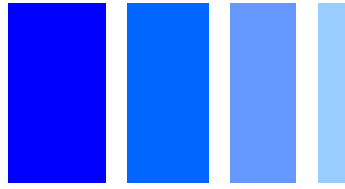


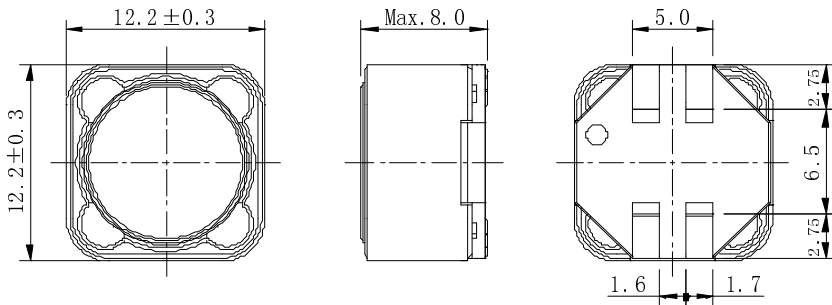
SMD Power Inductor CDRCH12D78B



Description

- Ferrite drum core construction.
- Magnetically shielded.
- L × W × H: 12.5 × 12.5 × 8.0 mm Max.
- Product weight: 4.1g(Ref.)
- Moisture Sensitivity Level: 1
- RoHS compliance.
- Halogen Free available.

Dimension - [mm]



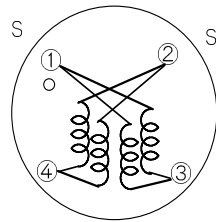
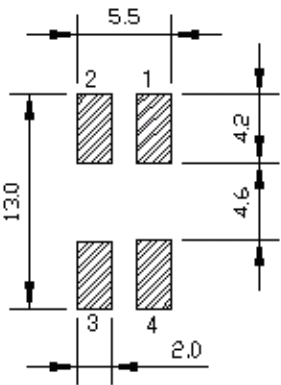
Environmental Data

- Operating temperature range: -40°C~+125°C (including coil's self temperature rise)
- Storage temperature range: -40°C~+105°C
- Solder reflow temperature: 260 °C peak.

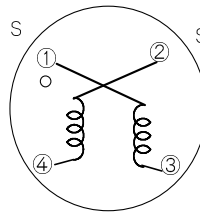
Packaging

- Carrier tape and reel packaging.

Land pattern and Schematics - [mm]



(4.7 μH ~ 22 μH)



(33 μH ~ 470 μH)

Applications

- Ideally used in LED modules, DC/DC converters and 1:1 Transformer, etc.

SMD Power Inductor

CDRCH12D78B



Electrical Characteristics

| Part Name | Stamp | Inductance(μ H) [within] ※1 | D.C.R.(Ω) [Max.] ※2 | Saturation Current (A) (at 20°C) ※3 | Temperature rise current (A) ※4 |
|---------------------|-------|-------------------------------------|---------------------------------|---|---------------------------------------|
| CDRCH12D78BHF-4R7NC | 4R7 | 4.7 \pm 30% | 40m(30m) | 13.2(15.6) | 3.9(4.4) |
| CDRCH12D78BHF-6R8NC | 6R8 | 6.8 \pm 30% | 46m(36m) | 12.0(14.2) | 3.6(4.1) |
| CDRCH12D78BHF-100MC | 100 | 10 \pm 20% | 54m(42m) | 10.0(11.8) | 3.2(3.6) |
| CDRCH12D78BHF-150MC | 150 | 15 \pm 20% | 72m(58m) | 8.2(9.7) | 2.8(3.2) |
| CDRCH12D78BHF-220MC | 220 | 22 \pm 20% | 96m(80m) | 7.0(8.2) | 2.3(2.6) |
| CDRCH12D78BHF-330MC | 330 | 33 \pm 20% | 144m(120m) | 5.5(6.5) | 1.8(2.1) |
| CDRCH12D78BHF-470MC | 470 | 47 \pm 20% | 186m(155m) | 4.6(5.5) | 1.5(1.7) |
| CDRCH12D78BHF-680MC | 680 | 68 \pm 20% | 266m(222m) | 3.9(4.6) | 1.3(1.5) |
| CDRCH12D78BHF-101MC | 101 | 100 \pm 20% | 384m(320m) | 3.1(3.7) | 1.10(1.25) |
| CDRCH12D78BHF-151MC | 151 | 150 \pm 20% | 648m(540m) | 2.5(3.0) | 0.83(0.95) |
| CDRCH12D78BHF-221MC | 221 | 220 \pm 20% | 936m(780m) | 2.1(2.5) | 0.68(0.78) |
| CDRCH12D78BHF-331MC | 331 | 330 \pm 20% | 1.35(1.17) | 1.7(2.1) | 0.56(0.64) |
| CDRCH12D78BHF-471MC | 471 | 470 \pm 20% | 2.01(1.75) | 1.5(1.75) | 0.45(0.52) |

※1 Measuring frequency inductance at 100 kHz.

※2 () are typical value.

※3 Saturation current: The value of D.C. current when the inductance is over 70% of the initial value.

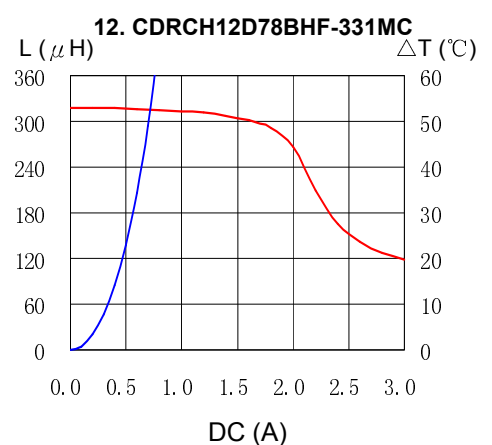
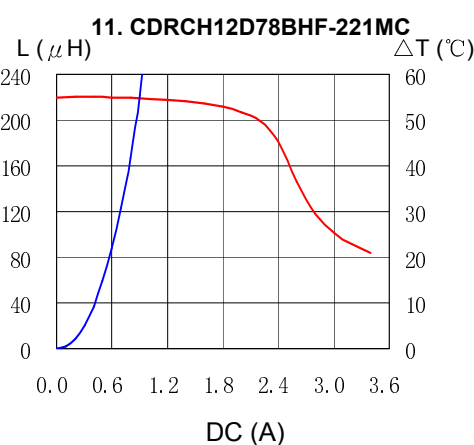
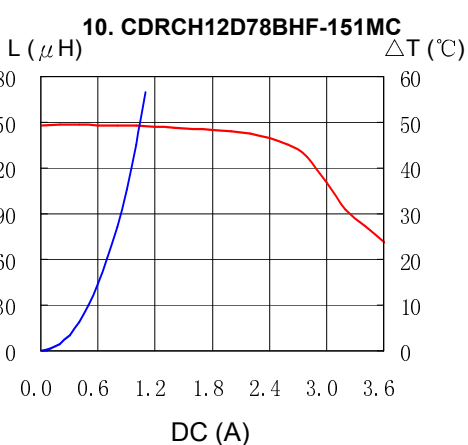
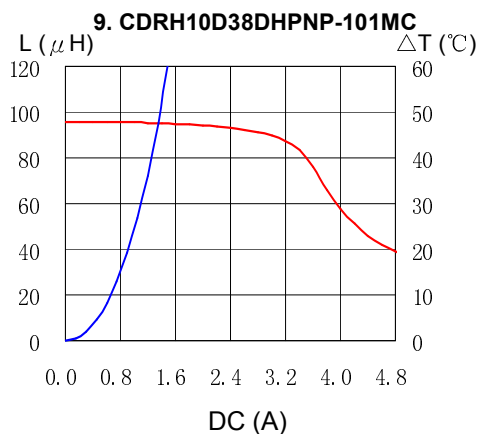
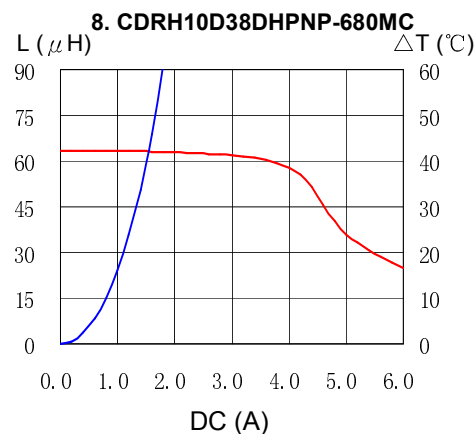
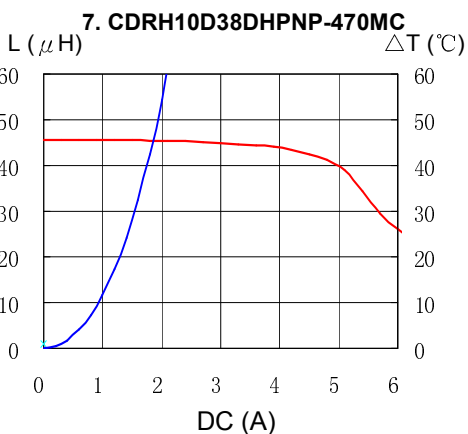
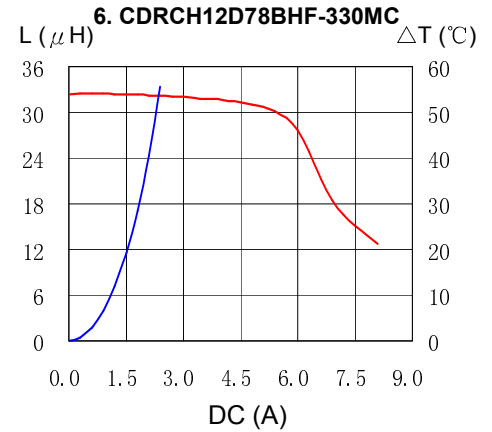
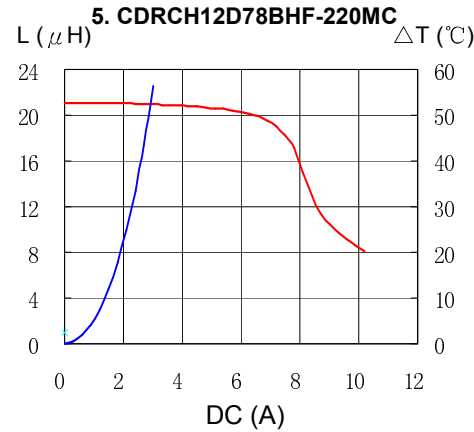
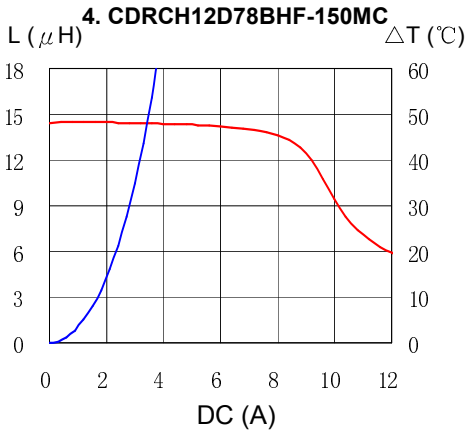
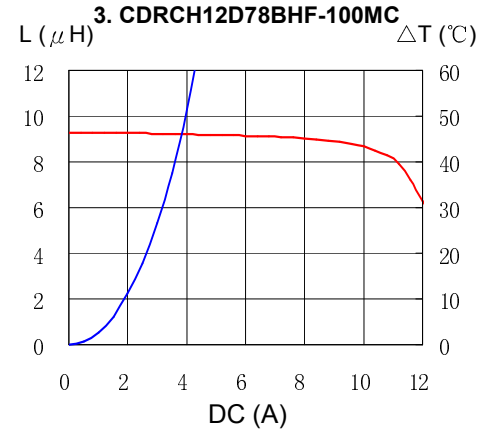
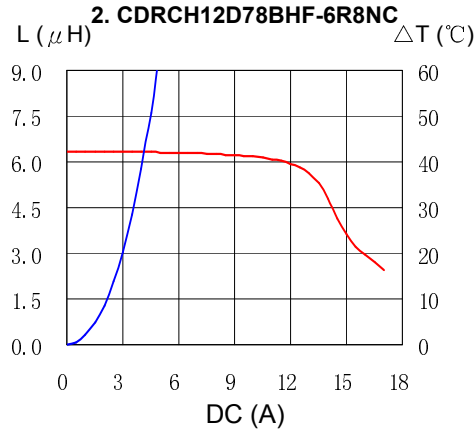
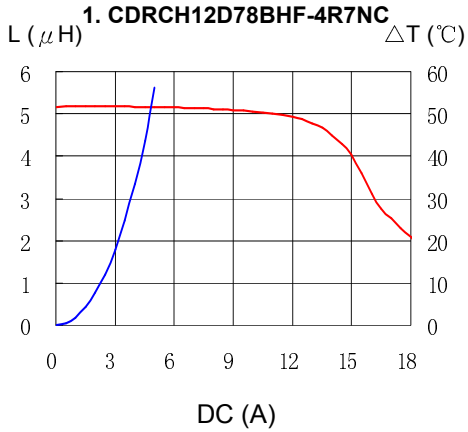
※4 Temperature rise current: The value of D.C. current when the temperature rise is $\Delta t=40^{\circ}\text{C}$. ($T_a=20^{\circ}\text{C}$)

SMD Power Inductor CDRCH12D78B



Saturation Current & Temperature Rise Graph

— L (20°C) — ΔT

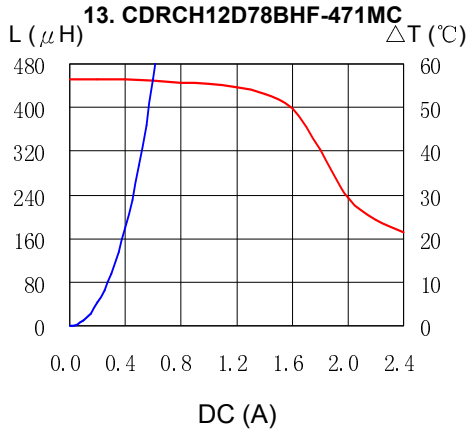


SMD Power Inductor CDRCH12D78B

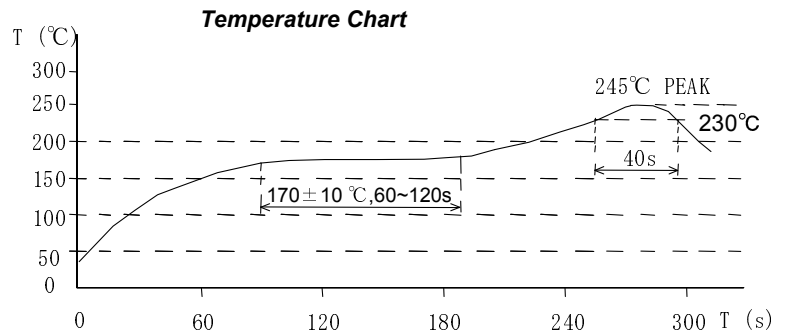
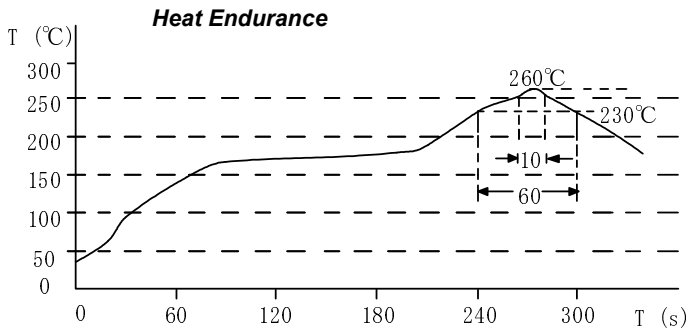


Saturation Current & Temperature Rise Graph

— L (20°C) — ΔT



Solder Reflow Condition



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