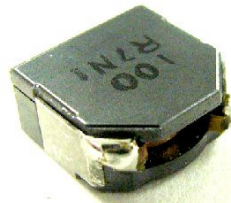


# SMD Power Inductor CDEIR8D38F



Halogen Free



## Description

- Ferrite core construction.
- Magnetically shielded.
- L × W × H: 8.5 × 8.3 × 4.0 mm Max.
- Product weight: 1.1 g(Ref.)
- Moisture Sensitivity Level: 1
- RoHS compliance.

## 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.

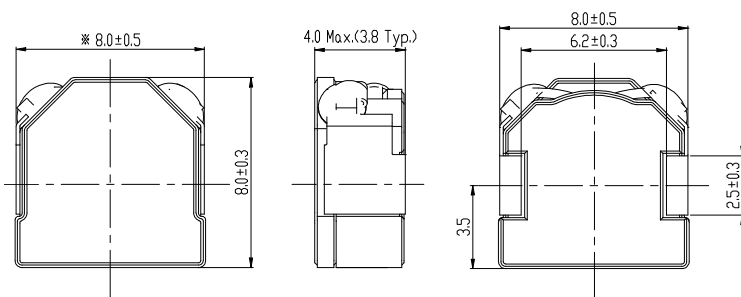
## Packaging

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

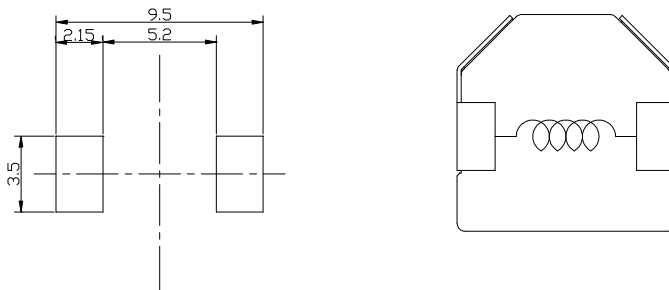
## Applications

- Ideally used in Notebook, PDA and other devices.

## Dimension - [mm]



## Land pattern and Schematics - [mm]



## Electrical Characteristics

| PART NO.           | STAMP | INDUCTANCE ( $\mu$ H)<br>[WITHIN] ※1 | D.C.R.( $m\Omega$ )<br>[MAX.] (Typ.)<br>(at 20°C) | SATURATION CURRENT (A) ※2 |            | TEMPERATURE RISE CURRENT (A) ※3 |
|--------------------|-------|--------------------------------------|---|---------------------------|------------|---------------------------------|
|                    |       |                                      |   | (at 20°C)                 | (at 105°C) |                                 |
| CDEIR8D38FNP-4R0NC | 4R0   | $4.0 \pm 30\%$                       | 23.2(18.5)  | 7.0                       | 5.8        | 4.8                             |
| CDEIR8D38FNP-5R1NC | 5R1   | $5.1 \pm 30\%$                       | 25.9(20.7)  | 6.2                       | 5.1        | 4.6                             |
| CDEIR8D38FNP-6R3NC | 6R3   | $6.3 \pm 30\%$                       | 30.7(24.5)  | 5.3                       | 4.4        | 4.1                             |
| CDEIR8D38FNP-7R6NC | 7R6   | $7.6 \pm 30\%$                       | 34.0(27.2)  | 4.9                       | 4.1        | 3.8                             |
| CDEIR8D38FNP-100NC | 100   | $10 \pm 30\%$                        | 43.8(35.0)  | 4.6                       | 3.8        | 3.4                             |
| CDEIR8D38FNP-120NC | 120   | $12 \pm 30\%$                        | 66.7(53.3)  | 4.0                       | 3.2        | 2.5                             |
| CDEIR8D38FNP-150NC | 150   | $15 \pm 30\%$                        | 70.2(56.1)  | 3.7                       | 3.0        | 2.4                             |
| CDEIR8D38FNP-180NC | 180   | $18 \pm 30\%$                        | 83.1(66.5)  | 3.3                       | 2.7        | 2.3                             |
| CDEIR8D38FNP-220NC | 220   | $22 \pm 30\%$                        | 88.3(70.6)  | 3.0                       | 2.5        | 2.2                             |

※1. Measuring condition: at 100kHz.

※2. Saturation current: The value of D.C. current when the inductance decreases to 65% of it's nominal value.

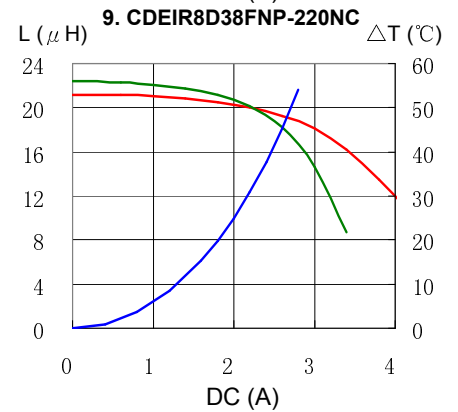
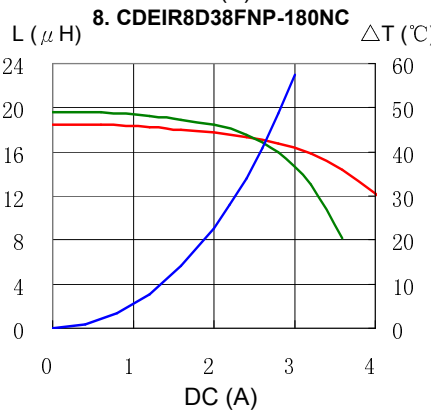
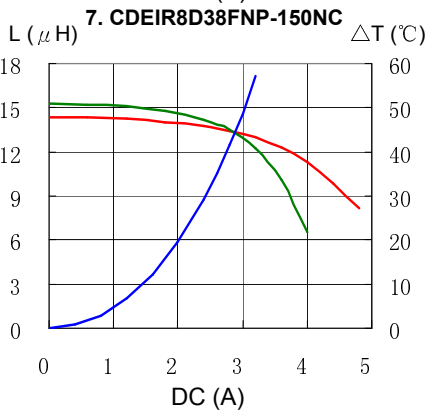
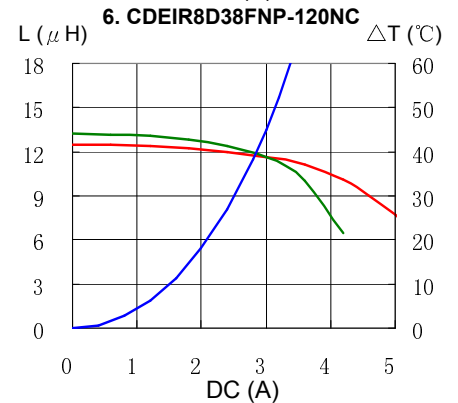
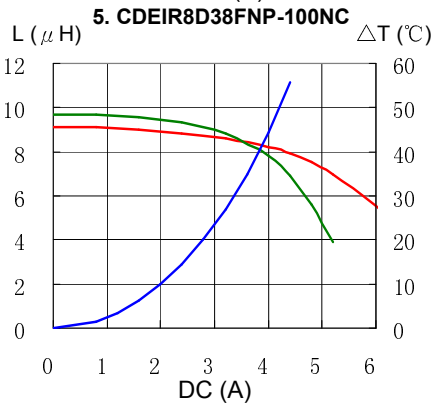
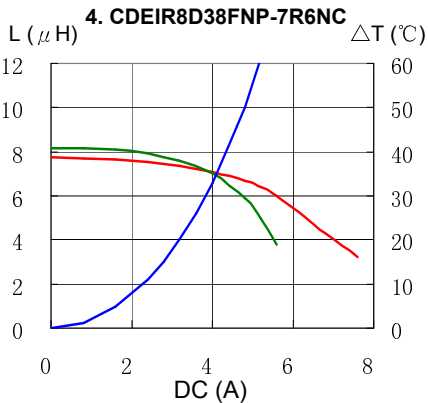
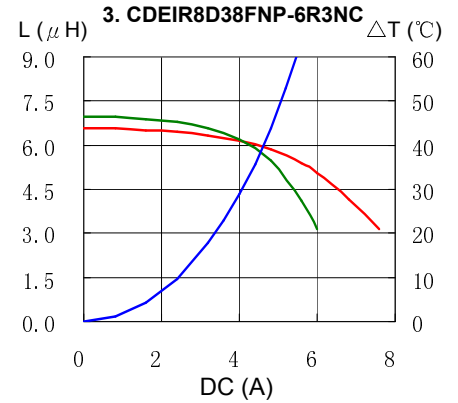
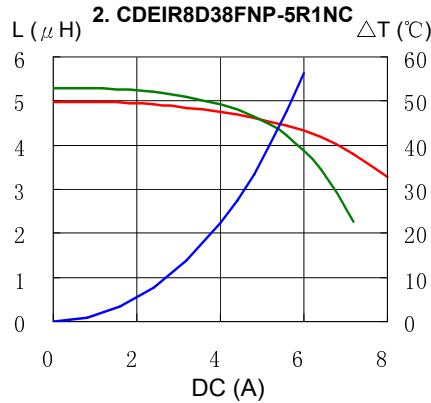
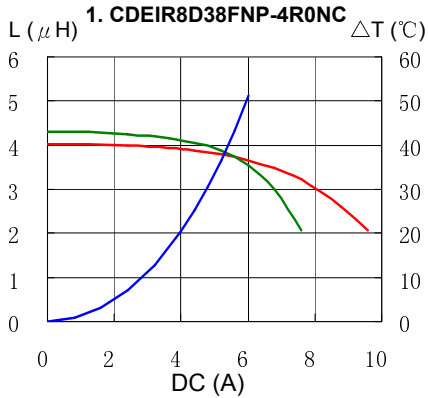
※3. Temperature rise current: The value of D.C. current when the temperature rise is  $\Delta t = 40^\circ\text{C}$  ( $T_a = 20^\circ\text{C}$ ).

# SMD Power Inductor CDEIR8D38F



## Saturation Current & Temperature Rise Graph

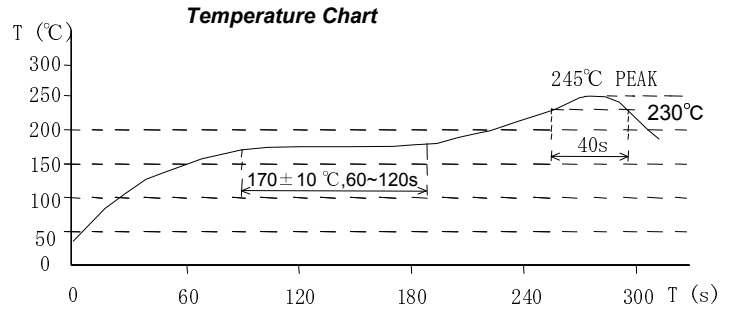
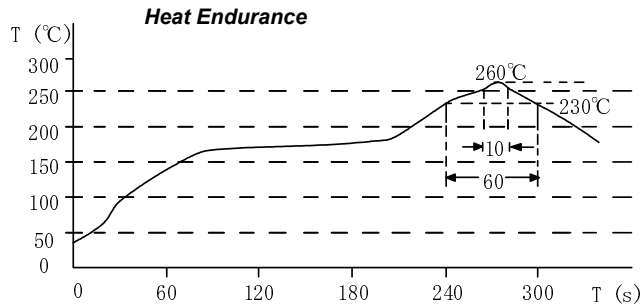
— L (20°C) — L (100°C) —  $\Delta T$



# SMD Power Inductor CDEIR8D38F



## Solder Reflow Condition



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