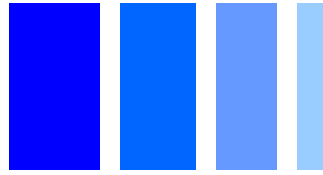
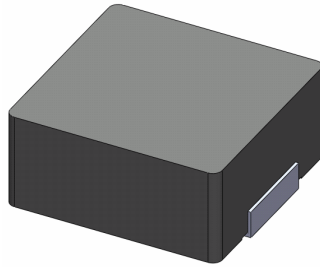


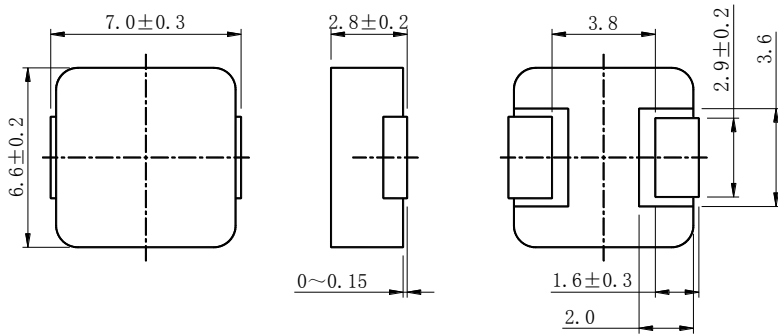
SMD Power Inductor 0630CDMCC/DS



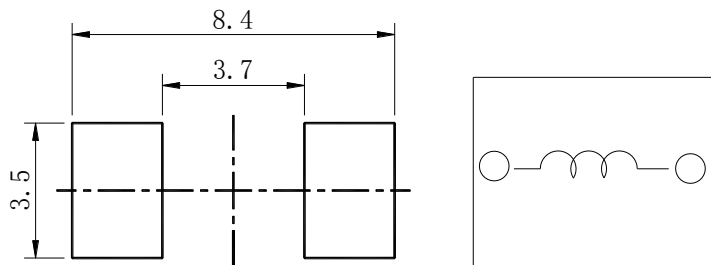
Halogen
Free



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



Electrical Characteristics

| Part No. | Stamp | Inductance(μ H) [Within] ※1 | D.C.R(m Ω) at 25°C Max.(Typ.) | Saturation Current(A) at 25°C ※2 Max.(Typ.) | Temperature rise current (A) ※3 Typ. |
|-------------------|-------|-------------------------------------|---|--|--|
| 0630CDMCCDS-R10MC | R10 | 0.10 \pm 20% | 1.08(0.90) | 61.2(72.0) | 40.0 |
| 0630CDMCCDS-R15MC | R15 | 0.15 \pm 20% | 1.14(0.95) | 34.4(40.5) | 35.0 |
| 0630CDMCCDS-R22MC | R22 | 0.22 \pm 20% | 3.0(2.5) | 32.3(38.0) | 24.0 |
| 0630CDMCCDS-R24MC | R24 | 0.24 \pm 20% | 3.1(2.6) | 31.0(36.6) | 23.0 |
| 0630CDMCCDS-R33MC | R33 | 0.33 \pm 20% | 3.5(3.0) | 27.5(32.3) | 21.0 |
| 0630CDMCCDS-R47MC | R47 | 0.47 \pm 20% | 4.1(3.5) | 20.6(24.2) | 20.0 |
| 0630CDMCCDS-R56MC | R56 | 0.56 \pm 20% | 4.5(3.9) | 17.5(20.5) | 18.8 |
| 0630CDMCCDS-R68MC | R68 | 0.68 \pm 20% | 5.3(4.8) | 17.0(20.0) | 16.5 |
| 0630CDMCCDS-R82MC | R82 | 0.82 \pm 20% | 6.0(5.4) | 16.5(19.5) | 14.8 |
| 0630CDMCCDS-1R0MC | 1R0 | 1.0 \pm 20% | 7.4(6.7) | 14.0(16.5) | 14.4 |
| 0630CDMCCDS-1R5MC | 1R5 | 1.5 \pm 20% | 12.1(10.6) | 12.9(15.2) | 10.2 |
| 0630CDMCCDS-2R2MC | 2R2 | 2.2 \pm 20% | 15.0(13.5) | 10.5(12.3) | 9.3 |
| 0630CDMCCDS-3R3MC | 3R3 | 3.3 \pm 20% | 22.0(18.0) | 9.7(11.4) | 8.4 |
| 0630CDMCCDS-4R7MC | 4R7 | 4.7 \pm 20% | 33.0(28.0) | 5.8(6.8) | 6.3 |
| 0630CDMCCDS-5R6MC | 5R6 | 5.6 \pm 20% | 43.0(37.0) | 5.5(6.5) | 5.2 |
| 0630CDMCCDS-6R8MC | 6R8 | 6.8 \pm 20% | 48.0(42.5) | 5.3(6.3) | 5.0 |
| 0630CDMCCDS-8R2MC | 8R2 | 8.2 \pm 20% | 60.0(54.0) | 4.9(5.8) | 4.3 |
| 0630CDMCCDS-100MC | 100 | 10.0 \pm 20% | 67.0(62.0) | 4.6(5.5) | 4.0 |
| 0630CDMCCDS-150MC | 150 | 15.0 \pm 20% | 115.0(104.0) | 3.6(4.3) | 3.3 |
| 0630CDMCCDS-220MC | 220 | 22.0 \pm 20% | 200.0(180.0) | 3.4(4.0) | 2.3 |
| 0630CDMCCDS-330MC | 330 | 33.0 \pm 20% | 258.0(215.0) | 2.3(2.7) | 2.1 |

※1 Measuring frequency Inductance at 100kHz 1V

※2 Saturation current: This indicates the value of D.C. current when the inductance becomes 30% lower than its initial value.

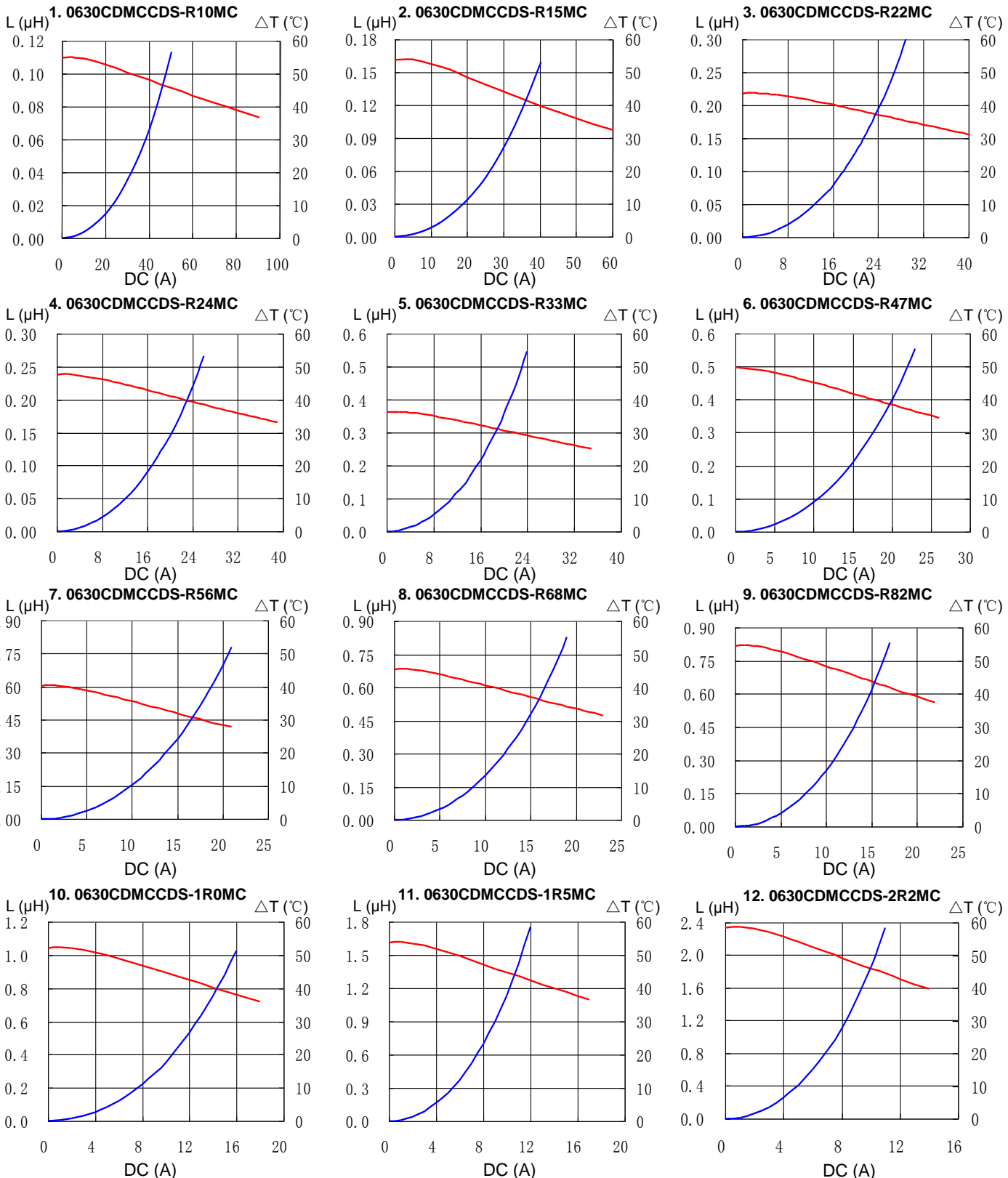
※3 Temperature rise current: The actual value of D.C. current when the temperature of coil becomes $\Delta T=40^{\circ}\text{C}$ ($T_a=25^{\circ}\text{C}$). (Test board condition: FR4, Copper=70 μm , four-layer PWB t=1.6mm)

SMD Power Inductor 0630CDMCC/DS

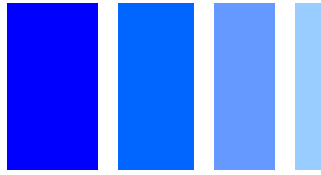


Saturation Current & Temperature Rise Graph

— L (20°C) — ΔT

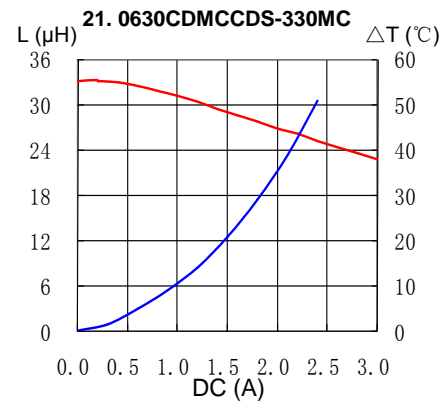
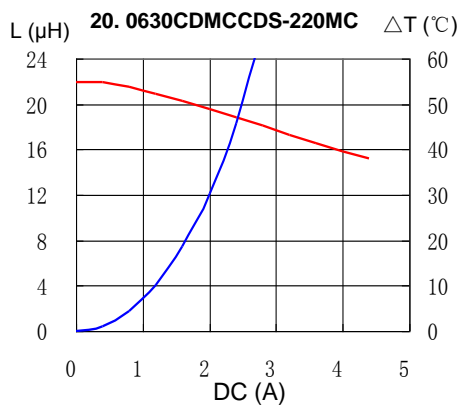
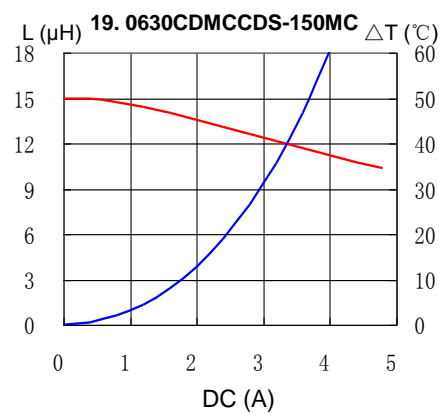
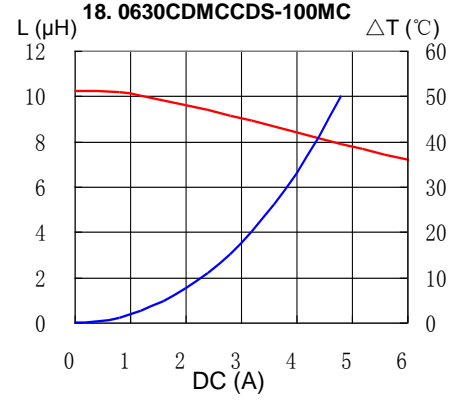
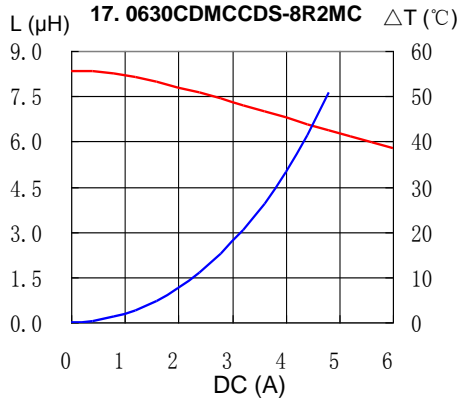
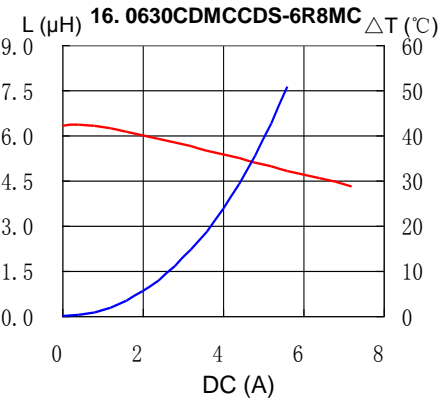
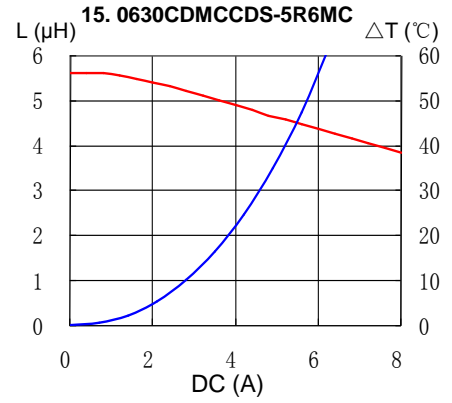
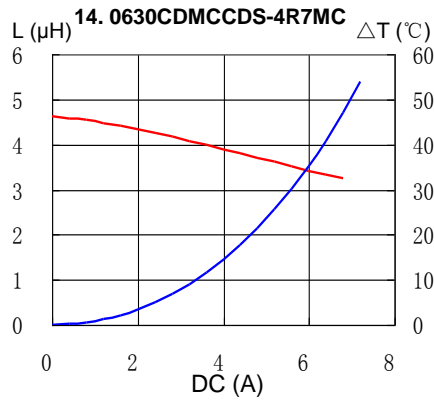
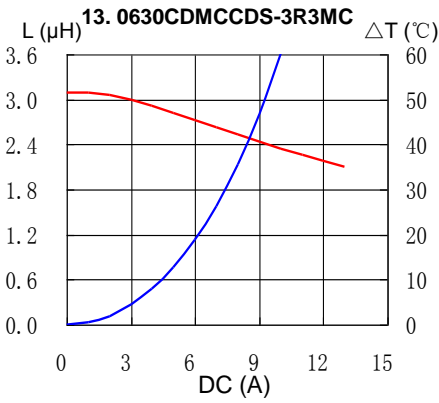


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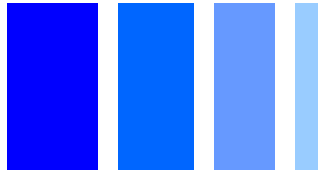


Saturation Current & Temperature Rise Graph

— L (20°C) — ΔT

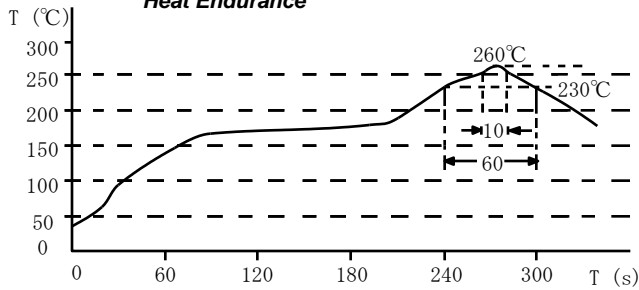


SMD Power Inductor 0630CDMCC/DS

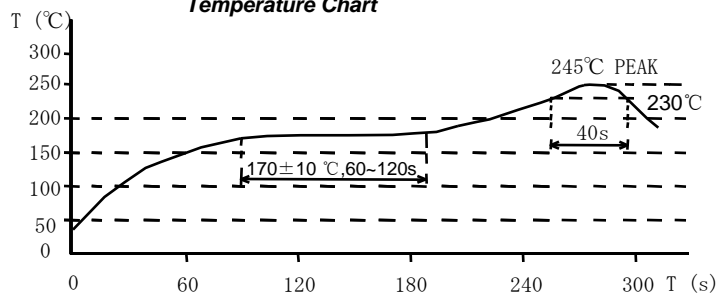


Solder Reflow Condition

Heat Endurance



Temperature Chart



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