

# Low-Profile High Current Power Inductor

## CDMC60D28/T150



### Description

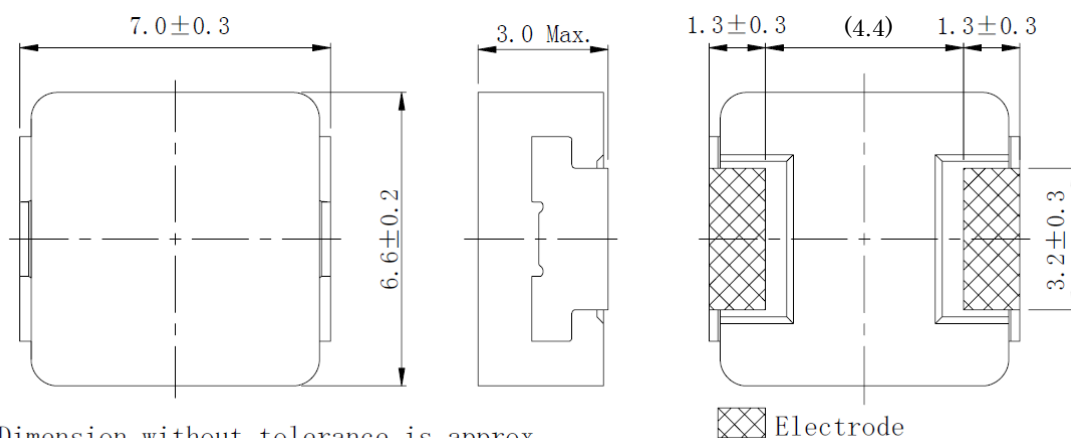
- Metal composite type (High Power Type Series)
- L x W x H: 7.30 x 6.80 x 3.00 mm Max.
- Absolute maximum voltage (across inductor): 100V
- Magnetically shielded
- Qualified AEC-Q200
- Operating temperature range: -55°C~ +150°C  
(including coil's self- temperature rise)



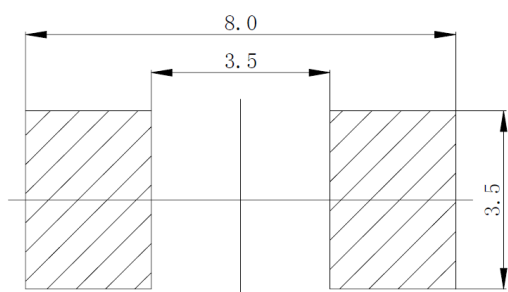
### Applications

- LED head light for automobile.
- ECU
- Automotive and other high temperature, high reliability applications

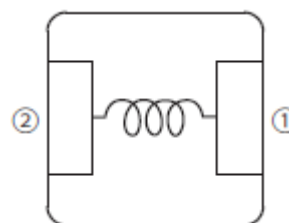
### Dimension - [mm]



### Reference Land pattern – [mm]



### Connection (bottom view)



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

# Low-Profile High Current Power Inductor

## CDMC60D28/T150



### Electrical Characteristics

| Part No.              | Inductance<br>[within] ( $\mu$ H)<br>※1 | D.C.R.<br>[Within]<br>(m $\Omega$ )<br>(at 20°C)<br>Max. (Typ.) | Saturation<br>Current (A)<br>Max. (Typ.)<br>※2 | Temperature Rise Current<br>(A)<br>Max. (Typ.)<br>※3 |
|-----------------------|-----------------------------------------|-----------------------------------------------------------------|------------------------------------------------|------------------------------------------------------|
| CDMC60D28T150NP-R10MC | 0.10 $\pm$ 20%                          | 1.96 (1.70)                                                     | (80.0)                                         | (26.0)                                               |
| CDMC60D28T150NP-R15MC | 0.15 $\pm$ 20%                          | 2.53 (2.20)                                                     | (73.0)                                         | (21.3)                                               |
| CDMC60D28T150NP-R22MC | 0.22 $\pm$ 20%                          | 3.08 (2.80)                                                     | (57.0)                                         | (19.0)                                               |
| CDMC60D28T150NP-R33MC | 0.33 $\pm$ 20%                          | 3.96 (3.60)                                                     | (43.5)                                         | (16.6)                                               |
| CDMC60D28T150NP-R47MC | 0.47 $\pm$ 20%                          | 4.84 (4.40)                                                     | (36.5)                                         | (15.1)                                               |
| CDMC60D28T150NP-R68MC | 0.68 $\pm$ 20%                          | 6.93 (6.30)                                                     | (30.5)                                         | (12.9)                                               |
| CDMC60D28T150NP-R82MC | 0.82 $\pm$ 20%                          | 7.92 (7.20)                                                     | (28.0)                                         | (11.5)                                               |
| CDMC60D28T150NP-1R0MC | 1.0 $\pm$ 20%                           | 9.90 (9.00)                                                     | (24.00)                                        | (10.6)                                               |
| CDMC60D28T150NP-1R5MC | 1.5 $\pm$ 20%                           | 17.9 (16.3)                                                     | (23.0)                                         | (7.6)                                                |
| CDMC60D28T150NP-2R2MC | 2.2 $\pm$ 20%                           | 27.4 (24.9)                                                     | (19.0)                                         | (6.2)                                                |
| CDMC60D28T150NP-3R3MC | 3.3 $\pm$ 20%                           | 36.4 (33.1)                                                     | (16.6)                                         | (5.4)                                                |
| CDMC60D28T150NP-4R7MC | 4.7 $\pm$ 20%                           | 50.5 (45.9)                                                     | (11.1)                                         | (4.4)                                                |
| CDMC60D28T150NP-6R8MC | 6.8 $\pm$ 20%                           | 80.7 (73.4)                                                     | (9.3)                                          | (3.5)                                                |
| CDMC60D28T150NP-8R2MC | 8.2 $\pm$ 20%                           | 95.6 (86.9)                                                     | (9.8)                                          | (3.3)                                                |
| CDMC60D28T150NP-100MC | 10.0 $\pm$ 20%                          | 113 (102)                                                       | (9.3)                                          | (3.0)                                                |
| CDMC60D28T150NP-150MC | 15.0 $\pm$ 20%                          | 208 (189)                                                       | (7.1)                                          | (2.3)                                                |

※1 Measuring frequency at 100kHz, 0.1V

※2 Saturation current: This indicates the actual 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  $\Delta T=40^{\circ}\text{C}$ . ( $T_a=20^{\circ}\text{C}$ )

Note: Please note that when using the product while applying current with audio-frequency (AF) signals may result in audible noises due to magnetostriction. Also, in order to avoid an audible noise problem, operating with non-AF signals would be recommended. The noise amplifies depending on the coil mount area on the PCB.

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

# Low-Profile High Current Power Inductor

## CDMC60D28/T150

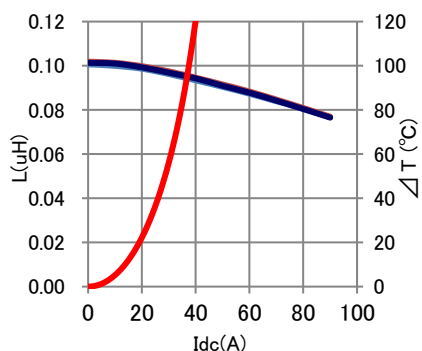


Saturation Current & Temperature Rise Graph

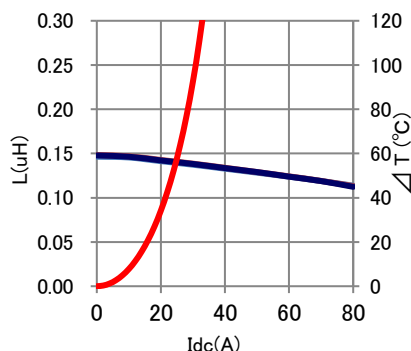
— L (20°C & 150°C)

—  $\Delta T$

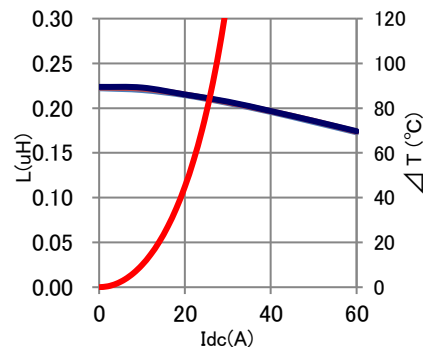
CDMC60D28T150NP-R10MC



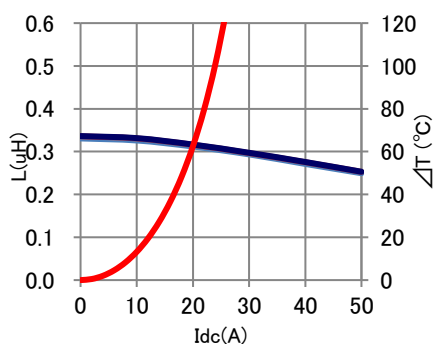
CDMC60D28T150NP-R15MC



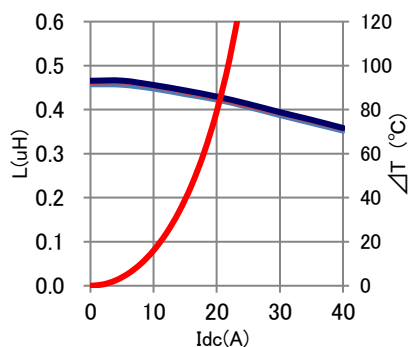
CDMC60D28T150NP-R22MC



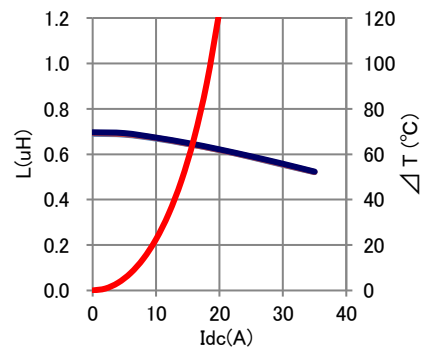
CDMC60D28T150NP-R33MC



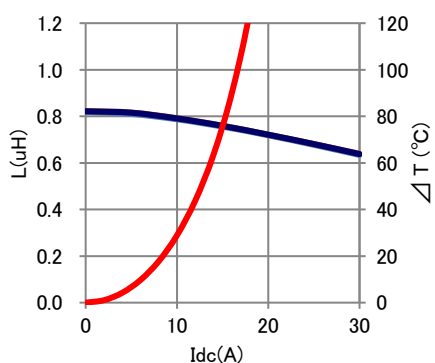
CDMC60D28T150NP-R47MC



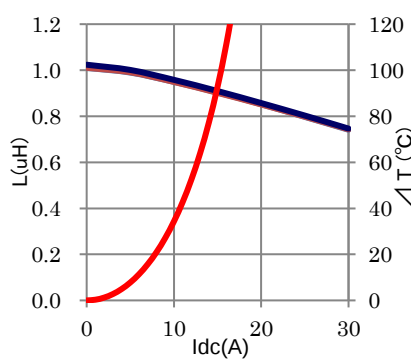
CDMC60D28T150NP-R68MC



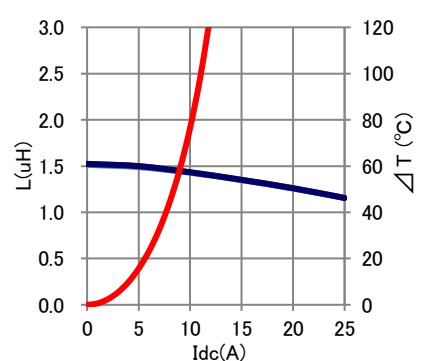
CDMC60D28T150NP-R82MC



CDMC60D28T150NP-1R0MC



CDMC60D28T150NP-1R5MC



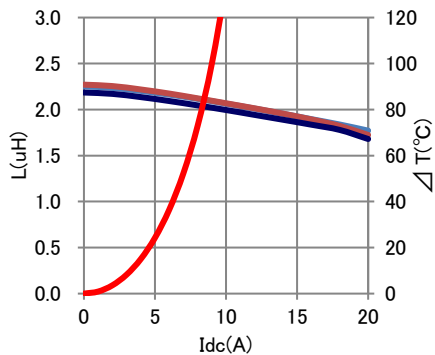
Note: This specification is subject to change without notice. Please contact your nearest sales office for updated information when placing an order.

# Low-Profile High Current Power Inductor

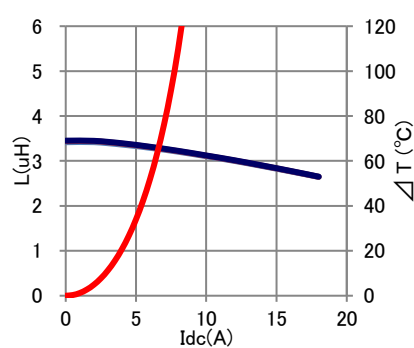
## CDMC60D28/T150



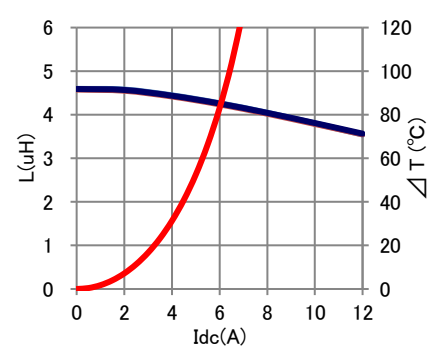
CDMC60D28T150NP-2R2MC



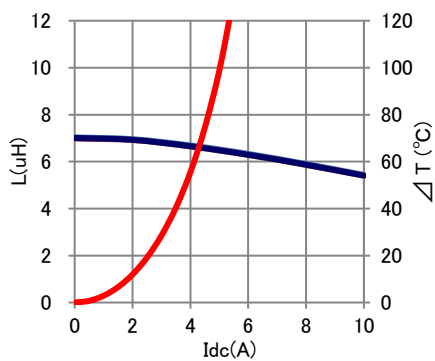
CDMC60D28BT150NP-3R3MC



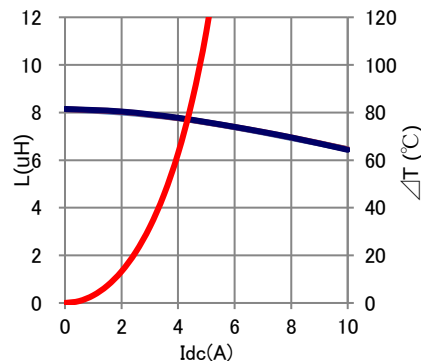
CDMC60D28T150NP-4R7MC



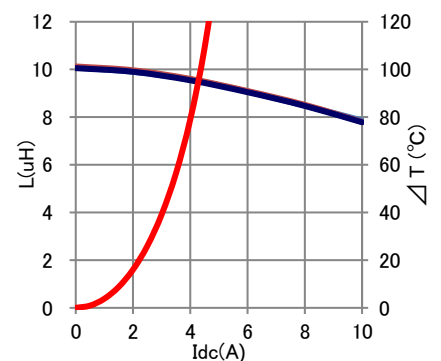
CDMC60D28T150NP-6R8MC



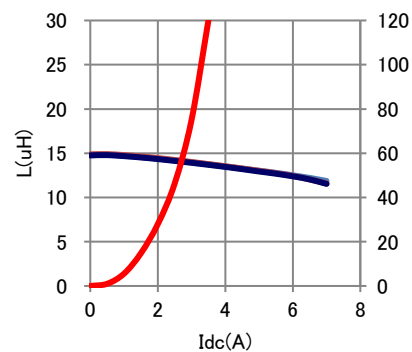
CDMC60D28T150NP-8R2MC



CDMC60D28T150NP-100MC



CDMC60D28T150NP-150MC



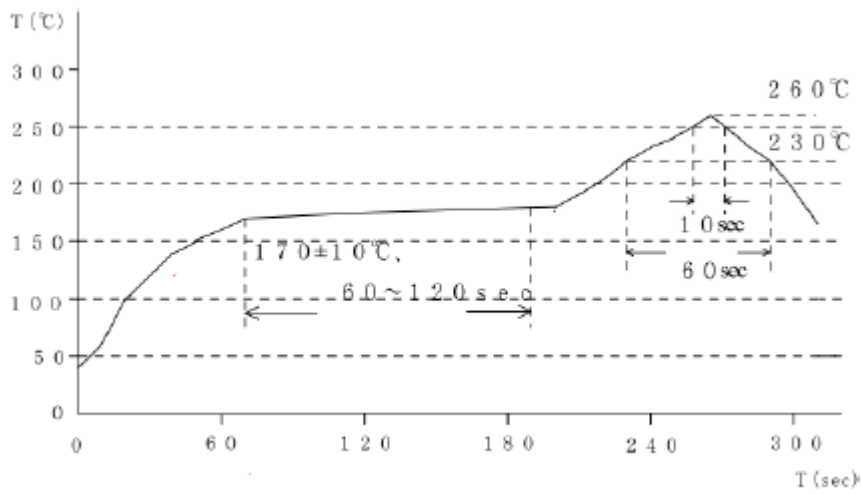
Note: This specification is subject to change without notice. Please contact your nearest sales office for updated information when placing an order.

# Low-Profile High Current Power Inductor

## CDMC60D28/T150



### Solder Reflow Condition



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

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