

# Wire Wound Chip Common Mode Choke Coil – SDCW Series

Operating Temp. : -40℃~+85℃



## FEATURES

- Winding type realizes small size and low profile
- Prevention of common mode noise at high frequency
- 30Ω~2200Ω are optional for different noise level and signal frequency
- Excellent solderability

## APPLICATIONS

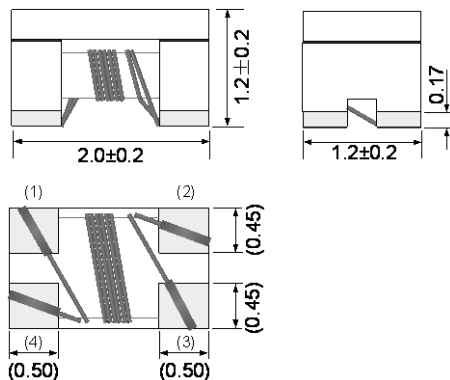
- USB2.0 of PC, peripheral equipments, small digital AV equipments, etc.
- LVDS lines of Note PC, LCD
- Audio lines

## PRODUCT IDENTIFICATION

| <u>SDCW</u> | <u>2012</u>                         | <u>(L)</u> | <u>-2</u>                      | <u>-900</u> | <u>T</u>            | <u>F</u>       |
|-------------|-------------------------------------|------------|--------------------------------|-------------|---------------------|----------------|
| ①           | ②                                   | ③          | ④                              | ⑤           | ⑥                   | ⑦              |
| ①           | Type                                |            | External Dimensions (L×W) (mm) |             | Code                |                |
| SDCW        | Winding Type Common Mode Choke Coil |            | 2012 [0805]                    | 2.0×1.2     | L                   | Larger Current |
|             |                                     |            | 3216 [1206]                    | 3.2×1.6     |                     |                |
| ④           | Number of Lines                     |            | Packing                        |             | Hazardous Substance |                |
|             | 2                                   |            | T                              |             | Free Products       |                |
| ⑤           | Impedance                           |            |                                |             | F                   |                |
| Example     | Nominal Value                       |            |                                |             |                     |                |
| 900         | 90Ω                                 |            |                                |             |                     |                |

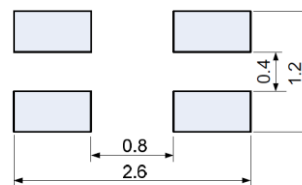
## SHAPE AND DIMENSIONS

SDCW2012 Type



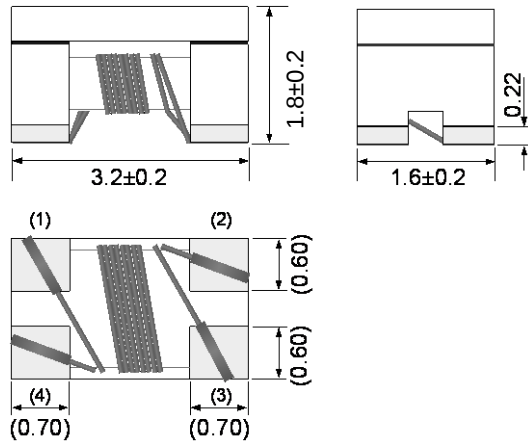
Recommended Land Pattern

Unit: mm



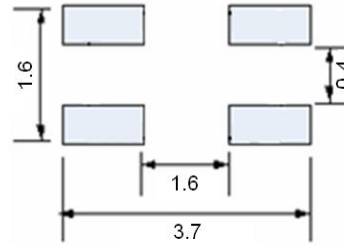
## SHAPE AND DIMENSIONS

### SDCW3216 Type



Recommended Land Pattern

Unit: mm



## SPECIFICATIONS

### SDCW2012(L) TYPE

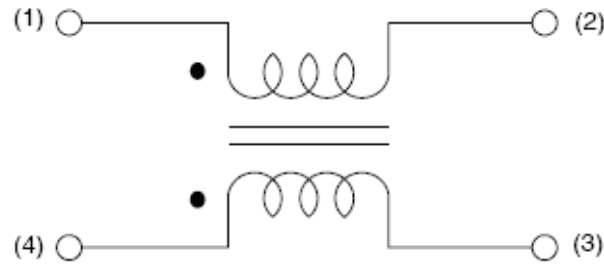
| Part Number       | Common Mode Impedance @100MHz | Max. DC Resistance | Max. Rated Current | Rated Voltage   | Min. Insulation Resistance |
|-------------------|-------------------------------|--------------------|--------------------|-----------------|----------------------------|
| Units             | $\Omega$                      | $\Omega$           | mA                 | Volts           | M $\Omega$                 |
| Symbol            | Z                             | DCR                | I <sub>r</sub>     | V <sub>DC</sub> | IR                         |
| SDCW2012-2-300TF  | 30±25%                        | 0.20               | 450                | 50              | 10                         |
| SDCW2012-2-670TF  | 67±25%                        | 0.25               | 400                | 50              | 10                         |
| SDCW2012-2-750TF  | 75±25%                        | 0.25               | 400                | 50              | 10                         |
| SDCW2012-2-900TF  | 90±25%                        | 0.35               | 330                | 50              | 10                         |
| SDCW2012-2-121TF  | 120±25%                       | 0.30               | 370                | 50              | 10                         |
| SDCW2012-2-181TF  | 180±25%                       | 0.35               | 330                | 50              | 10                         |
| SDCW2012-2-201TF  | 200±25%                       | 0.40               | 300                | 50              | 10                         |
| SDCW2012-2-221TF  | 220±25%                       | 0.40               | 300                | 50              | 10                         |
| SDCW2012-2-261TF  | 260±25%                       | 0.40               | 300                | 50              | 10                         |
| SDCW2012-2-361TF  | 360±25%                       | 0.45               | 280                | 50              | 10                         |
| SDCW2012-2-371TF  | 370±25%                       | 0.45               | 280                | 50              | 10                         |
| SDCW2012-2-601TF  | 600±25%                       | 0.55               | 200                | 50              | 10                         |
| SDCW2012-2-751TF  | 750±25%                       | 0.70               | 180                | 50              | 10                         |
| SDCW2012-2-901TF  | 900±25%                       | 0.80               | 150                | 50              | 10                         |
| SDCW2012-2-102TF  | 1000±25%                      | 0.80               | 150                | 50              | 10                         |
| SDCW2012L-2-900TF | 90±25%                        | 0.19               | 400                | 50              | 10                         |
| SDCW2012L-2-121TF | 120±25%                       | 0.22               | 370                | 50              | 10                         |
| SDCW2012L-2-201TF | 200±25%                       | 0.25               | 350                | 50              | 10                         |

### SDCW3216 TYPE

| Part Number      | Common Mode Impedance @100MHz | Max. DC Resistance | Max. Rated Current | Rated Voltage   | Min. Insulation Resistance |
|------------------|-------------------------------|--------------------|--------------------|-----------------|----------------------------|
| Units            | $\Omega$                      | $\Omega$           | mA                 | Volts           | M $\Omega$                 |
| Symbol           | Z                             | DCR                | I <sub>r</sub>     | V <sub>DC</sub> | IR                         |
| SDCW3216-2-900TF | 90±25%                        | 0.30               | 370                | 50              | 10                         |
| SDCW3216-2-161TF | 160±25%                       | 0.40               | 340                | 50              | 10                         |
| SDCW3216-2-261TF | 260±25%                       | 0.50               | 310                | 50              | 10                         |
| SDCW3216-2-601TF | 600±25%                       | 0.80               | 260                | 50              | 10                         |
| SDCW3216-2-102TF | 1000±25%                      | 1.00               | 230                | 50              | 10                         |
| SDCW3216-2-222TF | 2200±25%                      | 1.20               | 200                | 50              | 10                         |

※: Products with other electrical characteristics can be provided upon customer's request. Please contact your local sales.

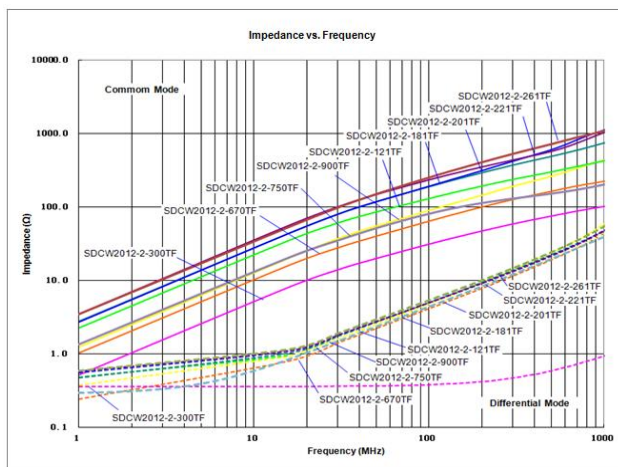
## EQUIVALENT CIRCUIT



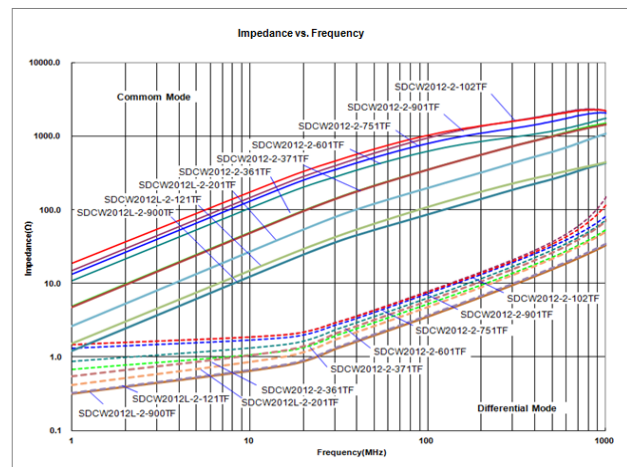
## TYPICAL ELECTRICAL CHARACTERISTICS

Impedance vs. Frequency

SDCW2012 TYPE  
(30~260Ω)



SDCW2012 TYPE  
(360~1000Ω)



SDCW3216 TYPE  
(90~2200Ω)

