

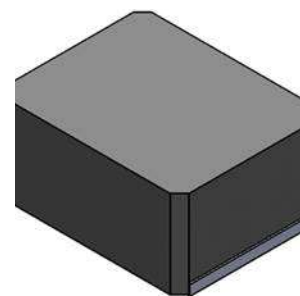
# SMD Power Inductor

## 201610CDMCD/DS



### Description

- Metal compound molding type construction
- Magnetically shielded
- Low audible core noise
- Suitable for large current.
- LxWxH: 2.2x1.8x1.0mm Max.
- Product weight: 0.2mg (Ref.)
- Moisture Sensitivity Level: 1



### Environmental Data

- Operating temperature range: -55°C~+125°C (including coil's self temperature rise)
- Storage temperature range: -55°C~+125°C

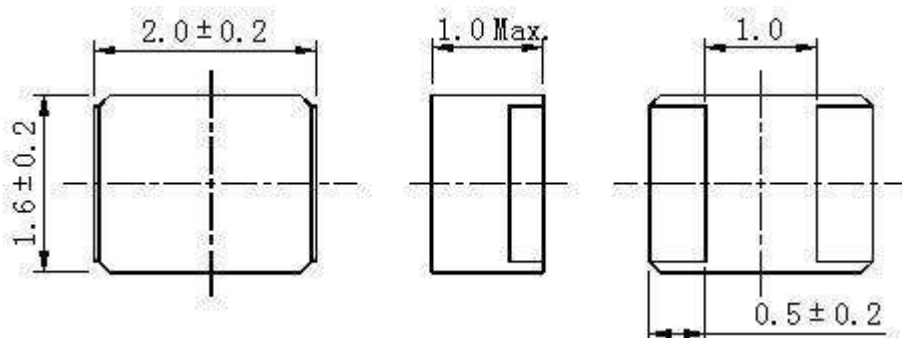
### Packaging

- Carrier tape and reel packaging.
- 3000Pcs per reel

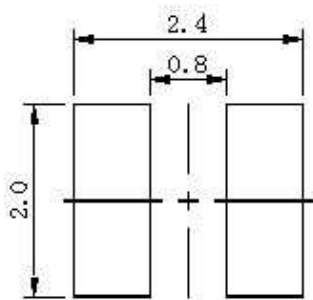
### Applications

- DC/DC converter for CPU in Notebook PC. Smartphones, LCD displays, HDDs, DVDs, DVCs, DSCs, PDAs ect..
- Thin type on-board power supply module for exchanger VRM for server.
- Low profile, high current power supplies.
- Battery powered devices.

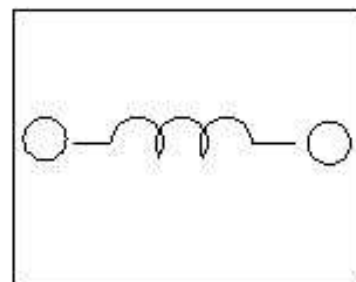
### Dimension - [mm]



### Recommended Land pattern - [mm]



### Wire Connection





### Electrical Characteristics

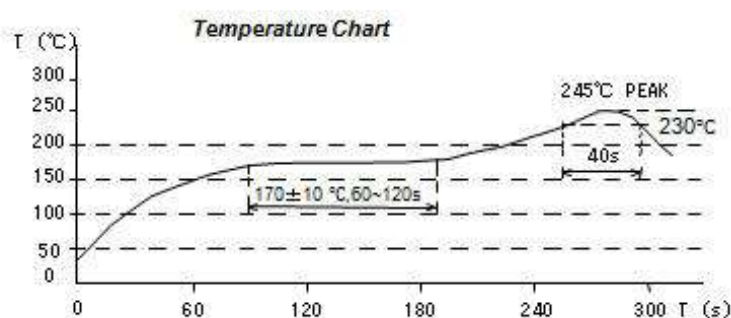
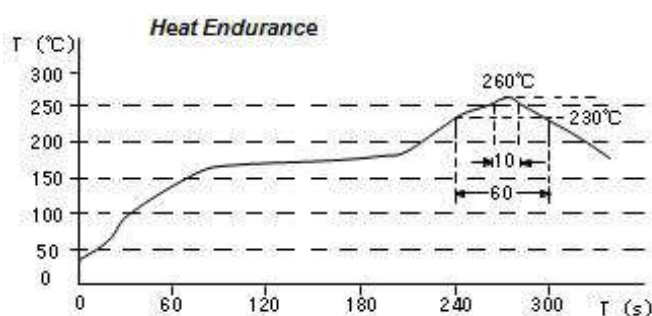
Part Number	Inductance [Within] ( $\mu$ H) ※1	D.C.R. at 20°C (A) Max. (Typ.) (m $\Omega$ )	Saturation Current (A) Max. (Typ.) ※2	Temperature Rise Current (A) (Typ.) ※3
201610CDMCDDS-R24MC	0.24 $\pm$ 20%	20.00 (16.00)	6.10 (7.20)	(6.30)
201610CDMCDDS-R47MC	0.47 $\pm$ 20%	32.00 (26.00)	4.80 (5.30)	(4.60)
201610CDMCDDS-R68MC	0.68 $\pm$ 20%	43.00 (36.00)	3.60 (4.20)	(4.20)
201610CDMCDDS-1R0MC	1.00 $\pm$ 20%	57.00 (48.00)	3.00 (3.50)	(3.30)
201610CDMCDDS-2R2MC	2.20 $\pm$ 20%	138 (115)	2.00 (2.30)	(2.10)

※1 Measuring frequency Inductance at 1MHz,0.1V

※2 Saturation current: This indicates the actual 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  $\mu$ m, four-layer PWB t=1.6mm)

### Solder Reflow Condition



# SMD Power Inductor

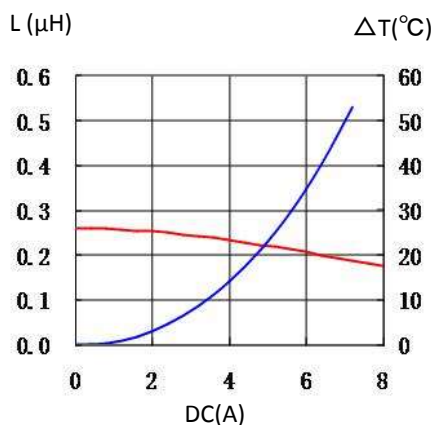
201610CDMCD/DS



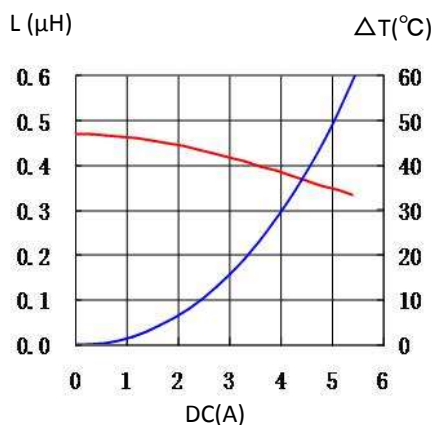
## Saturation Current & Temperature Rise Graph

— L (20°C) —  $\Delta T$

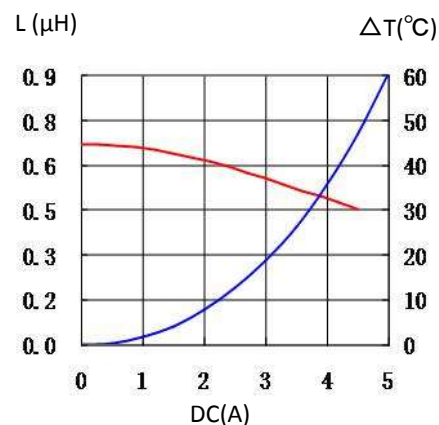
1. 201610CDMCDDS-R24MC



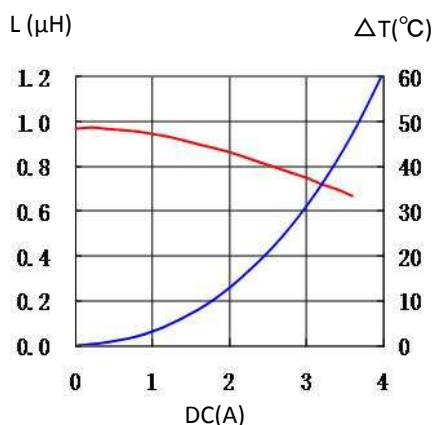
2. 201610CDMCDDS-R47MC



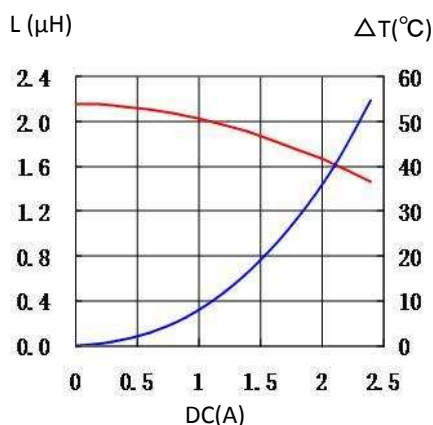
3. 201610CDMCDDS-R68MC



4. 201610CDMCDDS-1R0MC



5. 201610CDMCDDS-2R2MC



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