

# DLP31SN221ML2#

“#” at the end indicates the package specification code.



## < List of part numbers with package codes >

DLP31SN221ML2B      DLP31SN221ML2L

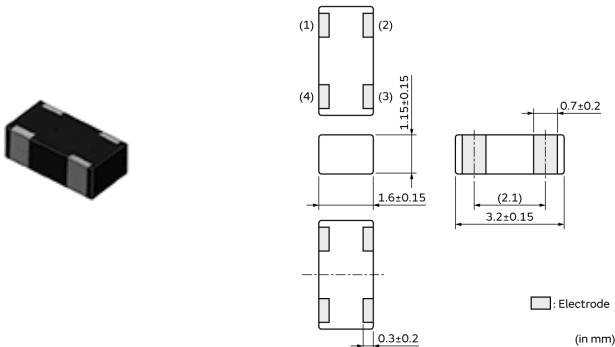
## Applications

Unsuitable Applications	Please be sure to read and comply with these "Precautions for use."
Specific Applications	<p>Consumer equipment, Medical equipment [GHTF A/B/C] except for implant &amp; surgery &amp; auto injector, Industrial equipment except for transportation &amp; facility &amp; energy equipment</p> <p>Please refer to Our Website and specifications, etc. for information about the performance, functions, quality, management, and safety required for the above applications, and use Products after confirming the performance and reliability of the actual Product.</p>
Recommended Applications	Consumer equipment

## Packaging Information

Packaging	Specifications	Standard Packing Quantity
B	Bulk(Bag)	500
L	180mm Embossed Tape	3000

## Appearance & Shape



### Attention

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2.This datasheet has only typical specifications because there is no space for detailed specifications.

Therefore, please review our product specifications or consult the approval sheet for product specifications before ordering.

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## Features

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.)

### Applications

1. USB lines of PCs, peripheral equipment
2. LVDS lines of Note-PCs, LCDs
3. USB lines of digital A/V equipment such as digital cameras

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## Specifications

Shape	SMD
Size Code (in mm)	3216
Size Code (in inch)	1206
Length	3.2mm
Length Tolerance	±0.15mm
Width	1.6mm
Width Tolerance	±0.15mm
Thickness	1.15mm
Thickness Tolerance	±0.15mm
Common Mode Impedance (at 100MHz)	220Ω
Common Mode Impedance (at 100MHz) Tolerance	±20%
Rated Current	100mA
Derating of Rated Current	No
Rated Voltage	16Vdc
Withstanding Voltage	40Vdc
DC Resistance(max.)	2.5Ω
DC Resistance	2.5Ω max.
Insulation Resistance(min.)	100MΩ
Operating Temperature Range	-40°C to 85°C
Mass(typ.)	0.03g
Number of Circuit	1
Operating Temperature Range(Self-temperature rise is included)	No
Brand	Murata

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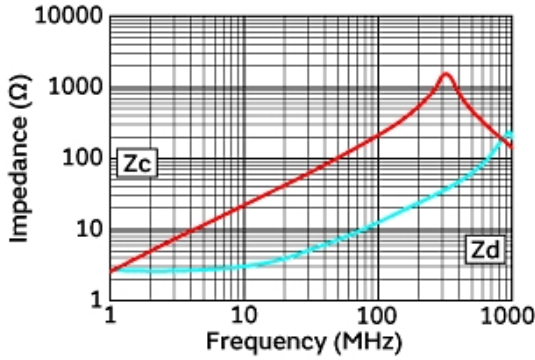
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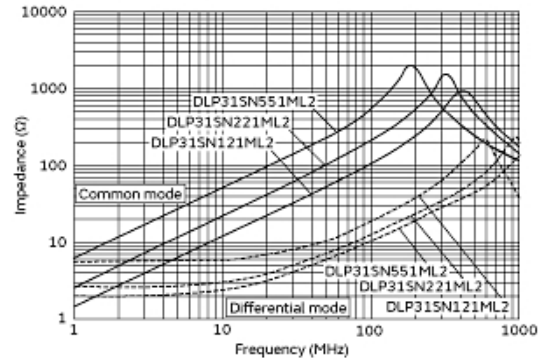
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## Product Data

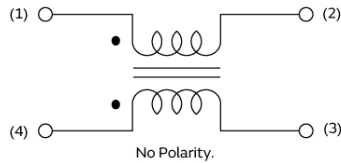


Impedance-Frequency Characteristics

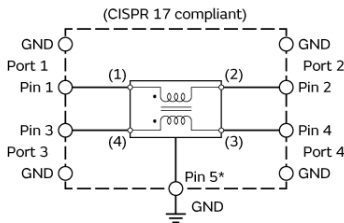


Impedance-Frequency Characteristics  
(Main Items)

### Equivalent Circuit (Note 1)



Note1: The Port/Pin No. of the Simulation Model provided by our company is as follows.



S-parameter: Port  $\square$   
SPICE model: Pin  $\square$  (Pin5\* connect to GND)

Equivalent Circuit

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