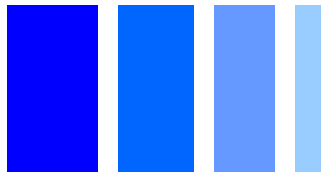


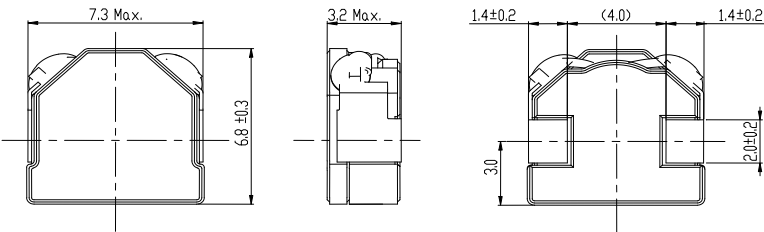
SMD Power Inductor CDEIR6D31F



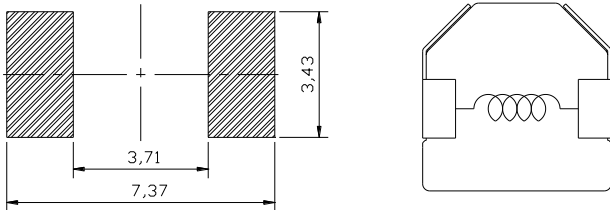
Description

- Ferrite core construction.
- Magnetically shielded.
- L × W × H: 7.3 × 7.1 × 3.2 mm Max.
- Product weight: 0.53g(Ref.)
- Moisture Sensitivity Level: 1
- RoHS compliance.

Dimension - [mm]



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.
- 13.0" diameter reel
- 1500pcs per reel

Applications

- Ideally used in HDD, Notebook and Mobile computer etc.

Electrical Characteristics

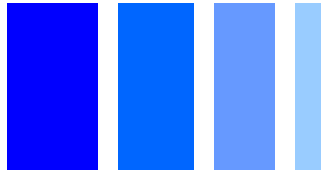
| Part No. | Stamp | Inductance (μH) [Within] ※1 | D.C.R.(mΩ) [Max.] (Typ.) (at 20°C) | saturation current (A) ※2 | Temperature rise current (A) ※3 |
|--------------------|-------|--------------------------------|--|------------------------------|---------------------------------------|
| CDEIR6D31FNP-1R0NC | 1R0 | 1.0 ± 30% | 8.8(7.3) | 7.7(9.7) | 7.4(8.5) |
| CDEIR6D31FNP-1R5NC | 1R5 | 1.5 ± 30% | 9.6(8.0) | 6.8(8.5) | 6.8(7.9) |
| CDEIR6D31FNP-2R2MC | 2R2 | 2.2 ± 20% | 12(10) | 6.0(7.5) | 6.5(7.4) |
| CDEIR6D31FNP-3R3MC | 3R3 | 3.3 ± 20% | 19(15) | 4.8(6.0) | 5.5(6.3) |
| CDEIR6D31FNP-4R7MC | 4R7 | 4.7 ± 20% | 26(21) | 4.0(5.0) | 4.7(5.4) |
| CDEIR6D31FNP-5R6MC | 5R6 | 5.6 ± 20% | 29(23) | 3.5(4.4) | 4.4(5.0) |
| CDEIR6D31FNP-6R8MC | 6R8 | 6.8 ± 20% | 40(32) | 3.0(3.8) | 3.5(4.0) |
| CDEIR6D31FNP-8R2MC | 8R2 | 8.2 ± 20% | 43(34) | 2.8(3.5) | 3.6(4.1) |
| CDEIR6D31FNP-100MC | 100 | 10.0 ± 20% | 66(53) | 2.6(3.2) | 2.6(2.9) |
| CDEIR6D31FNP-120MC | 120 | 12.0 ± 20% | 76(61) | 2.4(3.0) | 2.2(2.5) |

※1. Measuring condition: at 100kHz.

※2. Saturation current: The value of D.C. current when the inductance decreases to 70% of its nominal value.

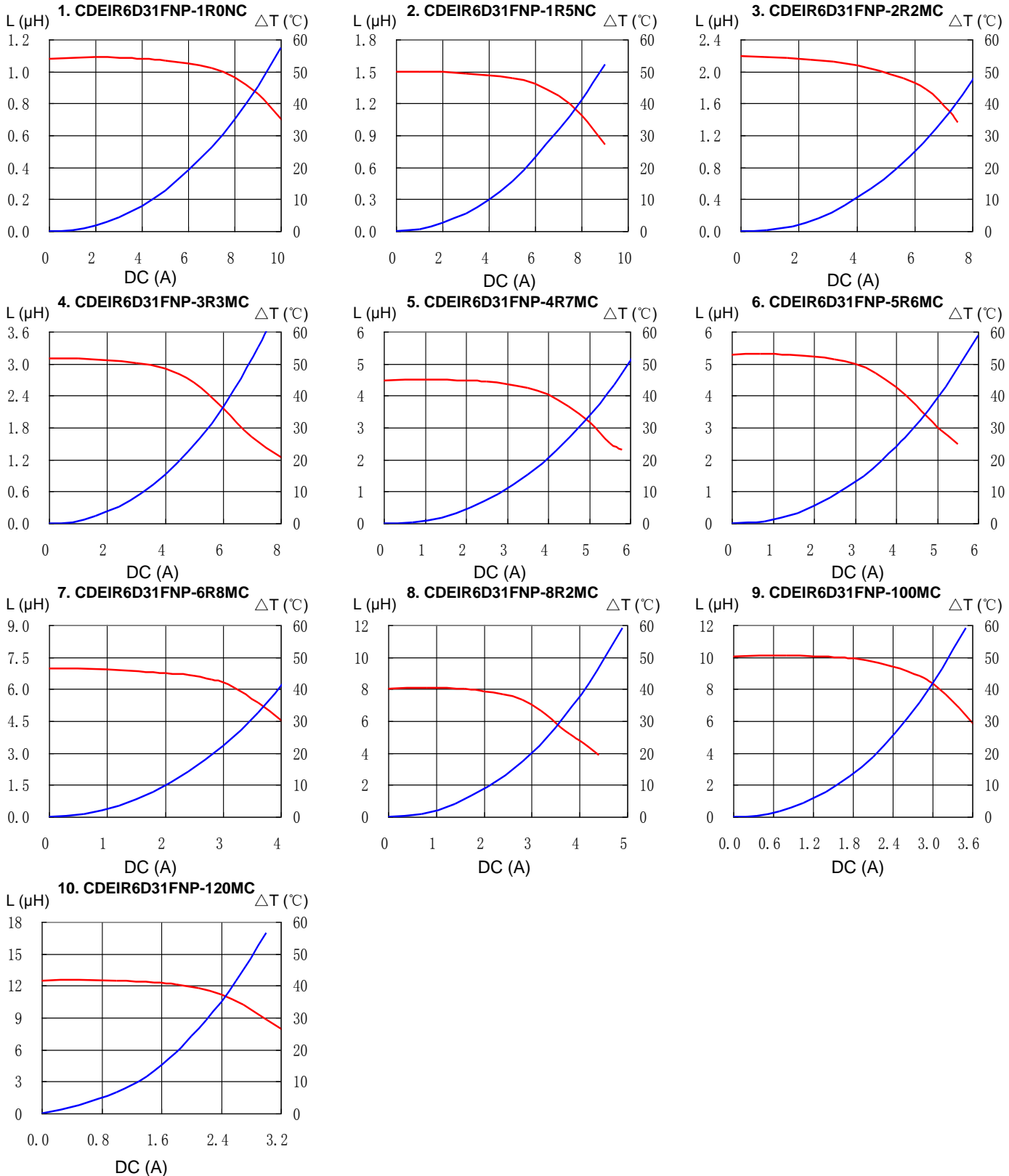
※3. Temperature rise current: The value of D.C. current when the temperature rise is $\Delta t = 40^\circ\text{C}$ ($T_a = 20^\circ\text{C}$).

SMD Power Inductor CDEIR6D31F



Saturation Current & Temperature Rise Graph

— L (20°C) — ΔT

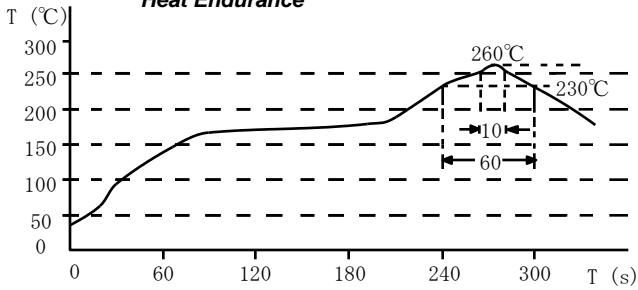


SMD Power Inductor CDEIR6D31F

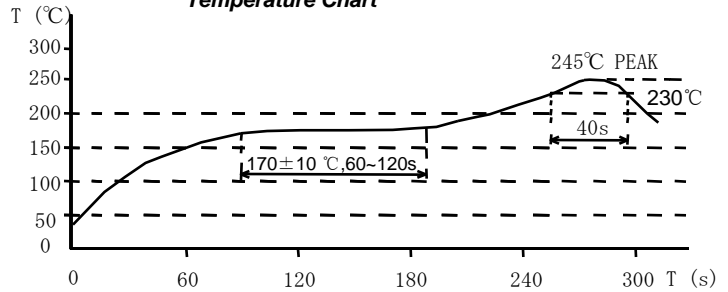


Solder Reflow Condition

Heat Endurance



Temperature Chart



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

Hong Kong

Tel.+852-2880-6781
FAX.+852-2565-9600
sales@hk.sumida.com

Saitama(Japan)

Tel.+81-48-691-7300
FAX.+81-48-691-7340
sales@jp.sumida.com

Chicago

Tel.+1-847-545-6700
FAX. +1-847-545-6720
sales@us.sumida.com

Shanghai

Tel.+86-21-5836-3299
FAX.+86-21-5836-3266
shanghai.sales@cn.sumida.com

Seoul

Tel.+82-2-6237-0777
FAX.+82-2-6237-0778
sales@kr.sumida.com

Obernzell

Tel.+49-8591-937-0
FAX. +49-8591-937-103
contact@eu.sumida.com

Shenzhen

Tel.+86-755-8291-0228
FAX.+86-755-8291-0338
shenzhen.sales@cn.sumida.com

Singapore

Tel.+65-6296-3388
FAX.+65-6841-4426
sales@sg.sumida.com

Neumarkt

Tel.+49-9181-4509-110
FAX. +49-9181-4509-310
infocomp@eu.sumida.com

Taipei

Tel.+886-2-8751-2737
FAX.+886-2-8751-2738
sales@tw.sumida.com

San Jose

Tel.+1-408-321-9660
FAX.+1-408-321-9308
sales@us.sumida.com