



**THE DATASHEET OF  
252012CDMCDS-2R2MC**



# SMD Power Inductor 252012CDMC/DS



Halogen Free

## Description

- Magnetically shielded.
- L × W × H: 2.7 × 2.2 × 1.2 mm Max.
- Product weight: 30mg(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.

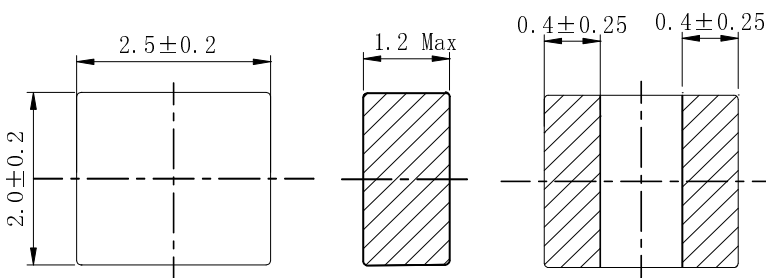
## Packaging

- Carrier tape and reel packaging.
- 7.1" diameter reel
- 3000pcs per reel

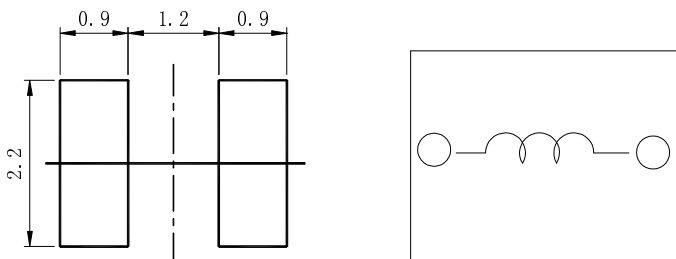
## Applications

- Ideally used in smart phone, tablet PC, SSD USB3.0 and other low profile high current application.

## Dimension - [mm]



## Land pattern and Schematics - [mm]



## Electrical Characteristics

Part No.	Inductance ( $\mu$ H) ※1	D.C.R (m $\Omega$ ) at 25°C	Saturation Current Max. (Typ.) (A) (at25°C) ※2	Temperature rise current Max. (Typ.) (A)	
				※3	※4
252012CDMCDS-R47MC	0.47 ± 20%	20 ± 20%	4.0(4.8)	3.8(4.5)	5.1(5.7)
252012CDMCDS-1R0MC	1.0 ± 20%	35 ± 20%	3.4(4.0)	3.1(3.7)	3.8(4.2)
252012CDMCDS-1R5MC	1.5 ± 20%	55 ± 20%	2.9(3.4)	2.5(2.9)	3.2(3.6)
252012CDMCDS-2R2MC	2.2 ± 20%	75 ± 20%	2.3(2.7)	2.0(2.3)	2.7(3.1)
252012CDMCDS-3R3MC	3.3 ± 20%	105 ± 20%	2.0(2.4)	1.5(1.8)	2.2(2.4)
252012CDMCDS-4R7MC	4.7 ± 20%	150 ± 20%	1.6(1.9)	1.4(1.6)	1.7(2.0)
252012CDMCDS-5R6MC	5.6 ± 20%	200 ± 20%	1.3(1.5)	1.3(1.5)	1.6(1.8)
252012CDMCDS-6R8MC	6.8 ± 20%	300 ± 20%	1.1(1.3)	1.1(1.3)	1.4(1.5)
252012CDMCDS-100MC	10 ± 20%	390 ± 20%	1.0(1.2)	0.9(1.1)	1.2(1.3)

※1 Measuring condition at 1MHz 0.1V

※2 Saturation current: The value of DC current when the inductance is over 70% of the initial value.

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

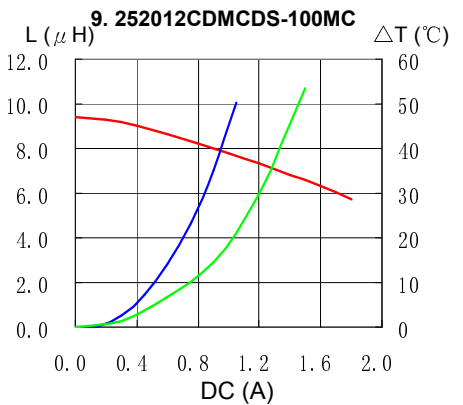
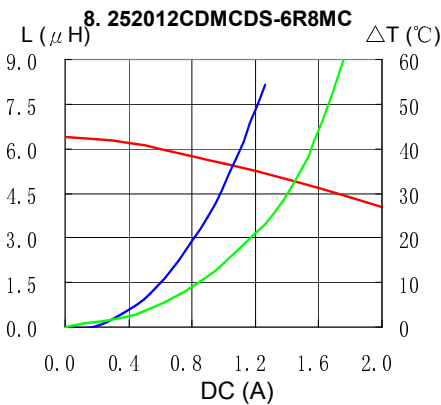
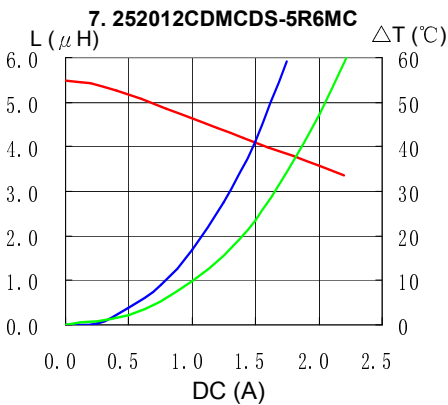
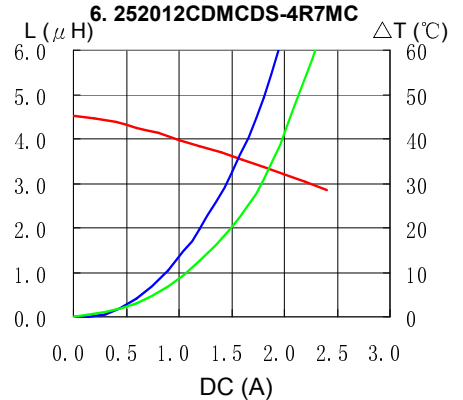
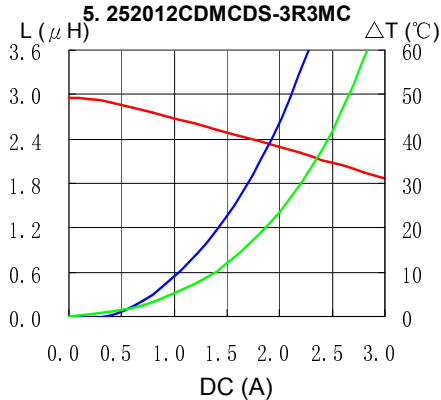
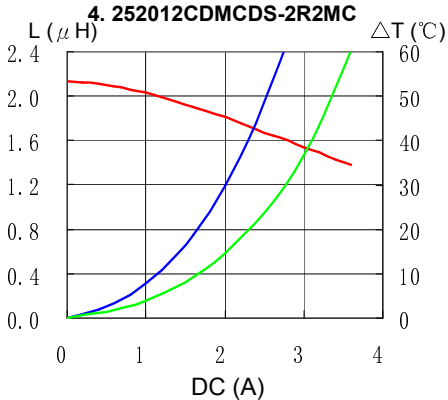
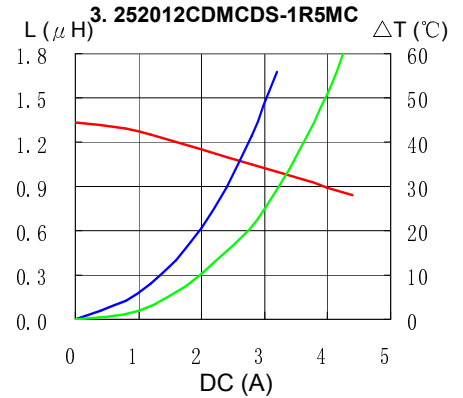
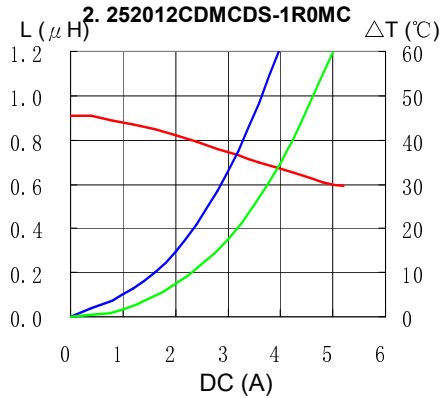
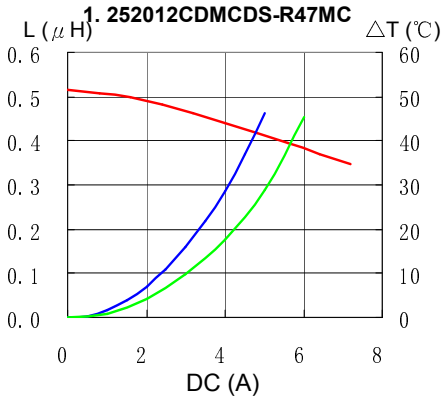
※4 Temperature rise current: The actual value of DC current when the top surface of test sample temperature rise is  $\Delta T=40^\circ\text{C}$  ( $T_a=25^\circ\text{C}$ ).

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## Saturation Current & Temperature Rise Graph

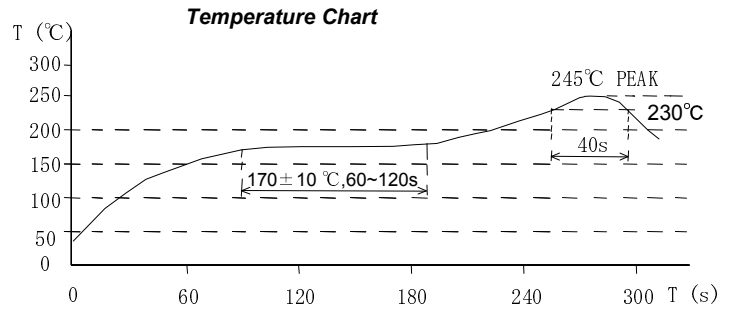
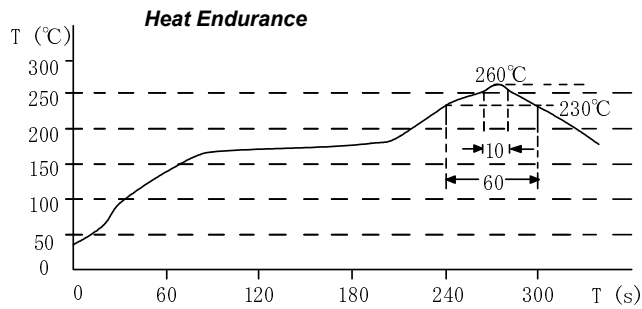
— L (20°C)    —  $\Delta T$ (the value of DC current)    —  $\Delta T$ (top surface temperature)



# SMD Power Inductor 252012CDMC/DS



## Solder Reflow Condition



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