

# SMD Power Inductor

## 0410CDMCC/DS



### Description

- Metal compound molding type construction
- Magnetically shielded
- Low audible core noise
- Suitable for large current
- L×W×H:4.75×4.45×1.0mm Max.
- Product weight: 0.098g (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

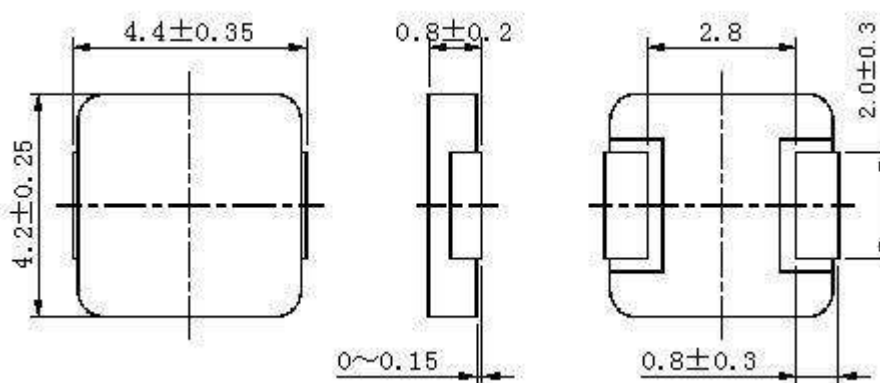
### Packaging

- Carrier tape and reel packaging.
- 3000pcs per reel

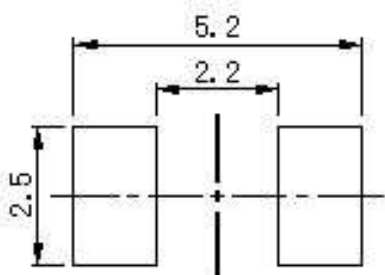
### Applications

- Ideally used in notebook, ultrabook, tablet PC, LCD display, server application.
- HDD, SSD modules application.
- Low profile, high current power supplies.
- Battery powered devices.
- High current, POL converters.
- DC/DC converter in distributed power systems.

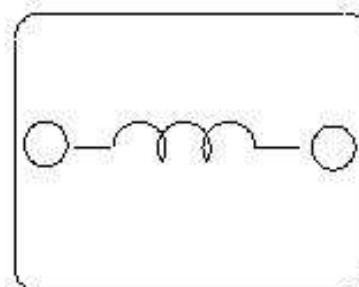
### Dimension - [mm]



### Recommended Land pattern - [mm]



### Wire Connection



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

## 0410CDMCC/DS



### Electrical Characteristics

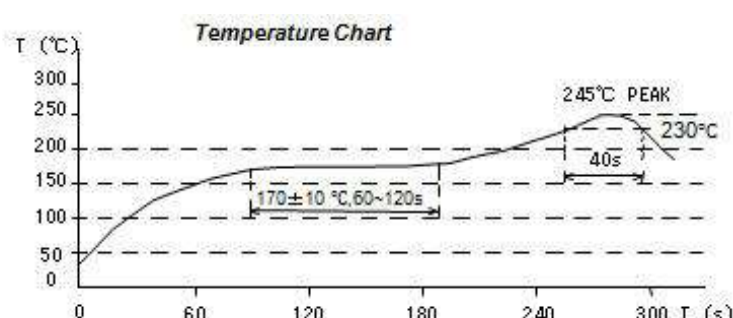
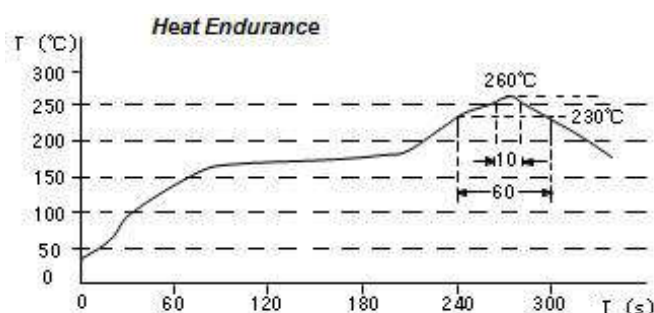
| Part Number       | Inductance<br>[Within]<br>( $\mu$ H) ※1 | D.C.R. at 20°C<br>Max.(Typ.) (m $\Omega$ ) | Saturation Current<br>(A) Max.(Typ.) ※2 | Temperature<br>Rise Current<br>(A) Max.(Typ.)<br>※3 |
|-------------------|-----------------------------------------|--------------------------------------------|-----------------------------------------|-----------------------------------------------------|
| 0410CDMCCDS-R10MC | 0.10 $\pm$ 20%                          | 5.80<br>(4.80)                             | 12.20<br>(14.40)                        | (14.00)                                             |
| 0410CDMCCDS-R15MC | 0.15 $\pm$ 20%                          | 6.30<br>(5.20)                             | 11.10<br>(13.10)                        | (13.00)                                             |
| 0410CDMCCDS-R22MC | 0.22 $\pm$ 20%                          | 11.70<br>(9.70)                            | 7.80<br>(9.20)                          | (9.00)                                              |
| 0410CDMCCDS-R33MC | 0.33 $\pm$ 20%                          | 23.00<br>(19.20)                           | 6.90<br>(8.10)                          | (6.00)                                              |
| 0410CDMCCDS-R47MC | 0.47 $\pm$ 20%                          | 30.50<br>(25.40)                           | 5.40<br>(6.40)                          | (5.00)                                              |
| 0410CDMCCDS-R56MC | 0.56 $\pm$ 20%                          | 34.50<br>(28.80)                           | 5.30<br>(6.20)                          | (4.50)                                              |
| 0410CDMCCDS-R68MC | 0.68 $\pm$ 20%                          | 38.90<br>(32.40)                           | 4.30<br>(5.10)                          | (4.00)                                              |
| 0410CDMCCDS-1R0MC | 1.00 $\pm$ 20%                          | 56.00<br>(49.00)                           | 3.50<br>(4.10)                          | (3.70)                                              |
| 0410CDMCCDS-1R2MC | 1.20 $\pm$ 20%                          | 66.00<br>(57.00)                           | 3.20<br>(3.80)                          | (3.50)                                              |
| 0410CDMCCDS-1R5MC | 1.50 $\pm$ 20%                          | 82.00<br>(72.00)                           | 2.90<br>(3.40)                          | (3.20)                                              |
| 0410CDMCCDS-2R2MC | 2.20 $\pm$ 20%                          | 107<br>(93.00)                             | 2.60<br>(3.10)                          | (2.90)                                              |
| 0410CDMCCDS-3R3MC | 3.30 $\pm$ 20%                          | 203<br>(177)                               | 2.20<br>(2.60)                          | (1.80)                                              |
| 0410CDMCCDS-4R7MC | 4.70 $\pm$ 20%                          | 243<br>(211)                               | 1.60<br>(1.90)                          | (1.75)                                              |
| 0410CDMCCDS-6R8MC | 6.80 $\pm$ 20%                          | 257<br>(224)                               | 1.50<br>(1.70)                          | (1.70)                                              |
| 0410CDMCCDS-100MC | 10.00 $\pm$ 20%                         | 318<br>(277)                               | 1.40<br>(1.65)                          | (1.60)                                              |

※1 Measuring frequency Inductance at 100kHz 1V.

※2 Saturation current: This indicates the actual value of D.C. current when the inductance becomes 30% 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



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

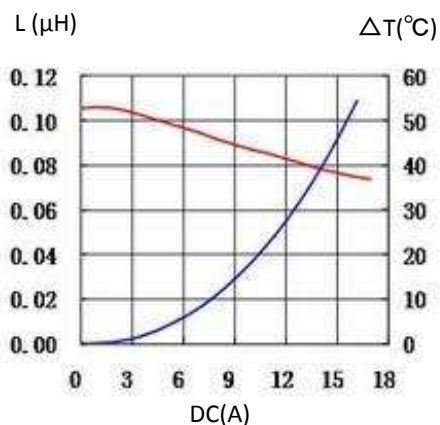
## 0410CDMCC/DS



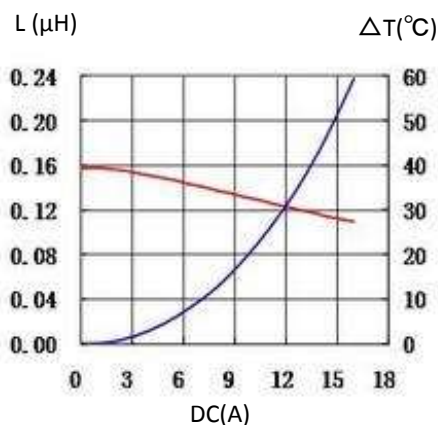
### Saturation Current & Temperature Rise Graph

— L (20°C) —  $\Delta T$

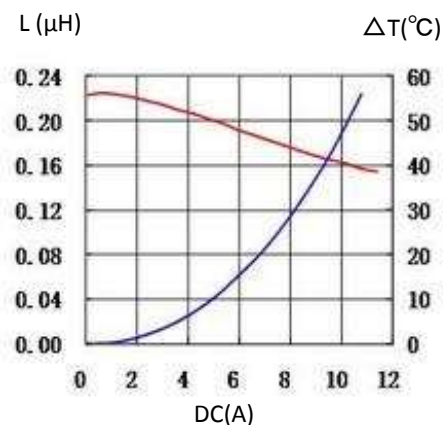
1. 0410CDMCCDS-R10MC



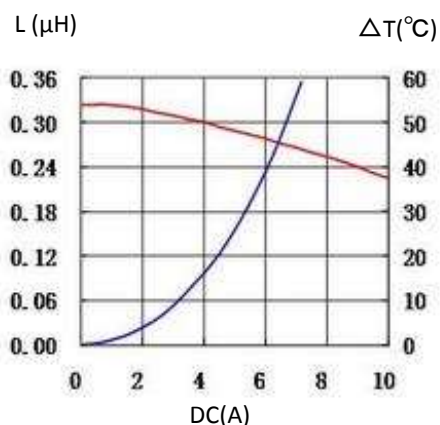
2. 0410CDMCCDS-R15MC



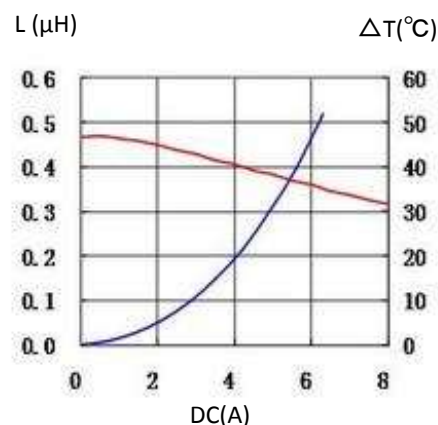
3. 0410CDMCCDS-R22MC



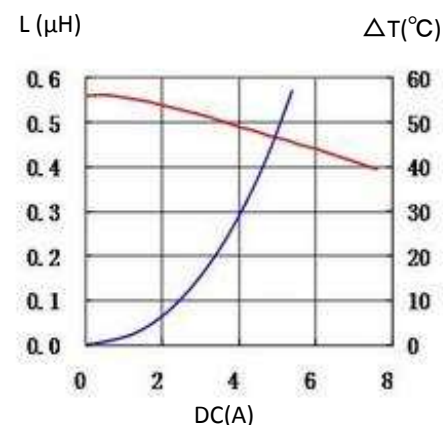
4. 0410CDMCCDS-R33MC



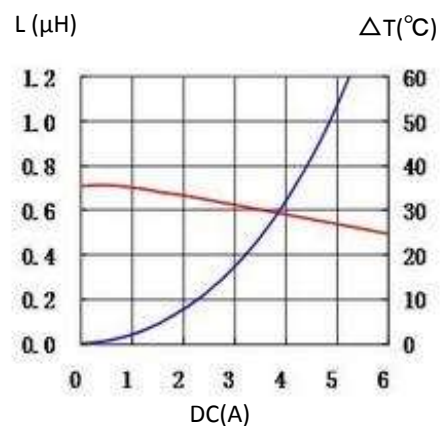
5. 0410CDMCCDS-R47MC



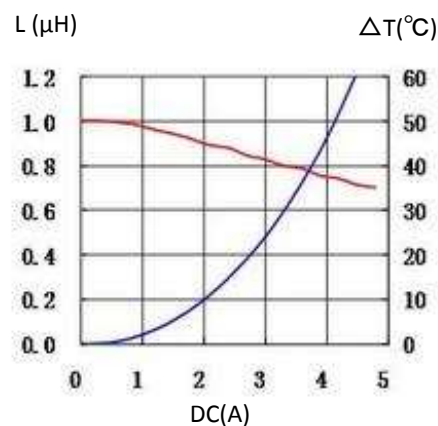
6. 0410CDMCCDS-R56MC



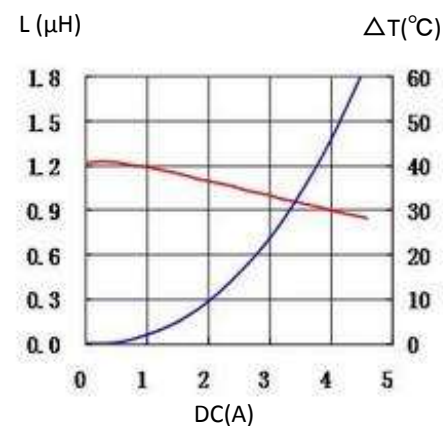
7. 0410CDMCCDS-R68MC



8. 0410CDMCCDS-1R0MC



9. 0410CDMCCDS-1R2MC

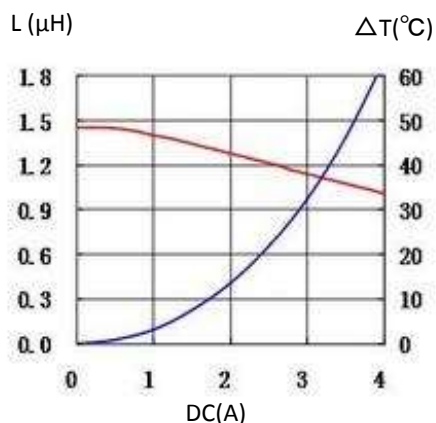


# SMD Power Inductor

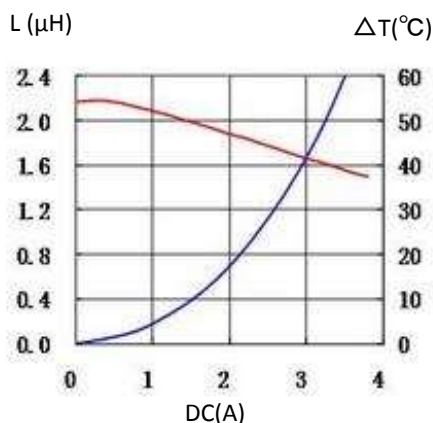
## 0410CDMCC/DS



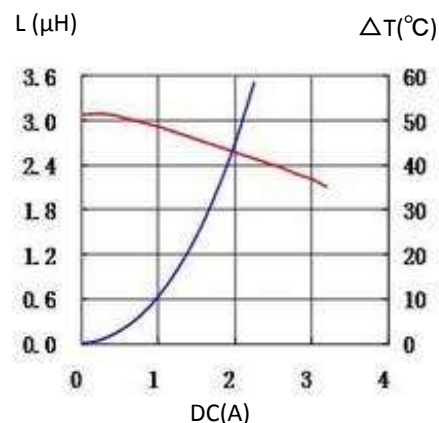
10. 0410CDMCCDS-1R5MC



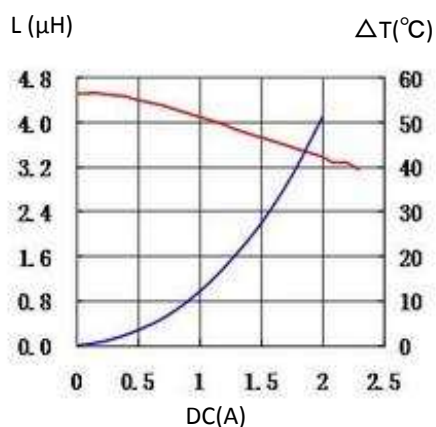
11. 0410CDMCCDS-2R2MC



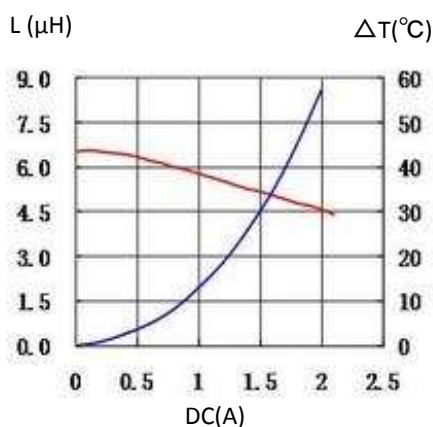
12. 0410CDMCCDS-3R3MC



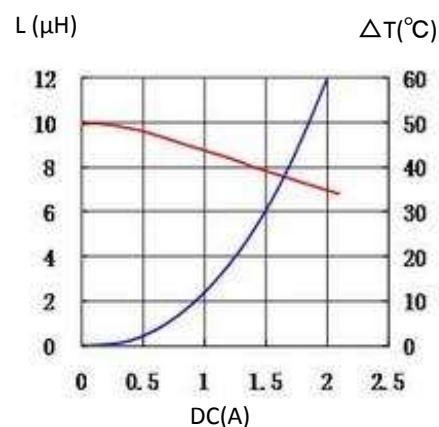
13. 0410CDMCCDS-4R7MC



14. 0410CDMCCDS-6R8MC



15. 0410CDMCCDS-100MC



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