

# SMD Power Inductor 0412CDMC/DS



Halogen Free

## Description

- Magnetically shielded.
- L × W × H: 4.75 × 4.35 × 1.2 mm Max.
- Product weight: 0.12 g(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.

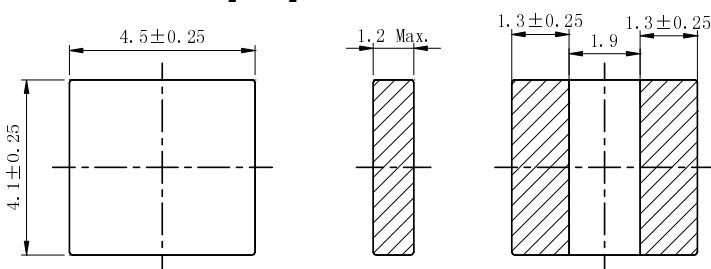
## Packaging

- Carrier tape and reel packaging.
- 13.0" diameter reel
- 5500pcs per reel

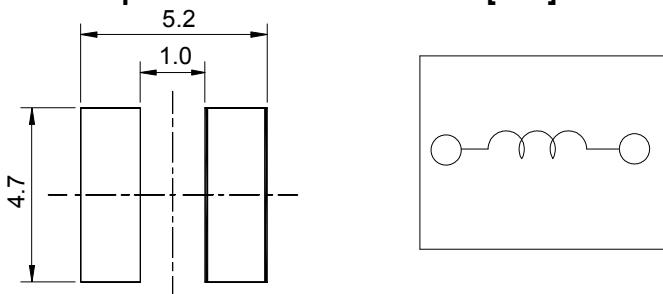
## Applications

- 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
0412CDMCDS-R47MC	R47	0.47 ± 20%	19 ± 20%	9.0	5.4
0412CDMCDS-1R0MC	1R0	1.0 ± 20%	40 ± 20%	6.0	4.5
0412CDMCDS-1R5MC	1R5	1.5 ± 20%	60 ± 20%	5.0	3.3
0412CDMCDS-2R2MC	2R2	2.2 ± 20%	79 ± 20%	4.0	2.8
0412CDMCDS-3R3MC	3R3	3.3 ± 20%	115 ± 20%	3.6	2.3
0412CDMCDS-4R7MC	4R7	4.7 ± 20%	160 ± 20%	3.2	1.9
0412CDMCDS-6R8MC	6R8	6.8 ± 20%	240 ± 20%	3.0	1.6
0412CDMCDS-100MC	100	10.0 ± 20%	370 ± 20%	2.0	1.3

※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 )

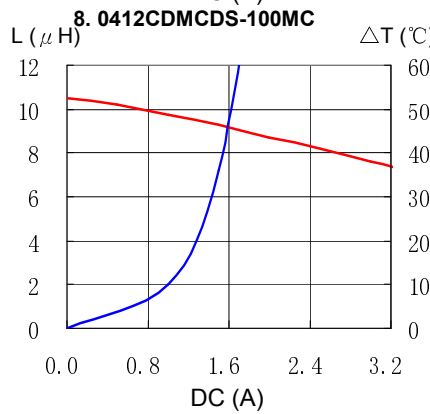
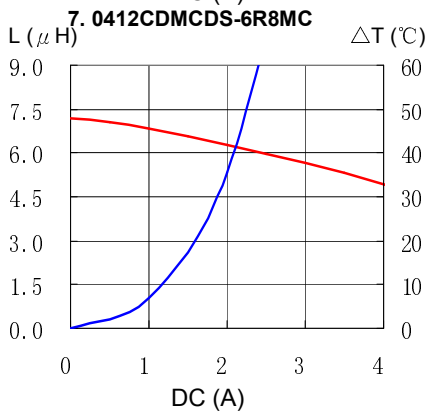
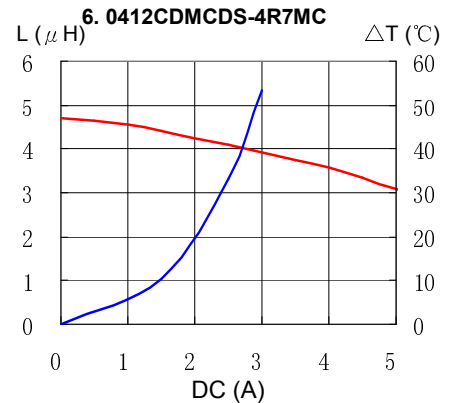
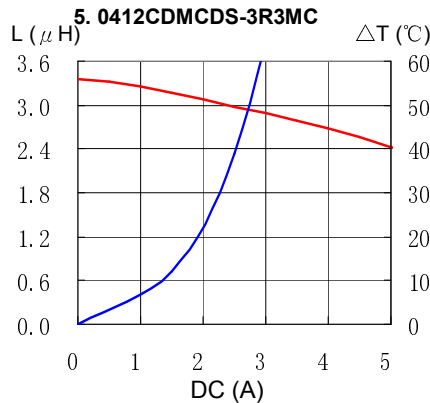
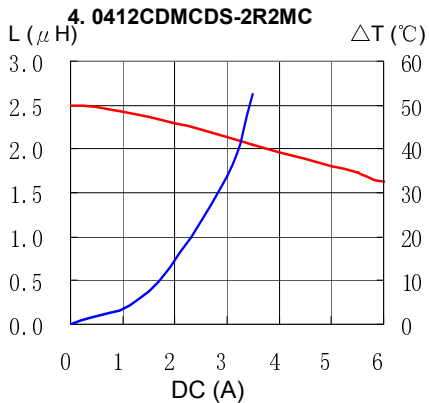
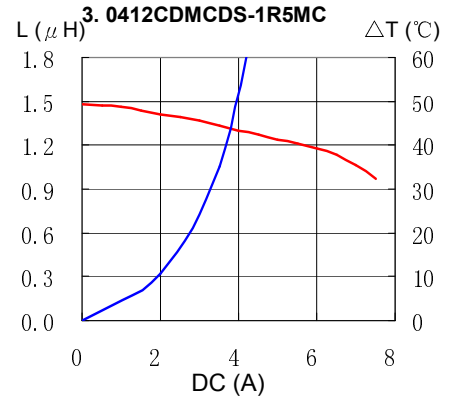
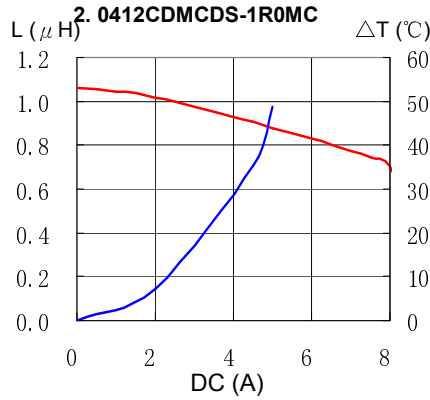
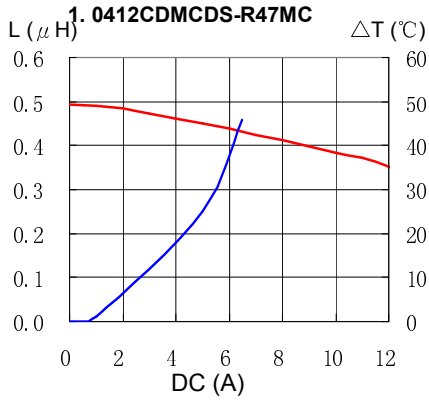
※3. Temperature rise current: The actual value of DC current when the top surface temperature of test sample rise is  $\Delta T = 40^\circ\text{C}$  ( $T_a = 25^\circ\text{C}$ ).

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## Saturation Current & Temperature Rise Graph

— L (20°C)    —  $\Delta T$

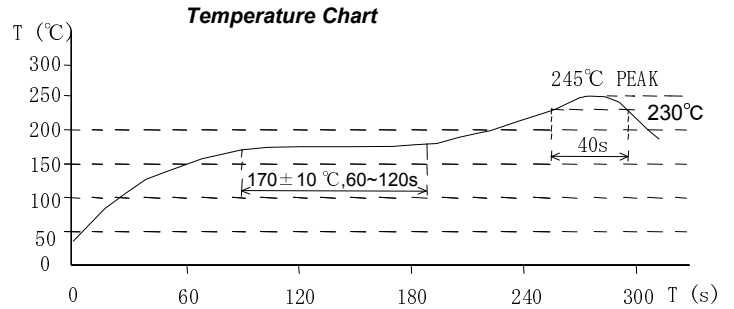
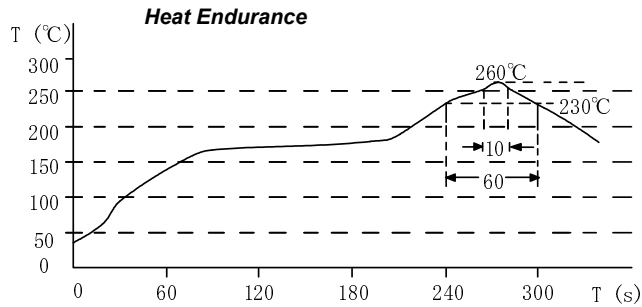


DC (A)

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## Solder Reflow Condition



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### 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)