

# SMD Power Inductor

## 0415CDMCB/DS



### Description

- Magnetically shielded.
- L × W × H: 4.75 × 4.35 × 1.5 mm Max.
- Product weight: 0.15g(Ref.)
- Moisture Sensitivity Level: 1
- RoHS compliance.
- Halogen Free available.

### Environmental Data

- Operating temperature range: -40°C~+105°C (including coil's self temperature rise)
- Storage temperature range: -40°C~+105°C
- Solder reflow temperature: 260 °C peak.

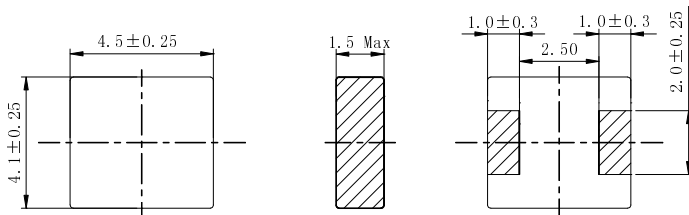
### Packaging

- Carrier tape and reel packaging.
- 13.0" diameter reel
- 4500pcs per reel

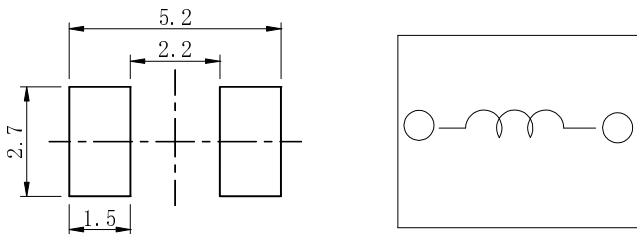
### Applications

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

### Dimension - [mm]



### Land pattern and Schematics - [mm]



### Electrical Characteristics

Part No.	Stamp	Inductance ( $\mu$ H) [within] ※1	D.C.R (m $\Omega$ ) [within] at 25°C	Saturation Current [Typ.](A) ※2	Temperature rise current [Typ.](A) Thermocouple Method※3
0415CDMCBDS-R33MC	R33	0.33±20%	10±20%	10.0	7.5
0415CDMCBDS-R47MC	R47	0.47±20%	13±20%	9.5	6.5
0415CDMCBDS-1R0MC	1R0	1.0±20%	30±20%	7.0	4.5
0415CDMCBDS-1R5MC	1R5	1.5±20%	45±20%	4.5	3.5
0415CDMCBDS-2R2MC	2R2	2.2±20%	67±20%	3.8	3.0
0415CDMCBDS-3R3MC	3R3	3.3±20%	82±20%	3.2	2.5
0415CDMCBDS-4R7MC	4R7	4.7±20%	108±20%	2.8	2.2
0415CDMCBDS-6R8MC	6R8	6.8±20%	185±20%	2.3	1.6
0415CDMCBDS-100MC	100	10.0±20%	285±20%	1.8	1.4

※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 )

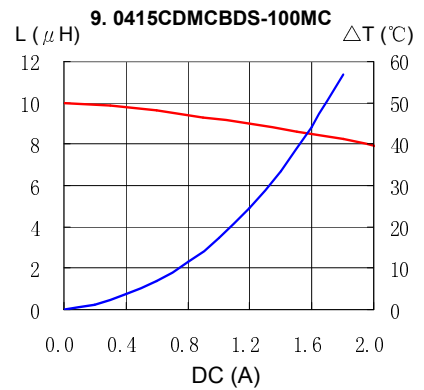
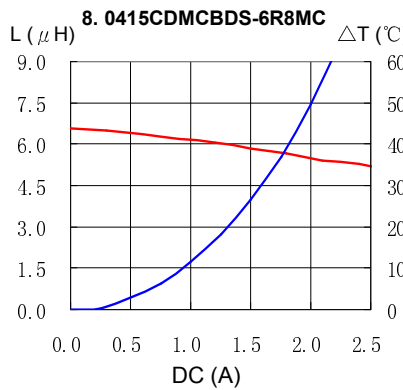
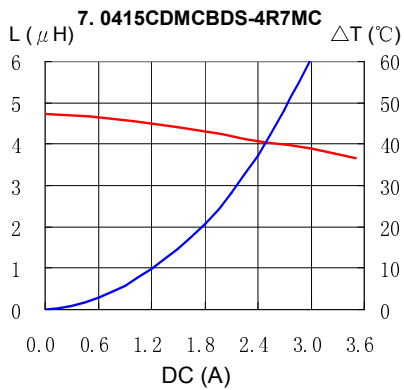
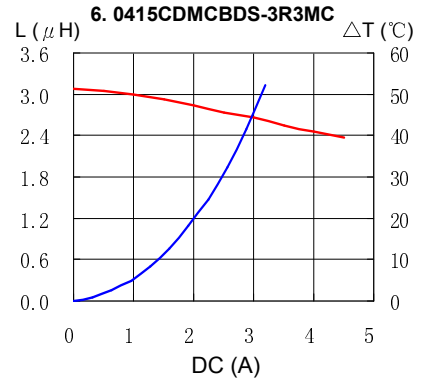
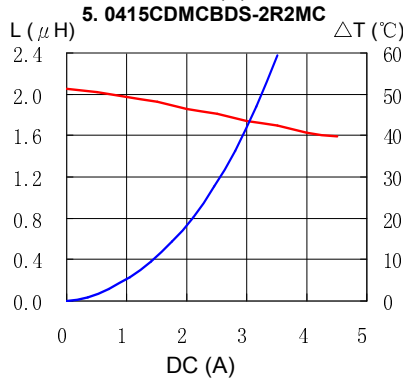
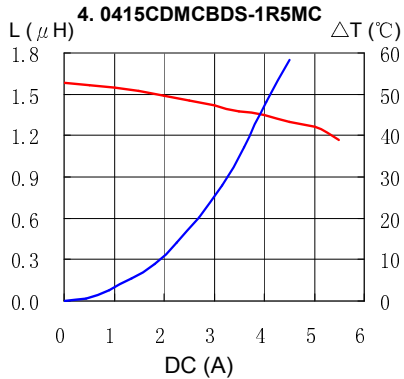
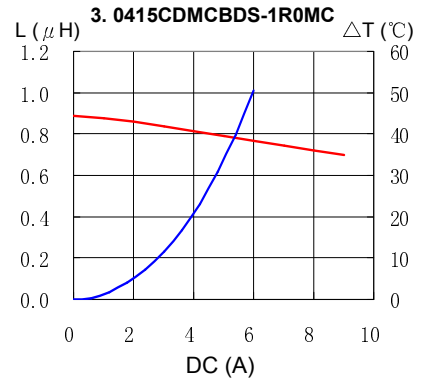
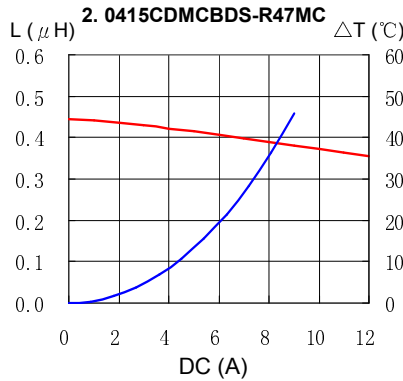
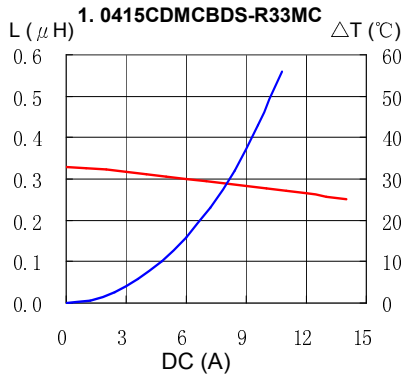
※3. Temperature rise current: The actual value of DC current when the top surface temperature of test sample rise is  $\Delta T = 40^\circ\text{C}$  ( $T_a = 25^\circ\text{C}$ ).

# SMD Power Inductor 0415CDMCB/DS



## Saturation Current & Temperature Rise Graph

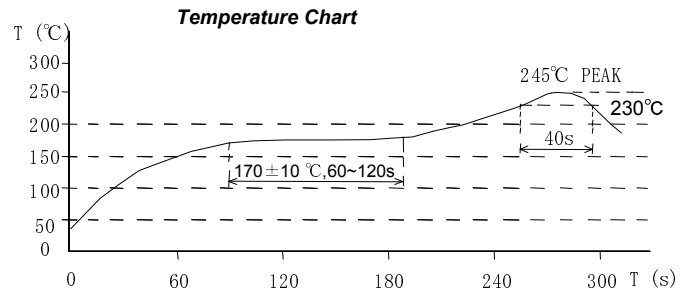
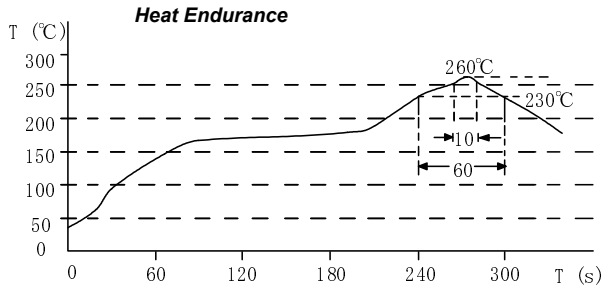
— L (20°C)    —  $\Delta T$



# SMD Power Inductor 0415CDMCB/DS



## Solder Reflow Condition



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

### Hong Kong

Tel.+852-2880-6688  
FAX.+852-2565-9600  
[sales@hk.sumida.com](mailto:sales@hk.sumida.com)

### Tokyo

Tel.+81-3-5202-7112  
FAX.+81-3-5202-7105  
[sales@jp.sumida.com](mailto:sales@jp.sumida.com)

### Chicago

Tel.+1-847-545-6700  
FAX.+1-847-545-6720  
[sales@us.sumida.com](mailto:sales@us.sumida.com)

### Shanghai

Tel.+86-021-5836-3299  
FAX.+86-021-5836-3266  
[shanghai.sales@cn.sumida.com](mailto:shanghai.sales@cn.sumida.com)

### Seoul

Tel.+82-2-6237-0777  
FAX.+82-2-6237-0778  
[sales@kr.sumida.com](mailto:sales@kr.sumida.com)

### Oberzell

Tel.+49-8591-937-0  
FAX.+49-8591-937-103  
[contact@sumida-eu.com](mailto:contact@sumida-eu.com)

### Shenzhen

Tel.+86-755-8291-0228  
FAX.+86-755-8291-0338  
[shenzhen.sales@cn.sumida.com](mailto:shenzhen.sales@cn.sumida.com)

### Singapore

Tel.+65-6296-3388  
FAX.+65-6296-3390  
[sales@sg.sumida.com](mailto:sales@sg.sumida.com)

### Neumarkt

Tel.+49-9181-4509-110  
FAX.+49-9181-4509-310  
[infocomp@eu.sumida.com](mailto:infocomp@eu.sumida.com)

### Taipei

Tel.+886-2-8751-2737  
FAX.+886-2-8751-2738  
[sales@tw.sumida.com](mailto:sales@tw.sumida.com)

### San Jose

Tel.+1-408-321-9660  
FAX.+1-408-321-9308  
[sales@us.sumida.com](mailto:sales@us.sumida.com)