



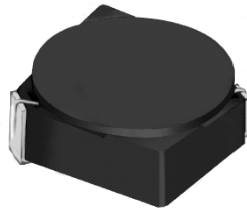
THE DATASHEET OF CDRH3D16/LDNP-220NC



SMD Power Inductor CDRH3D16/LD



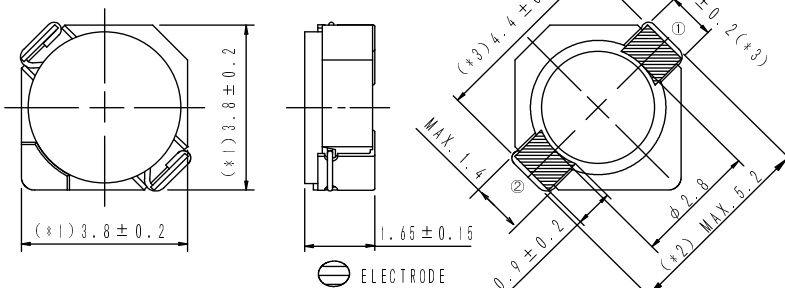
Halogen Free



Description

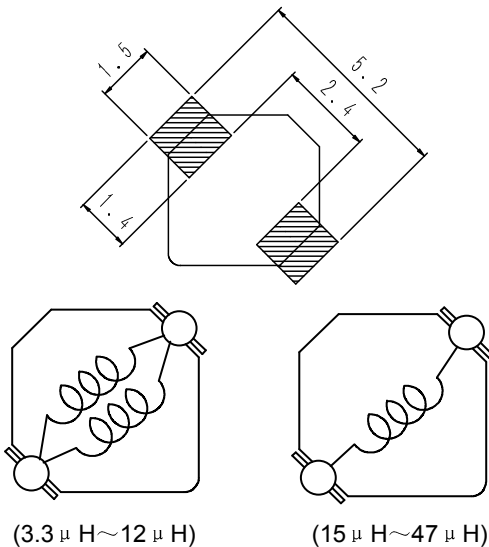
- Ferrite drum core construction.
- Magnetically shielded.
- L × W × H: 4.0 × 4.0 × 1.8 mm Max.
- Product weight: 80mg (Ref.)
- Moisture Sensitivity Level: 1
- RoHS compliance.
- Halogen Free available.

Dimension - [mm]



(*2) MAX.5.4 SHOULD BE USED FOR DOUBLE WIRE WINDING.

Land pattern and Schematics - [mm]



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, PDA, MP3, DSC/DVC, Portable DVD, etc as DC-DC converter inductors.

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Electrical Characteristics

| Part Name | Stamp | Inductance (μ H) [within] ※1 | D.C.R. (m Ω) Max. (Typ.) (at 20°C) | Saturation Current (A) ※2 | | Temperature Rise Current (A) ※3 |
|---------------------|-------|---|--|------------------------------|----------|---------------------------------------|
| | | | | at 20°C | at 100°C | |
| CDRH3D16/LDNP-3R3NC | A | 3.3 \pm 30% | 66(53) | 0.80 | 0.52 | 2.00 |
| CDRH3D16/LDNP-3R9NC | B | 3.9 \pm 30% | 81(65) | 0.75 | 0.44 | 1.75 |
| CDRH3D16/LDNP-4R7NC | C | 4.7 \pm 30% | 91(73) | 0.68 | 0.43 | 1.72 |
| CDRH3D16/LDNP-5R6NC | D | 5.6 \pm 30% | 102(82) | 0.62 | 0.38 | 1.64 |
| CDRH3D16/LDNP-6R8NC | E | 6.8 \pm 30% | 130(104) | 0.58 | 0.34 | 1.30 |
| CDRH3D16/LDNP-8R2NC | F | 8.2 \pm 30% | 140(112) | 0.51 | 0.32 | 1.28 |
| CDRH3D16/LDNP-100NC | G | 10 \pm 30% | 190(152) | 0.46 | 0.27 | 1.07 |
| CDRH3D16/LDNP-120NC | H | 12 \pm 30% | 205(164) | 0.42 | 0.26 | 0.98 |
| CDRH3D16/LDNP-150NC | J | 15 \pm 30% | 272(218) | 0.38 | 0.23 | 0.87 |
| CDRH3D16/LDNP-180NC | K | 18 \pm 30% | 327(262) | 0.34 | 0.21 | 0.76 |
| CDRH3D16/LDNP-220NC | L | 22 \pm 30% | 356(285) | 0.31 | 0.18 | 0.66 |
| CDRH3D16/LDNP-270NC | M | 27 \pm 30% | 470(377) | 0.28 | 0.17 | 0.60 |
| CDRH3D16/LDNP-330NC | N | 33 \pm 30% | 560(446) | 0.26 | 0.16 | 0.55 |
| CDRH3D16/LDNP-390NC | P | 39 \pm 30% | 700(558) | 0.24 | 0.15 | 0.47 |
| CDRH3D16/LDNP-470NC | Q | 47 \pm 30% | 775(630) | 0.21 | 0.13 | 0.45 |

※1. Inductance measuring condition: at 100kHz.

※2. Saturation current: The DC current at which the inductance decreases to 65% of its nominal value.

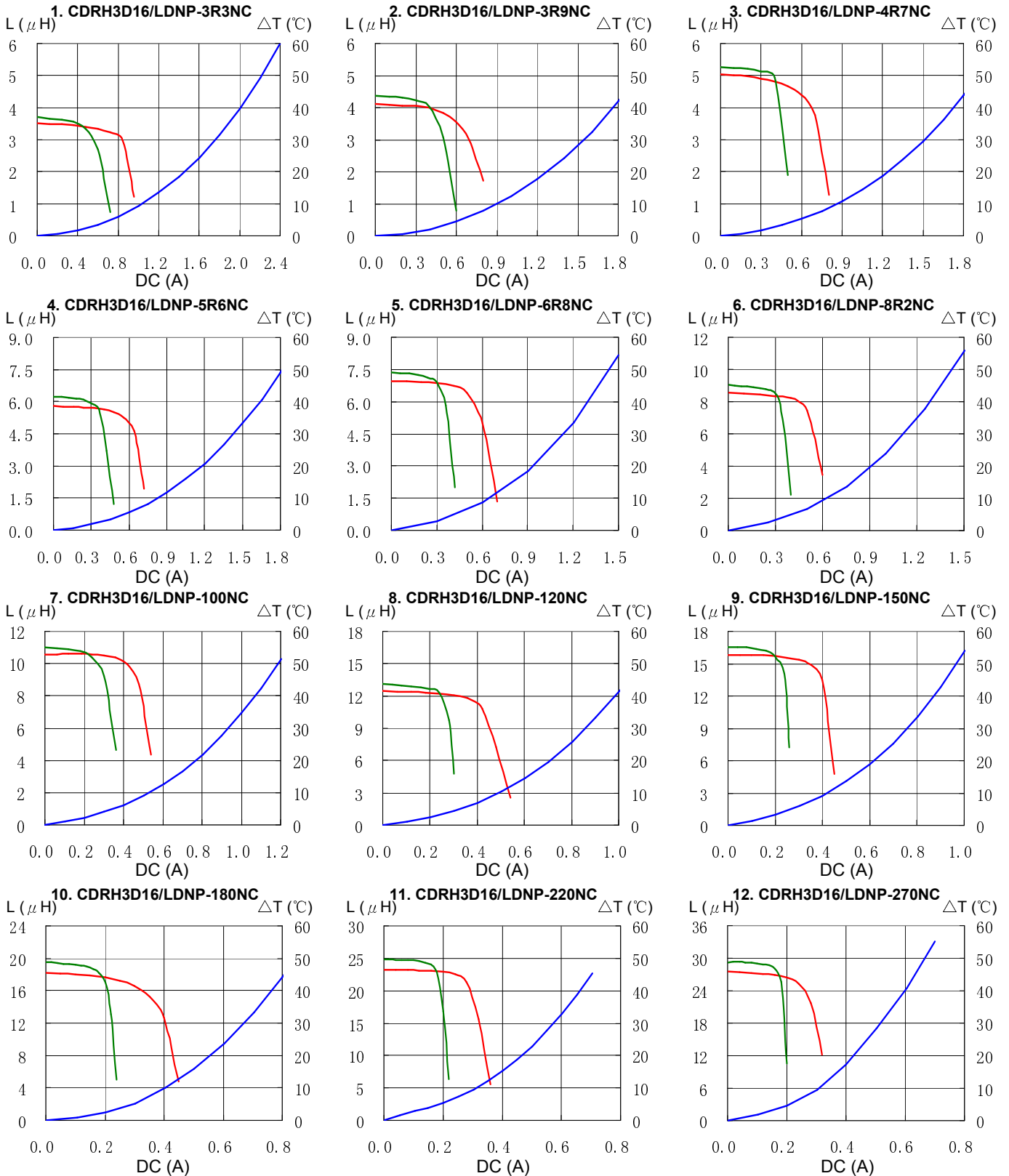
※3. Temperature rise current: The DC current at which the temperature rise is $\Delta t=40^{\circ}\text{C}$. ($T_a=20^{\circ}\text{C}$)

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Saturation Current & Temperature Rise Graph

— L (20°C) — L (105°C) — ΔT

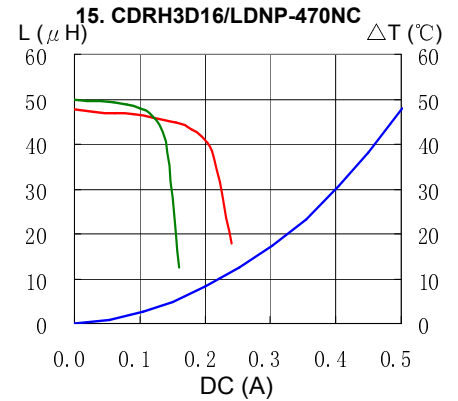
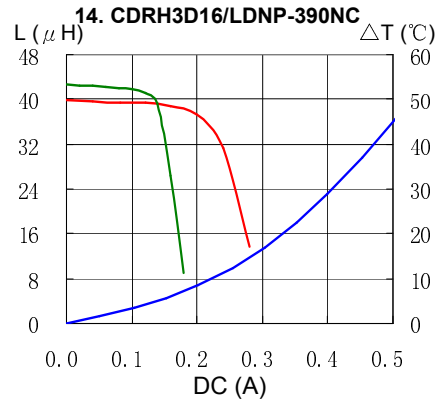
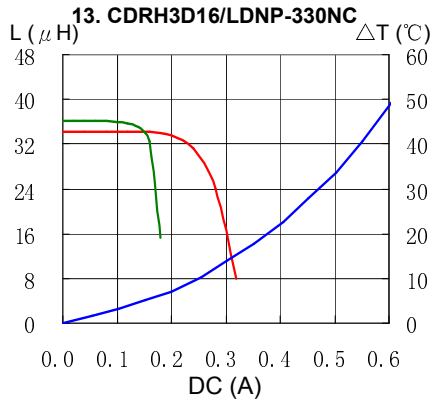


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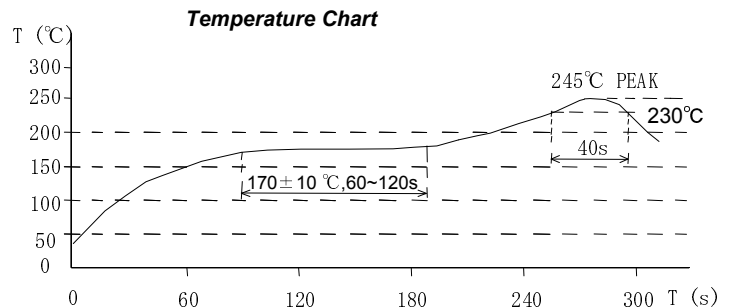
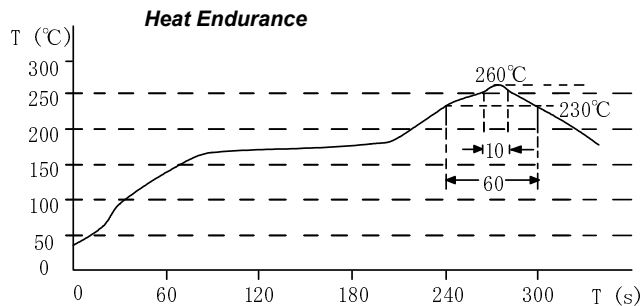


Saturation Current & Temperature Rise Graph

— L (20°C) — L (105°C) — ΔT



Solder Reflow Condition



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