

## Excellent Integrated System Limited

Stocking Distributor

Click to view price, real time Inventory, Delivery & Lifecycle Information:

[Sumida Corporation](#)  
[CDRH38D16RLDNP-6R8MC](#)

For any questions, you can email us directly:

[sales@integrated-circuit.com](mailto:sales@integrated-circuit.com)

# SMD Power Inductor CDRH38D16R/LD



## Description

- Ferrite drum core construction.
- Magnetically shielded.
- L × W × H: 4.2 × 3.95 × 1.8 mm Max.
- Product weight: 85mg(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.

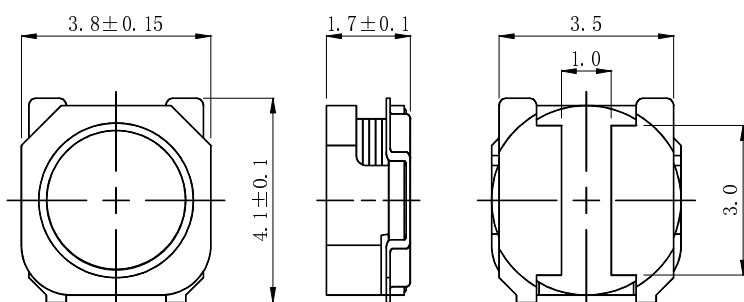
## Packaging

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

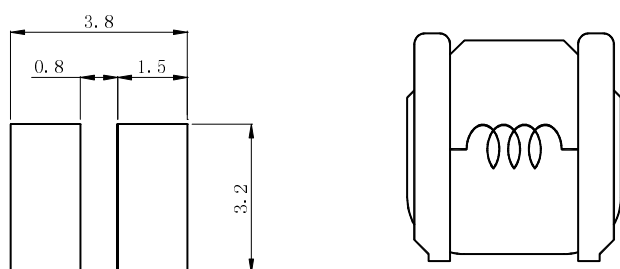
## Applications

- 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 CDRH38D16R/LD



### Electrical Characteristics

| Part No.             | Stamp | Inductance (μH)<br>[Within] ※1 | D.C.R. (mΩ)<br>[Within]<br>(at20°C) | Saturation current<br>(A) ※2 |           | Temperature rise<br>Current (A) ※3 |
|----------------------|-------|--------------------------------|-------------------------------------|------------------------------|-----------|------------------------------------|
|                      |       |                                |                                     | (at20°C)                     | (at100°C) |                                    |
| CDRH38D16RLDNP-R90NC | A     | 0.90 ± 30%                     | 18 ± 25%                            | 1.54                         | 1.31      | 3.80                               |
| CDRH38D16RLDNP-1R6NC | B     | 1.6 ± 30%                      | 25 ± 25%                            | 1.14                         | 0.99      | 3.15                               |
| CDRH38D16RLDNP-2R2NC | C     | 2.2 ± 30%                      | 30 ± 25%                            | 1.01                         | 0.88      | 3.00                               |
| CDRH38D16RLDNP-3R3MC | D     | 3.3 ± 20%                      | 37 ± 25%                            | 0.81                         | 0.70      | 2.60                               |
| CDRH38D16RLDNP-4R7MC | E     | 4.7 ± 20%                      | 55 ± 25%                            | 0.69                         | 0.59      | 2.00                               |
| CDRH38D16RLDNP-6R8MC | F     | 6.8 ± 20%                      | 75 ± 25%                            | 0.56                         | 0.49      | 1.75                               |
| CDRH38D16RLDNP-100MC | G     | 10 ± 20%                       | 104 ± 20%                           | 0.47                         | 0.40      | 1.45                               |
| CDRH38D16RLDNP-150MC | H     | 15 ± 20%                       | 163 ± 20%                           | 0.36                         | 0.32      | 1.13                               |
| CDRH38D16RLDNP-220MC | J     | 22 ± 20%                       | 248 ± 20%                           | 0.32                         | 0.28      | 0.90                               |
| CDRH38D16RLDNP-330MC | K     | 33 ± 20%                       | 351 ± 20%                           | 0.26                         | 0.23      | 0.75                               |
| CDRH38D16RLDNP-470MC | L     | 47 ± 20%                       | 490 ± 20%                           | 0.22                         | 0.19      | 0.65                               |
| CDRH38D16RLDNP-680MC | M     | 68 ± 20%                       | 867 ± 20%                           | 0.18                         | 0.15      | 0.45                               |
| CDRH38D16RLDNP-101MC | N     | 100 ± 20%                      | 1335 ± 20%                          | 0.15                         | 0.12      | 0.35                               |

※1. Measuring condition: at 100kHz.

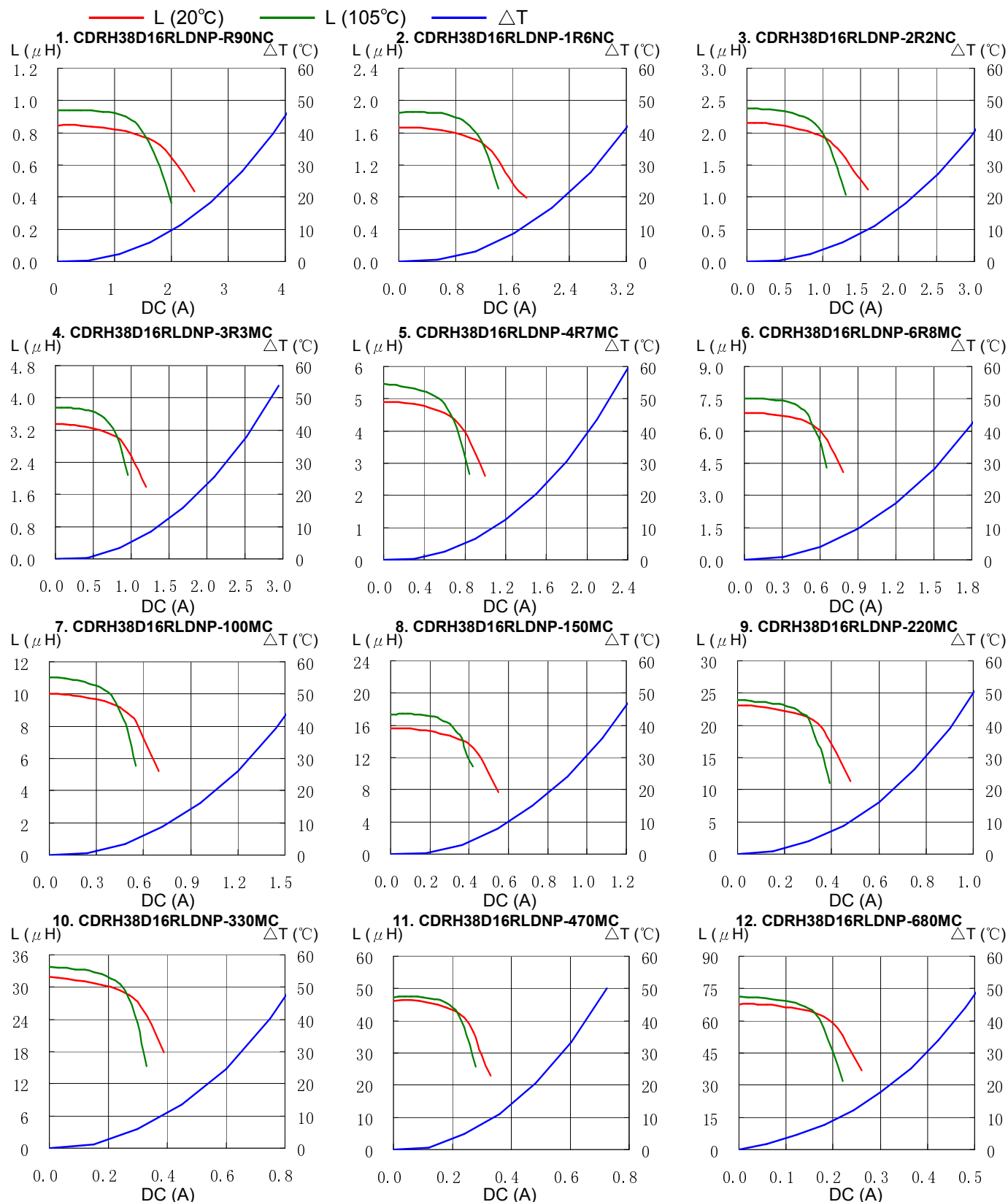
※2. Saturation current: The value of D.C. current when the inductance decreases to 70% of it's nominal value.

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

# SMD Power Inductor CDRH38D16R/LD



## Saturation Current & Temperature Rise Graph

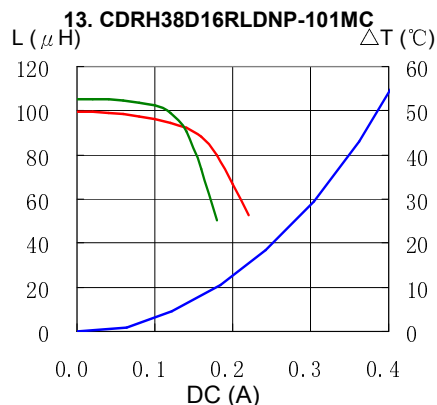


# SMD Power Inductor CDRH38D16R/LD

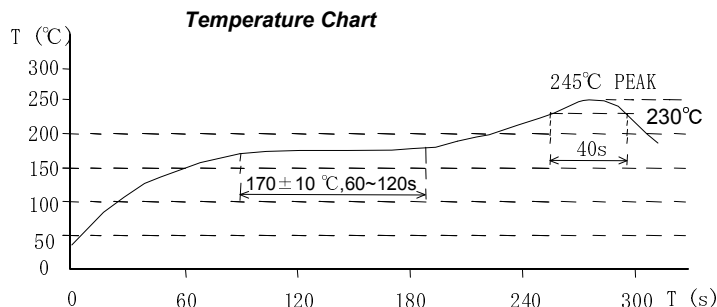
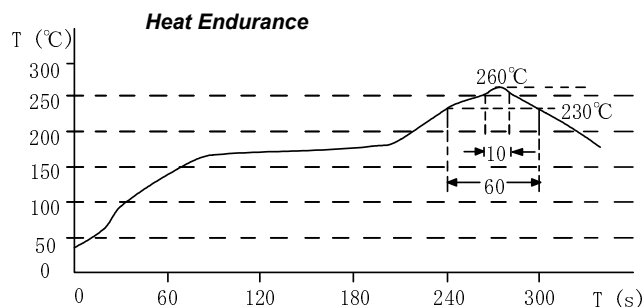


## Saturation Current & Temperature Rise Graph

— L (20°C) — L (105°C) —  $\Delta T$



## 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)

### 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)