

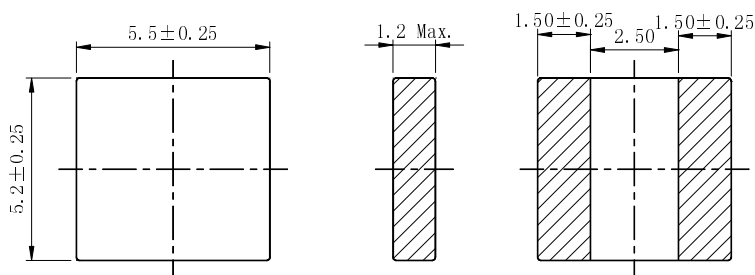
# SMD Power Inductor 0512CDMC/DS



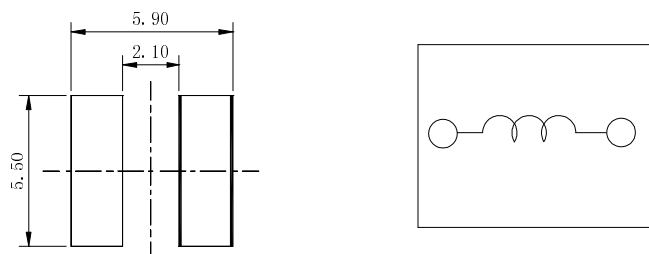
RoHS

Halogen  
Free

## Dimension - [mm]



## Land pattern and Schematics - [mm]



## Electrical Characteristics

| Part Number      | Stamp | Inductance<br>( $\mu$ H)<br>[within] ※1 | D.C.R (m $\Omega$ )<br>[ within ]<br>(at 25°C) | Saturation<br>Current (A)<br>[Typ.] ※2 | Temperature<br>rise Current (A)<br>[Typ.] ※3 |
|------------------|-------|-----------------------------------------|------------------------------------------------|----------------------------------------|----------------------------------------------|
| 0512CDMCDS-R33MC | R33   | 0.33 $\pm$ 20 %                         | 13 $\pm$ 20 %                                  | 11.5                                   | 6.5                                          |
| 0512CDMCDS-R47MC | R47   | 0.47 $\pm$ 20 %                         | 18 $\pm$ 20 %                                  | 10.9                                   | 6.1                                          |
| 0512CDMCDS-1R0MC | 1R0   | 1.0 $\pm$ 20 %                          | 30 $\pm$ 20 %                                  | 7.2                                    | 4.2                                          |
| 0512CDMCDS-1R5MC | 1R5   | 1.5 $\pm$ 20 %                          | 48 $\pm$ 20 %                                  | 6.1                                    | 3.4                                          |
| 0512CDMCDS-2R2MC | 2R2   | 2.2 $\pm$ 20 %                          | 70 $\pm$ 20 %                                  | 4.8                                    | 2.6                                          |
| 0512CDMCDS-3R3MC | 3R3   | 3.3 $\pm$ 20 %                          | 95 $\pm$ 20 %                                  | 3.8                                    | 2.3                                          |
| 0512CDMCDS-4R7MC | 4R7   | 4.7 $\pm$ 20 %                          | 120 $\pm$ 20 %                                 | 3.5                                    | 2.1                                          |
| 0512CDMCDS-5R6MC | 5R6   | 5.6 $\pm$ 20 %                          | 145 $\pm$ 20 %                                 | 3.1                                    | 1.9                                          |
| 0512CDMCDS-6R8MC | 6R8   | 6.8 $\pm$ 20 %                          | 175 $\pm$ 20 %                                 | 2.8                                    | 1.7                                          |
| 0512CDMCDS-100MC | 100   | 10.0 $\pm$ 20 %                         | 290 $\pm$ 20 %                                 | 2.5                                    | 1.3                                          |
| 0512CDMCDS-150MC | 150   | 15.0 $\pm$ 20 %                         | 400 $\pm$ 20 %                                 | 2.2                                    | 1.1                                          |

※1. Inductance measuring condition: at 100kHz.

※2 Saturation current: The value of DC current when the inductance is over 80% of the initial value. (at 25°C )

※3 Temperature rise current: The actual value of DC current when the top surface temperature of test sample rise is  $\Delta T = 40^\circ\text{C}$  ( $T_a = 25^\circ\text{C}$ ).

## Description

- Magnetically shielded.
- L  $\times$  W  $\times$  H: 5.75  $\times$  5.45  $\times$  1.2 mm Max.
- Product weight: 0.17g(Ref.)
- Moisture Sensitivity Level: 1
- RoHS compliance.
- Halogen Free available.

## Environmental Data

- Operating temperature range:  $-40^\circ\text{C} \sim +105^\circ\text{C}$   
(including coil's self temperature rise)
- Storage temperature range:  $-40^\circ\text{C} \sim +105^\circ\text{C}$
- Solder reflow temperature: 260  $^\circ\text{C}$  peak.

## Packaging

- Carrier tape and reel packaging.
- 13.0" diameter reel
- 4000pcs per reel

## Applications

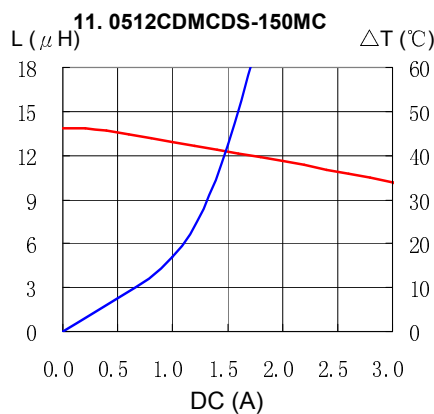
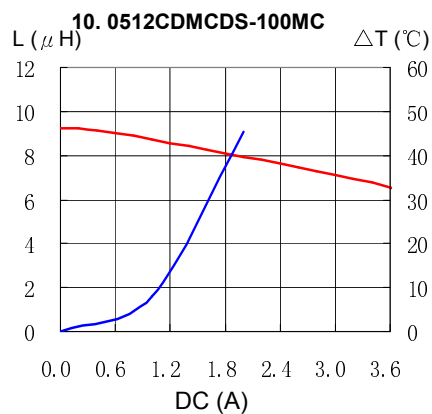
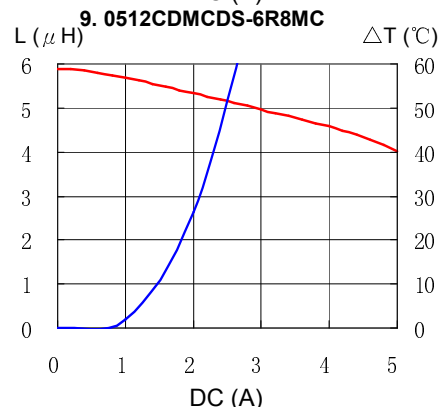
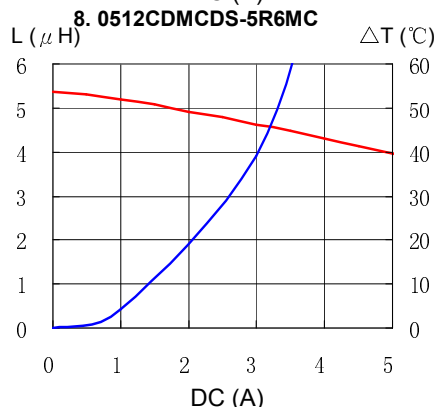
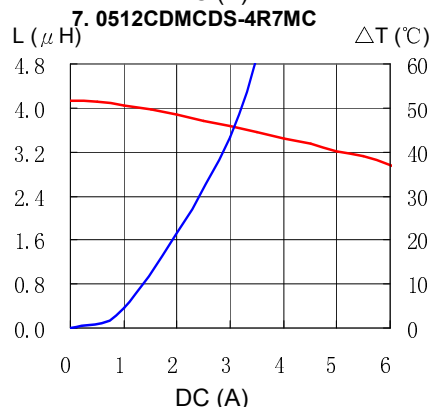
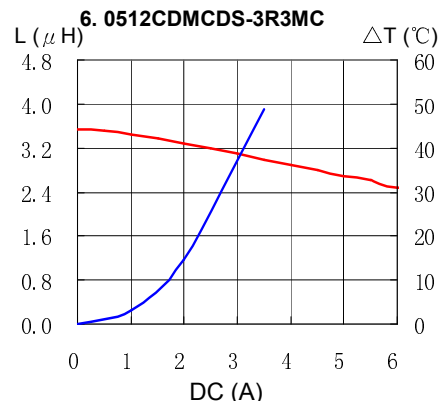
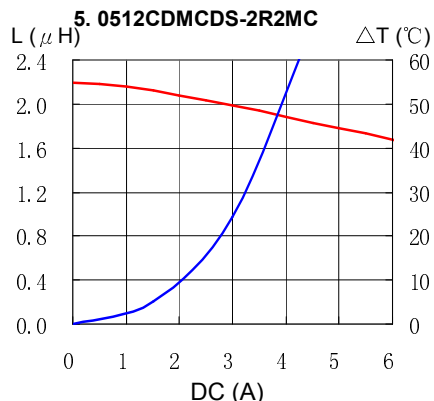
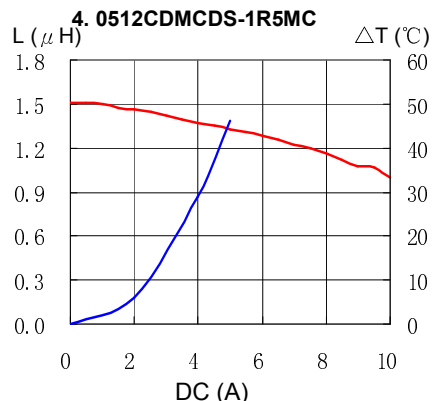
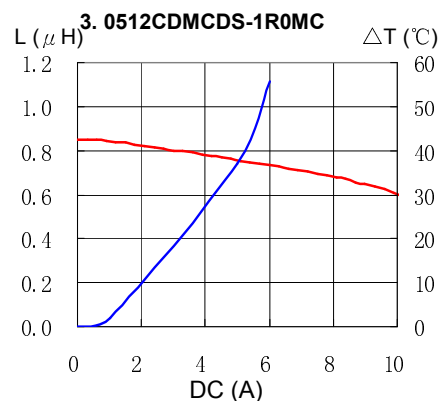
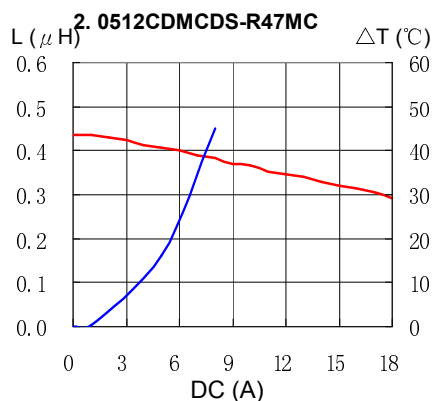
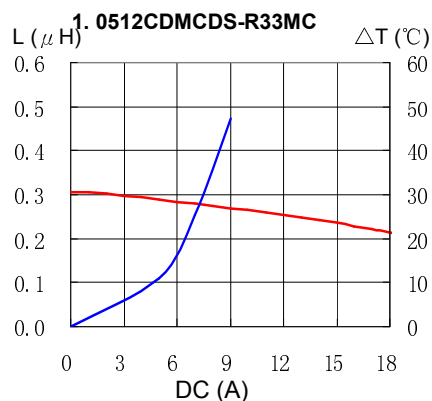
- Ideally used in notebook, ultrabook, tablet PC, LCD display, SSD and other low profile high current application.

# SMD Power Inductor 0512CDMC/DS



## Saturation Current & Temperature Rise Graph

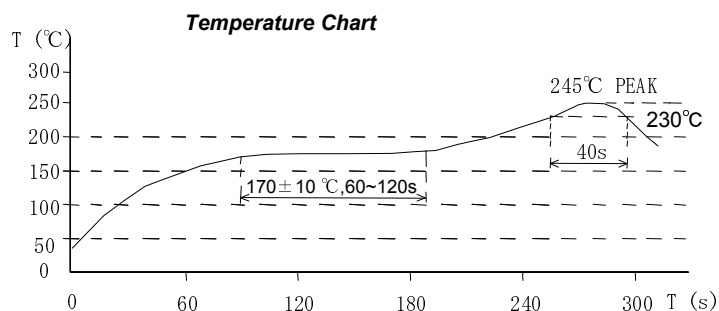
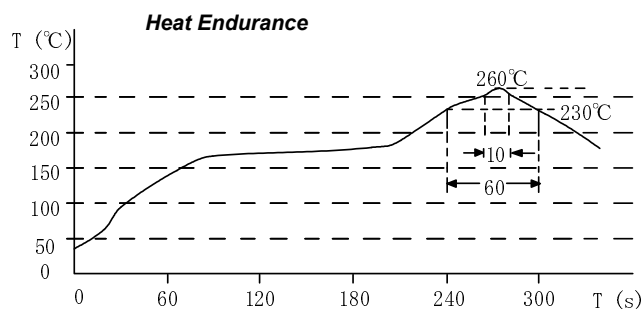
— L (20°C) —  $\Delta T$



# SMD Power Inductor 0512CDMC/DS



## Solder Reflow Condition



Please refer to the sales offices on our website - <http://www.sumida.com>

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