

# SMD Power Inductor 0512CDMC/DS



Halogen Free

## Description

- Magnetically shielded.
- L × W × H: 5.75 × 5.45 × 1.2 mm Max.
- Product weight: 0.17g(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.

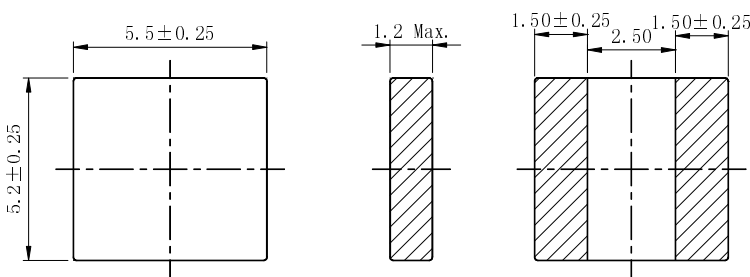
## Packaging

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

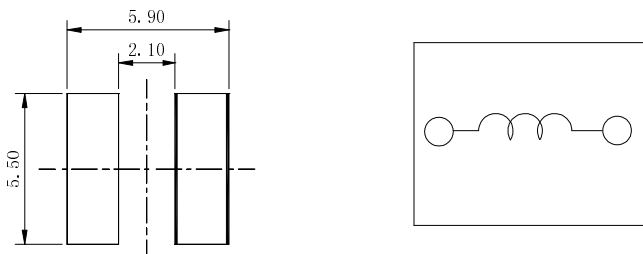
## Applications

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

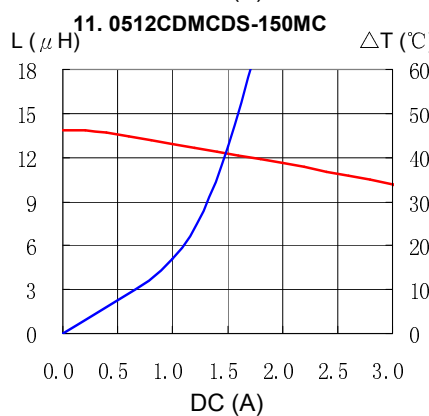
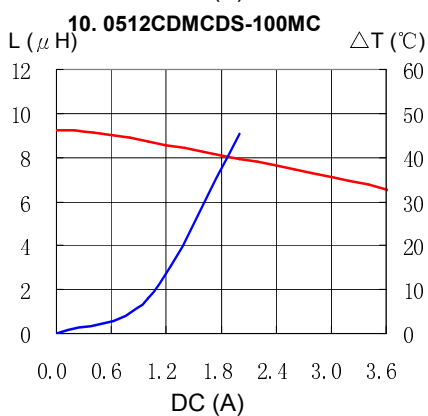
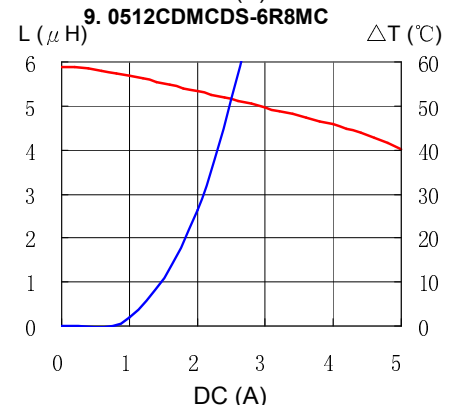
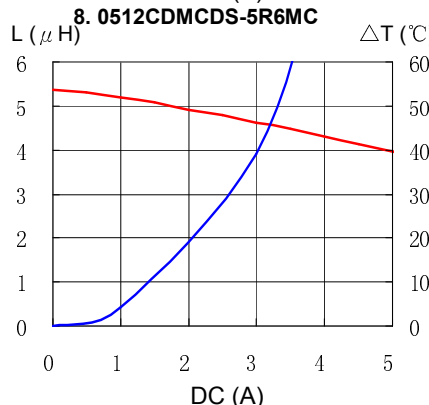
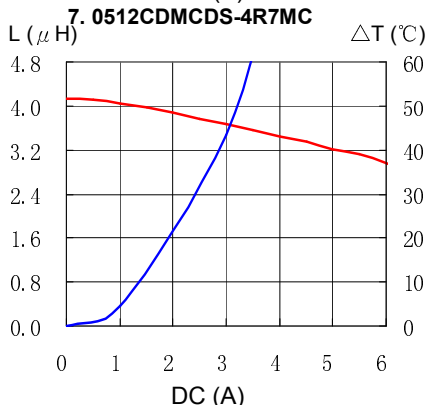
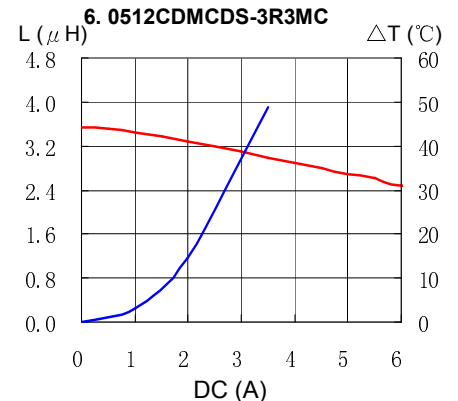
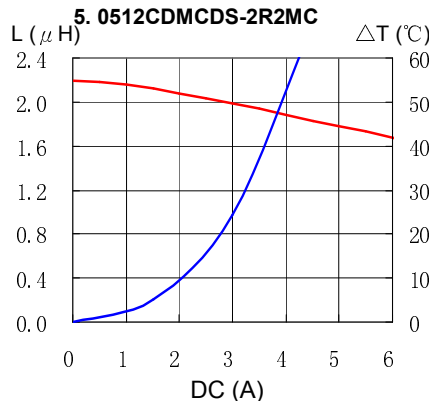
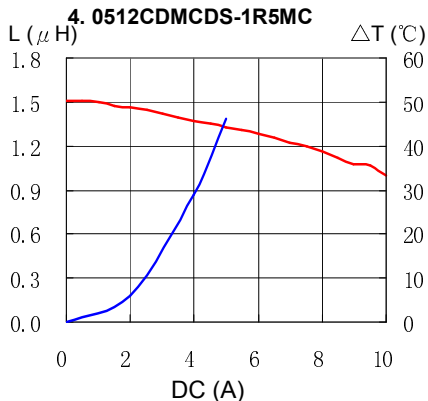
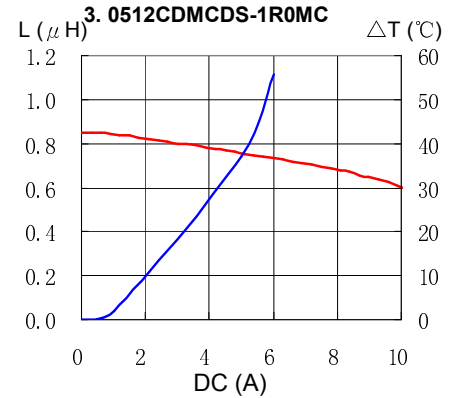
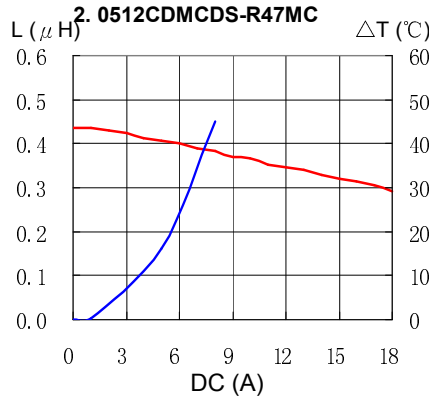
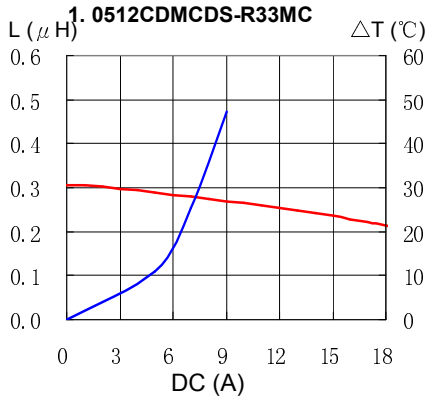
※3 Temperature rise current: The actual value of DC current when the top surface temperature of test sample rise is ΔT=40°C(Ta=25°C).

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## Saturation Current & Temperature Rise Graph

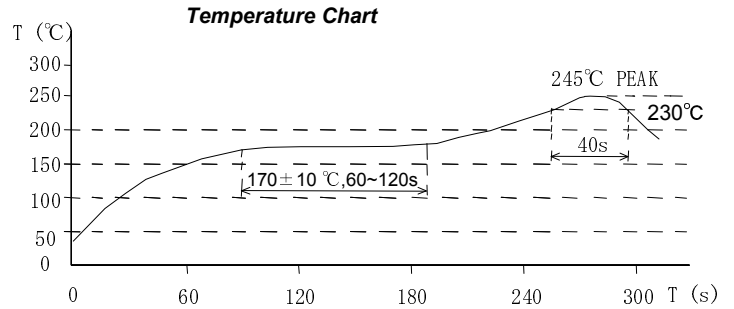
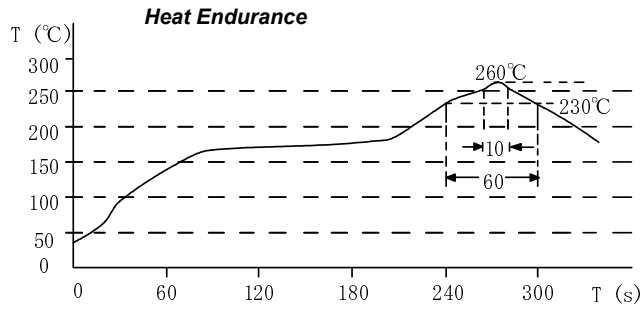
— L (20°C)    —  $\Delta T$



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## Solder Reflow Condition



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

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