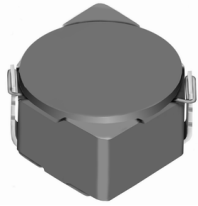




**THE DATASHEET OF
CDRH6D38-180NC**



SMD Power Inductor CDRH6D38



Description

- Ferrite drum core construction.
- Magnetically shielded.
- L × W × H: 7.0 × 7.0 × 4.0 mm Max.
- Product weight: 0.6g(Ref.)
- Moisture Sensitivity Level: 1
- RoHS compliance.

Environmental Data

- Operating temperature range: -40°C ~ +100°C (including coil's self temperature rise)
- Storage temperature range: -40°C ~ +100°C
- Solder reflow temperature: 260 °C peak.

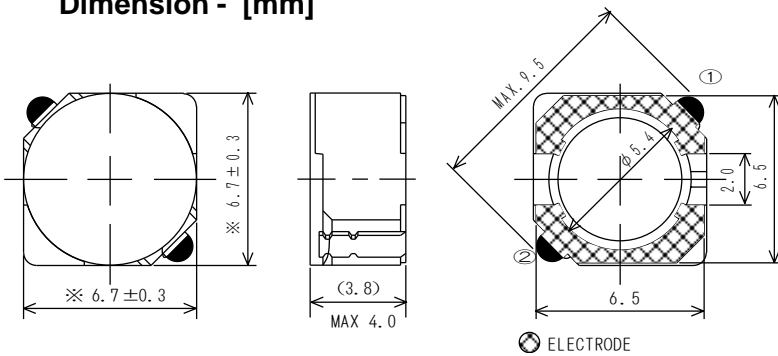
Packaging

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

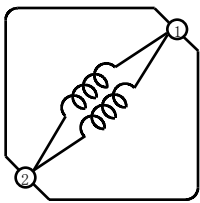
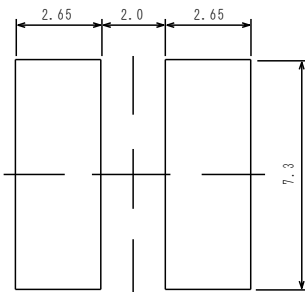
Applications

- Ideally used in Game machine, HDD, Notebook PC, Projector, PDA, etc as DC-DC converter inductors.

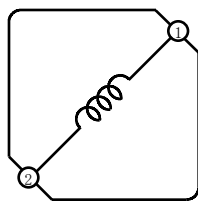
Dimension - [mm]



Land pattern and Schematics - [mm]



(3.3µH~15µH)



(18µH~100µH)

SMD Power Inductor

CDRH6D38



Electrical Characteristics

| Part Name | Stamp | Inductance (μH) [within] ※1 | D.C.R.(Ω) Max. (Typ.) (at 20°C) | Rated Current (A) ※2 |
|------------------|-------|--|--|-------------------------|
| CDRH6D38NP-3R3NC | 3R3 | 3.3 \pm 30% | 20m (15m) | 3.50 |
| CDRH6D38NP-5R0NC | 5R0 | 5.0 \pm 30% | 24m (18m) | 2.90 |
| CDRH6D38NP-6R2NC | 6R2 | 6.2 \pm 30% | 27m (20m) | 2.50 |
| CDRH6D38NP-7R4NC | 7R4 | 7.4 \pm 30% | 31m (23m) | 2.30 |
| CDRH6D38NP-8R7NC | 8R7 | 8.7 \pm 30% | 34m (25m) | 2.20 |
| CDRH6D38NP-100NC | 100 | 10 \pm 30% | 38m (28m) | 2.00 |
| CDRH6D38NP-120NC | 120 | 12 \pm 30% | 53m (39m) | 1.70 |
| CDRH6D38NP-150NC | 150 | 15 \pm 30% | 57m (42m) | 1.60 |
| CDRH6D38NP-180NC | 180 | 18 \pm 30% | 92m (68m) | 1.50 |
| CDRH6D38NP-220NC | 220 | 22 \pm 30% | 96m (71m) | 1.30 |
| CDRH6D38NP-270NC | 270 | 27 \pm 30% | 109m (81m) | 1.20 |
| CDRH6D38NP-330NC | 330 | 33 \pm 30% | 124m (92m) | 1.10 |
| CDRH6D38NP-390NC | 390 | 39 \pm 30% | 138m(102m) | 1.00 |
| CDRH6D38NP-470NC | 470 | 47 \pm 30% | 155m(115m) | 0.95 |
| CDRH6D38NP-560NC | 560 | 56 \pm 30% | 202m(150m) | 0.85 |
| CDRH6D38NP-680NC | 680 | 68 \pm 30% | 234m(173m) | 0.75 |
| CDRH6D38NP-820NC | 820 | 82 \pm 30% | 324m(240m) | 0.70 |
| CDRH6D38NP-101NC | 101 | 100 \pm 30% | 358m(265m) | 0.65 |

※1. Inductance measuring condition: at 100kHz.

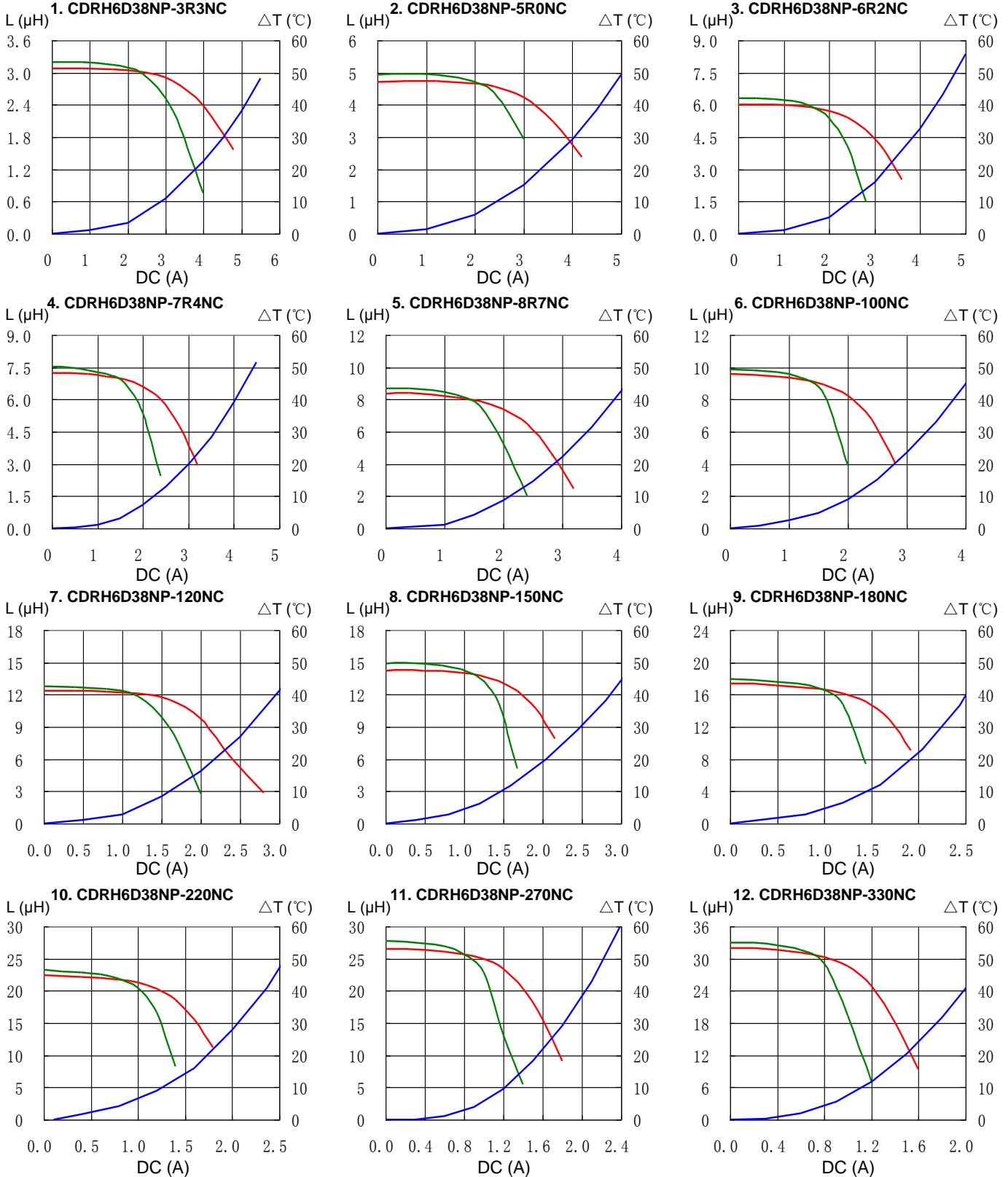
※2. Rated current: The DC current at which the inductance decreases to 65% of it's nominal value or when $\Delta t=30^\circ\text{C}$, whichever is lower ($T_a=20^\circ\text{C}$).

SMD Power Inductor CDRH6D38

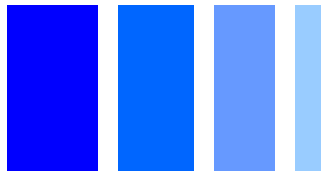


Saturation Current & Temperature Rise Graph

— L (20°C) — L (105°C) — ΔT

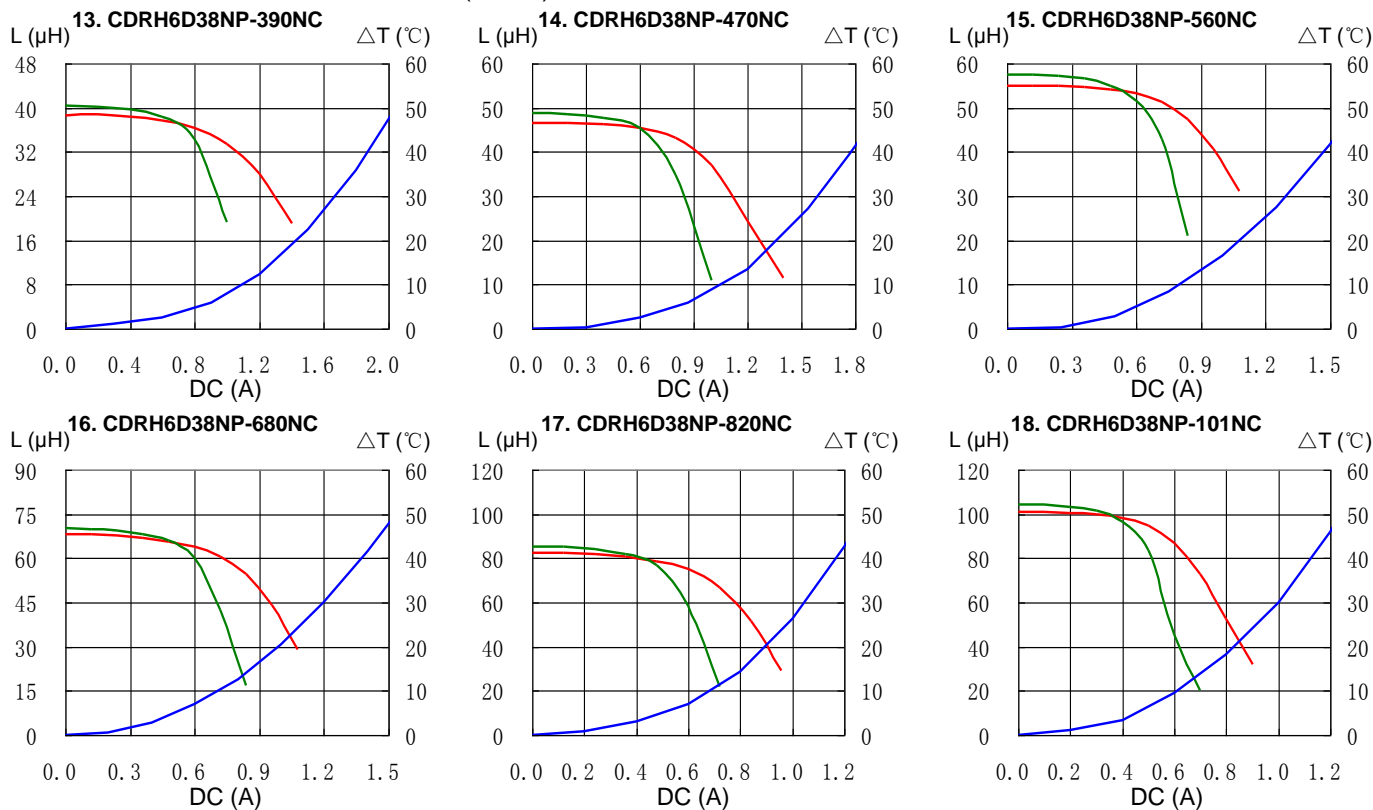


SMD Power Inductor CDRH6D38



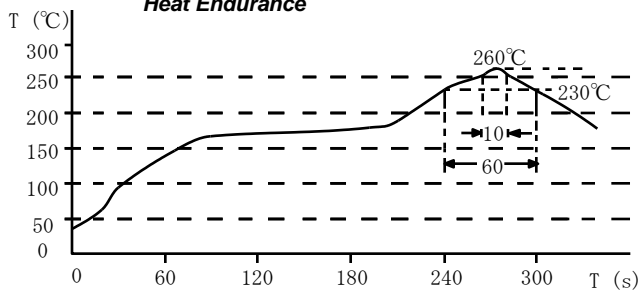
Saturation Current & Temperature Rise Graph

— L (20°C) — L (105°C) — ΔT

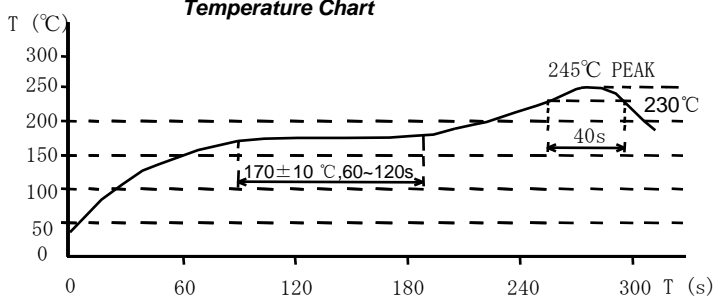


Solder Reflow Condition

Heat Endurance



Temperature Chart



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

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