

# SMD Power Inductor CDH38D16D/LD



Halogen Free



## Description

- Ferrite drum core construction.
- Magnetically unshielded.
- L × W × H: 4.1 × 3.95 × 1.8mm Max.
- Product weight: 80mg(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.

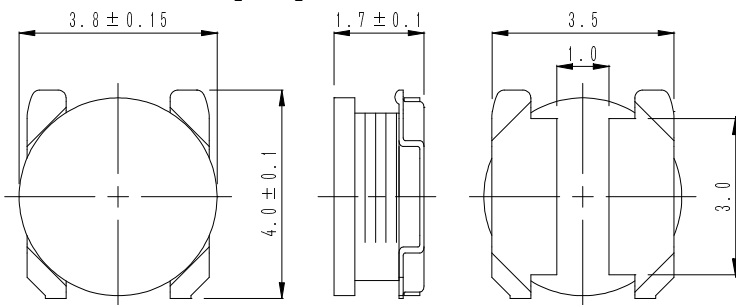
## Packaging

- Carrier tape and reel packaging.
- 13.0" diameter reel
- 3000pcs per reel

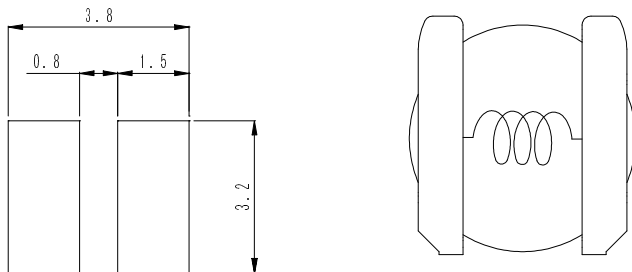
## Applications

- Ideally used in Mobilephone, PDA, MP3, DSC/ DVC, HDD etc as DC-DC converter inductors.

## Dimension - [mm]



## Land pattern and Schematics - [mm]



# SMD Power Inductor CDH38D16D/LD



## Electrical Characteristics

Part No.	Stamp	Inductance [ $\mu$ H] [Within] ※1	D.C.R. (m $\Omega$ ) [Within] (at 20°C)	Saturation current (A) ※2		Temperature rise current (A) ※3
				(at 20°C)	(at 105°C)	
CDH38D16DLDF-1R0MC	A	1.0 $\pm$ 20%	25 $\pm$ 25%	2.40	1.90	3.12
CDH38D16DLDF-1R7MC	C	1.7 $\pm$ 20%	33 $\pm$ 25%	1.90	1.50	2.90
CDH38D16DLDF-2R0MC	E	2.0 $\pm$ 20%	38 $\pm$ 25%	1.70	1.35	2.70
CDH38D16DLDF-3R3MC	G	3.3 $\pm$ 20%	53 $\pm$ 25%	1.35	1.05	2.20
CDH38D16DLDF-4R7MC	J	4.7 $\pm$ 20%	73 $\pm$ 25%	1.15	0.90	1.85
CDH38D16DLDF-6R8MC	L	6.8 $\pm$ 20%	108 $\pm$ 20%	0.95	0.75	1.52
CDH38D16DLDF-100MC	N	10 $\pm$ 20%	157 $\pm$ 20%	0.76	0.60	1.26
CDH38D16DLDF-150MC	Q	15 $\pm$ 20%	250 $\pm$ 20%	0.64	0.50	1.02
CDH38D16DLDF-220MC	S	22 $\pm$ 20%	340 $\pm$ 20%	0.52	0.42	0.78
CDH38D16DLDF-330MC	U	33 $\pm$ 20%	540 $\pm$ 20%	0.42	0.34	0.64

※1. Measuring condition: at 100kHz.

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

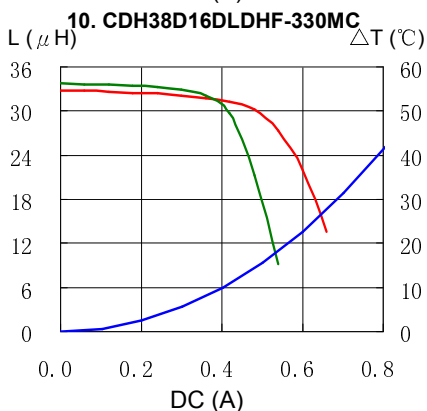
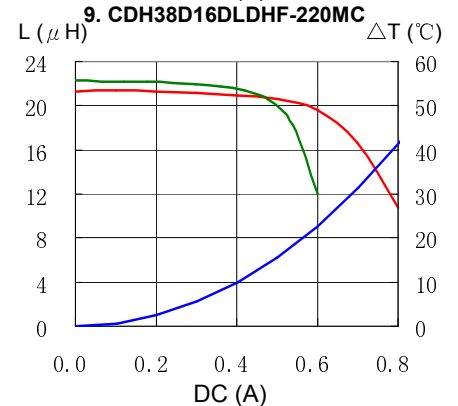
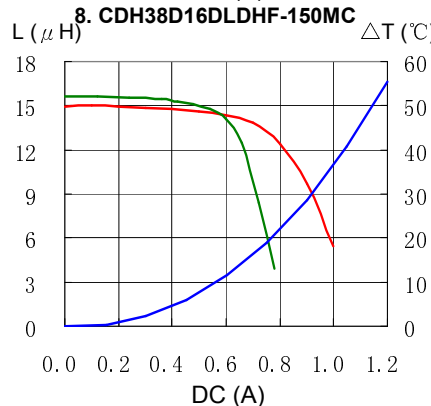
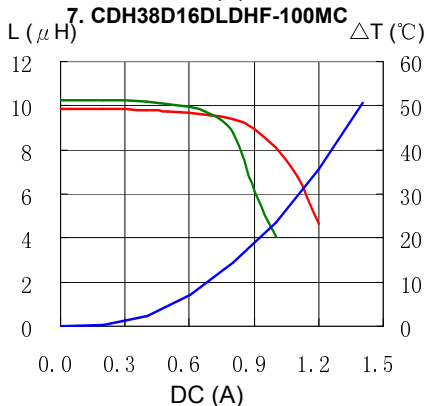
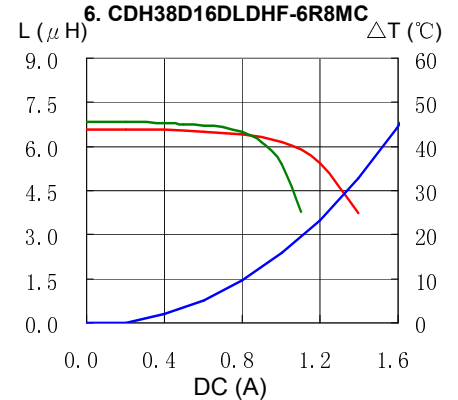
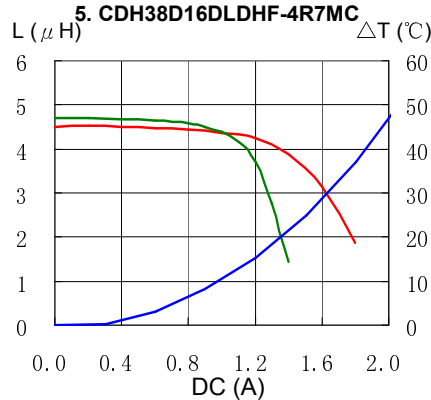
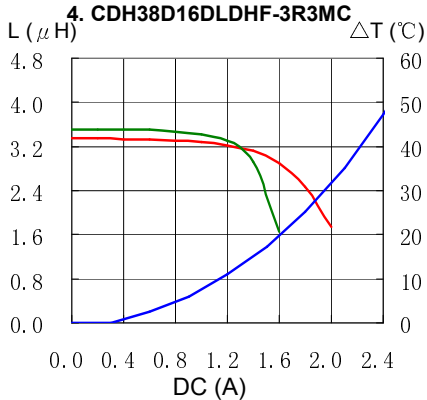
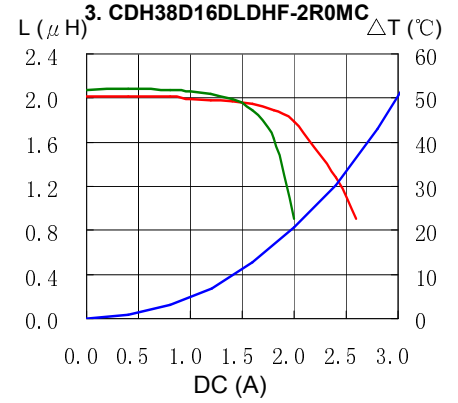
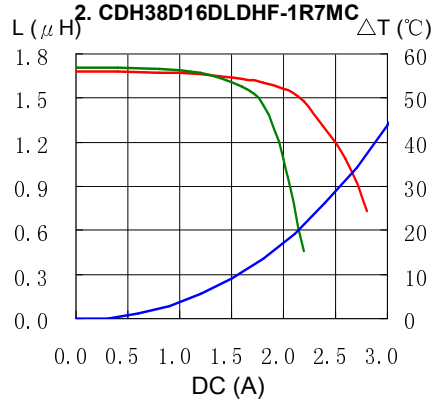
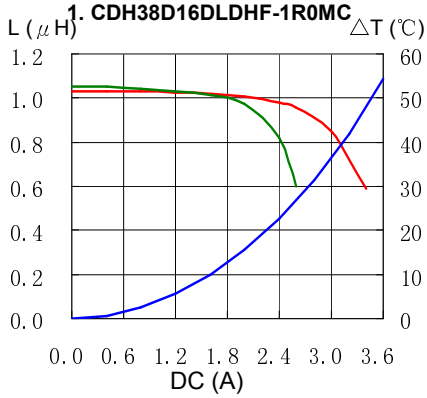
※3. Temperature rise current: The value of D.C. current when the temperature rise is  $\Delta t=40^{\circ}\text{C}$  ( $T_a=20^{\circ}\text{C}$ ).

# SMD Power Inductor CDH38D16D/LD



## Saturation Current & Temperature Rise Graph

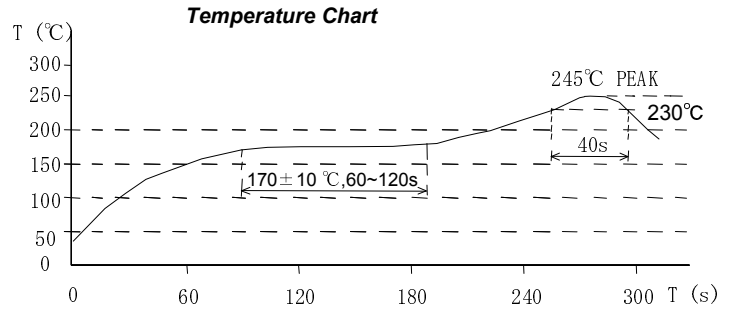
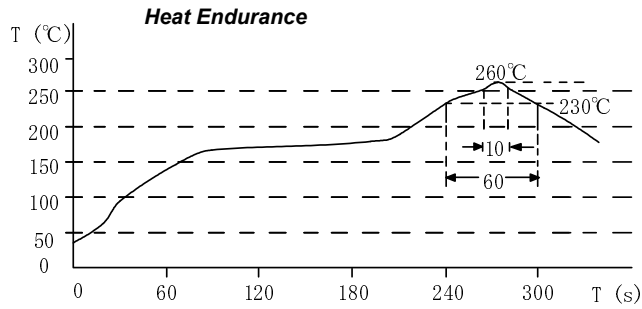
— L (20°C) — L (105°C) —  $\Delta T$



# SMD Power Inductor CDH38D16D/LD



## Solder Reflow Condition



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)

### Oberzell

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)