

# Wire Wound Chip Common Mode Choke Coil – SDCW-U Series

Operating Temp. : -40°C~+85°C



## FEATURES

- Winding type realizes small size and low profile
- Prevention of common mode noise at high frequency
- Excellent solderability

## APPLICATIONS

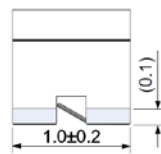
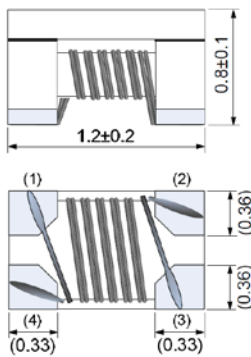
- Super speed differential signal lines for USB3.0.

## PRODUCT IDENTIFICATION

<u>SDCW</u> ①		<u>2012</u> ②		<u>U</u> ③	<u>-2</u> ④	<u>-900</u> ⑤	<u>T</u> ⑥	<u>F</u> ⑦
Type		External Dimensions (LxW) (mm)		Code				
SDCW	Winding Type	1210 [0504]	1.2x1.0	U	For Super Speed Differential Signal Lines			
	Common Mode Choke Coil	2012 [0805]	2.0x1.2					
Impedance		Number of Lines		Packing		Hazardous Substance Free Products		
Example	Nominal Value	2		T		F		
900	90Ω			Tape & Reel				

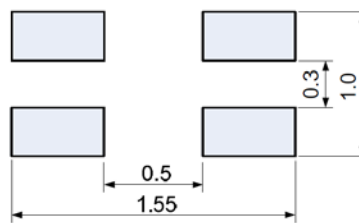
## SHAPE AND DIMENSIONS

### SDCW1210U TYPE

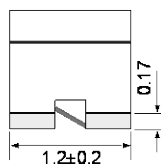
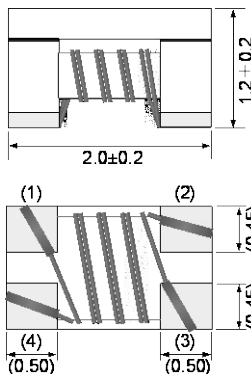


### Recommended Land Pattern

Unit: mm

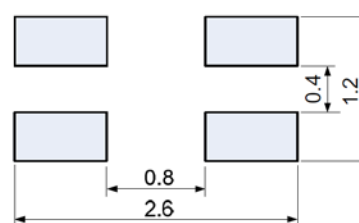


### SDCW2012U TYPE



### Recommended Land Pattern

Unit: mm



## SPECIFICATIONS

### SDCW1210U TYPE

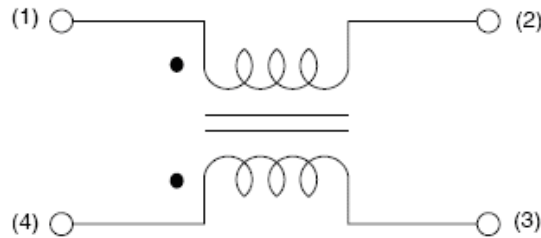
Part Number	Common Mode Impedance @100MHz	Max. DC Resistance	Max. Rated Current	Rated Voltage	Min. Insulation Resistance
Units	$\Omega$	$\Omega$	mA	Volts	M $\Omega$
Symbol	Z	DCR	I <sub>r</sub>	V <sub>DC</sub>	IR
SDCW1210U-2-140TF	14±25%	0.12	600	20	10
SDCW1210U-2-600TF	60±25%	0.40	300	20	10
SDCW1210U-2-900TF	90±25%	0.50	280	20	10

### SDCW2012U 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
SDCW2012U-2-900TF	90±25%	0.40	280	20	10

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

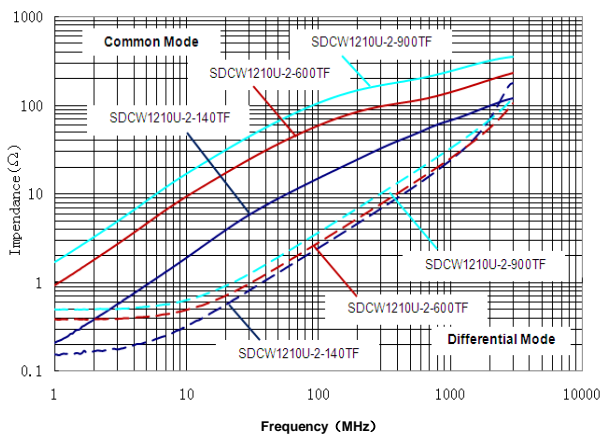
## EQUIVALENT CIRCUIT



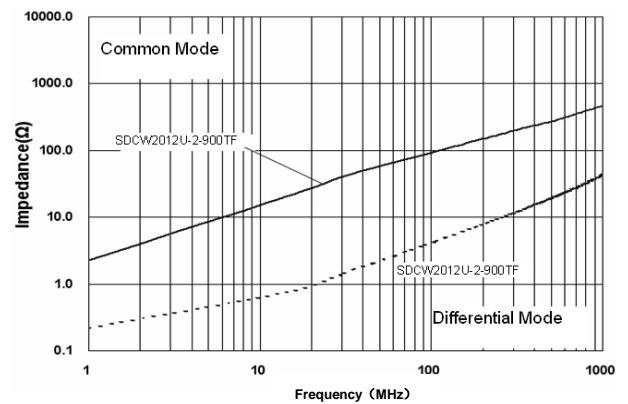
## TYPICAL ELECTRICAL CHARACTERISTICS

Impedance vs. Frequency

SDCW1210U TYPE



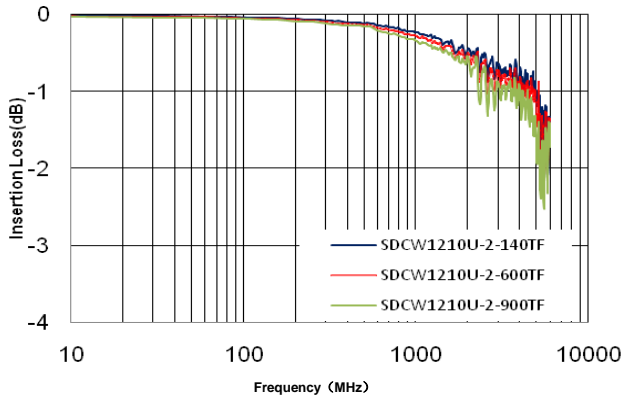
SDCW2012U TYPE



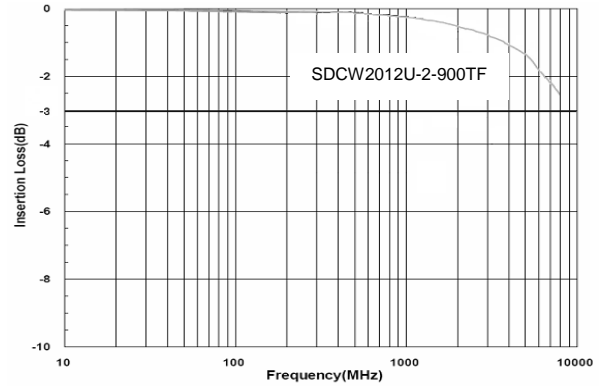
# TYPICAL ELECTRICAL CHARACTERISTICS

## Insertion Loss

### SDCW1210U TYPE

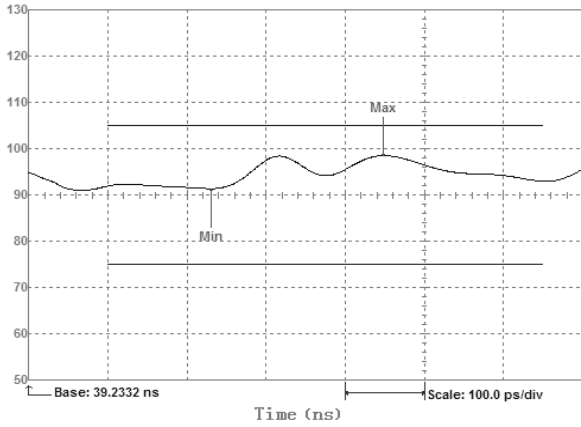


### SDCW2012U TYPE



## Differential Mode Impedance Characteristics

### SDCW2012U-2-900TF



## Eye Diagram in USB3.0

### SDCW2012U-2-900TF

