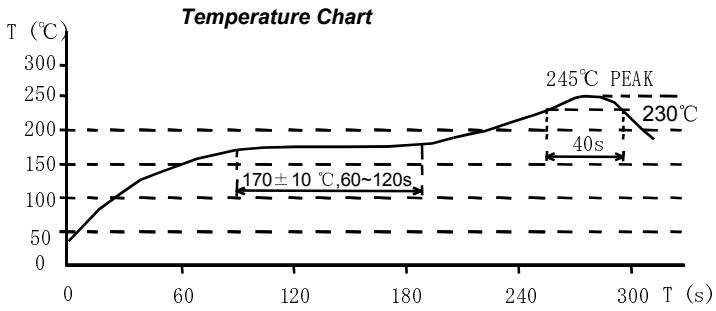
## Saturation Current & Temperature Rise Graph

L (20℃) △T



## Solder Reflow Condition




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