

# NFP0RSN122HL2#

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

Discontinued

RoHS

REACH

## < List of part numbers with package codes >

NFP0RSN122HL2B

NFP0RSN122HL2D

## Applications

|                          |  |
|--------------------------|--|
| Unsuitable Applications  | Please be sure to read and comply with these "Precautions for use."  |
| Specific Applications    | <p>Consumer Electronics - Differential Transmission, 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                       |
| D         | 180mm Paper Tape | 15000                     |

## Features

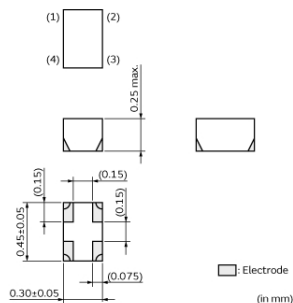
1. Small size and tight dimensional tolerance  
Size: 0.45x0.30x0.25mm
2. Common mode noise suppression effect  
( The effect become maximum at 1.1GHz and 1.2GHz )
3. Prevents signal damaging in high speed differential lines.
4. Designed to match line impedance.

### ■Application

Common mode noise suppression of high speed differential signal lines for mipi, USB 2.0, IEEE1394, LVDS etc.

1. Note PCs
2. Cellular phones
3. Digital Still Cameras, Digital Video Cameras

## Appearance & Shape



### Attention

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

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## Specifications

|   |   |
|---|---|
| Shape                                       | SMD   |
| Size Code (in mm)                           | 0403  |
| Size Code (in inch)                         | 018012  |
| Length                                      | 0.45mm  |
| Length Tolerance                            | ±0.05mm   |
| Width                                       | 0.3mm   |
| Width Tolerance                             | ±0.05mm   |
| Thickness                                   | 0.25mm  |
| Thickness Tolerance                         | max.  |
| Common Mode Impedance (at 100MHz)           | 65Ω   |
| Common Mode Impedance (at 100MHz) Tolerance | (Typ.)  |
| Common Mode Insertion Loss Characteristic   | 9dB Typ.(240MHz), 19dB Typ. (700MHz), 22dB Typ. (900MHz),24dB Typ.(1.7GHz), 20dB Typ.(2.4GHz) |
| Rated Current                               | 50mA  |
| Derating of Rated Current                   | No  |
| Rated Voltage                               | 5Vdc  |
| Withstanding Voltage                        | 12.5Vdc   |
| DC Resistance(max.)                         | 3.9Ω  |
| DC Resistance                               | 3.0Ω±30%  |
| Insulation Resistance(min.)                 | 100MΩ   |
| Cut-off Frequency                           | 4.5GHz (Typ.)   |
| Operating Temperature Range                 | -40°C to 85°C   |
| Mass(typ.)                                  | 0.2mg   |

|  |        |
|--|--------|
| Number of Circuit  | 1      |
| Operating Temperature Range(Self-temperature rise is included) | No     |
| Brand  | Murata |

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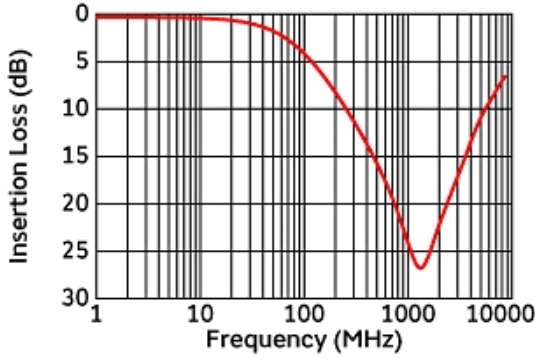
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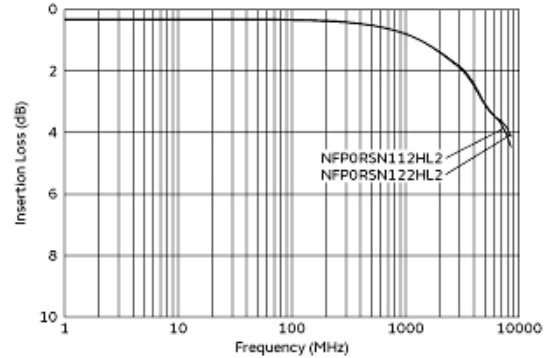
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## Product Data

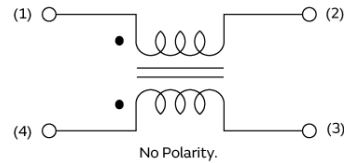


Common Mode Insertion Loss Characteristic  
(Typical Value)

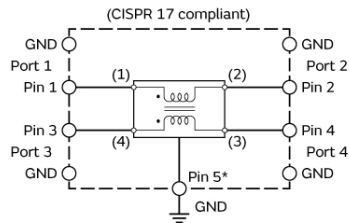


Differential Mode Transmission Characteristics  
(Typical Value)

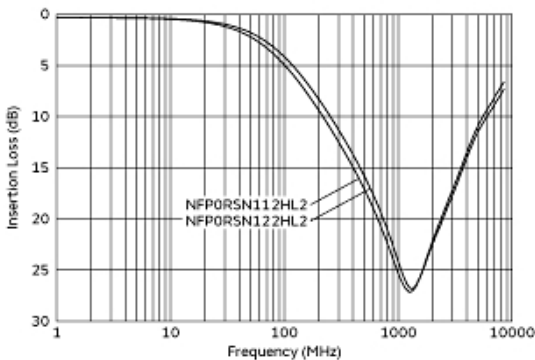
### Equivalent Circuit (Note 1)



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



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



Common Mode Insertion Loss Characteristic  
(Main Items)(Typical Value)

Equivalent Circuit

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