



**THE DATASHEET OF
CD54NP-100MC**



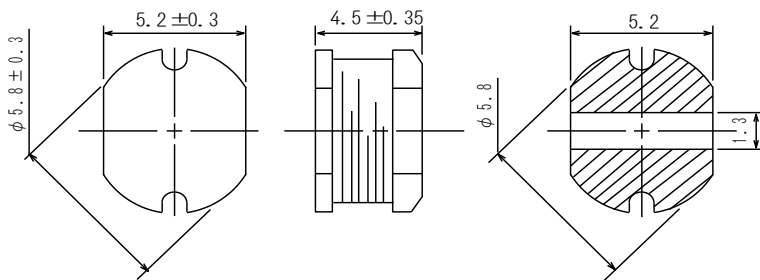
SMD Power Inductor CD54



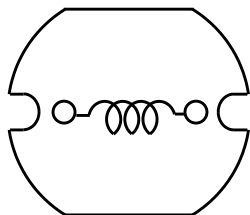
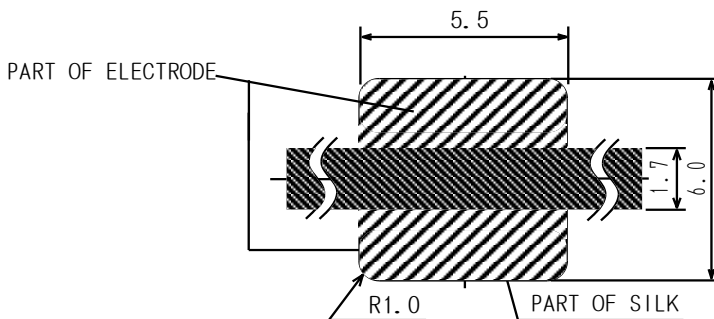
Description

- Ferrite drum core construction.
- Magnetically unshielded.
- L × W × H: 6.1 × 5.5 × 4.85mm Max.
- Product weight 0.4g(Ref.)
- Moisture Sensitivity Level: 1
- RoHS compliance.

Dimension - [mm]



Land pattern and Schematics - [mm]



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.
- 13.0" diameter reel
- 1500pcs per reel

Applications

- Ideally used in Mobilephone, PDA, MP3, DSC/DVC, portable DVD etc as DC-DC Converter inductors.



Electrical Characteristics

| Part Name | Stamp | Inductance (μH) [within] ※1 | D.C.R (Ω) [Max.] (at 20°C) | Rated Current (A) ※2 |
|--------------|-------|--|--|-------------------------|
| CD54NP-100MC | 100 | 10 \pm 20% | 0.10 | 1.44 |
| CD54NP-120MC | 120 | 12 \pm 20% | 0.12 | 1.40 |
| CD54NP-150MC | 150 | 15 \pm 20% | 0.14 | 1.30 |
| CD54NP-180MC | 180 | 18 \pm 20% | 0.15 | 1.23 |
| CD54NP-220MC | 220 | 22 \pm 20% | 0.18 | 1.11 |
| CD54NP-270MC | 270 | 27 \pm 20% | 0.20 | 0.97 |
| CD54NP-330LC | 330 | 33 \pm 15% | 0.23 | 0.88 |
| CD54NP-390LC | 390 | 39 \pm 15% | 0.32 | 0.80 |
| CD54NP-470LC | 470 | 47 \pm 15% | 0.37 | 0.72 |
| CD54NP-560KC | 560 | 56 \pm 10% | 0.42 | 0.68 |
| CD54NP-680KC | 680 | 68 \pm 10% | 0.46 | 0.61 |
| CD54NP-820KC | 820 | 82 \pm 10% | 0.60 | 0.58 |
| CD54NP-101KC | 101 | 100 \pm 10% | 0.70 | 0.52 |
| CD54NP-121KC | 121 | 120 \pm 10% | 0.93 | 0.48 |
| CD54NP-151KC | 151 | 150 \pm 10% | 1.10 | 0.40 |
| CD54NP-181KC | 181 | 180 \pm 10% | 1.38 | 0.38 |
| CD54NP-221KC | 221 | 220 \pm 10% | 1.57 | 0.35 |

※1: Inductance measuring frequency: 10 μH ~ 82 μH , at 2.52MHz.
100 μH ~ 220 μH , at 1 kHz.

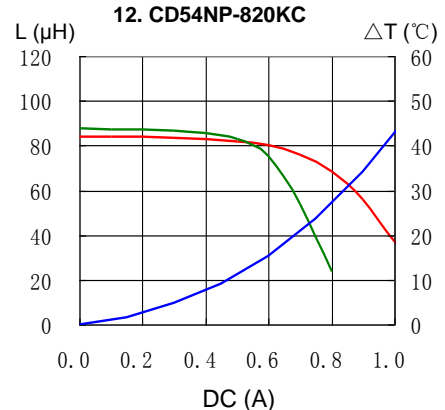
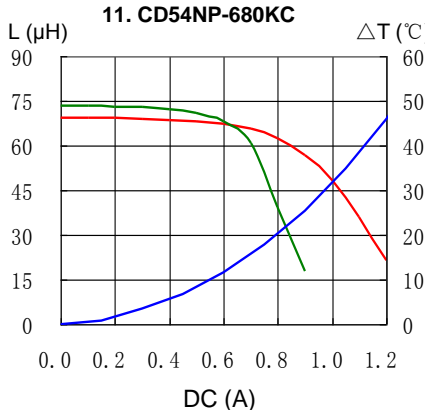
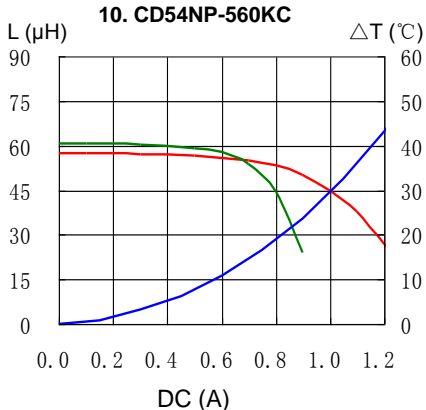
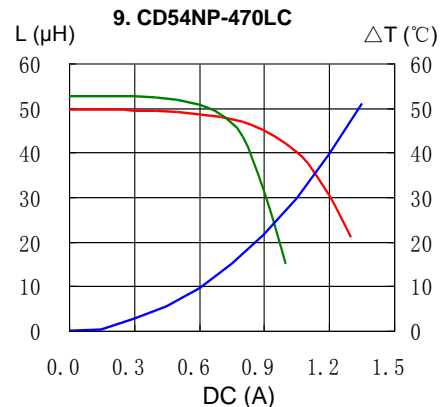
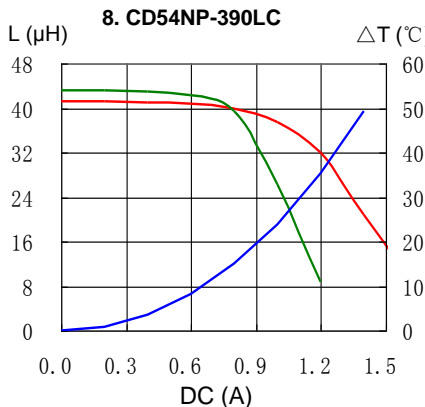
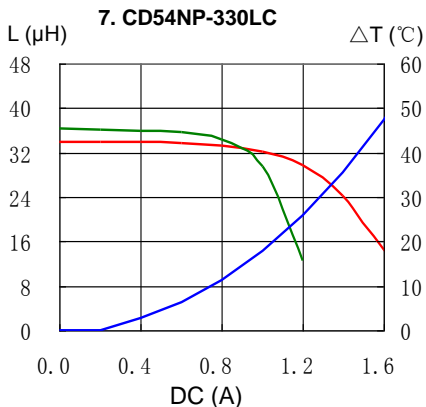
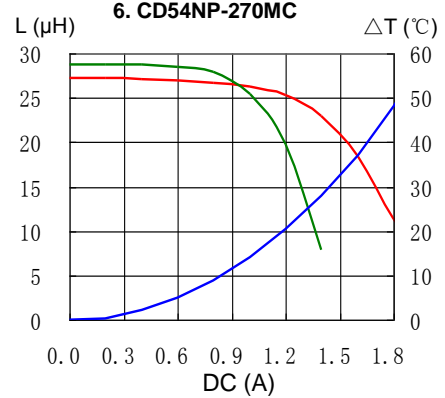
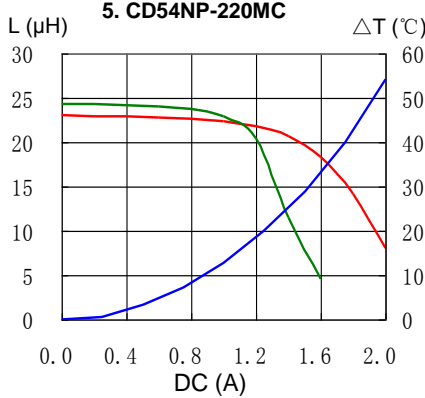
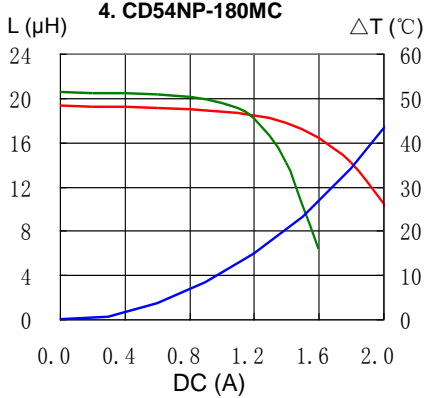
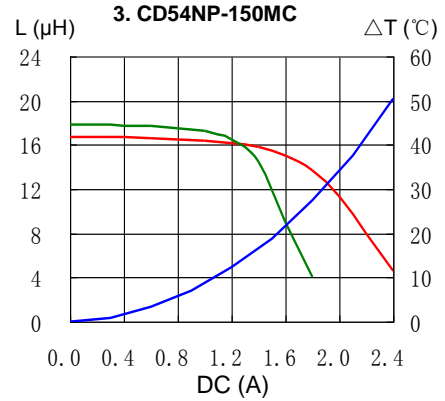
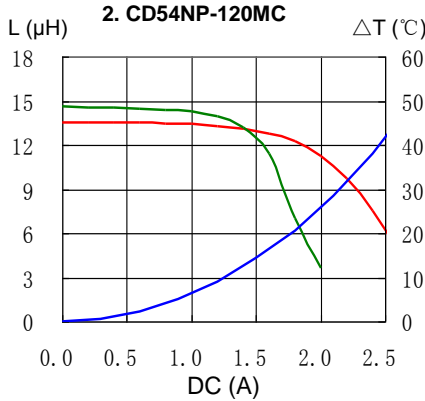
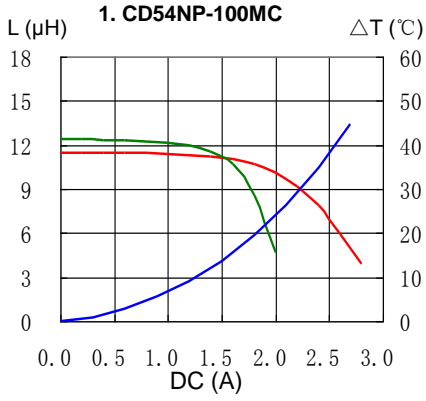
※2: Rated current: The DC current at which the inductance decreases to 90 % of it's initial value or when $\Delta t=40^\circ\text{C}$, whichever is lower ($T_a=20^\circ\text{C}$).

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Saturation Current & Temperature Rise Graph

— L (20°C) — L (105°C) — ΔT

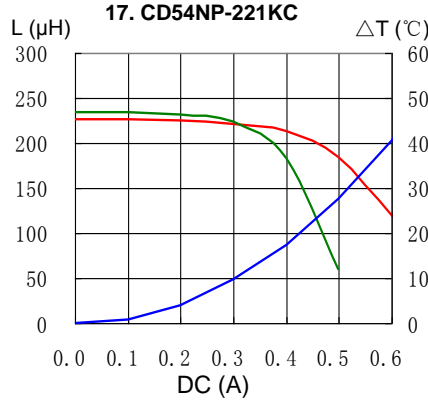
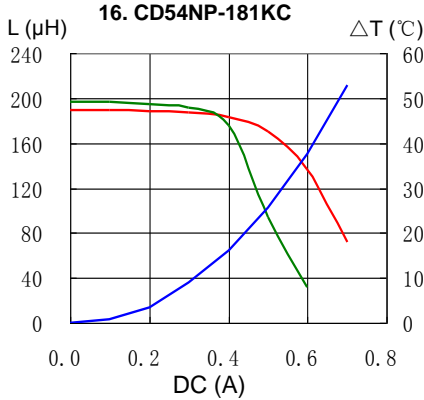
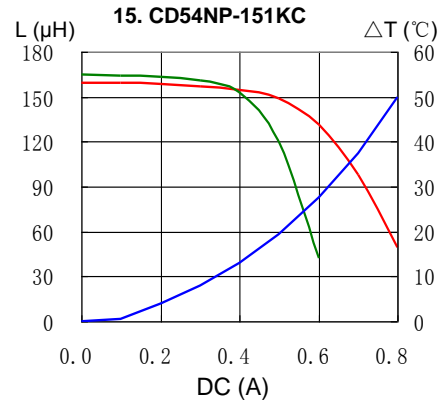
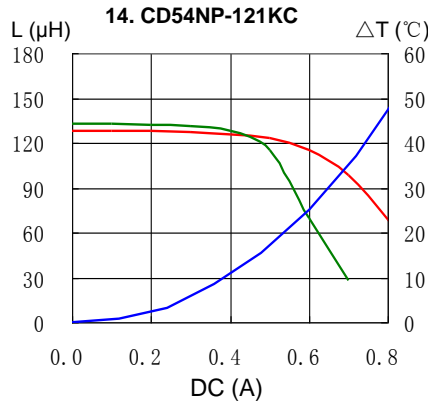
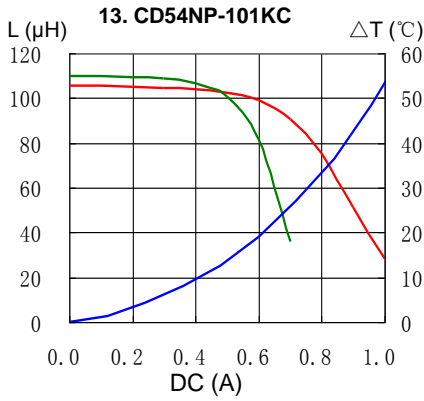


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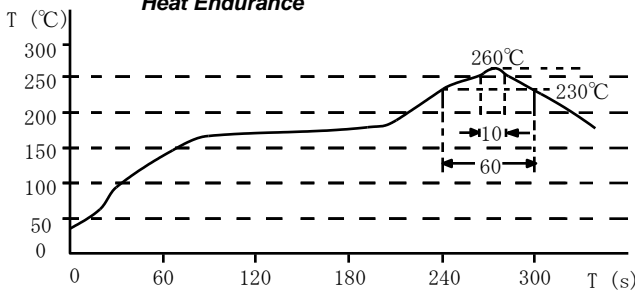
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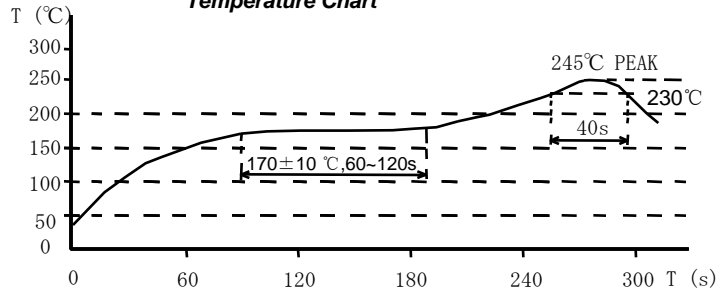


Solder Reflow Condition

Heat Endurance



Temperature Chart



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

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