

# SMD Power Inductor CDRH124



Halogen  
Free



## 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.
- Halogen Free available.

## 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.

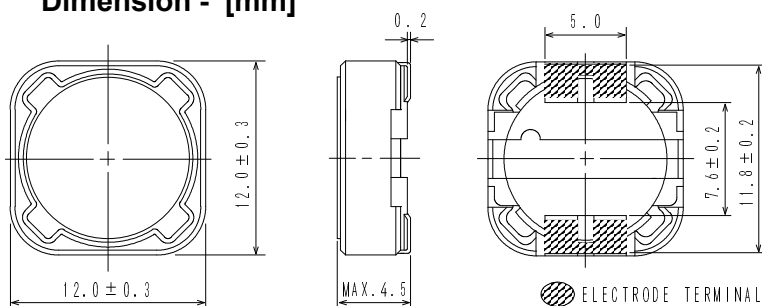
## Packaging

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

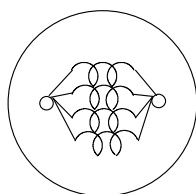
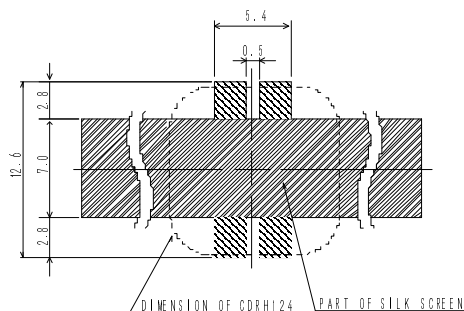
## Applications

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

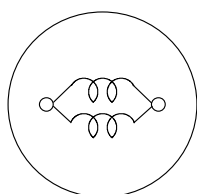
## Dimension - [mm]



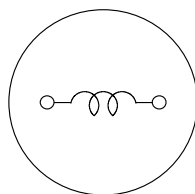
## Land pattern and Schematics - [mm]



3.9  $\mu$  H ~ 10  $\mu$  H



12  $\mu$  H ~ 47  $\mu$  H,  
68  $\mu$  H, 82  $\mu$  H



56  $\mu$  H,  
100  $\mu$  H ~ 330  $\mu$  H

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## Electrical Characteristics

| Part Name       | Stamp | Inductance<br>( $\mu$ 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.

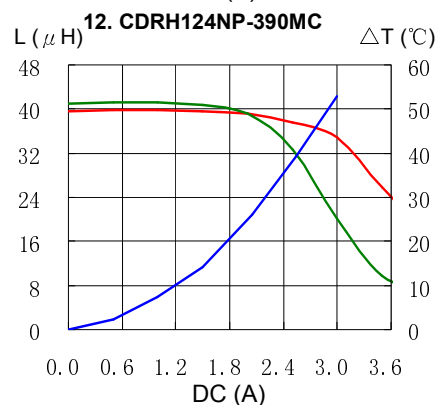
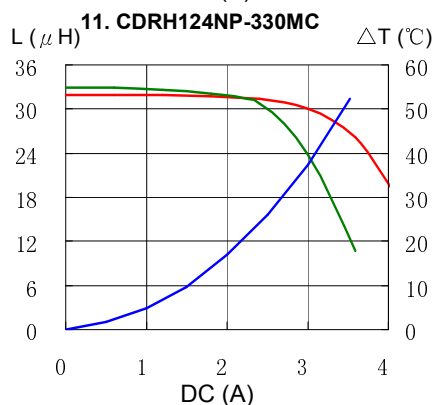
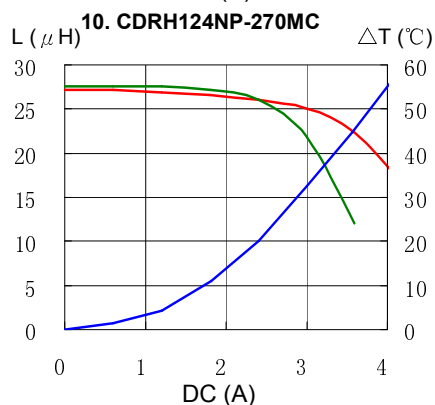
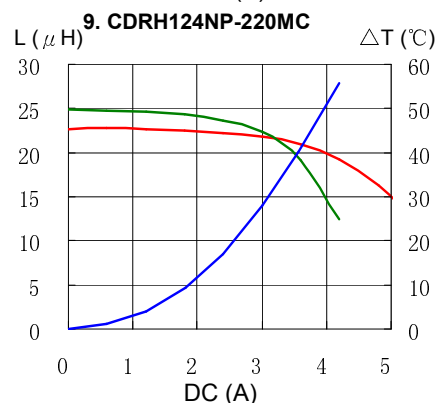
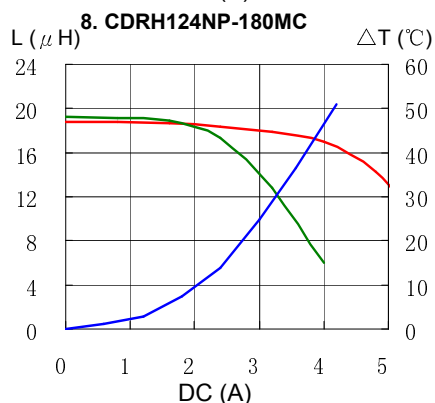
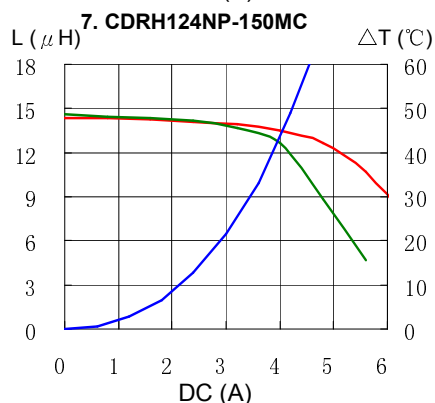
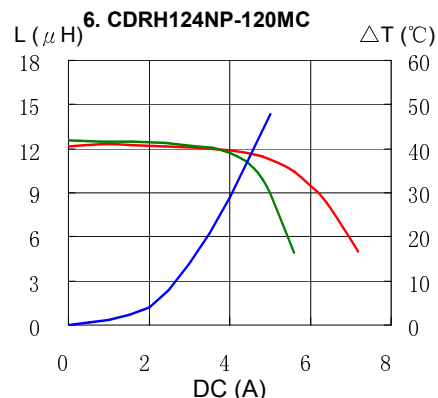
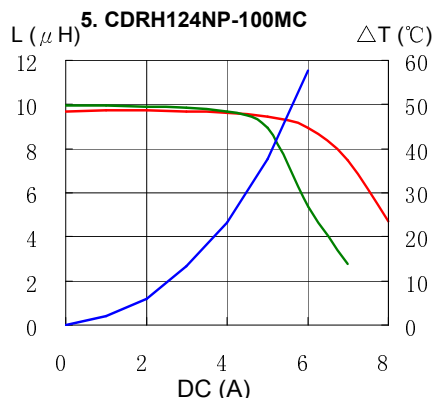
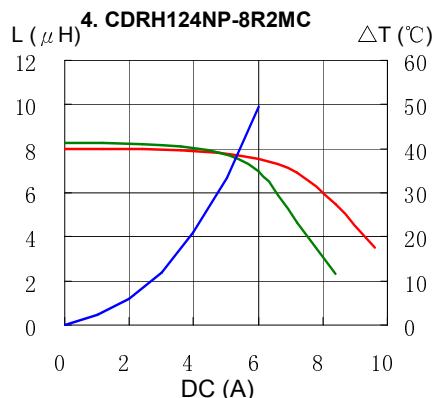
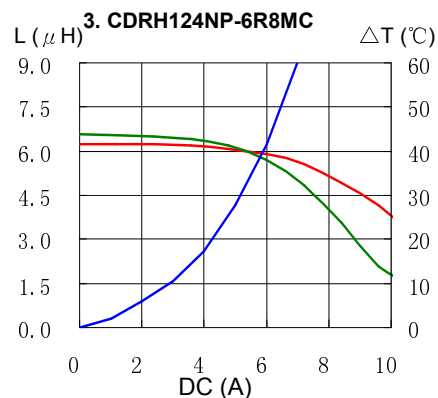
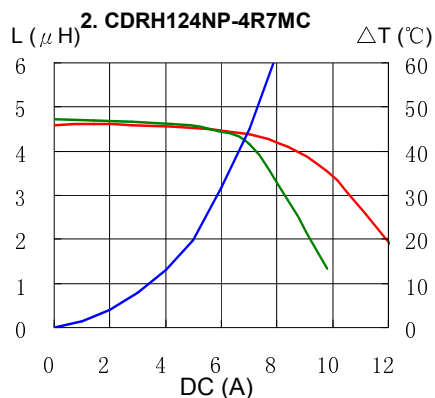
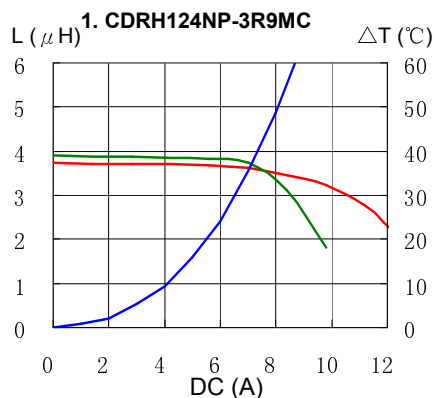
※2. Rated current: The DC current at which the inductance decreases to 75% of its nominal value or when  $\Delta t=40^\circ\text{C}$ , whichever is lower.

# SMD Power Inductor CDRH124



## Saturation Current & Temperature Rise Graph

— L (20°C) — L (100°C) —  $\Delta T$

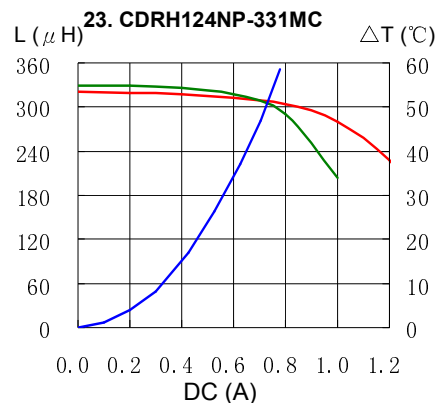
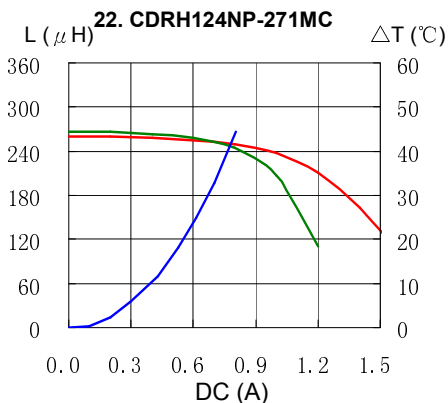
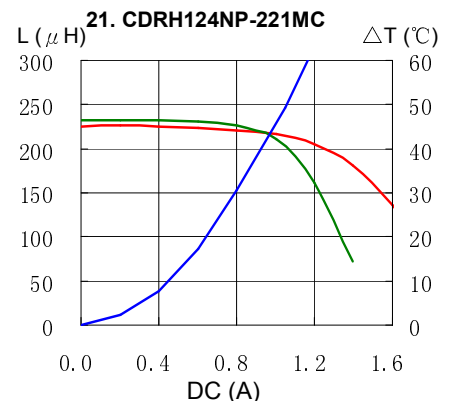
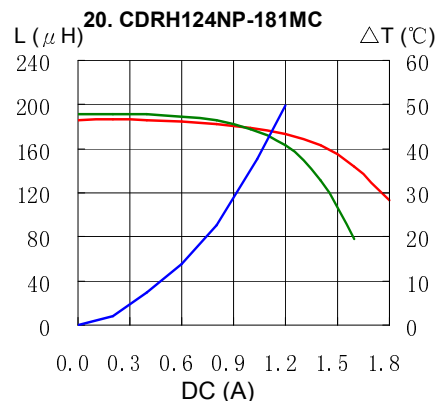
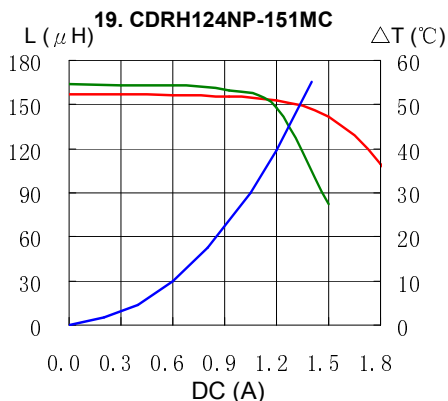
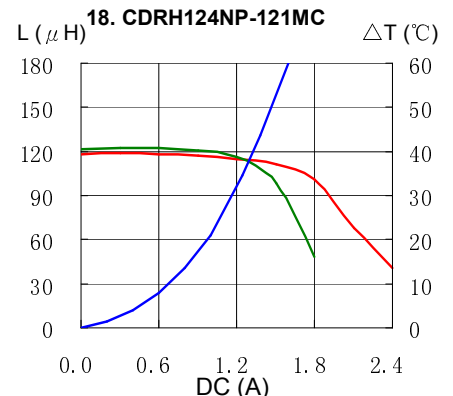
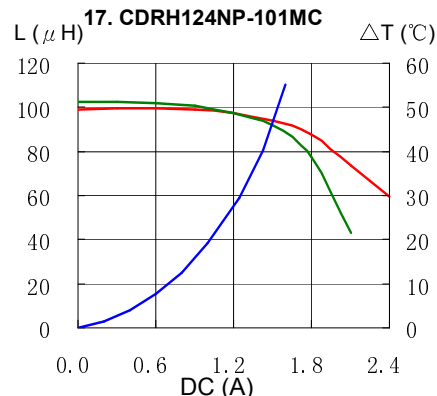
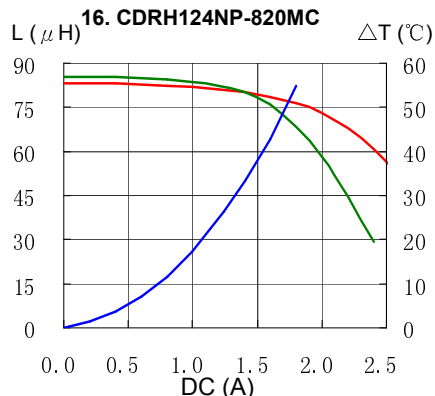
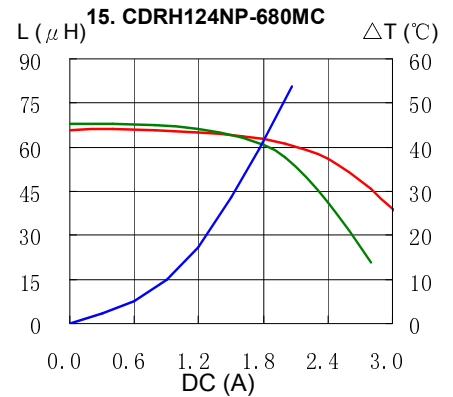
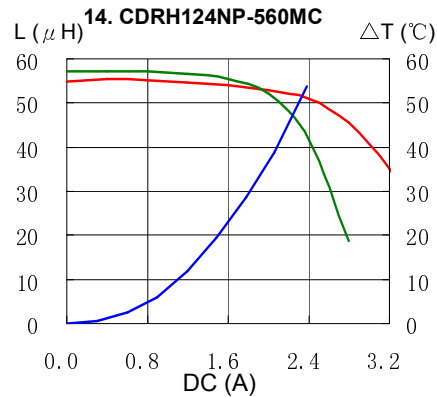
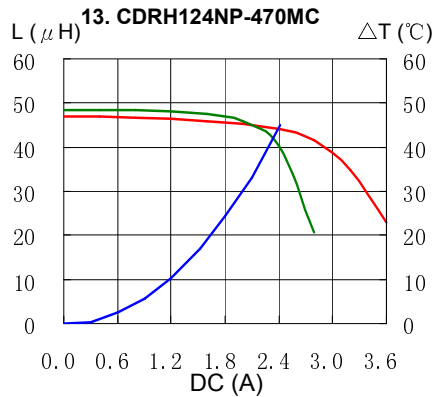


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## Saturation Current & Temperature Rise Graph

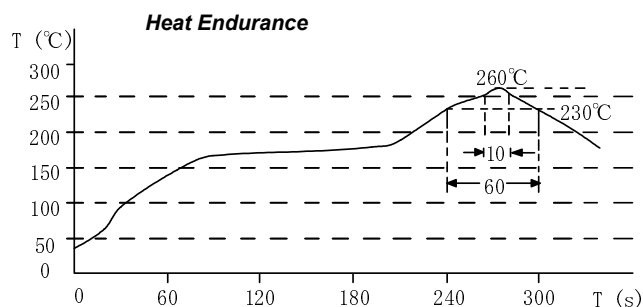
— L (20°C) — L (100°C) —  $\Delta T$



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## Solder Reflow Condition



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