

# SMD Power Inductor

## 104CDMCD/DS



Recommended Type

### Description

- Metal compound molding type construction
- Magnetically shielded
- Low audible core noise
- Suitable for large current
- L×W×H:11.5×10.3×4.0mm Max.
- Product weight: 2.2 g (Ref.)
- Moisture Sensitivity Level: 1



### Environmental Data

- Operating temperature range: -55°C~+125°C (including coil's self temperature rise)
- Storage temperature range: -55°C~+125°C

### Packaging

- Carrier tape and reel packaging
- 500pcs per reel

### Applications

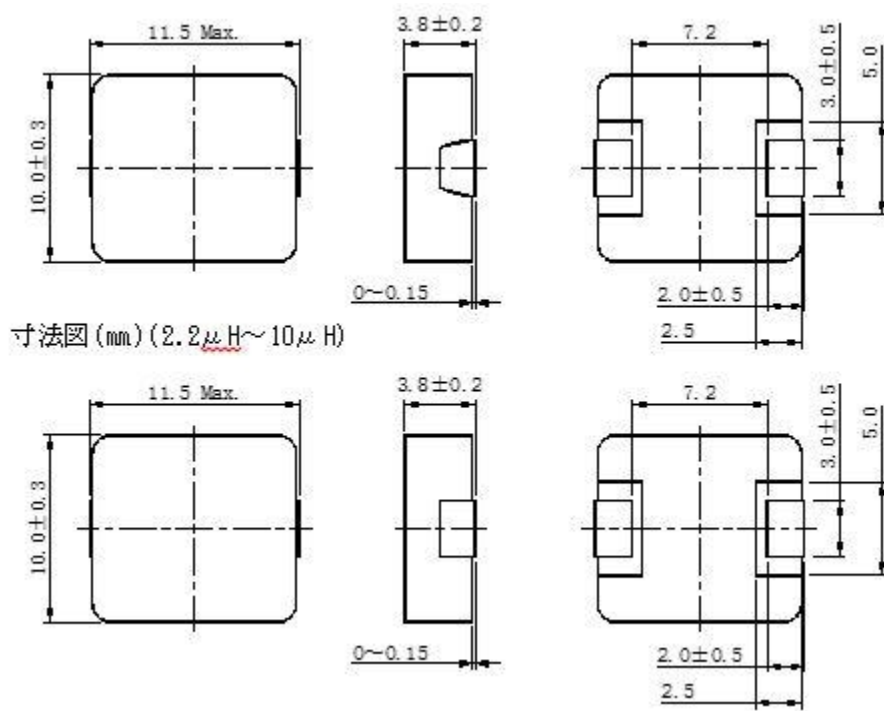
- Ideally used in notebook, tablet PC, LCD display, Server application
- High current, POL converters
- Low profile, high current power supplies
- Battery powered devices
- DC/DC converters in distributed power systems

# SMD Power Inductor

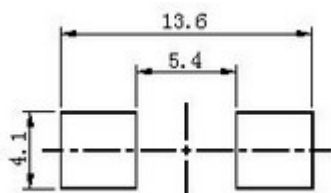
## 104CDMCD/DS



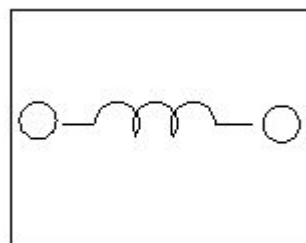
### Dimension - [mm]



### Recommended Land pattern - [mm]



### Wire Connection



# SMD Power Inductor

## 104CDMCD/DS



### Electrical Characteristics

| Part Number      | Inductance<br>[Within]<br>( $\mu$ H) ※1 | D.C.R. at 20°C<br>Max.(Typ.) (m $\Omega$ ) | Saturation Current<br>(A) Max.(Typ.) ※2 | Temperature<br>Rise Current<br>(A) Max.(Typ.)<br>※3 |
|------------------|-----------------------------------------|--------------------------------------------|-----------------------------------------|-----------------------------------------------------|
| 104CDMCDDS-R19MC | 0.19 $\pm$ 20%                          | 0.78 (0.65)                                | 76.50 (90.00)                           | (62.00)                                             |
| 104CDMCDDS-R24MC | 0.24 $\pm$ 20%                          | 1.15 (0.96)                                | 70.40 (82.80)                           | (43.00)                                             |
| 104CDMCDDS-R36MC | 0.36 $\pm$ 20%                          | 1.44 (1.20)                                | 67.30 (79.20)                           | (40.00)                                             |
| 104CDMCDDS-R47MC | 0.47 $\pm$ 20%                          | 1.80 (1.50)                                | 53.60 (63.00)                           | (34.00)                                             |
| 104CDMCDDS-R56MC | 0.56 $\pm$ 20%                          | 2.16 (1.80)                                | 36.70 (43.20)                           | (33.00)                                             |
| 104CDMCDDS-R82MC | 0.82 $\pm$ 20%                          | 2.76 (2.30)                                | 32.60 (38.50)                           | (25.00)                                             |
| 104CDMCDDS-1R0MC | 1.00 $\pm$ 20%                          | 3.36 (2.80)                                | 31.40 (37.00)                           | (24.00)                                             |
| 104CDMCDDS-1R5MC | 1.50 $\pm$ 20%                          | 6.60 (5.50)                                | 30.60 (36.00)                           | (16.50)                                             |
| 104CDMCDDS-2R2MC | 2.20 $\pm$ 20%                          | 8.60 (7.20)                                | 26.00 (30.60)                           | (14.00)                                             |
| 104CDMCDDS-3R3MC | 3.30 $\pm$ 20%                          | 13.00 (11.00)                              | 19.00 (22.50)                           | (11.80)                                             |
| 104CDMCDDS-4R7MC | 4.70 $\pm$ 20%                          | 18.00 (15.00)                              | 15.30 (18.00)                           | (9.50)                                              |
| 104CDMCDDS-5R6MC | 5.60 $\pm$ 20%                          | 22.50 (19.00)                              | 14.00 (16.50)                           | (9.00)                                              |
| 104CDMCDDS-6R8MC | 6.80 $\pm$ 20%                          | 24.00 (20.00)                              | 14.50 (17.00)                           | (8.80)                                              |
| 104CDMCDDS-100MC | 10.00 $\pm$ 20%                         | 39.00 (32.50)                              | 10.70 (12.60)                           | (6.60)                                              |

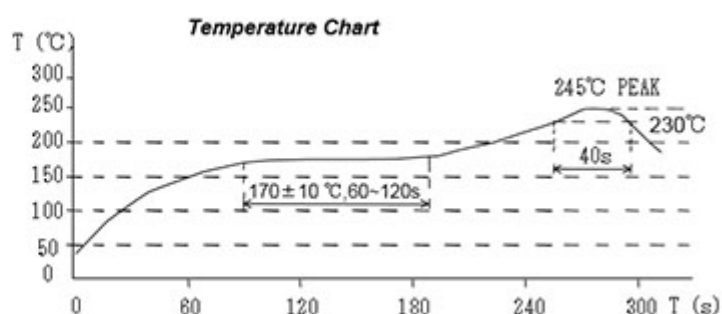
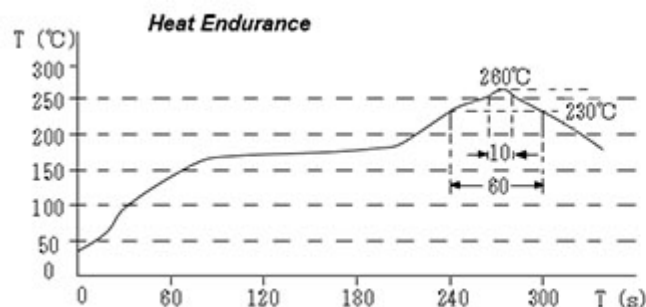
※1 Measuring frequency Inductance at 100kHz,1.0V.

※2 Saturation current: This indicates the value of D.C. current when the inductance becomes 20% lower than its initial value.

※3 Temperature rise current: The actual value of D.C. current when the temperature of coil becomes  $\Delta T=40^{\circ}\text{C}$  ( $T_a=25^{\circ}\text{C}$ ).

(Test board condition: FR4, Copper=70  $\mu$  m, four-layer PWB t=1.6mm)

### Solder Reflow Condition



# SMD Power Inductor

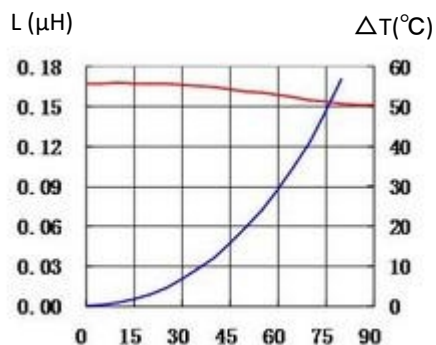
## 104CDMCD/DS



### Saturation Current & Temperature Rise Graph

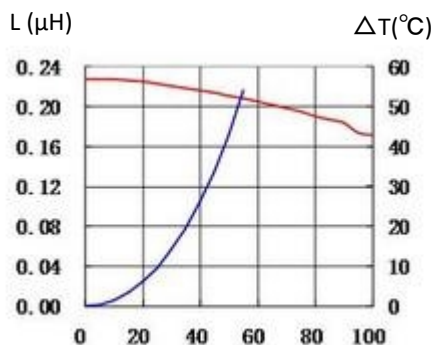
— L (20°C) —  $\Delta T$

1. 104CDMCDDS-R19MC



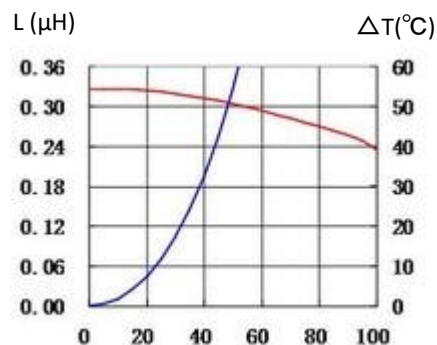
DC(A)

2. 104CDMCDDS-R24MC



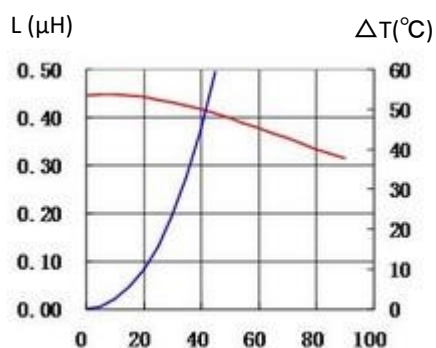
DC(A)

3. 104CDMCDDS-R36MC



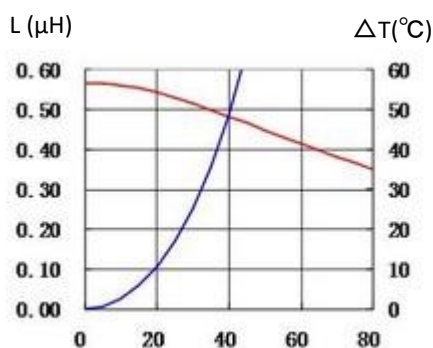
DC(A)

4. 104CDMCDDS-R47MC



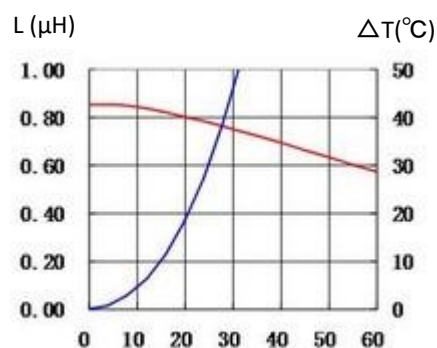
DC(A)

5. 104CDMCDDS-R56MC



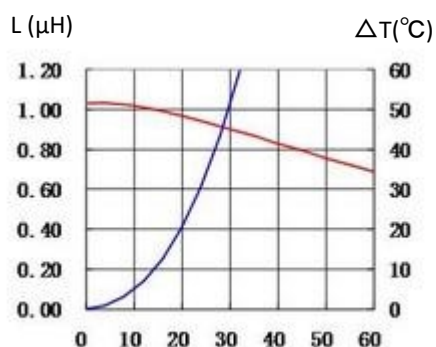
DC(A)

6. 104CDMCDDS-R82MC



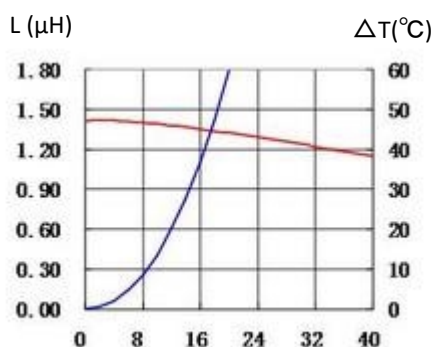
DC(A)

7. 104CDMCDDS-1R0MC



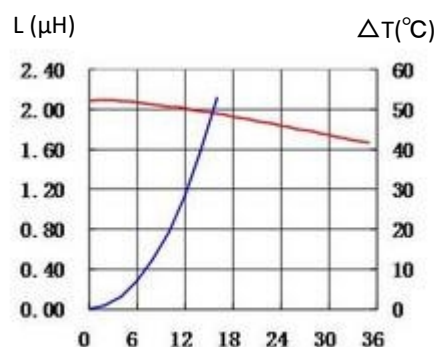
DC(A)

8. 104CDMCDDS-1R5MC



DC(A)

9. 104CDMCDDS-2R2MC



DC(A)

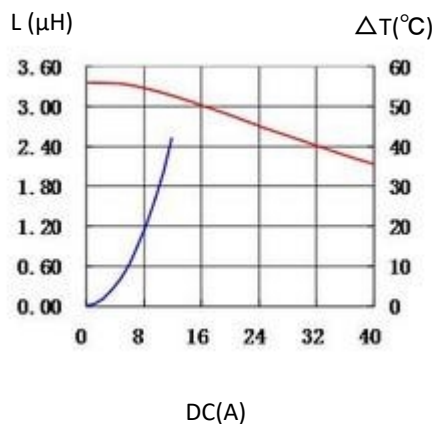
Note: This specification is subject to change without notice. Please contact your nearest sales office for updated information when placing an order.

# SMD Power Inductor

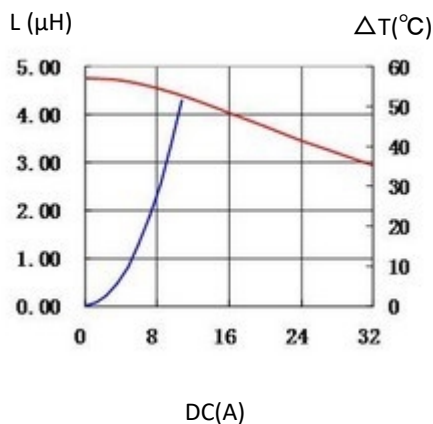
## 104CDMCD/DS



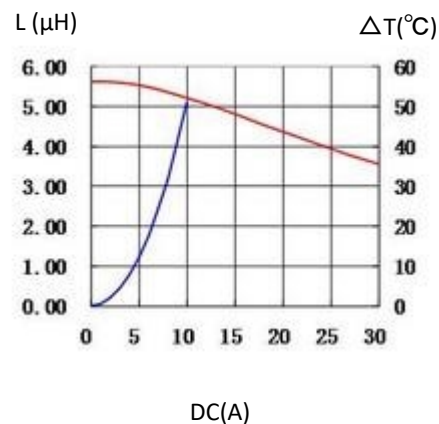
10. 104CDMCDDS-3R3MC



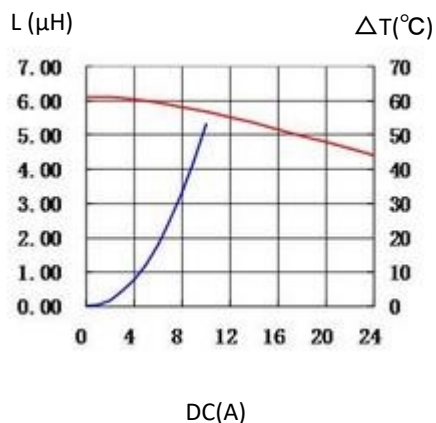
11. 104CDMCDDS-4R7MC



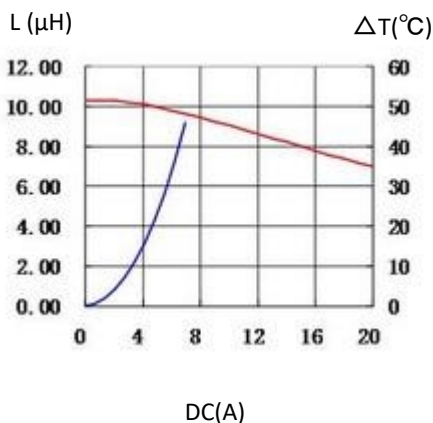
12. 104CDMCDDS-5R6MC



13. 104CDMCDDS-6R8MC



14. 104CDMCDDS-100MC



For sales office information, please [click here](#) to visit our website.

# Mouser Electronics

Authorized Distributor

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

[Sumida:](#)

[104CDMCDDS-1R5MC](#) [104CDMCDDS-100MC](#) [104CDMCDDS-5R6MC](#) [104CDMCDDS-R24MC](#) [104CDMCDDS-](#)  
[R36MC](#) [104CDMCDDS-R19MC](#) [104CDMCDDS-R56MC](#) [104CDMCDDS-3R3MC](#) [104CDMCDDS-R47MC](#)  
[104CDMCDDS-1R0MC](#) [104CDMCDDS-2R2MC](#) [104CDMCDDS-R82MC](#) [104CDMCDDS-6R8MC](#) [104CDMCDDS-](#)  
[4R7MC](#)