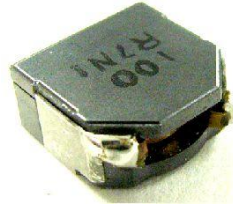




**THE DATASHEET OF  
CDEIR8D38FNP-180NC**



# SMD Power Inductor CDEIR8D38F



## 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.

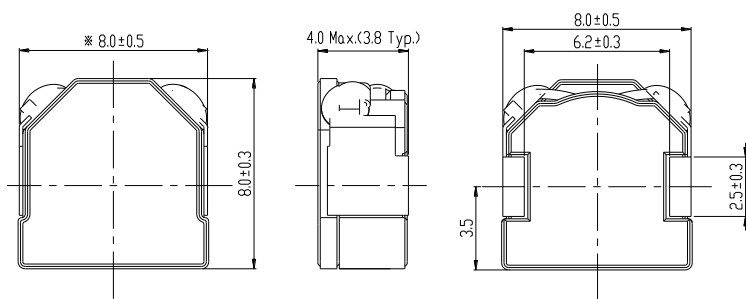
## Packaging

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

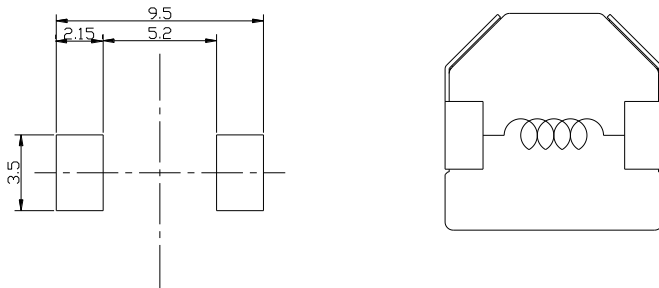
## Applications

- Ideally used in Notebook, PDA and other devices.

## Dimension - [mm]



## Land pattern and Schematics - [mm]



## Electrical Characteristics

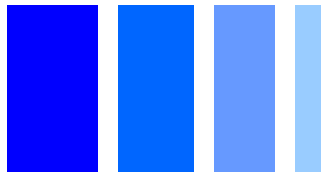
PART NO.	STAMP	INDUCTANCE (uH) [WITHIN] ※1	D.C.R.(mΩ) [MAX.] (Typ.) (at 20°C)	SATURATION CURRENT (A) ※2		TEMPERATURE RISE CURRENT (A) ※3
				(at 20°C)	(at 105°C)	
CDEIR8D38FNP-4R0NC	4R0	4.0 ± 30%	23.2(18.5)	7.0	5.8	4.8
CDEIR8D38FNP-5R1NC	5R1	5.1 ± 30%	25.9(20.7)	6.2	5.1	4.6
CDEIR8D38FNP-6R3NC	6R3	6.3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

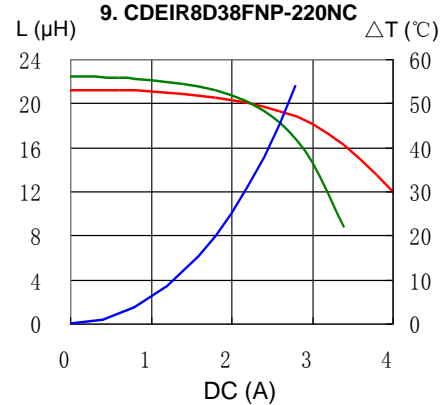
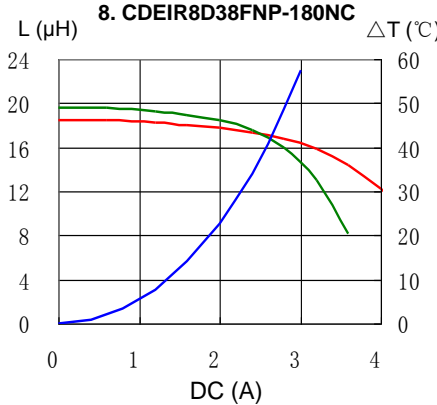
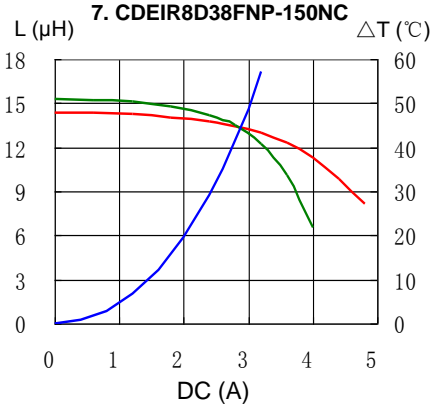
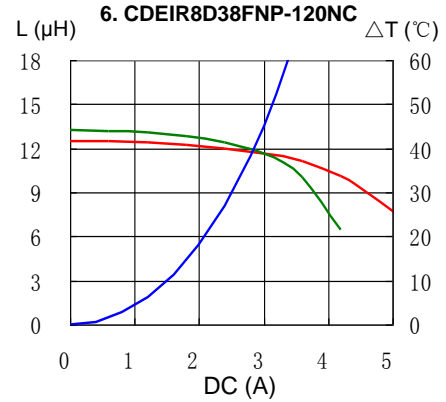
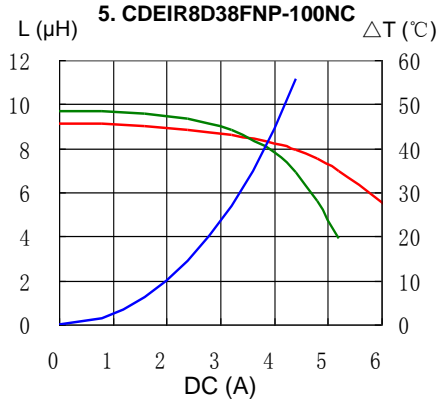
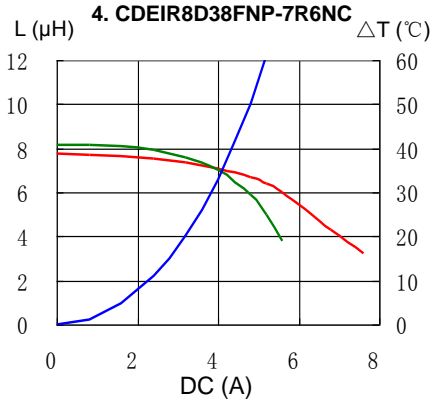
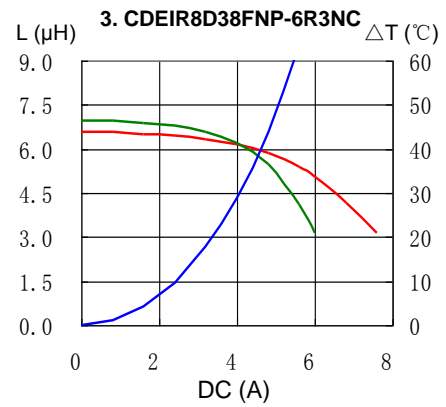
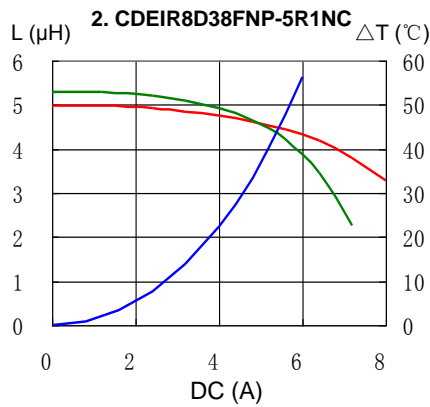
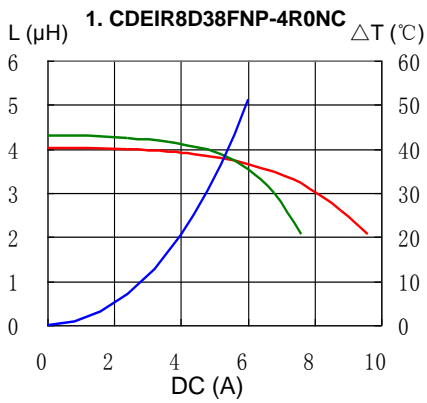
※3. Temperature rise current: The value of D.C. current when the temperature rise is  $\Delta t = 40^\circ\text{C}$  ( $T_a = 20^\circ\text{C}$ ).

# SMD Power Inductor CDEIR8D38F

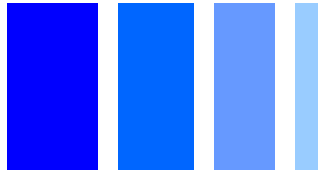


## Saturation Current & Temperature Rise Graph

— L (20°C) — L (100°C) —  $\Delta T$

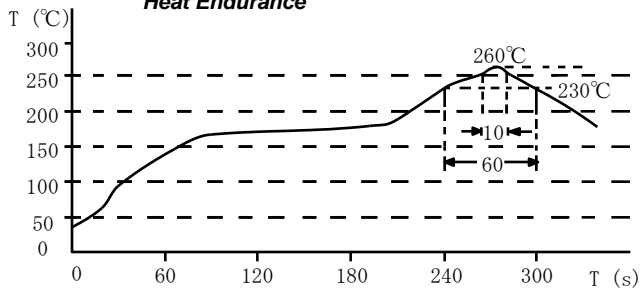


# SMD Power Inductor CDEIR8D38F

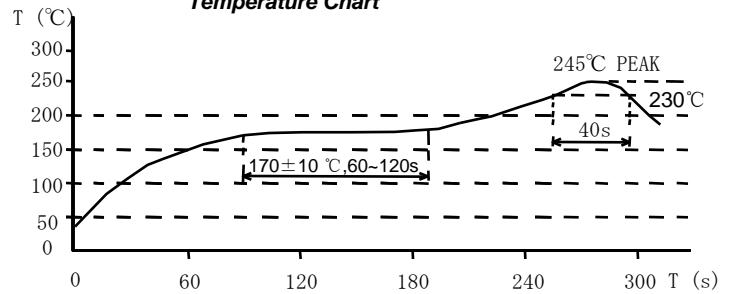


## Solder Reflow Condition

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](mailto:sales@hk.sumida.com)

### Saitama(Japan)

Tel.+81-48-691-7300  
FAX.+81-48-691-7340  
[sales@jp.sumida.com](mailto:sales@jp.sumida.com)

### Chicago

Tel.+1-847-545-6700  
FAX. +1-847-545-6720  
[sales@us.sumida.com](mailto:sales@us.sumida.com)

### Shanghai

Tel.+86-21-5836-3299  
FAX.+86-21-5836-3266  
[shanghai.sales@cn.sumida.com](mailto:shanghai.sales@cn.sumida.com)

### Seoul

Tel.+82-2-6237-0777  
FAX.+82-2-6237-0778  
[sales@kr.sumida.com](mailto:sales@kr.sumida.com)

### Obernzell

Tel.+49-8591-937-0  
FAX. +49-8591-937-103  
[contact@eu.sumida.com](mailto:contact@eu.sumida.com)

### Shenzhen

Tel.+86-755-8291-0228  
FAX.+86-755-8291-0338  
[shenzhen.sales@cn.sumida.com](mailto:shenzhen.sales@cn.sumida.com)

### Singapore

Tel.+65-6296-3388  
FAX.+65-6841-4426  
[sales@sg.sumida.com](mailto:sales@sg.sumida.com)

### Neumarkt

Tel.+49-9181-4509-110  
FAX. +49-9181-4509-310  
[infocomp@eu.sumida.com](mailto:infocomp@eu.sumida.com)

### Taipei

Tel.+886-2-8751-2737  
FAX.+886-2-8751-2738  
[sales@tw.sumida.com](mailto:sales@tw.sumida.com)

### San Jose







Tel.+1-408-321-9660  
FAX.+1-408-321-9308  
[sales@us.sumida.com](mailto:sales@us.sumida.com)

## Looking for pricing, stock, or lifecycle information?

Click below to explore more details on WIN SOURCE:

-  [View CDEIR8D38FNP-180NC on WIN SOURCE](#)
-  [Sumida America Components Inc. Information](#)

## Optimize Your Supply Chain with WIN SOURCE Solutions

-  Global Sourcing Solution
-  Obsolete Management
-  Cost Control Management
-  Shortage Management
-  Alternative Solution
-  Excess Inventory Management