

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

1	2	3	4	5	6	7
SDCW	2012	U	-2	-900	T	F

1 Type	
SDCW	Winding Type Common Mode Choke Coil

2 External Dimensions (L×W) (mm)	
1210 [0504]	1.2×1.0
2012 [0805]	2.0×1.2

3 Code	
U	For SuperSpeed Differential Signal Lines

4 Number of Lines	
2	

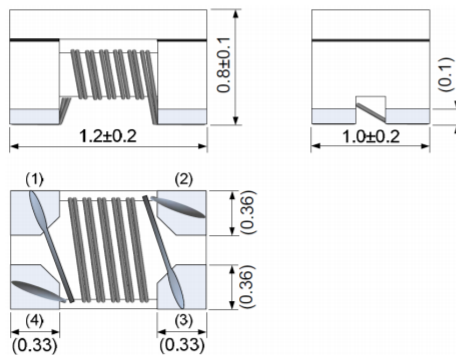
5 Impedance	
Example	Nominal Value
900	90Ω

6 Packing	
T	Tape & Reel

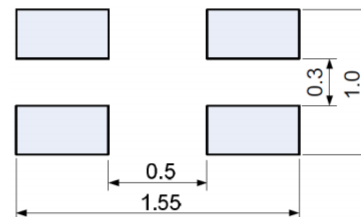
7 Hazardous Substance Free Products	
F	

SHAPE AND DIMENSIONS

SDCW1210U TYPE



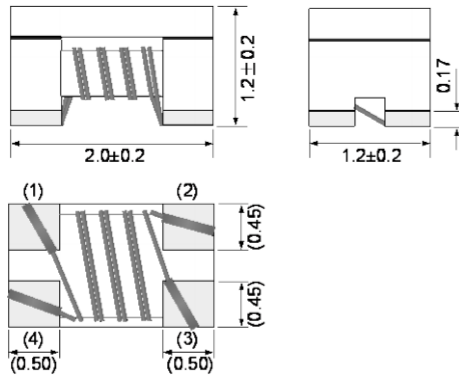
Recommended Land Pattern



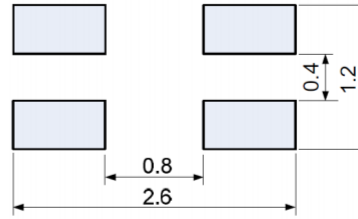
Unit: mm

SHAPE AND DIMENSIONS

SDCW2012U TYPE



Recommended Land Pattern



Unit: mm

SPECIFICATIONS

SDCW1210U TYPE

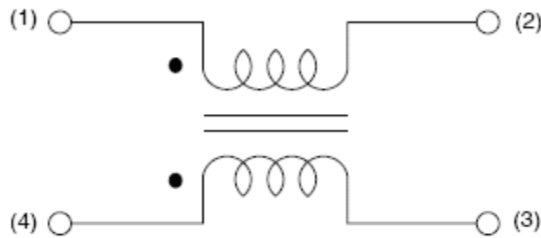
Part Number	Common Mode Impedance @ 100MHz	Max. DC Resistance	Max. Rated Current	Rated Voltage	Min. Insulation Resistance
Units	Ω	Ω	mA	Volts	M Ω
Symbol	Z	DCR	I _r	V _{DC}	IR
SDCW1210U-2-140TF	14±25%	0.12	600	20	10
SDCW1210U-2-600TF	60±25%	0.40	300	20	10
SDCW1210U-2-900TF	90±25%	0.50	280	20	10

SDCW2012U TYPE

Part Number	Common Mode Impedance @ 100MHz	Max. DC Resistance	Max. Rated Current	Rated Voltage	Min. Insulation Resistance
Units	Ω	Ω	mA	Volts	M Ω
Symbol	Z	DCR	I _r	V _{DC}	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.

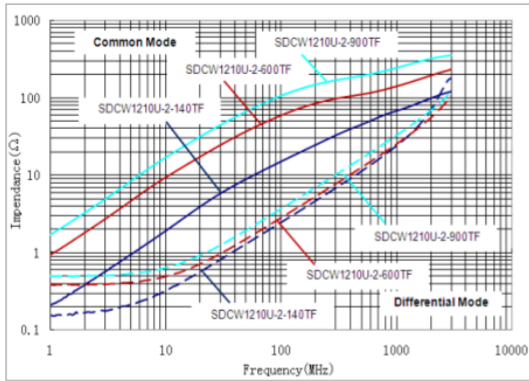
EQUIVALENT CIRCUIT



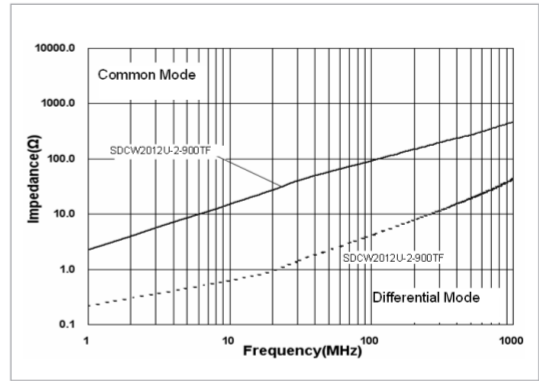
TYPICAL ELECTRICAL CHARACTERISTICS

Impedance vs. Frequency

SDCW1210U TYPE

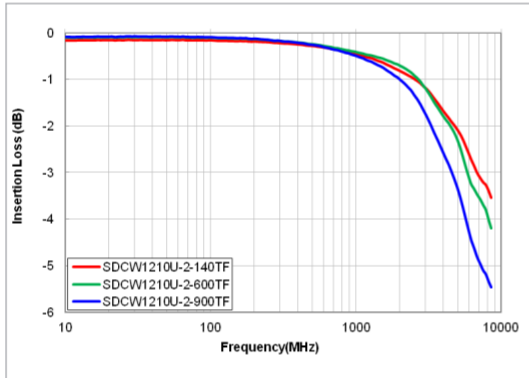


SDCW2012U TYPE

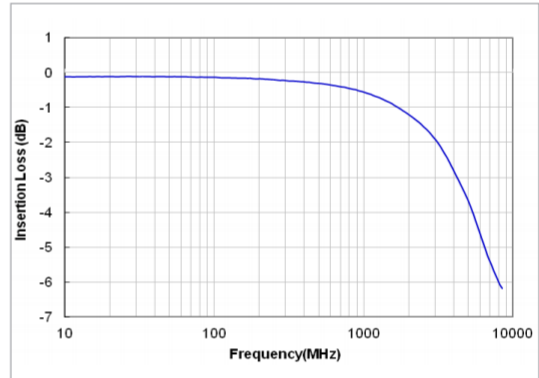


Insertion Loss

SDCW1210U TYPE

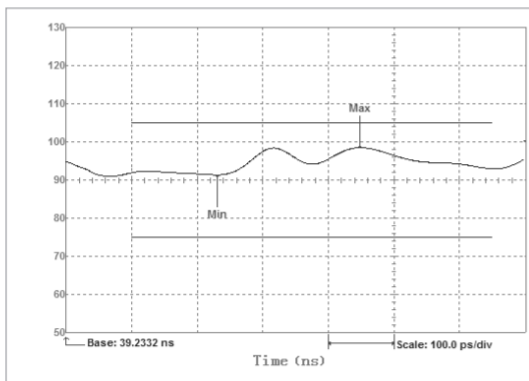


SDCW2012U TYPE



Differential Mode Impedance Characteristics

SDCW2012U-2-900TF



Eye Diagram in USB3.0

SDCW2012U-2-900TF

