### **SMD Power Inductor**

### **201610CDMCC/DS**





## **Sumida**

#### Description

- Metal compound molding type construction
- Magnetically shielded
- Low audible core noise
- Suitable for large current
- LxWxH:2.2x1.8x1.0mm Max.
- Product weight: 0.25mg (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

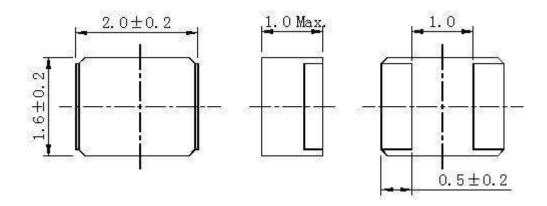
#### **Packaging**

• Carrier tape and reel packaging. 3,000pcs per reel.

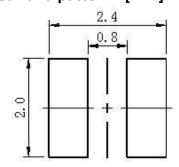
#### **Applications**

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

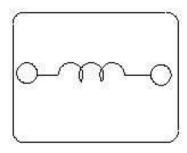
#### Dimension - [mm]



#### Recommended Land pattern - [mm]



#### **Wire Connection**



# SMD Power Inductor 201610CDMCC/DS



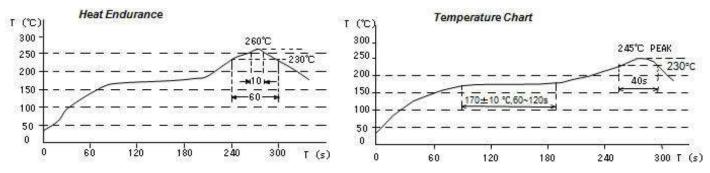


#### **Electrical Characteristics**

| Part Number         | Inductance<br>[Within]<br>(μH) ※1 | D.C.R. at 20°C max(typ) (mΩ) | Saturation Current at 20°C(A) ※2 | Temperature<br>Rise Current<br>(A) ※3 |
|---------------------|-----------------------------------|------------------------------|----------------------------------|---------------------------------------|
| 201610CDMCCDS-R24MC | 0.24 ± 20%                        | 23.00<br>(19.00)             | 6.50                             | 5.20                                  |
| 201610CDMCCDS-R47MC | 0.47 ± 20%                        | 41.00<br>(34.00)             | 4.20                             | 3.80                                  |

- ※ 1. Measuring frequency Inductance at 1MHz, 0. 1V.
- \* 2. Saturation current: The actual value of D.C current when the inductance decreases to 70% of it's initial value.
- $\divideontimes$  3. Temperature rise current: The actual value of DC current when the coil temperature rise is  $\triangle$ T=40°C (Ta=25°C) Board conditions: FR4, Copper=70  $\mu$  m, four-layer PWB, t=1.6mm.

#### **Solder Reflow Condition**

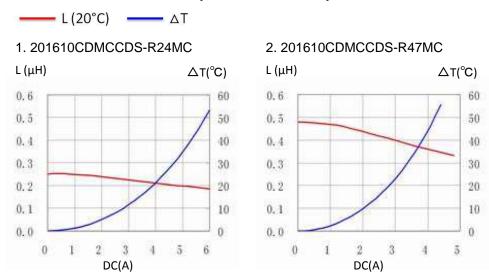


# SMD Power Inductor 201610CDMCC/DS





#### **Saturation Current & Temperature Rise Graph**





For sales office information, please <u>click here</u> to visit our website.