

SMD Power Inductor CDRH10D48/A



Description

- Ferrite drum core construction.
- Magnetically shielded.
- L × W × H: 10.5 × 10.5 × 5.0 mm Max.
- Product weight: 1.8 g(Ref.)
- Moisture Sensitivity Level: 1
- RoHS compliance.
- Qualification to AEC-Q200.

Environmental Data

- Operating temperature range: -40°C ~ +125°C (including coil's self temperature rise)
- Storage temperature range: -40°C ~ +85°C
- Solder reflow temperature: 260 °C peak.

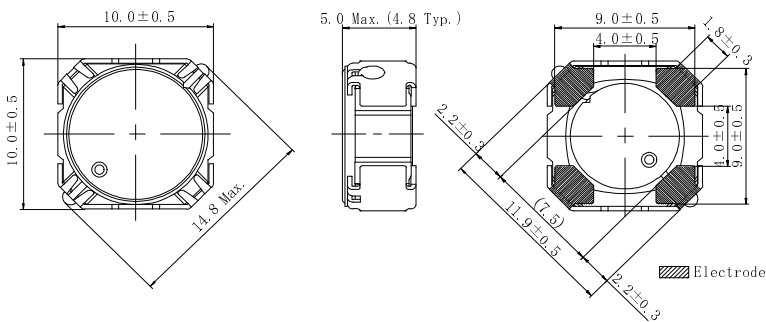
Packaging

- Carrier tape and reel packaging.
- 11.8" diameter reel
- 500pcs per reel

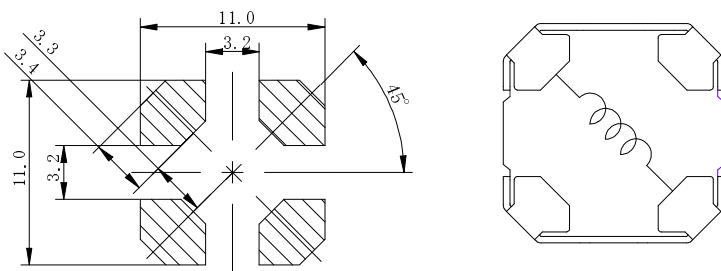
Applications

- Automotive and other high temperature, high reliability application.

Dimension - [mm]



Land pattern and Schematics - [mm]



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Electrical Characteristics

| Part No. | Stamp | Inductance [μ H] [within] ※1 | D.C.R. (m Ω) [Max.] (Typ.) (at 20°C) | Rated current (A) ※2 |
|---------------------|-------|---|--|-------------------------|
| CDRH10D48/ANP-2R4MC | 2R4 | 2.4 μ H \pm 20% | 12(9) | 5.2 |
| CDRH10D48/ANP-3R4MC | 3R4 | 3.4 μ H \pm 20% | 13(10) | 4.8 |
| CDRH10D48/ANP-4R3MC | 4R3 | 4.3 μ H \pm 20% | 15(12) | 4.3 |
| CDRH10D48/ANP-5R8MC | 5R8 | 5.8 μ H \pm 20% | 24(19) | 3.8 |
| CDRH10D48/ANP-7R2MC | 7R2 | 7.2 μ H \pm 20% | 29(23) | 2.9 |
| CDRH10D48/ANP-8R7MC | 8R7 | 8.7 μ H \pm 20% | 37(29) | 2.7 |
| CDRH10D48/ANP-100MC | 100 | 10 μ H \pm 20% | 40(32) | 2.6 |
| CDRH10D48/ANP-120MC | 120 | 12 μ H \pm 20% | 44(35) | 2.5 |
| CDRH10D48/ANP-150MC | 150 | 15 μ H \pm 20% | 49(39) | 2.3 |
| CDRH10D48/ANP-180MC | 180 | 18 μ H \pm 20% | 62(49) | 2.2 |
| CDRH10D48/ANP-220MC | 220 | 22 μ H \pm 20% | 70(56) | 1.9 |
| CDRH10D48/ANP-270MC | 270 | 27 μ H \pm 20% | 90(72) | 1.7 |
| CDRH10D48/ANP-330MC | 330 | 33 μ H \pm 20% | 113(90) | 1.5 |
| CDRH10D48/ANP-390MC | 390 | 39 μ H \pm 20% | 127(101) | 1.4 |
| CDRH10D48/ANP-470MC | 470 | 47 μ H \pm 20% | 138(110) | 1.3 |
| CDRH10D48/ANP-560MC | 560 | 56 μ H \pm 20% | 172(137) | 1.2 |
| CDRH10D48/ANP-680MC | 680 | 68 μ H \pm 20% | 209(167) | 1.1 |
| CDRH10D48/ANP-820MC | 820 | 82 μ H \pm 20% | 268(214) | 0.97 |
| CDRH10D48/ANP-101MC | 101 | 100 μ H \pm 20% | 294(235) | 0.92 |
| CDRH10D48/ANP-121MC | 121 | 120 μ H \pm 20% | 374(299) | 0.82 |
| CDRH10D48/ANP-151MC | 151 | 150 μ H \pm 20% | 437(349) | 0.77 |
| CDRH10D48/ANP-181MC | 181 | 180 μ H \pm 20% | 558(446) | 0.65 |
| CDRH10D48/ANP-221MC | 221 | 220 μ H \pm 20% | 637(509) | 0.61 |
| CDRH10D48/ANP-271MC | 271 | 270 μ H \pm 20% | 839(671) | 0.53 |
| CDRH10D48/ANP-331MC | 331 | 330 μ H \pm 20% | 938(750) | 0.49 |

※1. Measuring condition: at 100 kHz.

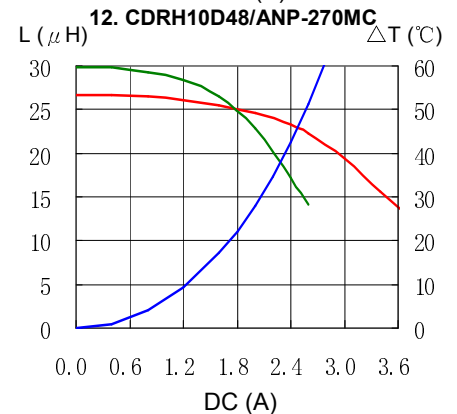
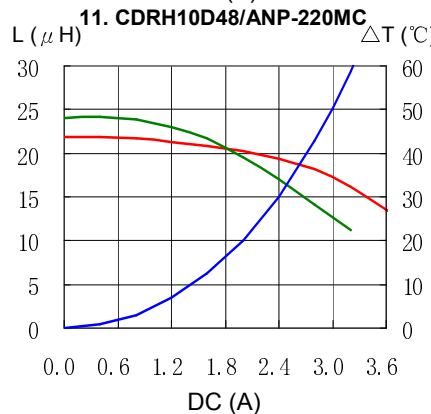
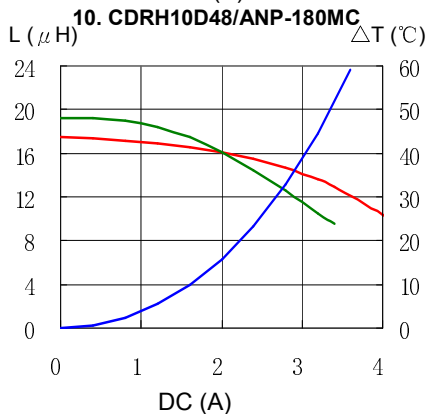
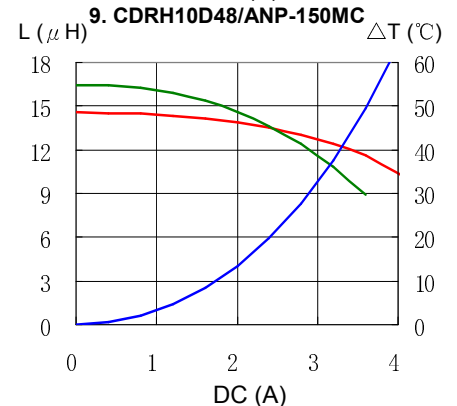
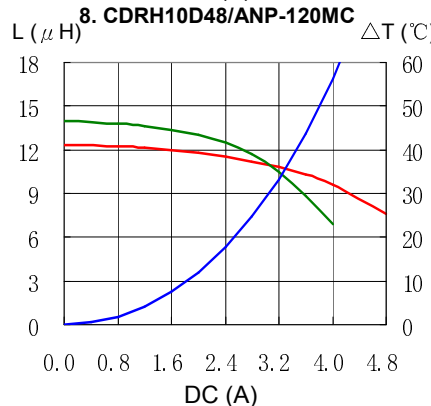
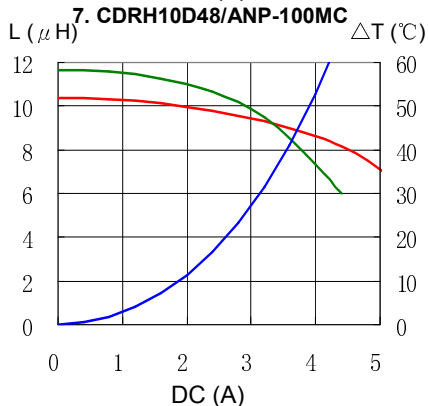
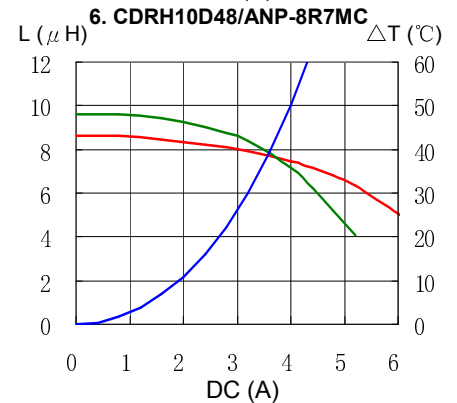
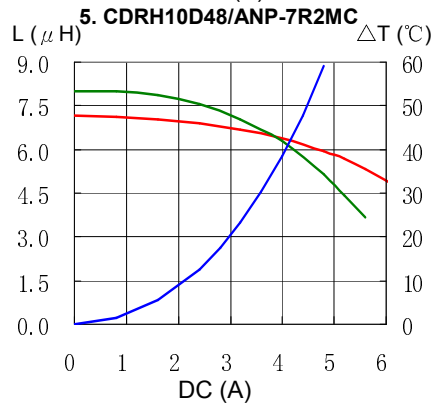
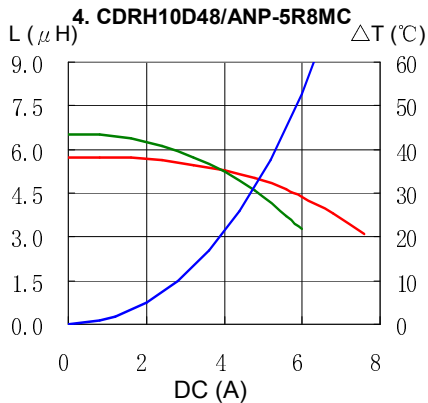
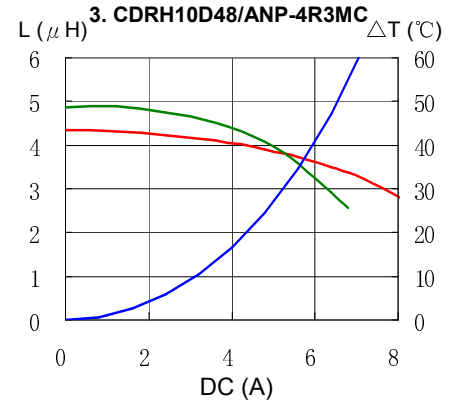
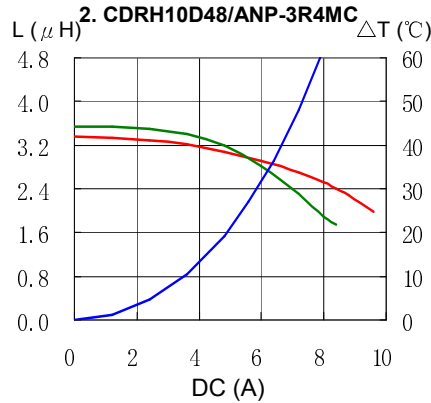
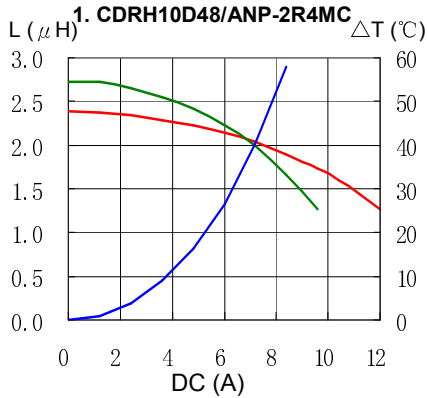
※2. The value of current when the inductance decrease to 65% of it's nominal value or DC current when $\Delta T=30^{\circ}\text{C}$ whichever is lower. ($T_a=125^{\circ}\text{C}$)

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Saturation Current & Temperature Rise Graph

— L (20°C) — L (125°C) — ΔT

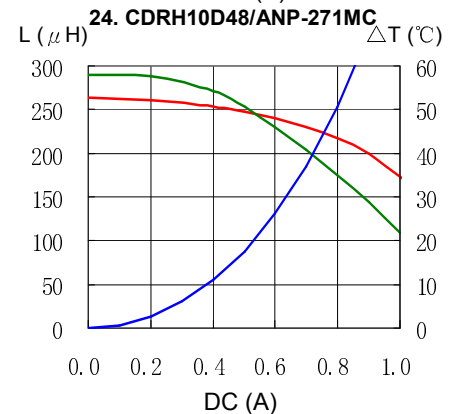
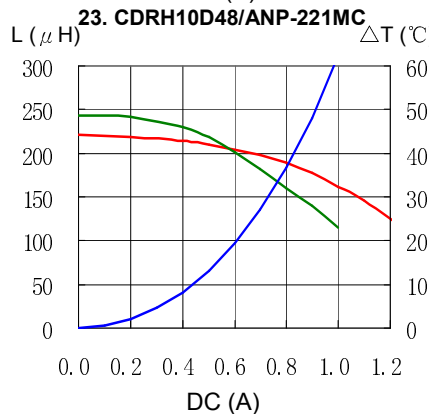
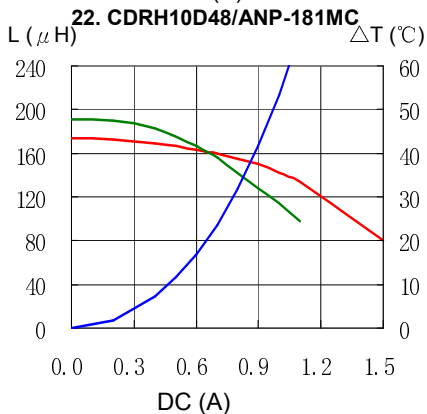
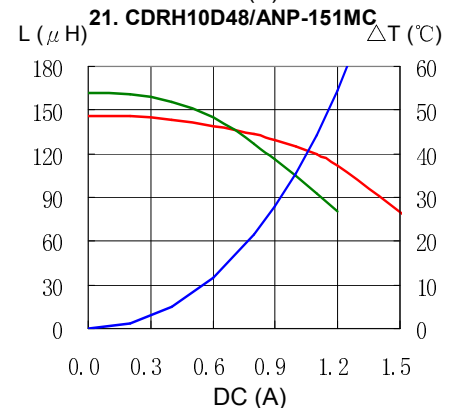
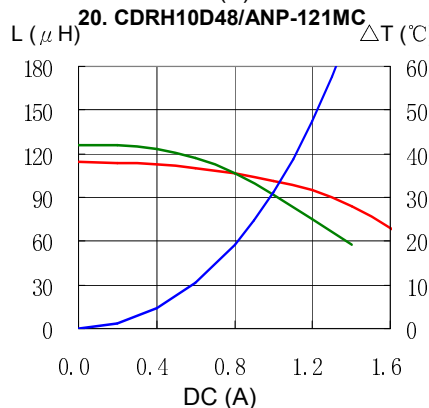
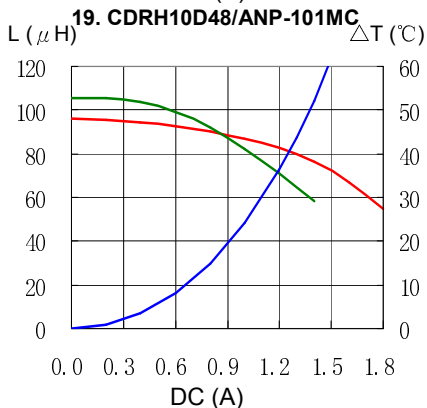
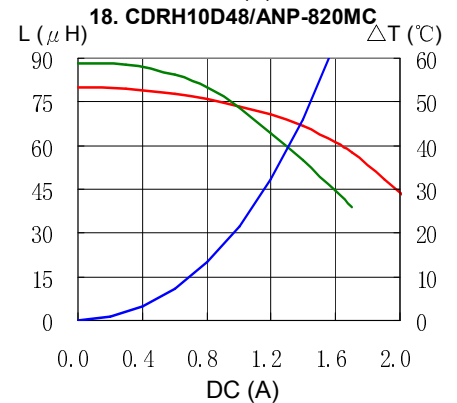
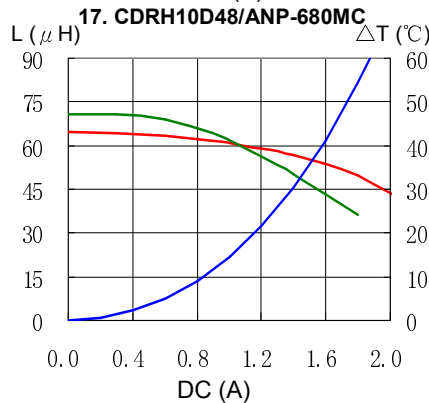
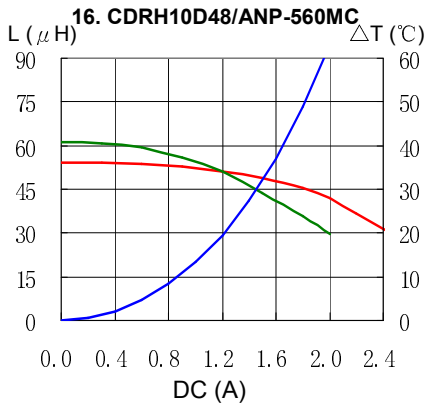
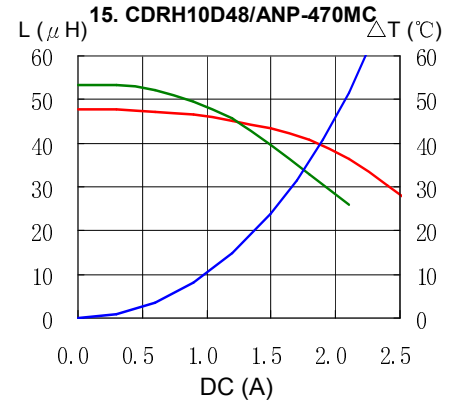
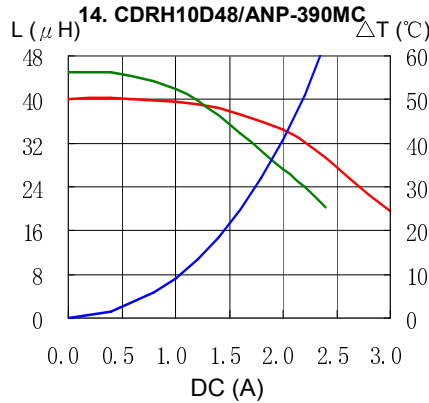
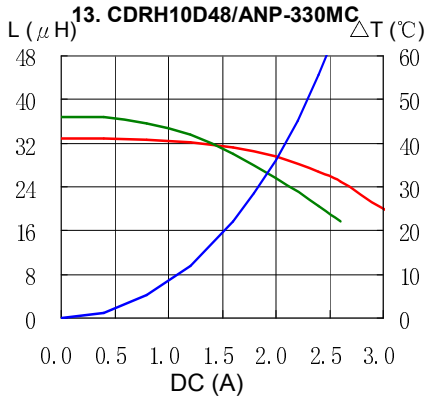


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Saturation Current & Temperature Rise Graph

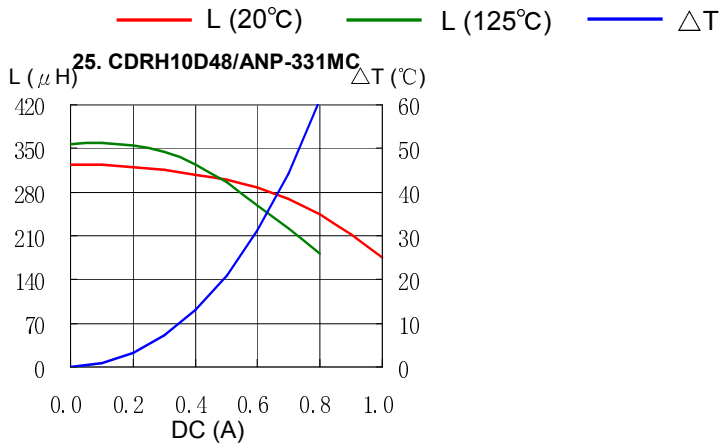
— L (20°C) — L (125°C) — ΔT



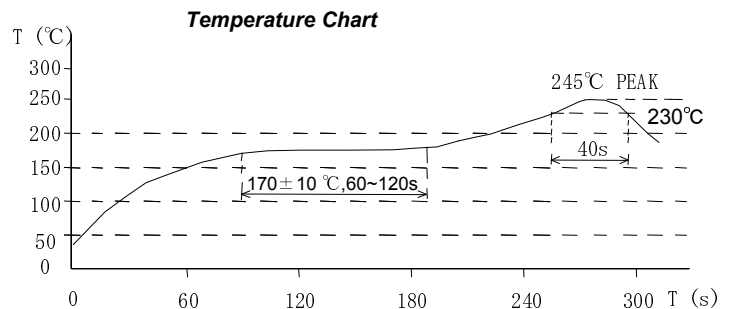
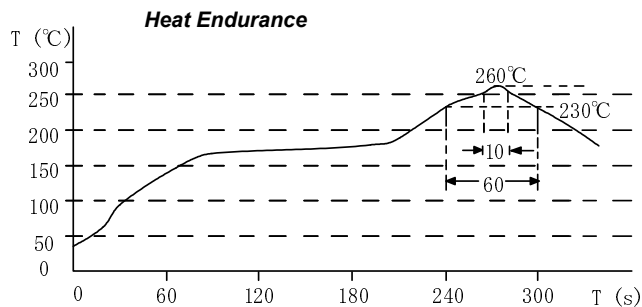
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Saturation Current & Temperature Rise Graph



Solder Reflow Condition



Please refer to the sales offices on our website - <http://www.sumida.com>

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