On-Board Type (DC) EMI Suppression Filters (EMIFIL®)

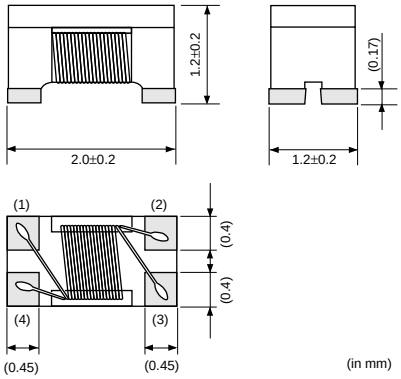
Chip Common Mode Choke Coils Winding Type DLW21S/DLW21H/DLW31S Series

DLW21S Series

■ Features

1. DLW21S series realizes small size and low profile. 2.0x1.2x1.2mm
2. High common mode impedance at high frequency effects excellent noise suppression performance.
3. Various common mode impedance items of 67 to 370 ohm can be used, considering noise level and signal frequency.
4. DLW21S series enables noise suppression for differential signal line without distortion in high speed signal transmission due to its high coupling.
5. Small dimension enables higher density packaging.

DLW21S



■ Applications

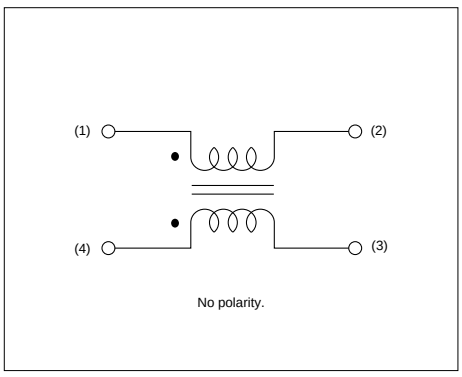
1. USB lines of PC, Peripheral equipment
2. LVDS lines of Note-PC, LCD
3. USB lines of Small digital AV equipment such as digital camera

Part Number	Common Mode Impedance (at 100MHz, 20°C) (ohm)	Rated Current (mA)	Rated Voltage (Vdc)	Insulation Resistance (min.) (M ohm)	Withstand Voltage (Vdc)	DC Resistance (ohm)
DLW21SN670SQ2	67 ±25%	400	50	10	125	0.25 max.
DLW21SN900SQ2	90 ±25%	330	50	10	125	0.35 max.
DLW21SN121SQ2	120 ±25%	370	50	10	125	0.30 max.
DLW21SN181SQ2	180 ±25%	330	50	10	125	0.35 max.
DLW21SN261SQ2	260 ±25%	300	50	10	125	0.40 max.
DLW21SN371SQ2	370 ±25%	280	50	10	125	0.45 max.

Operating Temperature Range : -40°C to 85°C

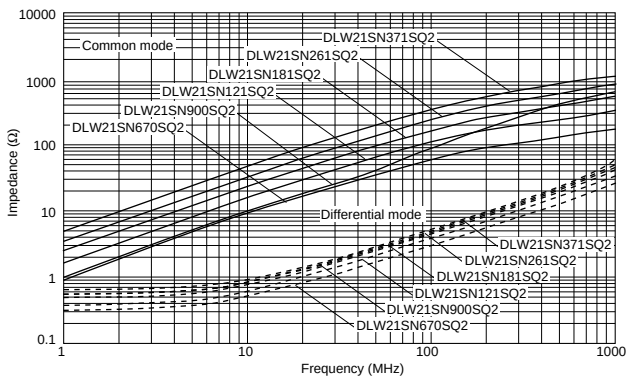
■ Equivalent Circuit

DLW21S



■ Impedance-Frequency Characteristics

DLW21S

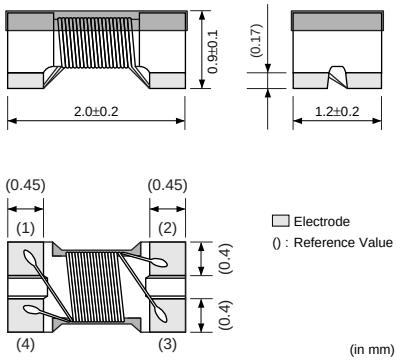


DLW21H Series

■ Features

1. Small size and low profile (2.0x1.2x0.9mm). Excellent noise suppression for sets of small and thin size.
2. High common mode impedance at high frequency effects excellent noise suppression performance.
3. Various common mode impedance from 67 to 180 ohm can be used, selected depending on noise level and signal frequency.
4. Suitable for differential signal line like USB2.0, IEEE1394 and LVDS, because DLW21H does not provide distortion to high speed signal transmission due to its high coupling. (USB2.0: DLW21HN900SQ2)
5. Small dimension enables higher density mounting

DLW21H



■ Applications

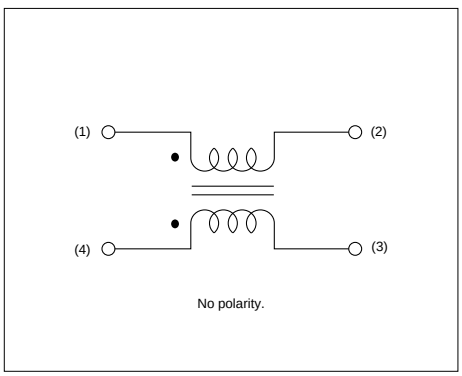
Common mode noise suppression of signal lines in high speed and high density digital equipment such as PC and peripherals and telecommunication equipment.

3

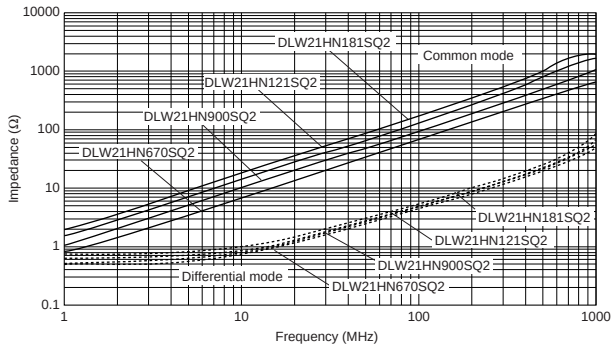
Part Number	Common Mode Impedance (at 100MHz, 20°C) (ohm)	Rated Current (mA)	Rated Voltage (Vdc)	Insulation Resistance (min.) (M ohm)	Withstand Voltage (Vdc)	DC Resistance (ohm)
DLW21HN670SQ2	67 ±25%	330	50	10	125	0.35 max.
DLW21HN900SQ2	90 ±25%	330	50	10	125	0.35 max.
DLW21HN121SQ2	120 ±25%	280	50	10	125	0.45 max.
DLW21HN181SQ2	180 ±25%	250	50	10	125	0.50 max.

Operating Temperature Range : -40°C to 85°C

DLW21H



DLW21H

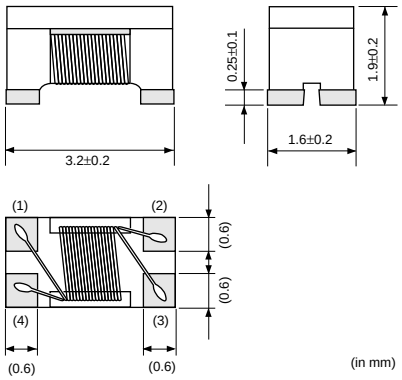


DLW31S Series

■ Features

1. DLW31S realizes small size and low profile. 3.2x1.6x1.9mm.
2. High common mode impedance at high frequency effects excellent noise suppression performance.
3. Various common mode impedance items of 90 to 2200 ohm can be used, considering noise level and signal frequency.
4. DLW31S series enables noise suppression for differential signal line without distortion in high speed signal transmission due to its high coupling.
5. Small dimension enables higher density packaging.

DLW31S



■ Applications

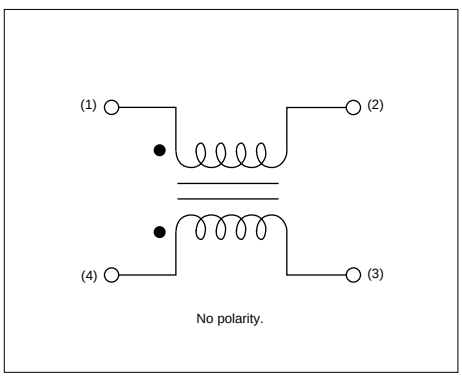
1. USB lines of PC, Peripheral equipment
2. LVDS lines of Note-PC, LCD

Part Number	Common Mode Impedance (at 100MHz, 20°C) (ohm)	Rated Current (mA)	Rated Voltage (Vdc)	Insulation Resistance (min.) (M ohm)	Withstand Voltage (Vdc)	DC Resistance (ohm)
DLW31SN900SQ2	90 ±25%	370	50	10	125	0.3 max.
DLW31SN161SQ2	160 ±25%	340	50	10	125	0.4 max.
DLW31SN261SQ2	260 ±25%	310	50	10	125	0.5 max.
DLW31SN601SQ2	600 ±25%	260	50	10	125	0.8 max.
DLW31SN102SQ2	1000 ±25%	230	50	10	125	1.0 max.
DLW31SN222SQ2	2200 ±25%	200	50	10	125	1.2 max.

Operating Temperature Range : -40°C to 85°C

■ Equivalent Circuit

DLW31S



■ Impedance-Frequency Characteristics

DLW31S