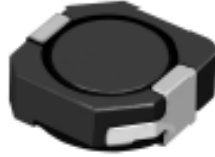
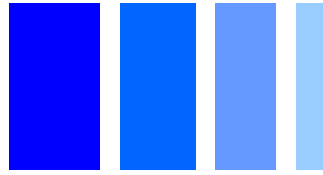




**THE DATASHEET OF
CDRH104RNP-221NC**



SMD Power Inductor CDRH104R



Description

- Ferrite drum core construction.
- Magnetically shielded.
- L × W × H: 10.5 × 10.3 × 4.0mm Max.
- Product weight: 1.5g(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.

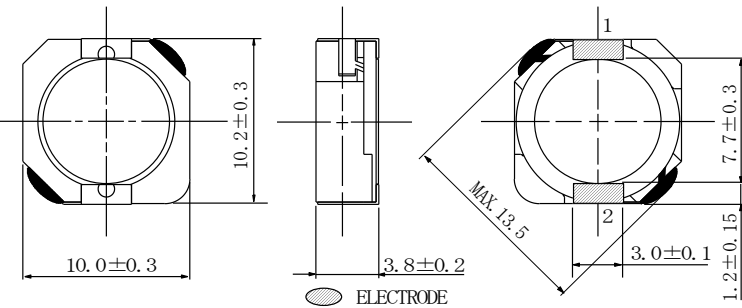
Packaging

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

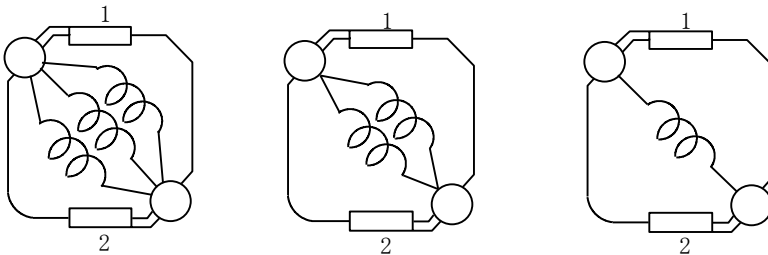
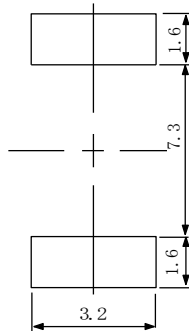
Applications

- Ideally used in Notebook PC, LCD TV, DVD, Game machine, STB, Projector etc as DC-DC converter inductors.

Dimension - [mm]



Land pattern and Schematics - [mm]



(1.5μH ~ 5.2μH, 10μH) (7.0μH, 12μH ~ 33μH) (39μH ~ 330μH)



Electrical Characteristics

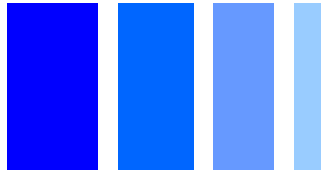
| PART NO. | STAMP | INDUCTANCE [WITHIN] ※1 | D. C. R. (mΩ) [MAX.] (TYP.) (at 20°C) | SATURATION CURRENT (A) MAX. (TYP.) ※2 | TEMPERATURE RISE CURRENT (A) ※3 |
|------------------|-------|------------------------------|--|---|--|
| CDRH104RNP-1R5NC | 1R5 | 1.5 μH ± 30% | 8.1 (6.0) | 10.0 (12.5) | 8.50 |
| CDRH104RNP-2R5NC | 2R5 | 2.5 μH ± 30% | 10.5 (7.8) | 7.90 (9.90) | 7.70 |
| CDRH104RNP-3R8NC | 3R8 | 3.8 μH ± 30% | 13.0 (9.6) | 7.00 (8.80) | 7.40 |
| CDRH104RNP-5R2NC | 5R2 | 5.2 μH ± 30% | 22 (16) | 5.60 (7.00) | 6.00 |
| CDRH104RNP-7R0NC | 7R0 | 7.0 μH ± 30% | 27 (20) | 5.25 (6.60) | 5.30 |
| CDRH104RNP-100NC | 100 | 10 μH ± 30% | 35 (26) | 4.48 (5.60) | 4.50 |
| CDRH104RNP-120NC | 120 | 12 μH ± 30% | 46 (34) | 4.00 (5.00) | 3.80 |
| CDRH104RNP-150NC | 150 | 15 μH ± 30% | 50 (37) | 3.50 (4.40) | 3.70 |
| CDRH104RNP-180NC | 180 | 18 μH ± 30% | 69 (51) | 3.25 (4.10) | 3.10 |
| CDRH104RNP-220NC | 220 | 22 μH ± 30% | 73 (54) | 2.85 (3.60) | 2.80 |
| CDRH104RNP-270NC | 270 | 27 μH ± 30% | 88 (65) | 2.60 (3.28) | 2.70 |
| CDRH104RNP-330NC | 330 | 33 μH ± 30% | 93 (69) | 2.30 (2.90) | 2.60 |
| CDRH104RNP-390NC | 390 | 39 μH ± 30% | 127 (94) | 2.10 (2.62) | 2.40 |
| CDRH104RNP-470NC | 470 | 47 μH ± 30% | 128 (95) | 1.95 (2.44) | 2.30 |
| CDRH104RNP-560NC | 560 | 56 μH ± 30% | 188 (139) | 1.74 (2.18) | 1.75 |
| CDRH104RNP-680NC | 680 | 68 μH ± 30% | 213 (158) | 1.66 (2.08) | 1.68 |
| CDRH104RNP-820NC | 820 | 82 μH ± 30% | 283 (218) | 1.50 (1.88) | 1.48 |
| CDRH104RNP-101NC | 101 | 100 μH ± 30% | 304 (225) | 1.33 (1.66) | 1.42 |
| CDRH104RNP-121NC | 121 | 120 μH ± 30% | 375 (278) | 1.25 (1.56) | 1.20 |
| CDRH104RNP-151NC | 151 | 150 μH ± 30% | 506 (375) | 1.12 (1.40) | 1.15 |
| CDRH104RNP-181NC | 181 | 180 μH ± 30% | 568 (421) | 0.99 (1.24) | 1.00 |
| CDRH104RNP-221NC | 221 | 220 μH ± 30% | 756 (560) | 0.95 (1.19) | 0.88 |
| CDRH104RNP-271NC | 271 | 270 μH ± 30% | 853 (632) | 0.85 (1.06) | 0.68 |
| CDRH104RNP-331NC | 331 | 330 μH ± 30% | 1090 (810) | 0.74 (0.92) | 0.66 |

※1 Measuring frequency at 100kHz

※2 Saturation current: this indicates the value of D.C. current when the inductance becomes 35% lower than its initial value. (Ta=20°C)

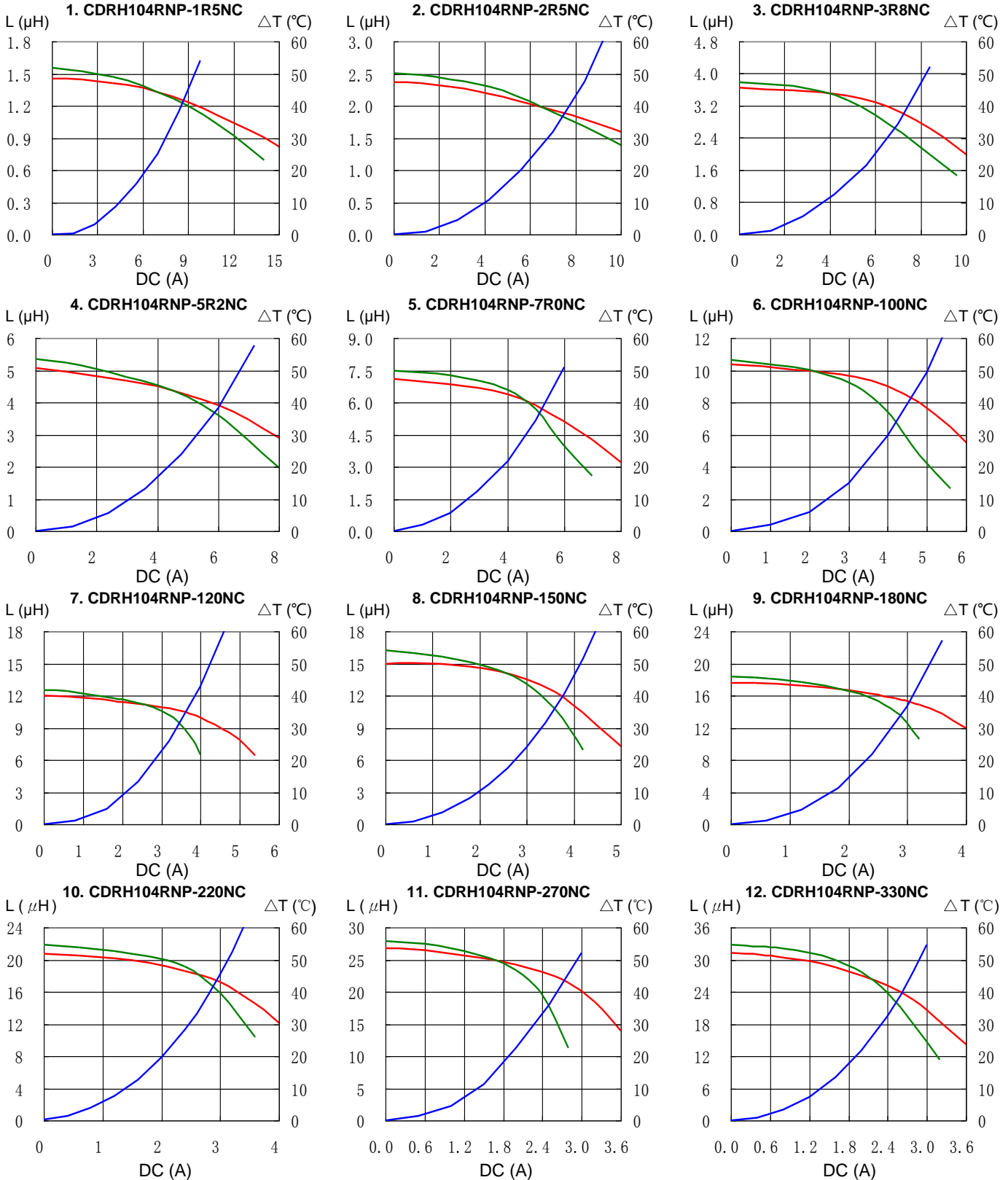
※3 Temperature rise current: the actual value of D.C. current when the temperature of coil becomes ΔT=40°C (Ta=20°C).

SMD Power Inductor CDRH104R

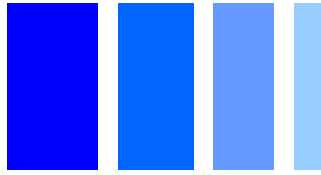


Saturation Current & Temperature Rise Graph

— L (20°C) — L (105°C) — ΔT

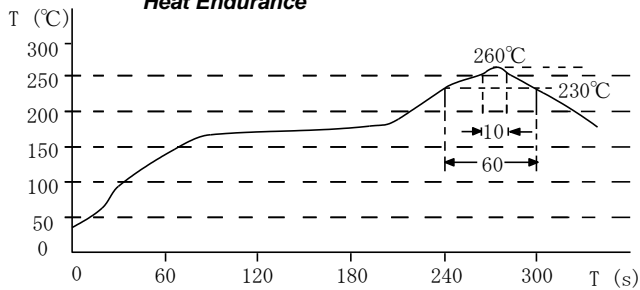


SMD Power Inductor CDRH104R

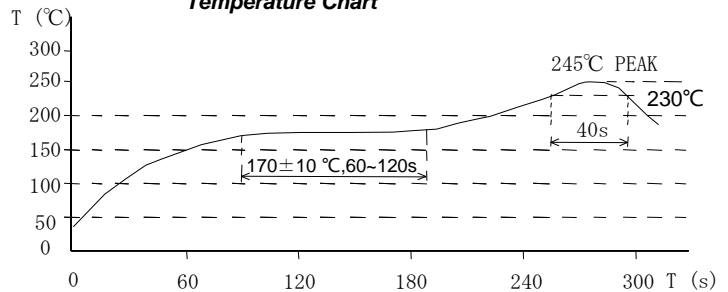


Solder Reflow Condition

Heat Endurance



Temperature Chart



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

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