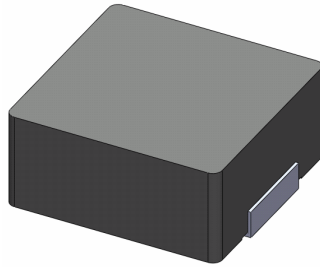


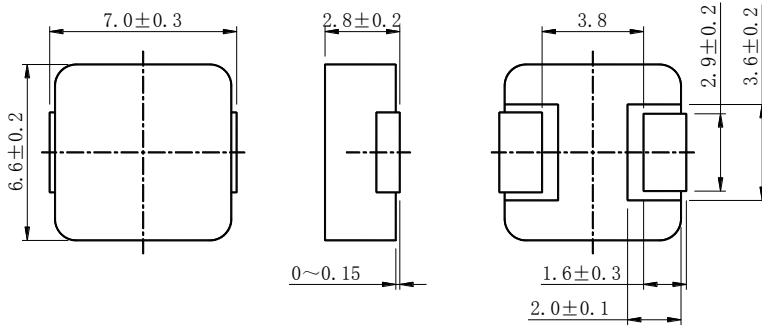
# SMD Power Inductor 0630CDMCC/DS



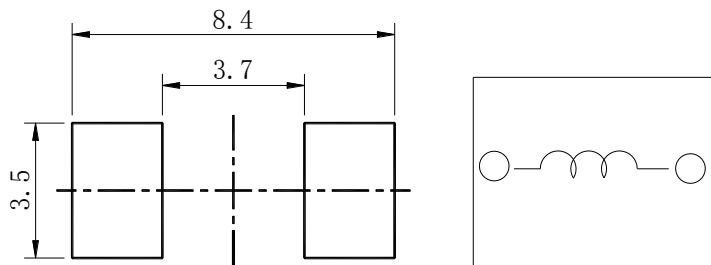
Halogen  
Free



## Dimension - [mm]



## Land pattern and Schematics - [mm]



## Description

- Metal compound molding type construction.
- Magnetically shielded.
- Low audible core noise.
- Suitable for large current.
- L × W × H: 7.3 × 6.8 × 3.0mm Max.
- Product weight: 0.73g (Ref.)
- Moisture Sensitivity Level: 1
- RoHS compliance.
- Halogen Free available.

## Environmental Data

- Operating temperature range:  $-55^{\circ}\text{C} \sim +125^{\circ}\text{C}$  (including coil's self temperature rise)
- Storage temperature range:  $-55^{\circ}\text{C} \sim +125^{\circ}\text{C}$
- Solder reflow temperature:  $260^{\circ}\text{C}$  peak.

## Packaging

- Carrier tape and reel packaging.
- 1500pcs/Reel.

## Applications

- Ideally used in notebook, ultrabook, 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.



### Electrical Characteristics

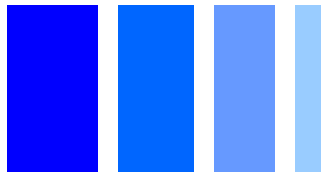
Part No.	Stamp	Inductance( $\mu$ H) [Within] ※1	D.C.R(m $\Omega$ ) at 25°C Max.(Typ.)	Saturation Current(A) at 25°C ※2 Max.(Typ.)	Temperature rise current (A) ※3 Typ.
0630CDMCCDS-R10MC	R10	0.10 $\pm$ 20%	1.08(0.90)	61.2(72.0)	40.0
0630CDMCCDS-R15MC	R15	0.15 $\pm$ 20%	1.14(0.95)	34.4(40.5)	35.0
0630CDMCCDS-R22MC	R22	0.22 $\pm$ 20%	3.0(2.5)	32.3(38.0)	24.0
0630CDMCCDS-R24MC	R24	0.24 $\pm$ 20%	3.1(2.6)	31.0(36.6)	23.0
0630CDMCCDS-R33MC	R33	0.33 $\pm$ 20%	3.5(3.0)	27.5(32.3)	21.0
0630CDMCCDS-R47MC	R47	0.47 $\pm$ 20%	4.1(3.5)	20.6(24.2)	20.0
0630CDMCCDS-R56MC	R56	0.56 $\pm$ 20%	4.5(3.9)	17.5(20.5)	18.8
0630CDMCCDS-R68MC	R68	0.68 $\pm$ 20%	5.3(4.8)	17.0(20.0)	16.5
0630CDMCCDS-R82MC	R82	0.82 $\pm$ 20%	6.0(5.4)	16.5(19.5)	14.8
0630CDMCCDS-1R0MC	1R0	1.0 $\pm$ 20%	7.4(6.7)	14.0(16.5)	14.4
0630CDMCCDS-1R5MC	1R5	1.5 $\pm$ 20%	12.1(10.6)	12.9(15.2)	10.2
0630CDMCCDS-2R2MC	2R2	2.2 $\pm$ 20%	15.0(13.5)	10.5(12.3)	9.3
0630CDMCCDS-3R3MC	3R3	3.3 $\pm$ 20%	22.0(18.0)	9.7(11.4)	8.4
0630CDMCCDS-4R7MC	4R7	4.7 $\pm$ 20%	33.0(28.0)	5.8(6.8)	6.3
0630CDMCCDS-5R6MC	5R6	5.6 $\pm$ 20%	43.0(37.0)	5.5(6.5)	5.2
0630CDMCCDS-6R8MC	6R8	6.8 $\pm$ 20%	48.0(42.5)	5.3(6.3)	5.0
0630CDMCCDS-8R2MC	8R2	8.2 $\pm$ 20%	60.0(54.0)	4.9(5.8)	4.3
0630CDMCCDS-100MC	100	10.0 $\pm$ 20%	67.0(62.0)	4.6(5.5)	4.0
0630CDMCCDS-150MC	150	15.0 $\pm$ 20%	115.0(104.0)	3.6(4.3)	3.3
0630CDMCCDS-220MC	220	22.0 $\pm$ 20%	200.0(180.0)	3.4(4.0)	2.3
0630CDMCCDS-330MC	330	33.0 $\pm$ 20%	258.0(215.0)	2.3(2.7)	2.1

※1 Measuring frequency Inductance at 100kHz 1V

※2 Saturation current: This indicates the value of D.C. current when the inductance becomes 30% lower than its initial value.

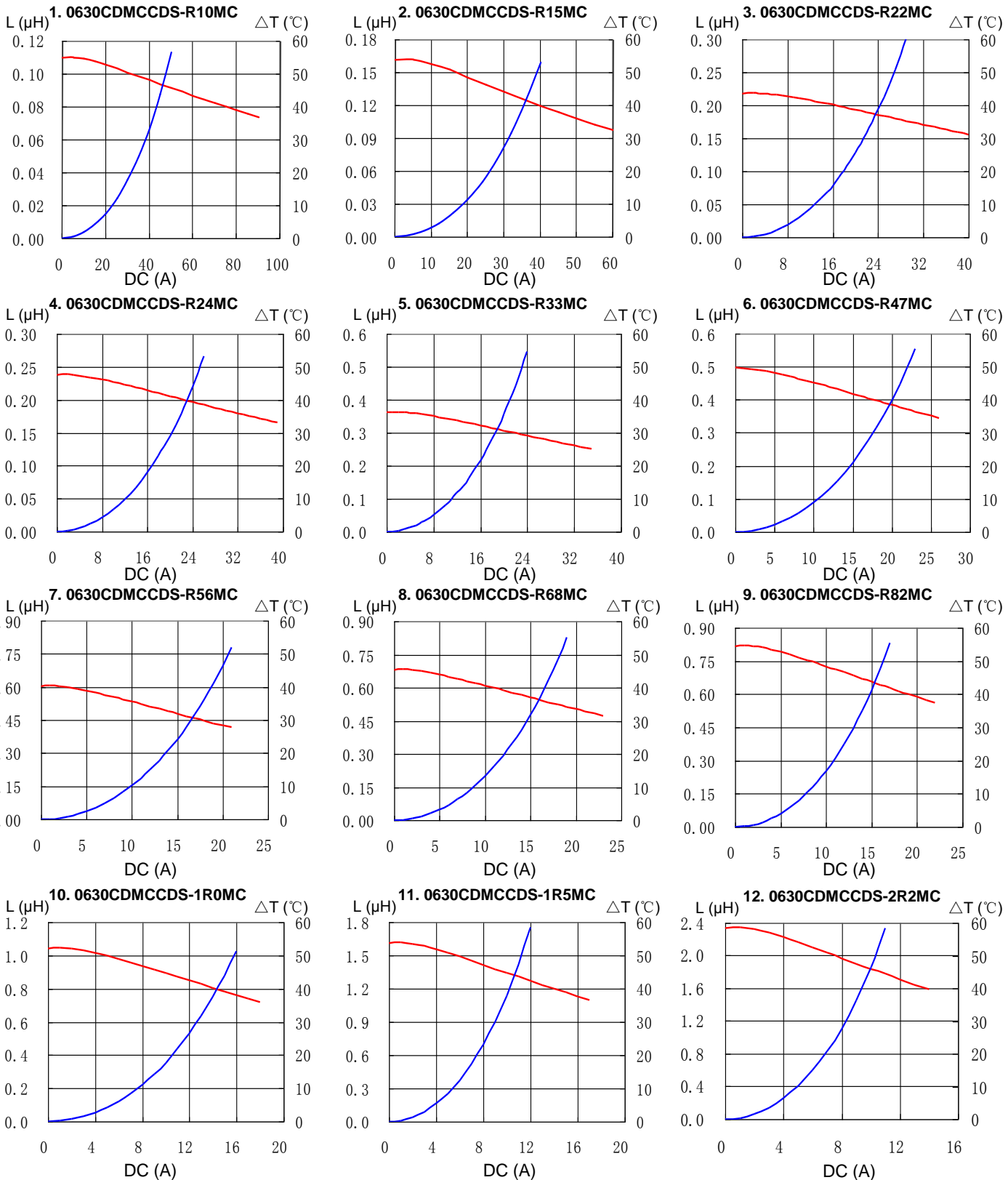
※3 Temperature rise current: The actual value of D.C. current when the temperature of coil becomes  $\Delta T=40^{\circ}\text{C}$  ( $T_a=25^{\circ}\text{C}$ ). (Test board condition: FR4, Copper=70 $\mu\text{m}$ , four-layer PWB t=1.6mm)

# SMD Power Inductor 0630CDMCC/DS



## Saturation Current & Temperature Rise Graph

— L (20°C)    —  $\Delta T$

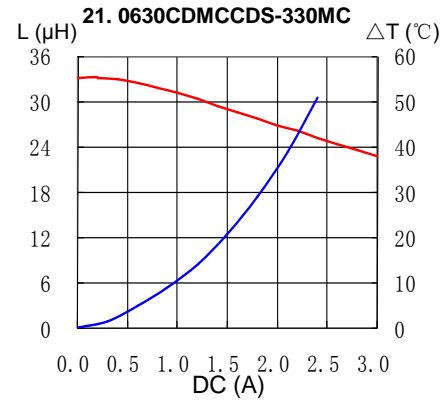
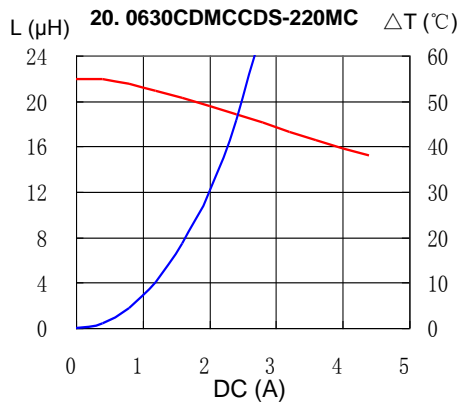
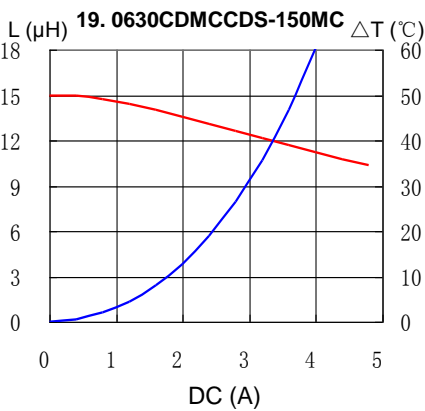
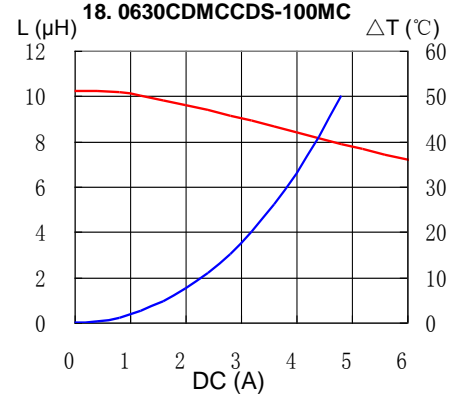
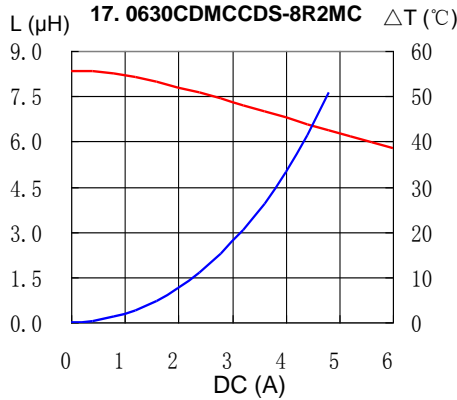
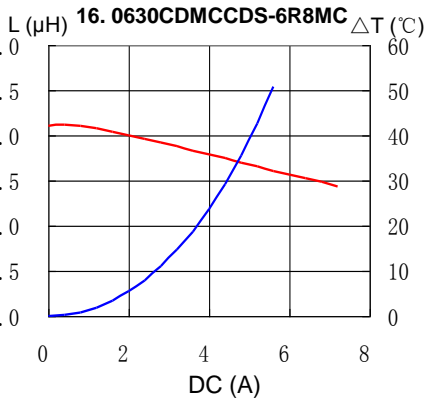
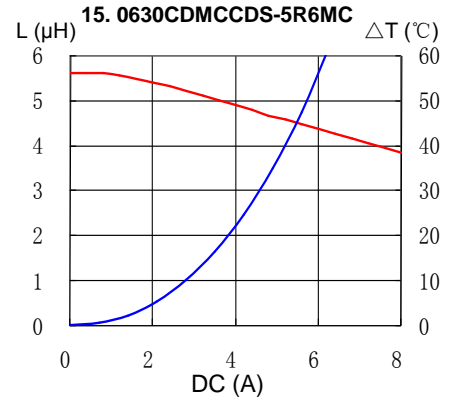
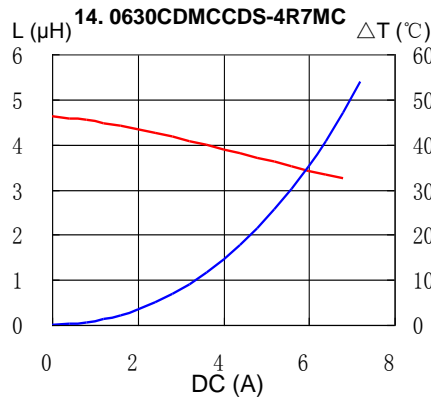
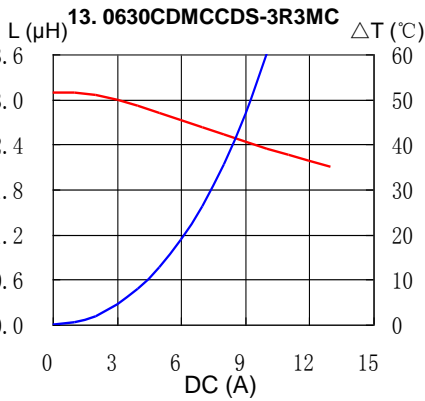


# SMD Power Inductor 0630CDMCC/DS



## Saturation Current & Temperature Rise Graph

— L (20°C)    —  $\Delta T$

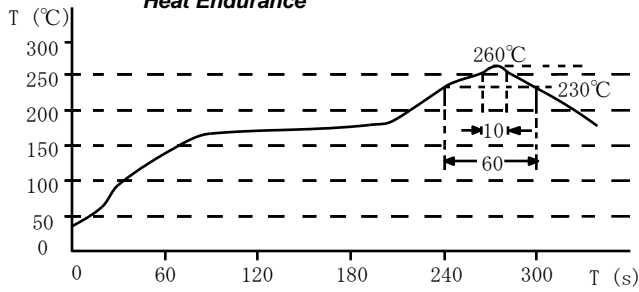


# SMD Power Inductor 0630CDMCC/DS

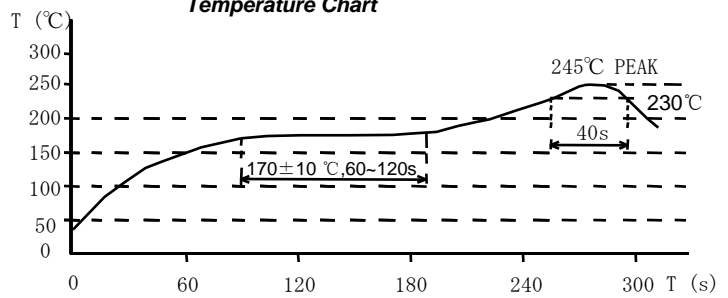


## Solder Reflow Condition

**Heat Endurance**



**Temperature Chart**



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

### Hong Kong

Tel.+852-2880-6781  
FAX.+852-2565-9600  
[sales@hk.sumida.com](mailto:sales@hk.sumida.com)

### Saitama(Japan)

Tel.+81-48-691-7300  
FAX.+81-48-691-7340  
[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.+86-21-5836-3299  
FAX.+86-21-5836-3266  
[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)

### Obernzell

Tel.+49-8591-937-0  
FAX. +49-8591-937-103  
[contact@eu.sumida.com](mailto:contact@eu.sumida.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.+65-6841-4426  
[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)