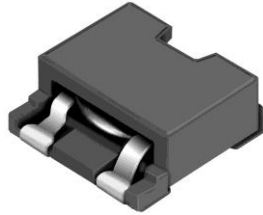


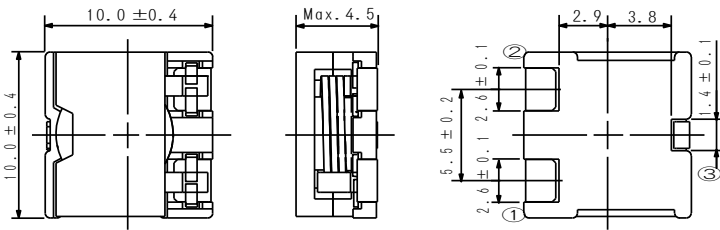
SMD Power Inductor CDEP104



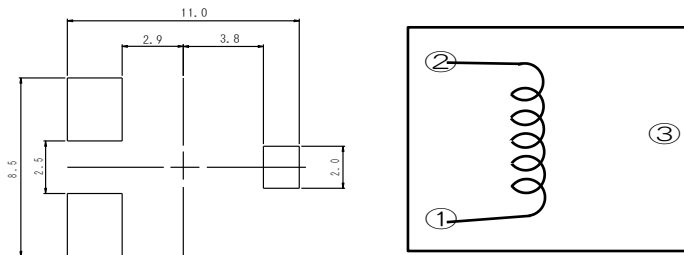
Description

- Ferrite core construction.
- Magnetically shielded.
- L × W × H: 10.4 × 10.4 × 4.5 mm Max.
- Product weight: 2.1g(Ref.)
- Moisture Sensitivity Level: 1
- RoHS compliance.

Dimension - [mm]



Land pattern and Schematics - [mm]



Environmental Data

- Operating temperature range: -40°C ~ +125°C (including coil's self temperature rise)
- Storage temperature range: -40°C ~ +125°C
- Solder reflow temperature: 260 °C peak.

Packaging

- Carrier tape and reel packaging
- 13.0" diameter reel
- 500pcs per reel

Applications

- Ideally used in portable computer CPU power supply

SMD Power Inductor

CDEP104



ELECTRICAL CHARACTERISTICS-LOW D.C.R. TYPE

| PART NO. | STAMP | INDUCTANCE [WITHIN] ※1 | D.C.R. (mΩ) [MAX.] (at 20°C) | THE SATURATION CURRENT (A) ※2 | | TEMPERATURE RISE CURRENT (A) ※3 ΔT=40°C |
|--------------------|-------|---------------------------|------------------------------------|----------------------------------|-----------|--|
| | | | | (at 20°C) | (at100°C) | |
| CDEP1Ø4NP-ØR3NC-88 | 0R3NL | 0.36μH±30% | 2.2(1.8) | 24.2 | 20.8 | 18.0 |
| CDEP1Ø4NP-ØR8MC-88 | 0R8ML | 0.8μH±20% | 3.7(3.1) | 16.2 | 14.0 | 13.4 |
| CDEP1Ø4NP-1R4MC-88 | 1R4ML | 1.4μH±20% | 5.9(4.9) | 12.2 | 10.5 | 10.2 |
| CDEP1Ø4NP-2R2MC-88 | 2R2ML | 2.2μH±20% | 11.8(9.8) | 9.8 | 8.6 | 7.3 |
| CDEP1Ø4NP-3R2MC-88 | 3R2ML | 3.2μH±20% | 18.6(15.5) | 8.1 | 7.0 | 5.4 |
| CDEP1Ø4NP-4R3MC-88 | 4R3ML | 4.3μH±20% | 21.8(18.2) | 7.0 | 6.0 | 5.0 |

ELECTRICAL CHARACTERISTICS-STANDARD TYPE

| PART NO. | STAMP | INDUCTANCE [WITHIN] ※1 | D.C.R. (mΩ) [MAX.] (at 20°C) | THE SATURATION CURRENT (A) ※2 | | TEMPERATURE RISE CURRENT (A) ※3 ΔT=40°C |
|--------------------|-------|---------------------------|------------------------------------|----------------------------------|-----------|--|
| | | | | (at 20°C) | (at100°C) | |
| CDEP1Ø4NP-ØR2NC-5Ø | 0R2NS | 0.22μH±30% | 2.2(1.8) | 39.6 | 31.6 | 18.0 |
| CDEP1Ø4NP-ØR4MC-5Ø | 0R4MS | 0.45μH±20% | 3.7(3.1) | 27.6 | 22.1 | 13.4 |
| CDEP1Ø4NP-ØR8MC-5Ø | 0R8MS | 0.8μH±20% | 5.9(4.9) | 20.7 | 16.6 | 10.2 |
| CDEP1Ø4NP-1R3MC-5Ø | 1R3MS | 1.3μH±20% | 11.8(9.8) | 16.6 | 13.3 | 7.3 |
| CDEP1Ø4NP-1R8MC-5Ø | 1R8MS | 1.8μH±20% | 18.6(15.5) | 13.3 | 10.7 | 5.4 |
| CDEP1Ø4NP-2R5MC-5Ø | 2R5MS | 2.5μH±20% | 21.8(18.2) | 11.8 | 9.5 | 5.0 |

※1. Inductance measuring condition: at 100kHz.

※2. Saturation current: The value of D.C. current when the inductance decreases to 65% (while the tolerance is ±30%) or 75% (while the tolerance is ±20%) of it's nominal.

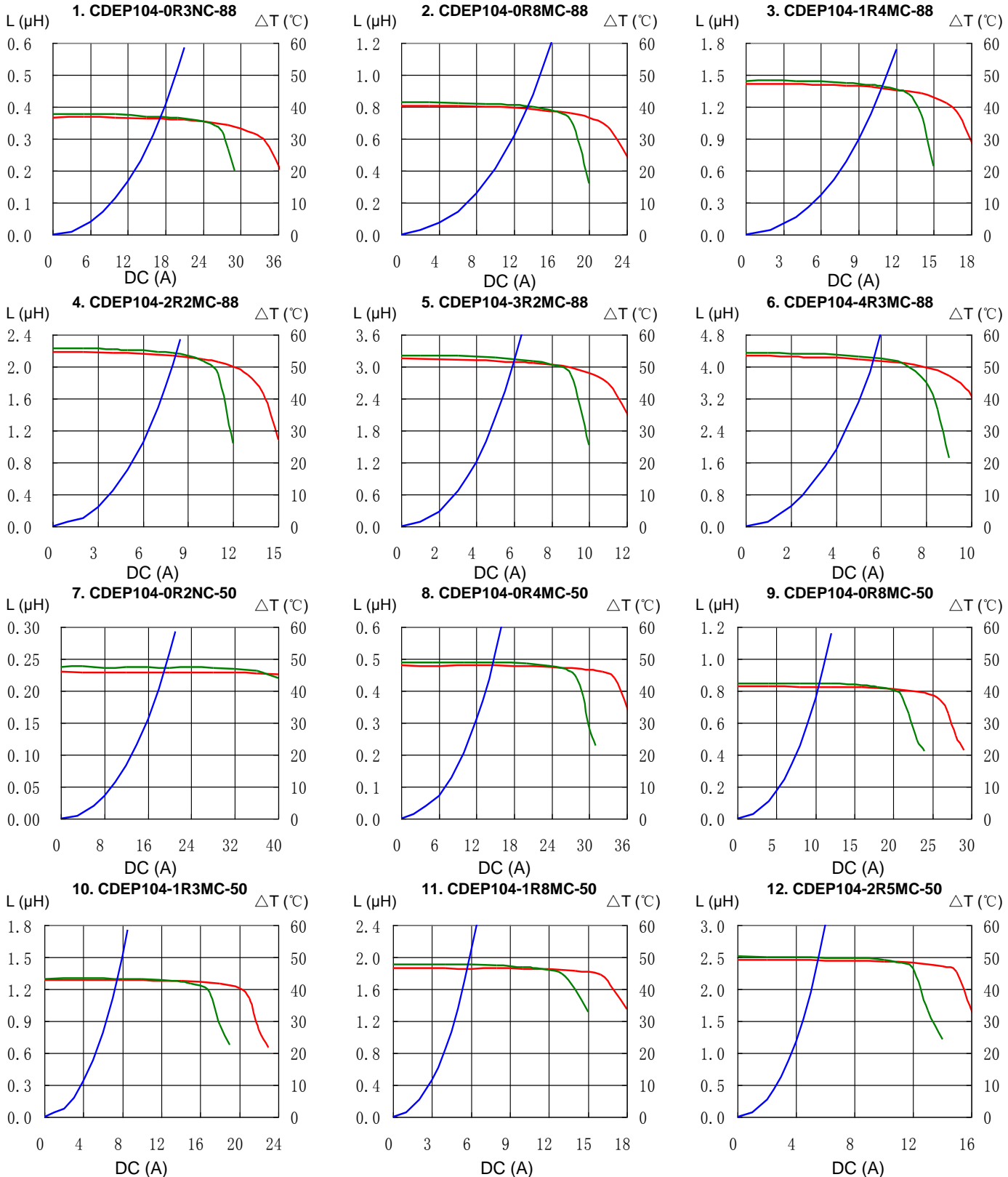
※3. Temperature rise current: The value of D.C. current when the temperature rise is Δt=40°C(Ta=20°C).

SMD Power Inductor CDEP104



Saturation Current & Temperature Rise Graph

— L (20°C) — L (100°C) — ΔT

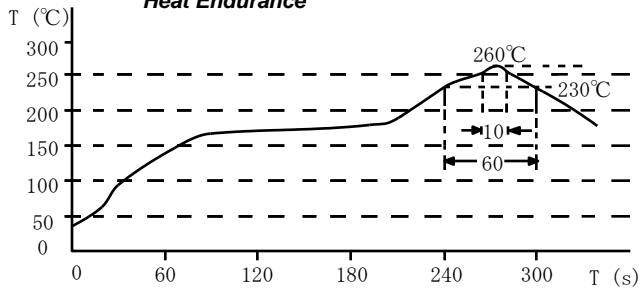


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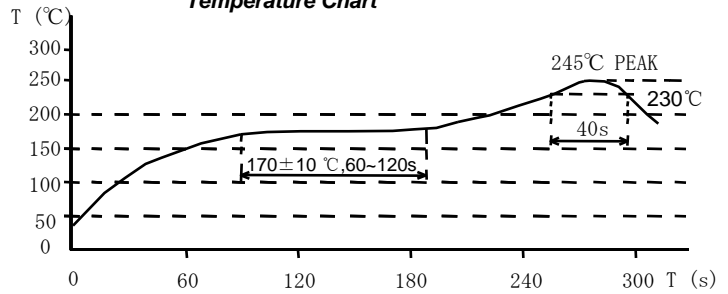


Solder Reflow Condition

Heat Endurance



Temperature Chart



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