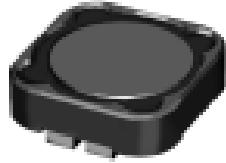




**THE DATASHEET OF  
CDRH124NP-270MC**



# SMD Power Inductor CDRH124



## Description

- Ferrite drum core construction.
- Magnetically shielded.
- L × W × H: 12.3 × 12.3 × 4.5 mm Max.
- Product weight: 2.3g(Ref.)
- Moisture Sensitivity Level: 1
- RoHS compliance.

## Environmental Data

- Operating temperature range: -40°C ~ +100°C (including coil's self temperature rise)
- Storage temperature range: -40°C ~ +100°C
- Solder reflow temperature: 260 °C peak.

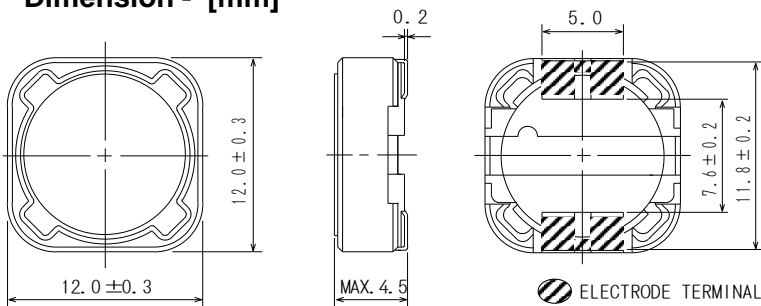
## Packaging

- Carrier tape and reel packaging
- 12.9" diameter reel
- 500pcs per reel

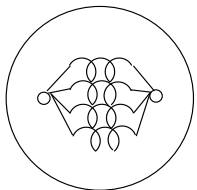
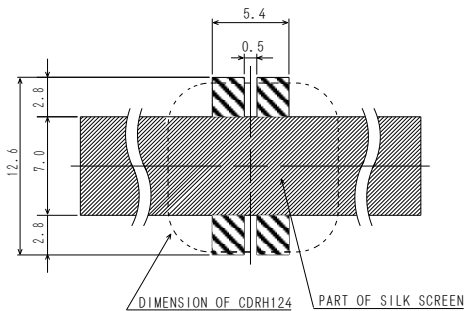
## Applications

- Ideally used in Notebook PC, LCD TV, DVD, Game machine, STB, Projector etc as DC-DC converter inductors.

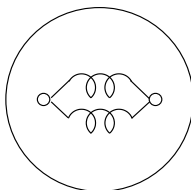
## Dimension - [mm]



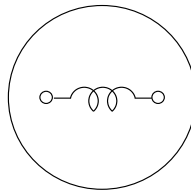
## Land pattern and Schematics - [mm]



3.9µH~10µH



12µH~47µH,  
68µH,82µH



56µH,  
100µH~330µH



## Electrical Characteristics

| Part Name       | Stamp | Inductance<br>( $\mu\text{H}$ )<br>[ within ] ※1 | D.C.R. (m $\Omega$ )<br>[Max.] (Typ.)<br>(at 20°C) | Rated current<br>(A) ※2 |
|-----------------|-------|--|--|-------------------------|
| CDRH124NP-3R9MC | 3R9   | 3.9 $\pm$ 20%                                    | 15(12)   | 6.5                     |
| CDRH124NP-4R7MC | 4R7   | 4.7 $\pm$ 20%                                    | 18(14)   | 5.7                     |
| CDRH124NP-6R8MC | 6R8   | 6.8 $\pm$ 20%                                    | 23(18)   | 4.9                     |
| CDRH124NP-8R2MC | 8R2   | 8.2 $\pm$ 20%                                    | 26(21)   | 4.6                     |
| CDRH124NP-100MC | 100   | 10 $\pm$ 20%                                     | 28(22)   | 4.5                     |
| CDRH124NP-120MC | 120   | 12 $\pm$ 20%                                     | 38(30)   | 4.0                     |
| CDRH124NP-150MC | 150   | 15 $\pm$ 20%                                     | 50(40)   | 3.2                     |
| CDRH124NP-180MC | 180   | 18 $\pm$ 20%                                     | 57(46)   | 3.1                     |
| CDRH124NP-220MC | 220   | 22 $\pm$ 20%                                     | 66(53)   | 2.9                     |
| CDRH124NP-270MC | 270   | 27 $\pm$ 20%                                     | 80(64)   | 2.8                     |
| CDRH124NP-330MC | 330   | 33 $\pm$ 20%                                     | 97(78)   | 2.7                     |
| CDRH124NP-390MC | 390   | 39 $\pm$ 20%                                     | 132(106)   | 2.1                     |
| CDRH124NP-470MC | 470   | 47 $\pm$ 20%                                     | 150(120)   | 1.9                     |
| CDRH124NP-560MC | 560   | 56 $\pm$ 20%                                     | 190(152)   | 1.8                     |
| CDRH124NP-680MC | 680   | 68 $\pm$ 20%                                     | 220(176)   | 1.5                     |
| CDRH124NP-820MC | 820   | 82 $\pm$ 20%                                     | 260(208)   | 1.3                     |
| CDRH124NP-101MC | 101   | 100 $\pm$ 20%                                    | 308(246)   | 1.2                     |
| CDRH124NP-121MC | 121   | 120 $\pm$ 20%                                    | 380(304)   | 1.1                     |
| CDRH124NP-151MC | 151   | 150 $\pm$ 20%                                    | 530(424)   | 0.95                    |
| CDRH124NP-181MC | 181   | 180 $\pm$ 20%                                    | 620(496)   | 0.85                    |
| CDRH124NP-221MC | 221   | 220 $\pm$ 20%                                    | 700(560)   | 0.8                     |
| CDRH124NP-271MC | 271   | 270 $\pm$ 20%                                    | 870(696)   | 0.6                     |
| CDRH124NP-331MC | 331   | 330 $\pm$ 20%                                    | 990(792)   | 0.5                     |

※1. Inductance measuring condition: at 100 kHz.

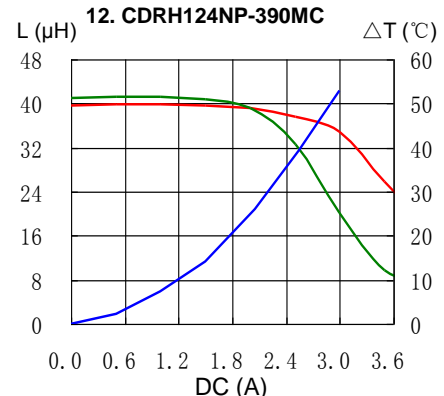
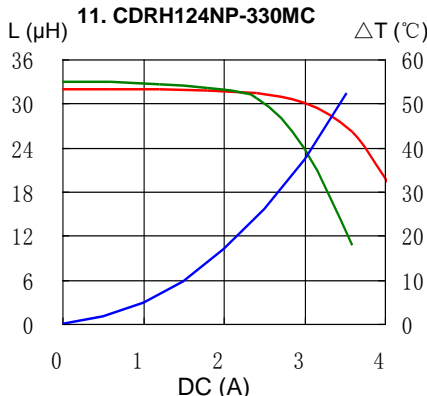
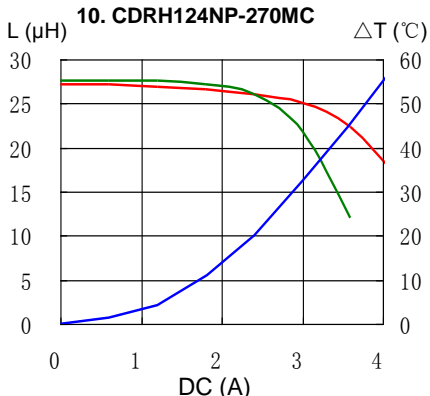
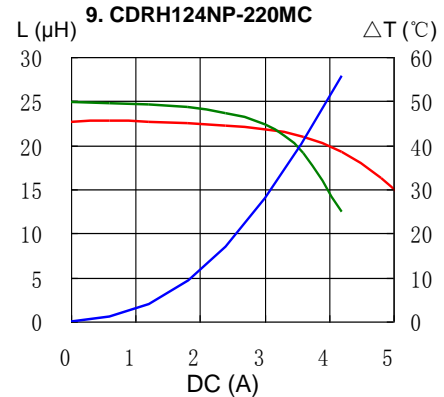
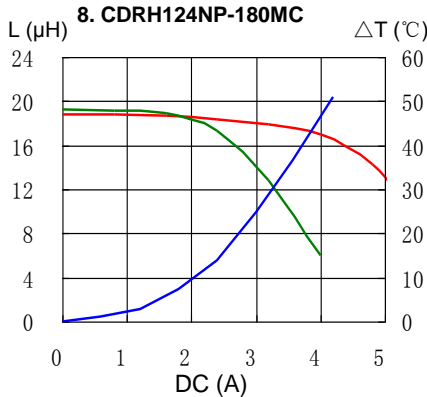
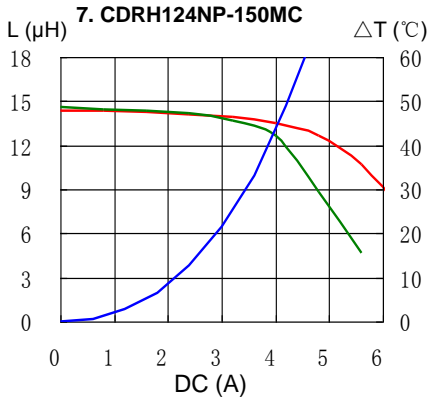
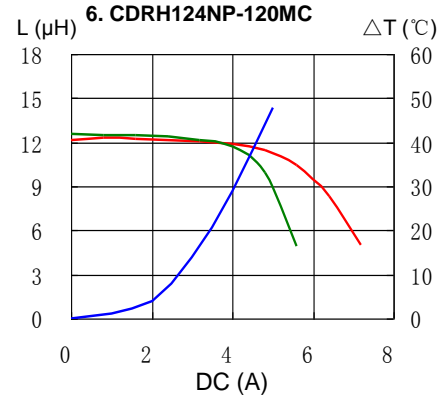
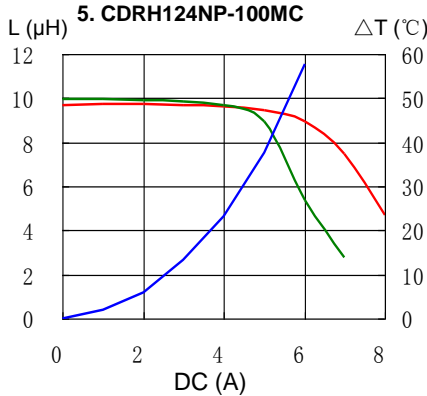
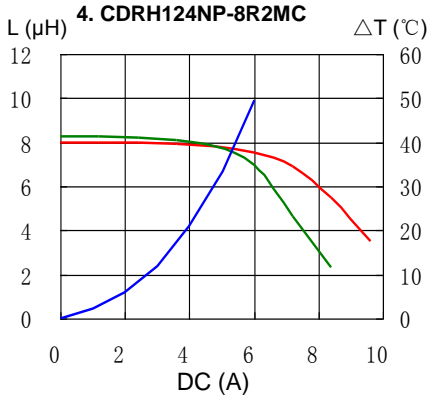
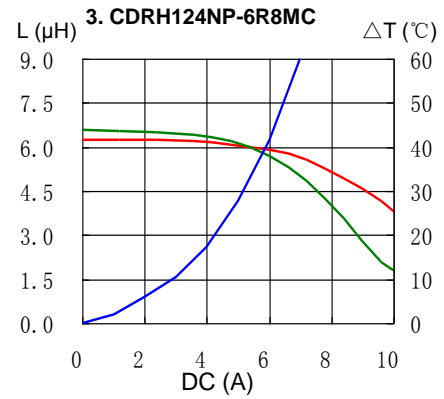
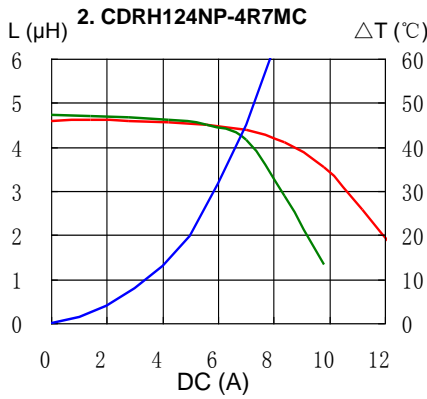
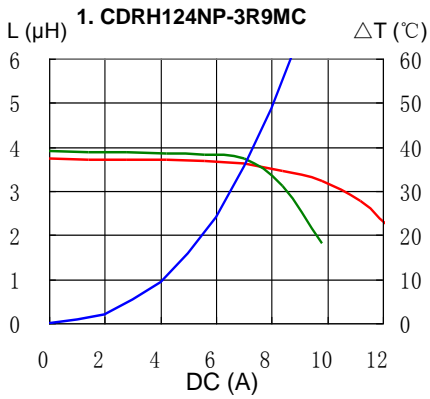
※2. Rated current: The DC current at which the inductance decreases to 75% of its nominal value or when  $\Delta t=40^\circ\text{C}$ , whichever is lower .

# SMD Power Inductor CDRH124



## Saturation Current & Temperature Rise Graph

— L (20°C) — L (100°C) —  $\Delta T$

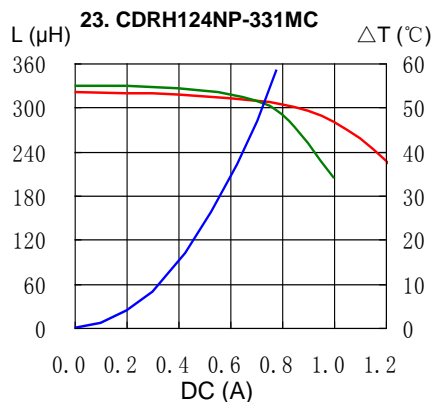
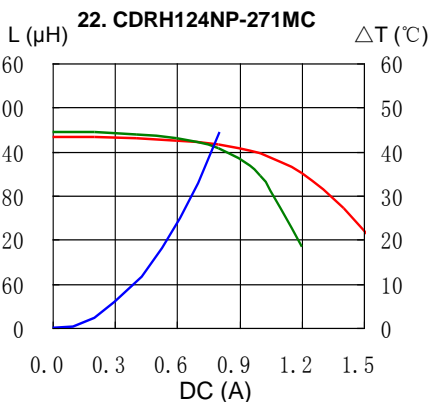
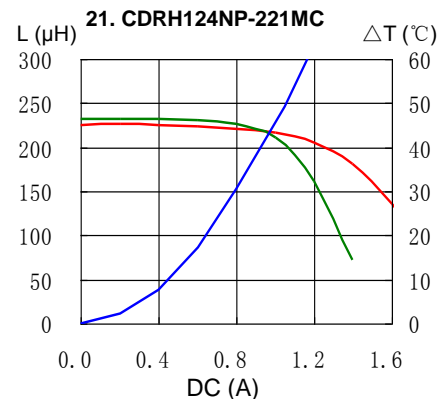
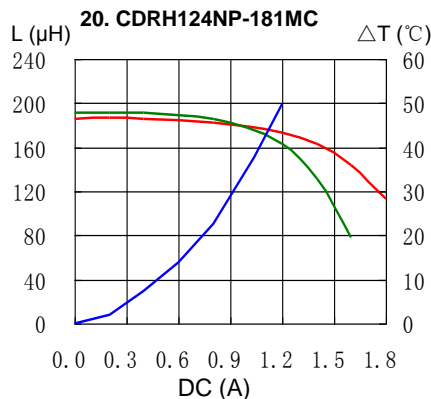
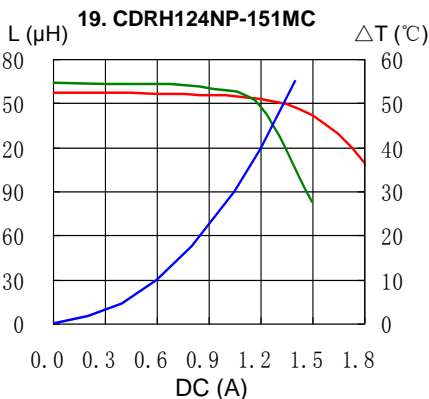
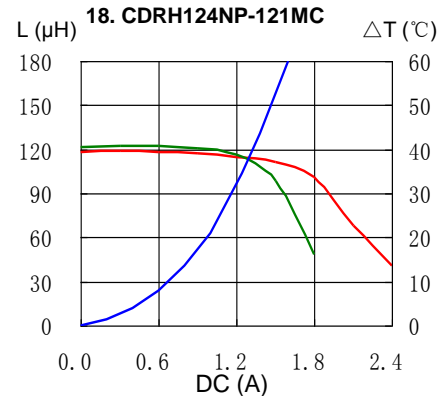
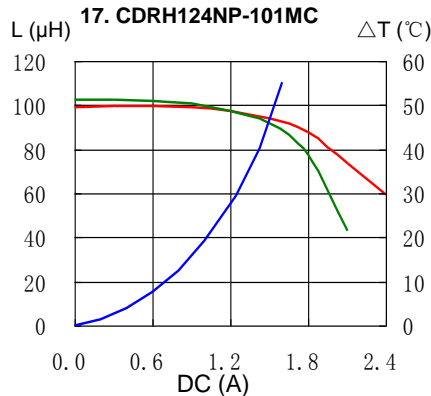
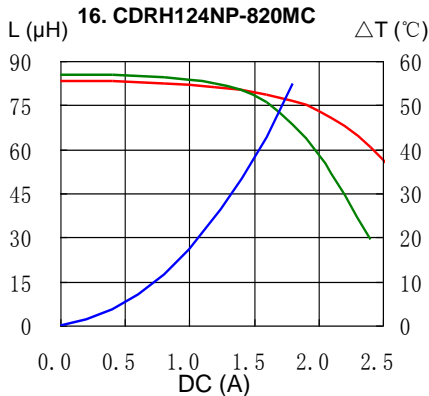
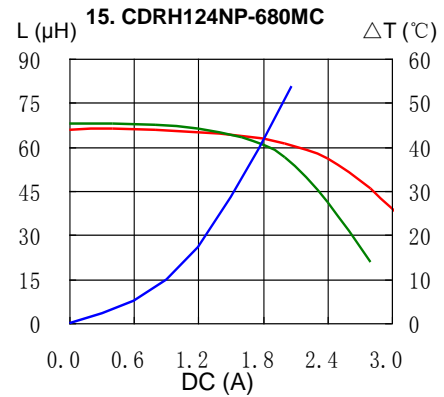
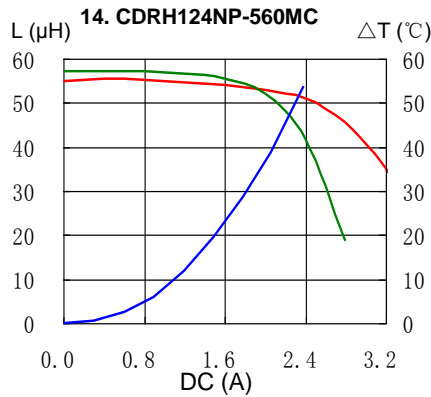
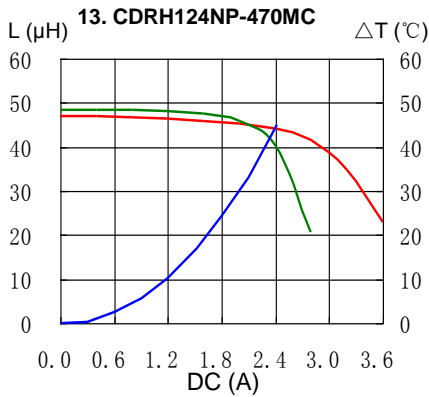


# SMD Power Inductor CDRH124



## Saturation Current & Temperature Rise Graph

— L (20°C) — L (100°C) —  $\Delta T$



# SMD Power Inductor CDRH124



## 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 CDRH124NP-270MC 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