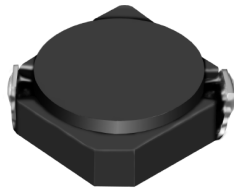


SMD Power Inductor CDRH5D16



Halogen Free



Description

- Ferrite drum core construction.
- Magnetically shielded.
- L × W × H: 5.8 × 5.8 × 1.8 mm Max.
- Product weight: 1.88mg(Ref.)
- Moisture Sensitivity Level: 1
- RoHS compliance.
- Halogen Free available.

Environmental Data

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

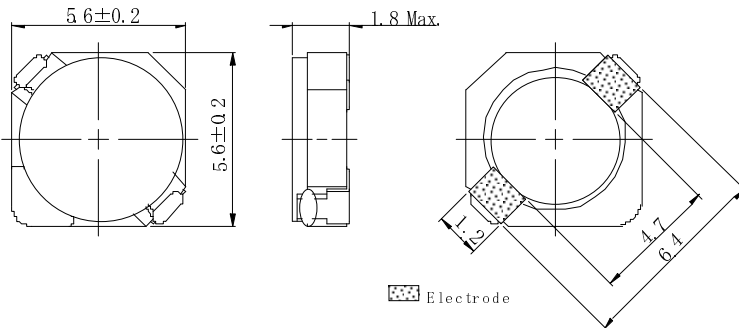
Packaging

- Carrier tape and reel packaging
- 7.0" diameter reel
- 1000pcs per reel

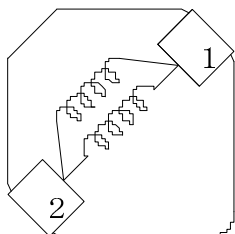
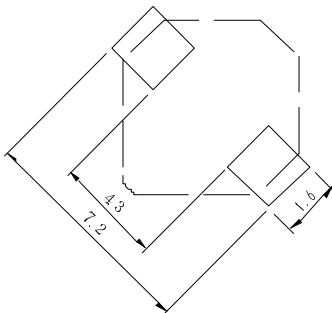
Applications

- Ideally used in Mobile phone, Notebook PC, MP3, PDA, HDD, DSC/DVC, Game machine, etc. as DC-DC converter inductors.

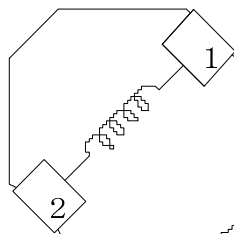
Dimension - [mm]



Land pattern and Schematics - [mm]



(0.90 μH ~ 10.0 μH)



(15.0 μH ~ 100 μH)

SMD Power Inductor CDRH5D16



Electrical Characteristics

| Part Name | Stamp | Inductance (μ H) [within] ※1 | D.C.R.(Ω) [Max.] (Typ.) (at 20°C) | Saturation Current (A) ※2 | | Temperature Rise Current (A) ※3 |
|------------------|-------|---|--|------------------------------|----------|---------------------------------------|
| | | | | at 20°C | at 105°C | |
| CDRH5D16NP-0R9NC | 0R9 | 0.90 \pm 25% | 14.6m(11.7m) | 4.70 | 3.90 | 4.70 |
| CDRH5D16NP-2R2NC | 2R2 | 2.2 \pm 25% | 35.9m(28.7m) | 3.00 | 2.45 | 2.90 |
| CDRH5D16NP-3R3NC | 3R3 | 3.3 \pm 25% | 44.5m(35.6m) | 2.60 | 2.15 | 2.40 |
| CDRH5D16NP-4R7NC | 4R7 | 4.7 \pm 25% | 64.1m(51.3m) | 2.15 | 1.75 | 2.10 |
| CDRH5D16NP-6R8NC | 6R8 | 6.8 \pm 25% | 84.3m(67.4m) | 1.80 | 1.45 | 1.70 |
| CDRH5D16NP-8R2NC | 8R2 | 8.2 \pm 25% | 0.11(89.7m) | 1.55 | 1.25 | 1.50 |
| CDRH5D16NP-100MC | 100 | 10.0 \pm 20% | 0.14(0.11) | 1.45 | 1.15 | 1.30 |
| CDRH5D16NP-150MC | 150 | 15.0 \pm 20% | 0.20(0.16) | 1.15 | 0.95 | 1.10 |
| CDRH5D16NP-220MC | 220 | 22.0 \pm 20% | 0.32(0.25) | 0.95 | 0.80 | 0.80 |
| CDRH5D16NP-330MC | 330 | 33.0 \pm 20% | 0.44(0.35) | 0.80 | 0.65 | 0.70 |
| CDRH5D16NP-470MC | 470 | 47.0 \pm 20% | 0.58(0.46) | 0.68 | 0.52 | 0.60 |
| CDRH5D16NP-680MC | 680 | 68.0 \pm 20% | 0.86(0.69) | 0.55 | 0.44 | 0.50 |
| CDRH5D16NP-820MC | 820 | 82.0 \pm 20% | 1.06(0.85) | 0.50 | 0.40 | 0.42 |
| CDRH5D16NP-101MC | 101 | 100 \pm 20% | 1.41(1.13) | 0.45 | 0.35 | 0.35 |

※1. Inductance measuring condition: at 100kHz.

※2. Saturation current: The value of D.C. current when the inductance decreases to 65% of it's nominal value.

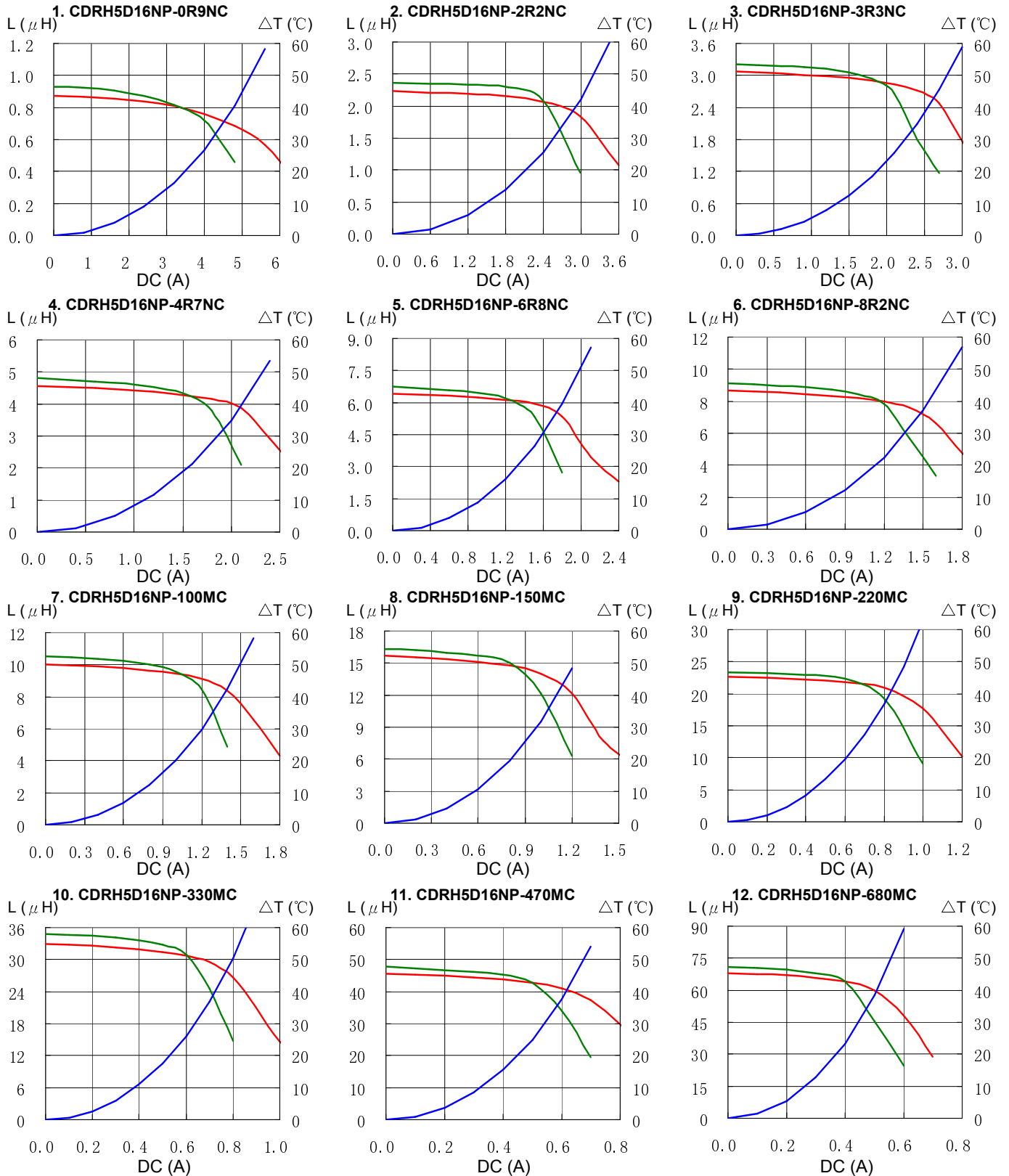
※3. Temperature rise current: The value of D.C. current when the temperature rise is $\Delta t=40^{\circ}\text{C}$ ($T_a=20^{\circ}\text{C}$).

SMD Power Inductor CDRH5D16



Saturation Current & Temperature Rise Graph

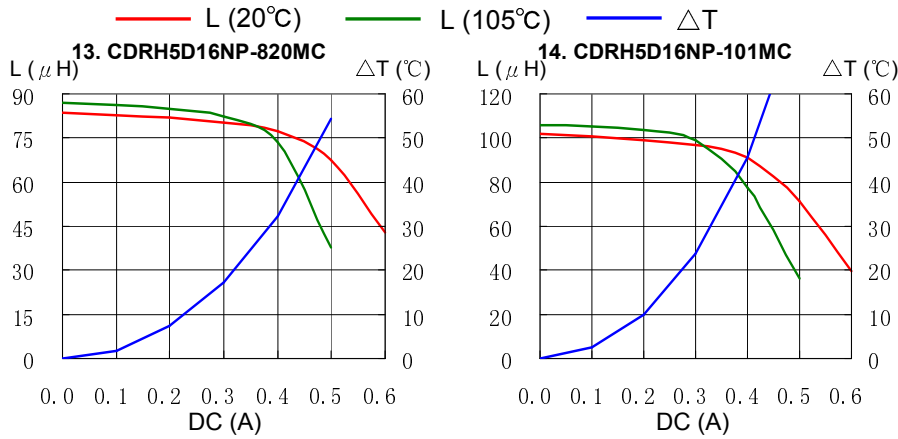
— L (20°C) — L (105°C) — ΔT



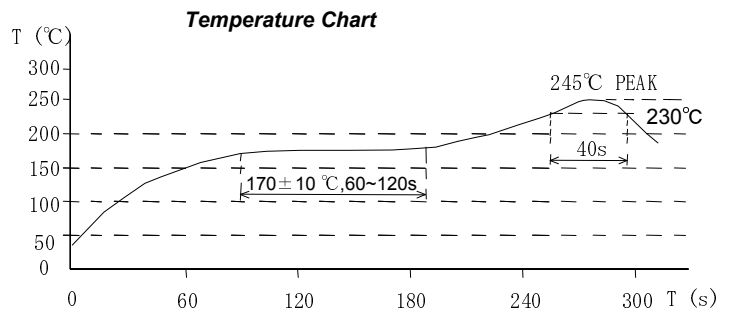
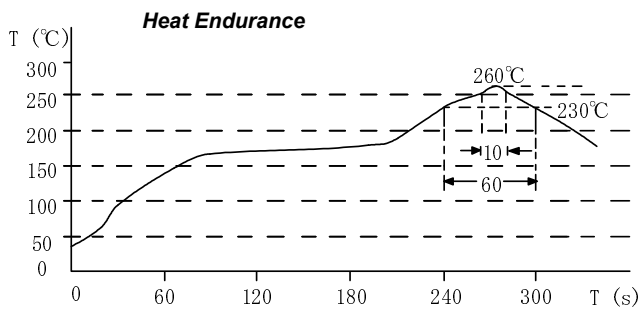
SMD Power Inductor CDRH5D16



Saturation Current & Temperature Rise Graph



Solder Reflow Condition



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