

# SMT Shielded Power Inductors

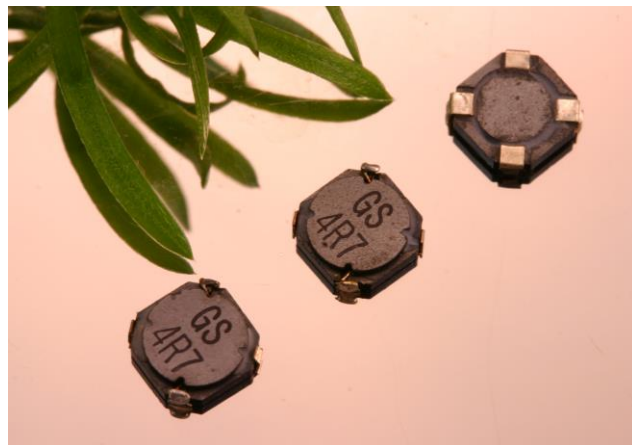
## GSD4009C / GSD4011C / GSD4014C

### Features (特長)

- Magnetically shielded construction (閉磁路構造設計)
- Low Profile (薄型結構)
- Large Current and Low DCR (大電流低直流阻抗)

### Applications (用途)

- LCD Driver (LCD 驅動器)
- Cellular Phone (手機)
- Small DC/DC converter (小型直流轉換器)

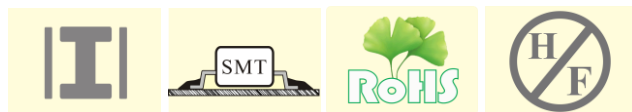


### Product Identification (產品識別)

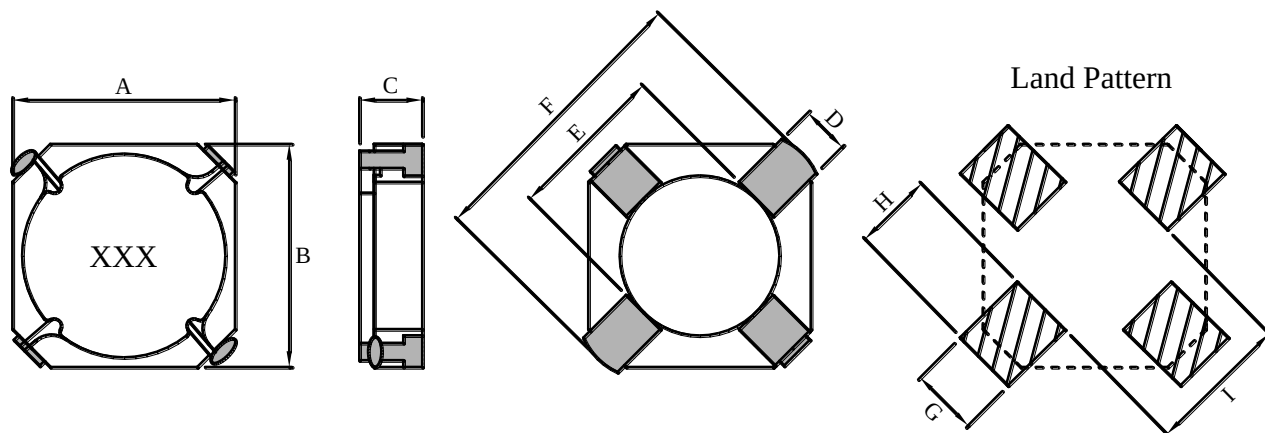
GSD4009C - \_\_\_\_\_ (Ex. GSD4009C-4R7N)

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1. SMT Shielded Power Inductors (閉磁式功率電感)  
(GSD4009C, GSD4011C, GSD4014C)
2. Inductance (電感值)
3. Tolerance (誤差值) ( 參照表 M 20%, N 30% )



### Configurations & Dimensions (結構圖及規格尺寸)



Unit In mm

| Type<br>(型式) | A<br>(max) | B<br>(max) | C<br>(max) | D   | E   | F   | G   | H    | I   |
|--------------|------------|------------|------------|-----|-----|-----|-----|------|-----|
| GSD4009C     | 4.9        | 4.9        | 1.0        | 1.0 | 3.3 | 5.4 | 1.4 | 1.65 | 2.9 |
| GSD4011C     | 4.9        | 4.9        | 1.2        | 1.0 | 3.3 | 5.4 | 1.4 | 1.65 | 2.9 |
| GSD4014C     | 4.9        | 4.9        | 1.5        | 1.0 | 3.3 | 5.4 | 1.4 | 1.65 | 2.9 |

♣Design as Customer's Requested Specifications. (可依客戶特殊需求設計)

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## GSD4009C

Electrical Characteristics for GSD4009C Series [GSD4009C 系列電子特性規格]

| Part Number<br>產品料號 | Inductance<br>( $\mu$ H)<br>電感值 (L) | Test Freq.<br>(KHz)<br>測試頻率 | DCR ( $\Omega$ )<br>(max)<br>直流阻抗 | Isat (A)<br>(max)<br>定格電流 | Irms (A)<br>(max)<br>溫昇電流 |
|---------------------|-------------------------------------|-----------------------------|-----------------------------------|---------------------------|---------------------------|
| GSD4009C – 4R7N     | 4.70                                | 100                         | 0.185                             | 0.80                      | 0.75                      |
| GSD4009C – 6R8N     | 6.80                                | 100                         | 0.260                             | 0.63                      | 0.63                      |
| GSD4009C – 100M     | 10.00                               | 100                         | 0.370                             | 0.50                      | 0.50                      |
| GSD4009C – 150M     | 15.00                               | 100                         | 0.580                             | 0.42                      | 0.37                      |
| GSD4009C – 220M     | 22.00                               | 100                         | 0.910                             | 0.35                      | 0.30                      |

※Test Freq. : 100KHz / 0.1V.

※Operating Temp. :  $-40^{\circ}\text{C} \sim +125^{\circ}\text{C}$

※Inductance drop = 35% typ. at Isat.

※ $\Delta T=40^{\circ}\text{C}$  rise at Irms.

※Storage Temperature&Humidity :  $\leq 40^{\circ}\text{C}$  & 70% RH maximum

## GSD4011C

Electrical Characteristics for GSD4011C Series [GSD4011C 系列電子特性規格]

| Part Number<br>產品料號 | Inductance<br>( $\mu$ H)<br>電感值 (L) | Test Freq.<br>(KHz)<br>測試頻率 | DCR ( $\Omega$ )<br>(max)<br>直流阻抗 | IDC (A)<br>(max)<br>定格電流 |
|---------------------|-------------------------------------|-----------------------------|-----------------------------------|--------------------------|
| GSD4011C – 3R3N     | 3.30                                | 100                         | 0.120                             | 1.00                     |
| GSD4011C – 4R7N     | 4.70                                | 100                         | 0.180                             | 0.80                     |
| GSD4011C – 6R8N     | 6.80                                | 100                         | 0.220                             | 0.70                     |
| GSD4011C – 100M     | 10.00                               | 100                         | 0.310                             | 0.60                     |
| GSD4011C – 150M     | 15.00                               | 100                         | 0.480                             | 0.50                     |
| GSD4011C – 220M     | 22.00                               | 100                         | 0.710                             | 0.40                     |
| GSD4011C – 330M     | 33.00                               | 100                         | 1.100                             | 0.30                     |

※Test Freq. : 100KHz / 0.1V.

※Operating Temp. :  $-40^{\circ}\text{C} \sim +125^{\circ}\text{C}$

※Inductance drop = 35% typ. at IDC.

※Storage Temperature&Humidity :  $\leq 40^{\circ}\text{C}$  & 70% RH maximum

# SMT Shielded Power Inductors

## GSD4014C

Electrical Characteristics for GSD4014C Series [GSD4014C 系列電子特性規格]

| Part Number<br>產 品 料 號 | Inductance<br>( $\mu$ H)<br>電 感 值 (L) | Test Freq.<br>(KHz)<br>測 試 頻 率 | DCR ( $\Omega$ )<br>(max)<br>直 流 阻 抗 | Isat (A)<br>(max)<br>定 格 電 流 | Irms (A)<br>(max)<br>溫 昇 電 流 |
|------------------------|---------------------------------------|--------------------------------|--------------------------------------|------------------------------|------------------------------|
| GSD4014C – 4R7N        | 4.70                                  | 100                            | 0.110                                | 0.90                         | 1.00                         |
| GSD4014C – 6R8N        | 6.80                                  | 100                            | 0.130                                | 0.80                         | 1.00                         |
| GSD4014C – 100M        | 10.00                                 | 100                            | 0.180                                | 0.65                         | 0.85                         |
| GSD4014C – 150M        | 15.00                                 | 100                            | 0.270                                | 0.55                         | 0.63                         |
| GSD4014C – 220M        | 22.00                                 | 100                            | 0.390                                | 0.45                         | 0.52                         |
| GSD4014C – 330M        | 33.00                                 | 100                            | 0.560                                | 0.35                         | 0.42                         |
| GSD4014C – 470M        | 47.00                                 | 100                            | 0.830                                | 0.30                         | 0.33                         |

※Test Freq. : 100KHz / 0.1V.

※Operating Temp. :  $-40^{\circ}\text{C} \sim +125^{\circ}\text{C}$

※Inductance drop = 35% typ. at Isat.

※ $\Delta T=40^{\circ}\text{C}$  rise at Irms.

※Storage Temperature&Humidity :  $\leq 40^{\circ}\text{C}$  & 70% RH maximum