

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



## Chip Common Mode Choke Coils Film Type DLP11S/DLP31S Series

### DLP11S Series

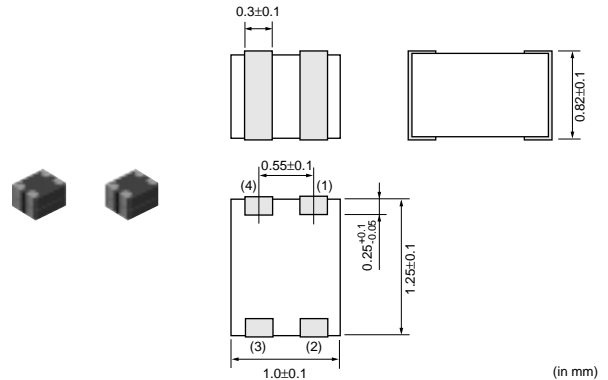
#### ■ Features

1. Small size and tight dimensional tolerance  
Size: 1.25x1.0x0.82mm Tolerance: +/-0.1mm
2. Useful impedance line-up 90/120/160/200 ohm
3. High noise suppression for high frequency
4. No distortion to high-speed signal transmission

#### ■ Applications

Common mode noise suppression of high speed differential signal lines for USB, IEEE1394, LVDS.

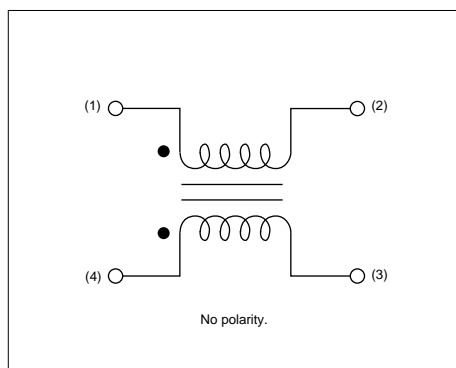
1. Note PC, PDA
2. Cellular phone
3. Digital Still Camera, Digital Video Camera



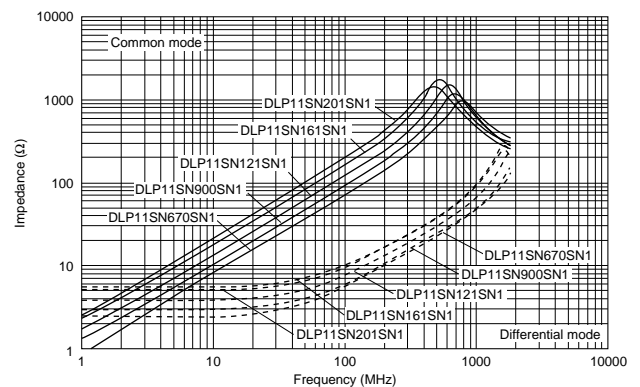
Part Number	Common Mode Impedance (at 100MHz, 20°C) (ohm)	Rated Current (mA)	Rated Voltage (Vdc)	Insulation Resistance (min.) (M ohm)	Withstand Voltage (Vdc)	DC Resistance (ohm)
DLP11SN670SL2	67 ±20%	180	5	100	12.5	1.3 ±25%
DLP11SN900SL2	90 ±20%	160	5	100	12.5	1.4 ±25%
DLP11SN121SL2	120 ±20%	140	5	100	12.5	2.0 ±25%
DLP11SN161SL2	160 ±20%	120	5	100	12.5	2.7 ±25%
DLP11SN201SL2	200 ±20%	130	5	100	12.5	2.5 ±25%

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

#### ■ Equivalent Circuit



#### ■ Impedance-Frequency Characteristics

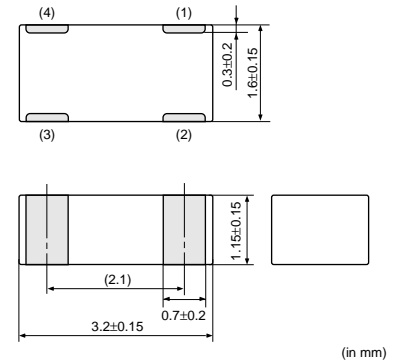


## DLP31S Series

DLP31S series is chip common mode choke coil that realizes high impedance in a small size with ferrite material technology and film processing technology. DLP31S series has excellent performance at high frequency range. It is suitable for differential signal line application.

### ■ Features

1. Small size, low profile, SMD. 3.2x1.6x1.15mm (Tolerance: 0.15mm)
2. High common mode impedance (550 ohm at 100MHz typ.) in small size.
3. DLP31S suppresses high frequency noise that was unable to be suppressed with existing common mode choke coils. Suitable for differential signal lines like USB, because DLP31S does not provide distortion to high speed signal transmission due to its high coupling (coupling coefficient: 0.98 min.)



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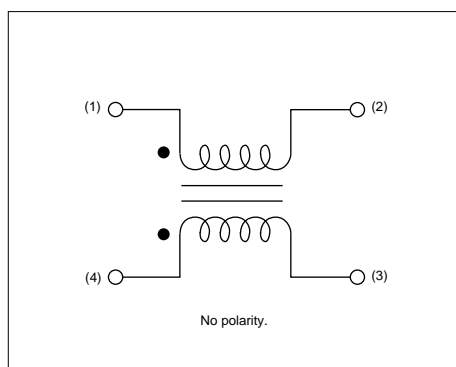
### ■ Applications

1. USB lines of PC, peripheral equipment
2. LVDS lines of Note-PC, LCD
3. USB lines of digital AV equipment such as digital cameras

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)
DLP31SN121SL2	120 ±20%	100	16	100	40	2.0 max.
DLP31SN221SL2	220 ±20%	100	16	100	40	2.5 max.
DLP31SN551SL2	550 ±20%	100	16	100	40	3.6 max.

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

### ■ Equivalent Circuit



### ■ Impedance-Frequency Characteristics

