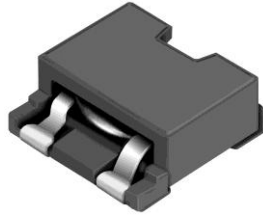
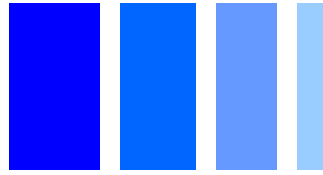


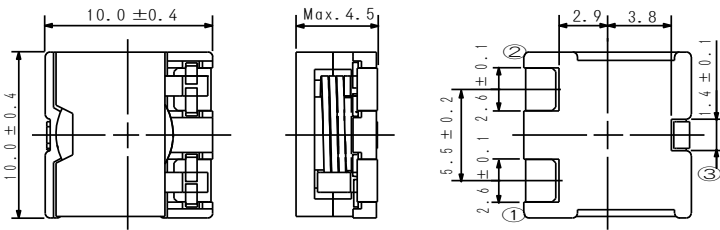
# SMD Power Inductor CDEP104



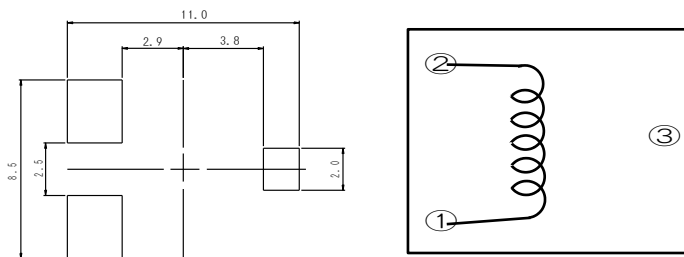
## Description

- 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

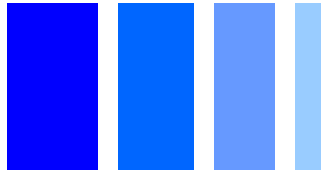
PART NO.	STAMP	INDUCTANCE [WITHIN] ※1	D.C.R. (mΩ) [MAX.] (at 20°C)	THE SATURATION CURRENT (A) ※2		TEMPERATURE RISE CURRENT (A) ※3 ΔT=40°C
				(at 20°C)	(at100°C)	
CDEP1Ø4NP-ØR2NC-5Ø	0R2NS	0.22μH±30%	2.2(1.8)	39.6	31.6	18.0
CDEP1Ø4NP-ØR4MC-5Ø	0R4MS	0.45μH±20%	3.7(3.1)	27.6	22.1	13.4
CDEP1Ø4NP-ØR8MC-5Ø	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.

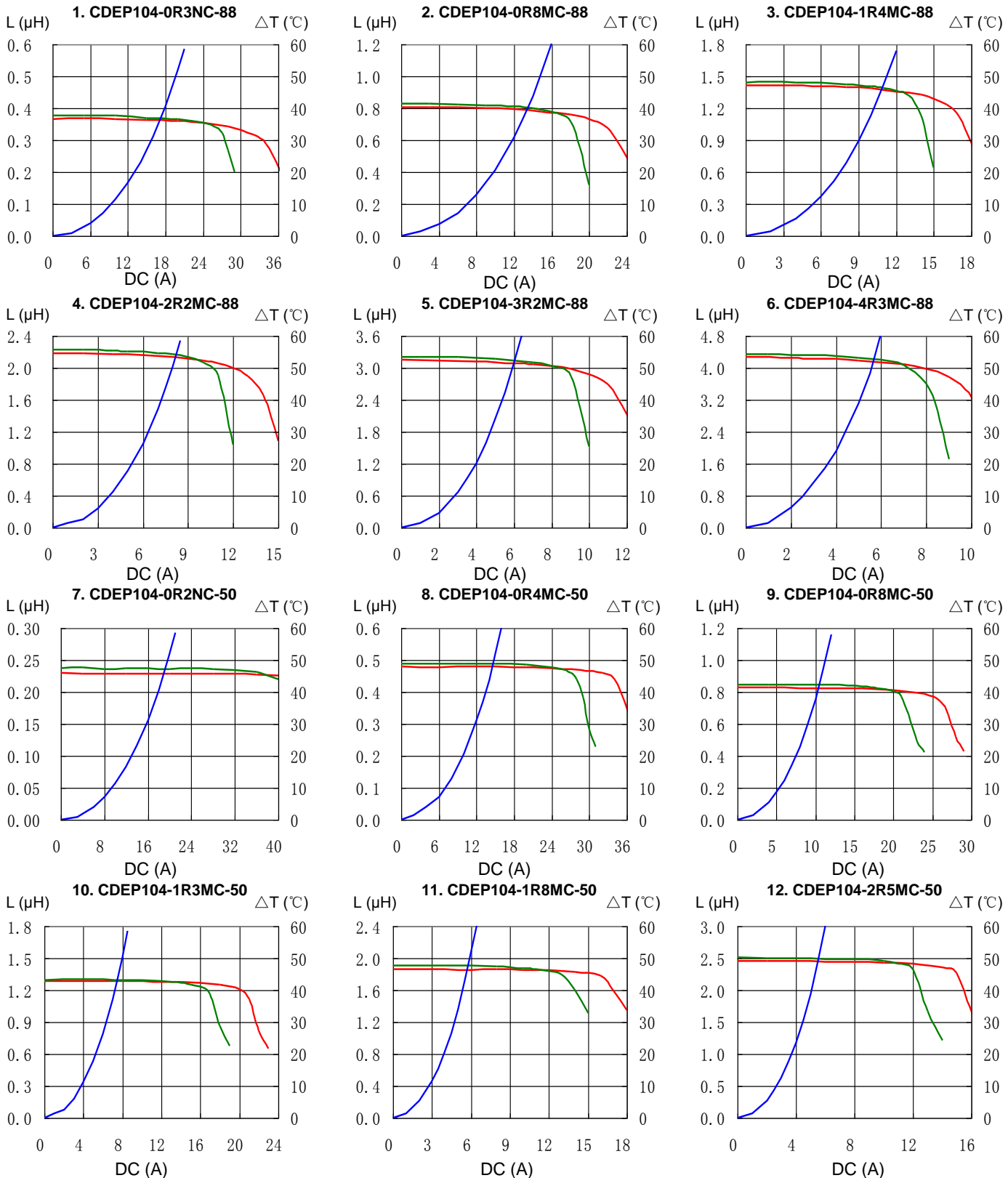
※3. Temperature rise current: The value of D.C. current when the temperature rise is Δt=40°C (Ta=20°C).

# SMD Power Inductor CDEP104

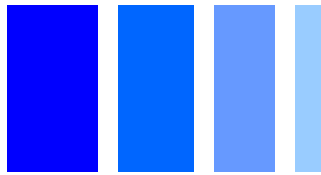


## Saturation Current & Temperature Rise Graph

— L (20°C) — L (100°C) —  $\Delta T$

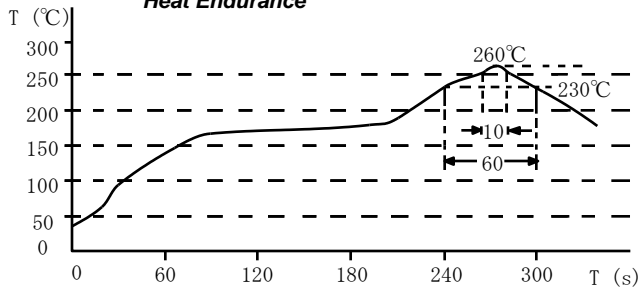


# SMD Power Inductor CDEP104

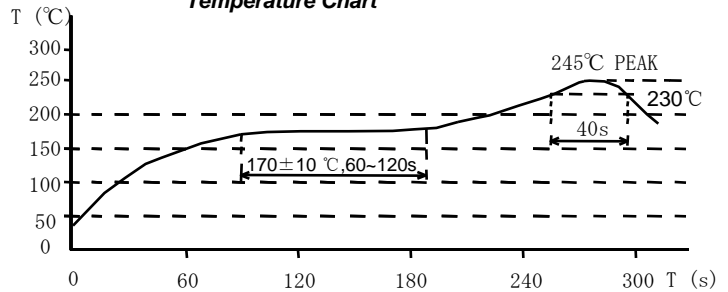


## Solder Reflow Condition

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)

# Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

## Sumida:

[CDEP104NP-1R4MC-88](#) [CDEP104NP-2R2MC-88](#) [CDEP104NP-2R5MC-50](#) [CDEP104NP-0R8MC-50](#) [CDEP104NP-0R3NC-88](#) [CDEP104NP-0R2NC-50](#) [CDEP104NP-3R2MC-88](#) [CDEP104NP-0R8MC-88](#) [CDEP104NP-1R3MC-50](#) [CDEP104NP-1R8MC-50](#) [CDEP104NP-0R4MC-50](#) [CDEP104NP-4R3MC-88](#)