

SMD Power Inductor CDEIR6D31F



Halogen Free



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.
- Halogen Free available.

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.

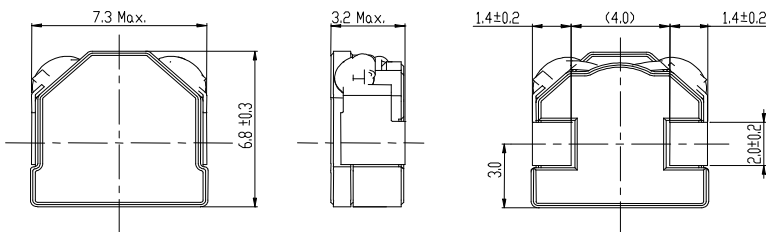
Packaging

- Carrier tape and reel packaging.
- 13.0" diameter reel
- 1500pcs per reel

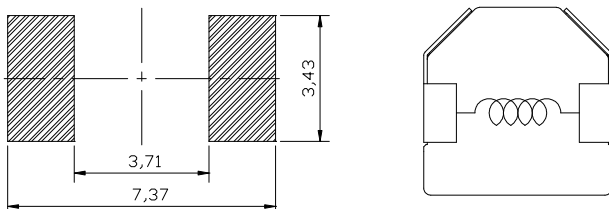
Applications

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

Dimension - [mm]



Land pattern and Schematics - [mm]



Electrical Characteristics

Part No.	Stamp	Inductance (μ H) [Within] ※1	D.C.R.(m Ω) [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 it's nominal value.

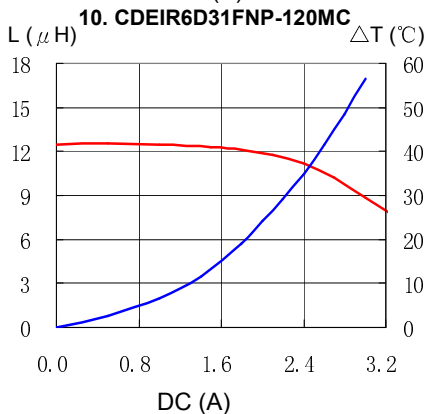
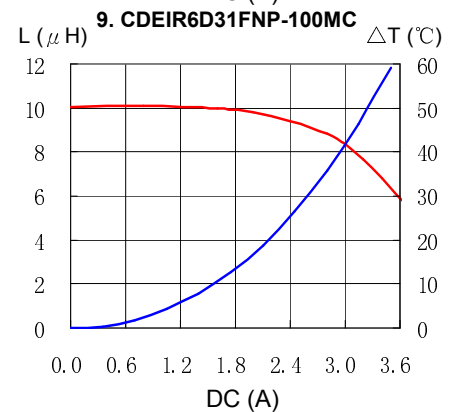
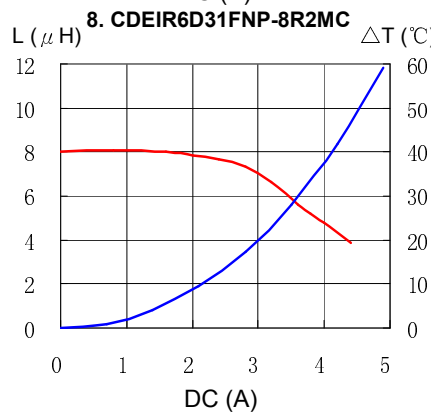
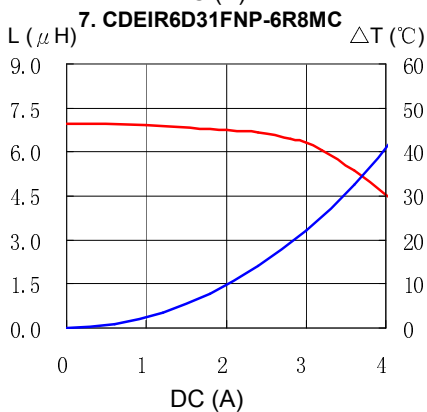
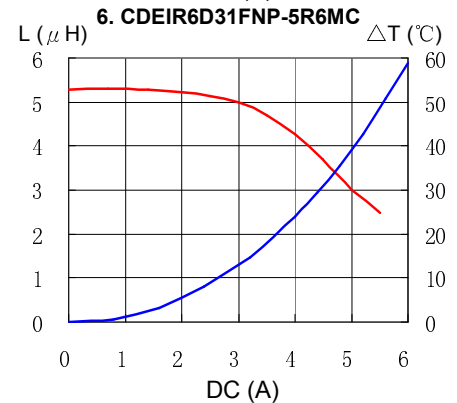
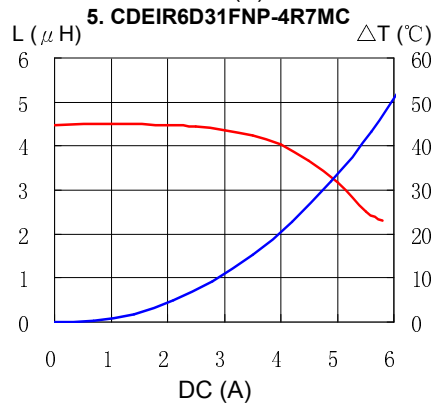
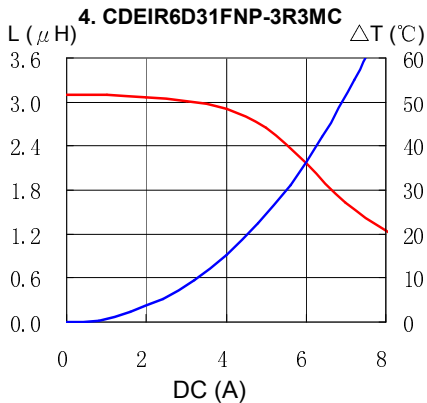
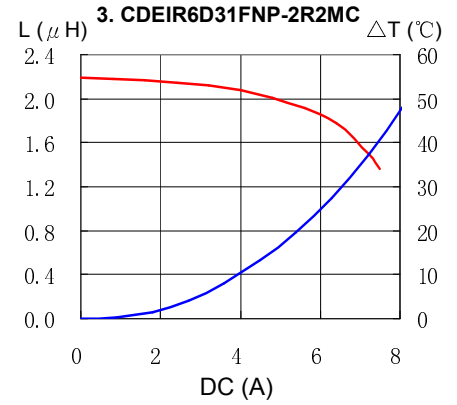
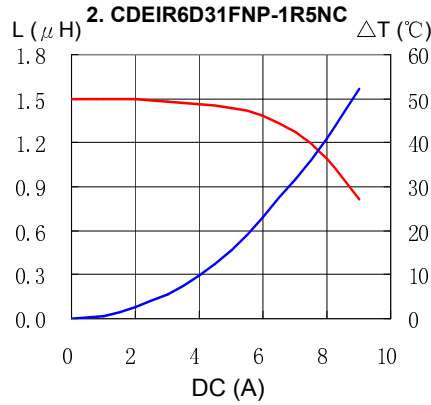
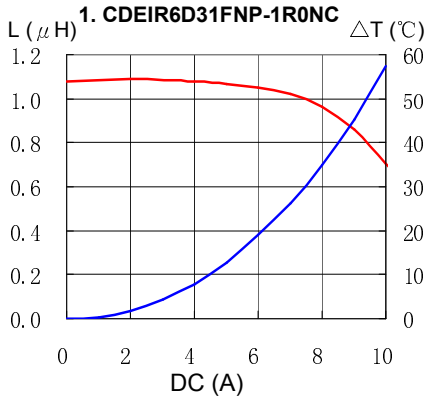
※3. Temperature rise current: The value of D.C. current when the temperature rise is $\Delta t=40^\circ\text{C}$ ($T_a=20^\circ\text{C}$).

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Saturation Current & Temperature Rise Graph

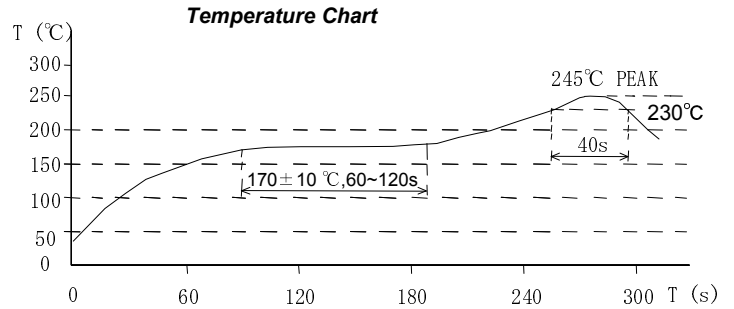
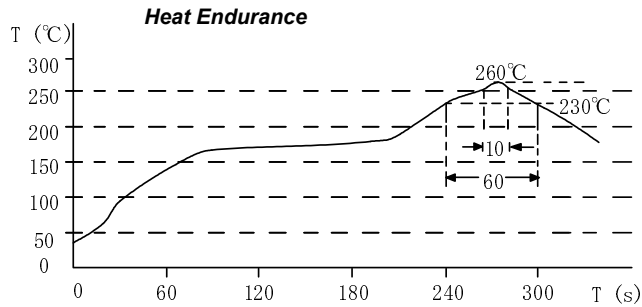
— L (20°C) — ΔT



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Solder Reflow Condition



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