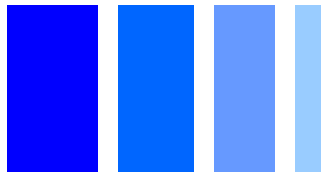
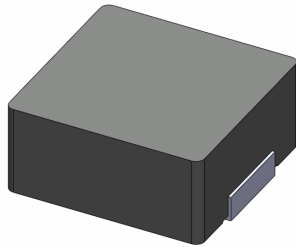


SMD Power Inductor 0630CDMCD/DS



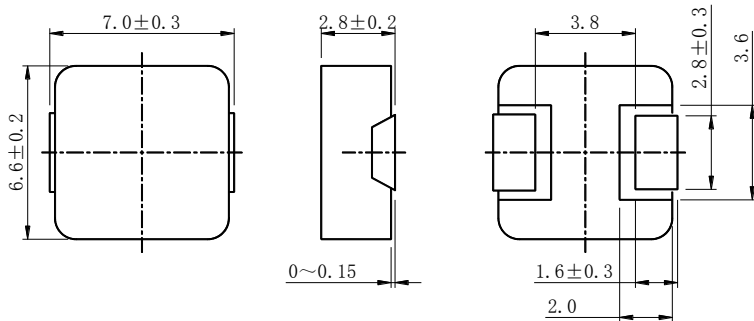
Halogen Free



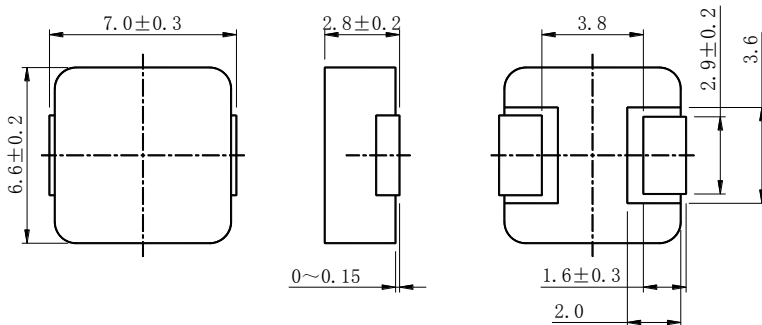
Description

- Carbonyl powder 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.

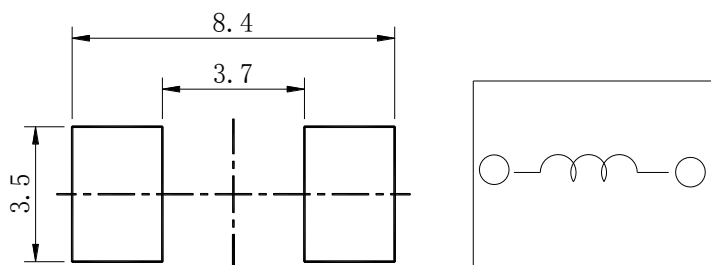
Dimension - [mm] (0.10μH、0.15μH)



Dimension - [mm] (0.20μH~6.8μH)



Land pattern and Schematics - [mm]



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

| No. | 品名 | 表示 | インダクタンス (μH) [以内] ※1 | D. C. R ($\text{m}\Omega$) at 25°C Max. (Typ.) | 直流重畳電流 (A) (at 25°C) Max. (Typ.) ※2 | 温度上昇電流 (A) Typ. ※3 |
|-----|-------------------|-----|--|---|---|-----------------------------|
| 01 | 0630CDMCDDS-R10MC | R10 | 0.10 \pm 20% | 1.7(1.5) | 52.5(61.8) | 32.5 |
| 02 | 0630CDMCDDS-R15MC | R15 | 0.15 \pm 20% | 1.1(0.9) | 47.6(56.0) | 37.0 |
| 03 | 0630CDMCDDS-R20MC | R20 | 0.20 \pm 20% | 3.0(2.4) | 41.0(51.0) | 24.0 |
| 04 | 0630CDMCDDS-R22MC | R22 | 0.22 \pm 20% | 3.2(2.5) | 40.0(47.5) | 23.0 |
| 05 | 0630CDMCDDS-R33MC | R33 | 0.33 \pm 20% | 3.9(3.5) | 30.0(35.5) | 20.0 |
| 06 | 0630CDMCDDS-R47MC | R47 | 0.47 \pm 20% | 4.2(4.0) | 24.6(29.0) | 19.5 |
| 07 | 0630CDMCDDS-R56MC | R56 | 0.56 \pm 20% | 5.0(4.7) | 23.8(28.0) | 18.8 |
| 08 | 0630CDMCDDS-R68MC | R68 | 0.68 \pm 20% | 5.5(5.0) | 21.8(25.6) | 18.0 |
| 09 | 0630CDMCDDS-R75MC | R75 | 0.75 \pm 20% | 6.2(5.4) | 21.0(25.0) | 17.5 |
| 10 | 0630CDMCDDS-R82MC | R82 | 0.82 \pm 20% | 8.0(6.7) | 20.8(24.5) | 16.0 |
| 11 | 0630CDMCDDS-1R0MC | 1R0 | 1.0 \pm 20% | 10.0(9.0) | 18.7(22.0) | 13.0 |
| 12 | 0630CDMCDDS-1R2MC | 1R2 | 1.2 \pm 20% | 12.0(10.0) | 17.8(20.9) | 12.5 |
| 13 | 0630CDMCDDS-1R5MC | 1R5 | 1.5 \pm 20% | 15.0(14.0) | 17.4(20.5) | 10.2 |
| 14 | 0630CDMCDDS-2R0MC | 2R0 | 2.0 \pm 20% | 18.0(16.0) | 14.8(17.5) | 9.5 |
| 15 | 0630CDMCDDS-2R2MC | 2R2 | 2.2 \pm 20% | 20.0(18.0) | 14.4(17.0) | 9.2 |
| 16 | 0630CDMCDDS-2R5MC | 2R5 | 2.5 \pm 20% | 22.0(20.0) | 12.0(14.0) | 7.8 |
| 17 | 0630CDMCDDS-3R3MC | 3R3 | 3.3 \pm 20% | 30.0(28.0) | 11.5(13.5) | 6.3 |
| 18 | 0630CDMCDDS-4R7MC | 4R7 | 4.7 \pm 20% | 40.0(37.0) | 10.5(12.3) | 5.5 |
| 19 | 0630CDMCDDS-6R8MC | 6R8 | 6.8 \pm 20% | 60.0(54.0) | 7.2(8.5) | 4.8 |
| 20 | 0630CDMCDDS-100MC | 100 | 10 \pm 20% | 62.0(55.0) | 4.6(5.4) | 4.5 |

※1 Measuring frequency Inductance at 100kHz ,1.0V

※2 Saturation current: The value of DC current when the inductance is over 80% of its initial value.

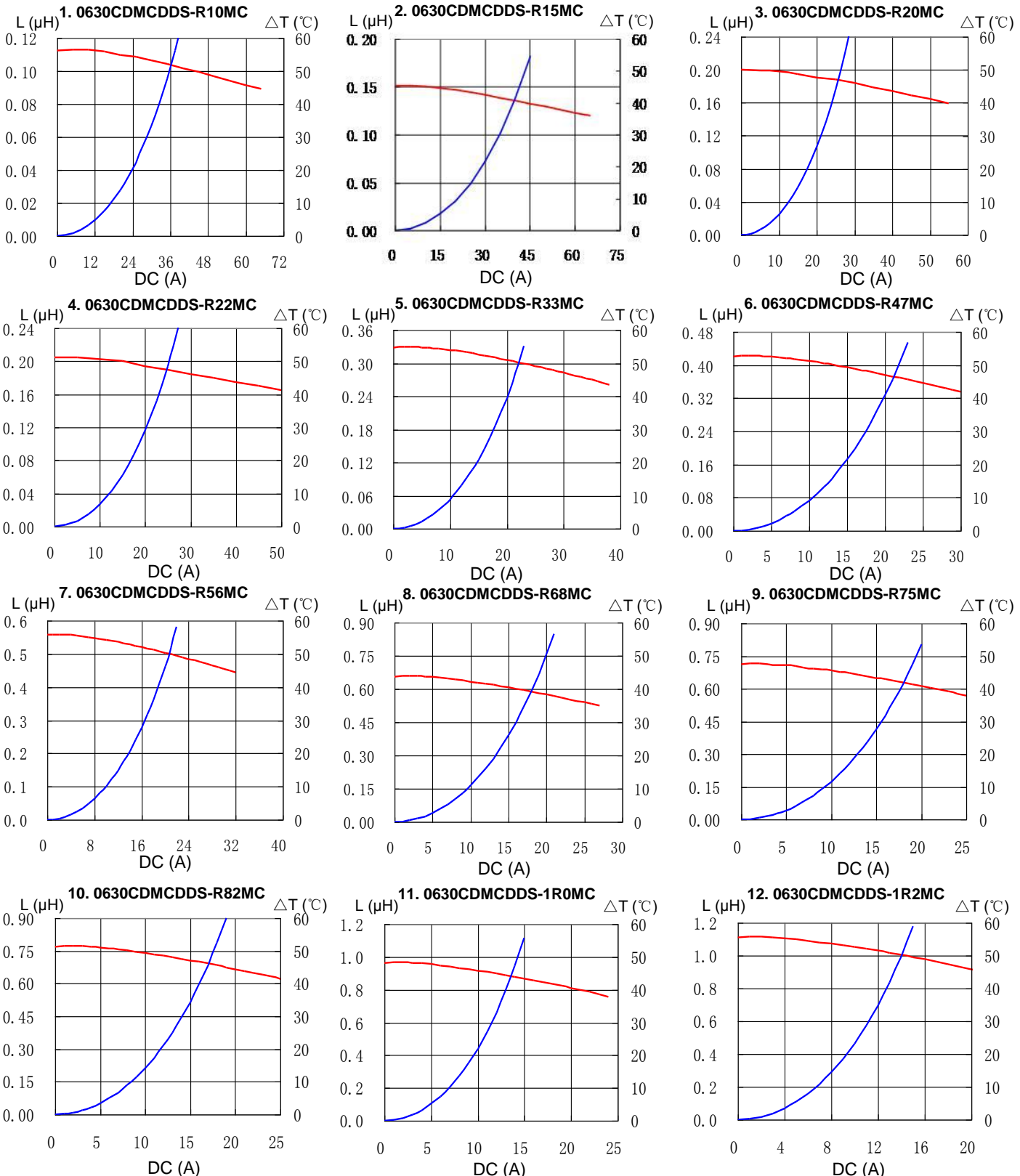
※3 Temperature rise current: The actual value of DC current when temperature of coil rise is $\Delta T=40^\circ\text{C}$ ($T_a=25^\circ\text{C}$) Board conditions: FR4, Copper=70 μm , four-layer PWB, t=1.6mm.

SMD Power Inductor 0630CDMCD/DS



Saturation Current & Temperature Rise Graph

— L (20°C) — ΔT

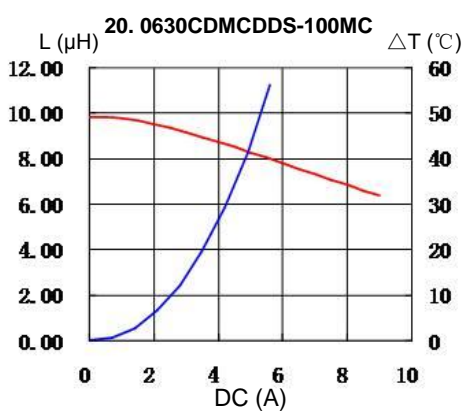
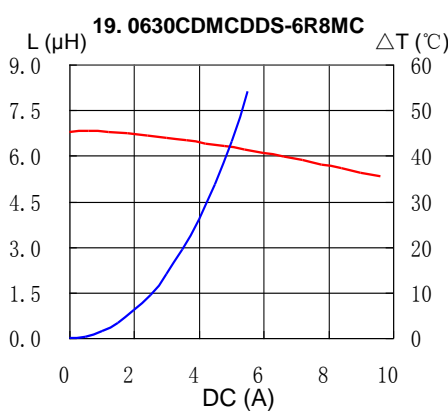
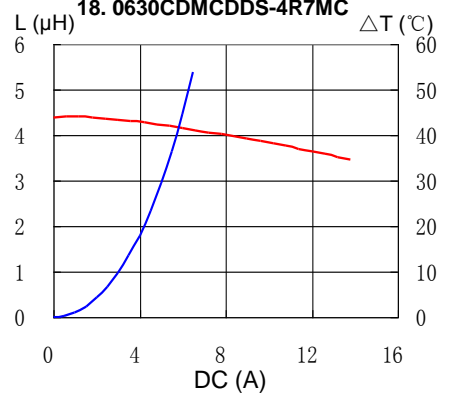
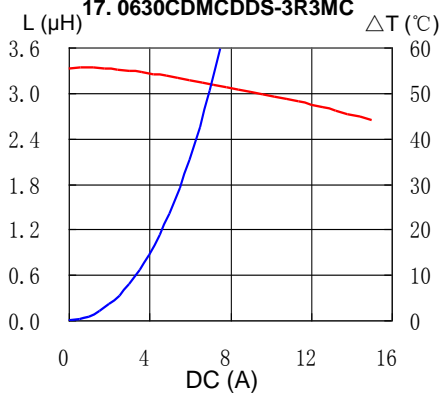
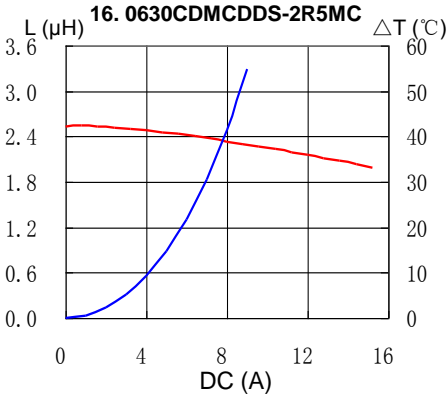
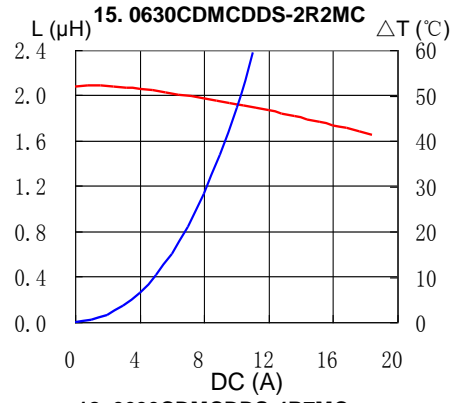
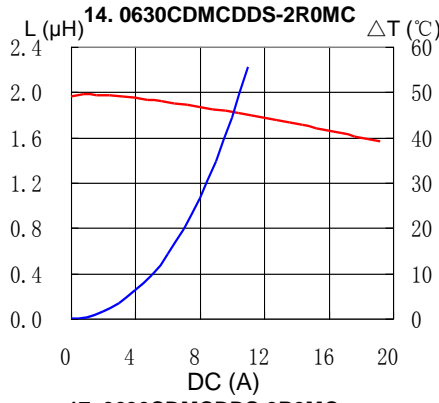
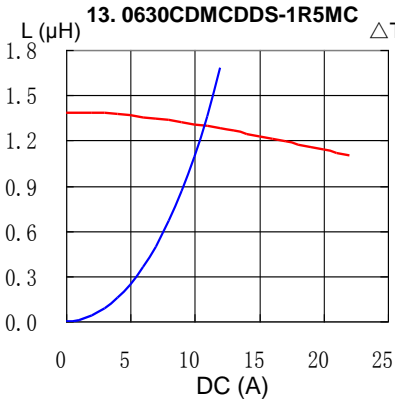


SMD Power Inductor 0630CDMCD/DS

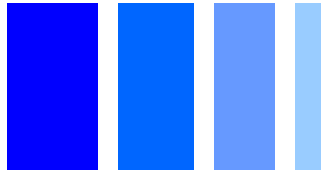


Saturation Current & Temperature Rise Graph

— L (20°C) — ΔT

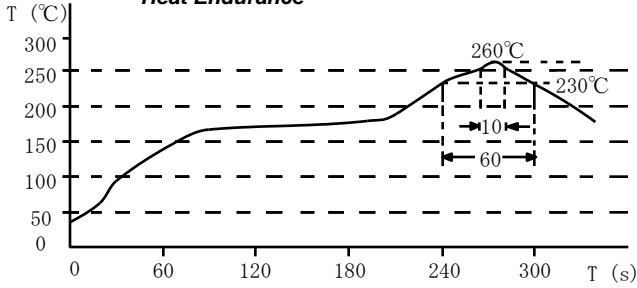


SMD Power Inductor 0630CDMCD/DS

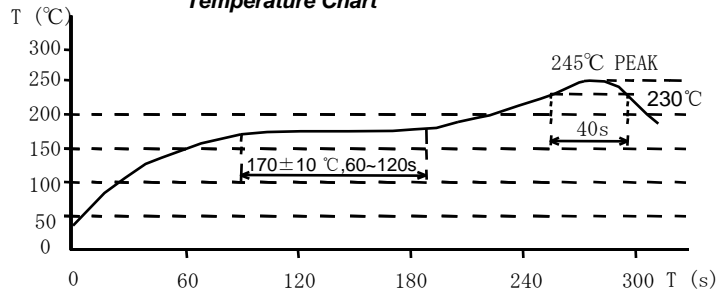


Solder Reflow Condition

Heat Endurance



Temperature Chart



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