

# NFW31SP407X1E4#

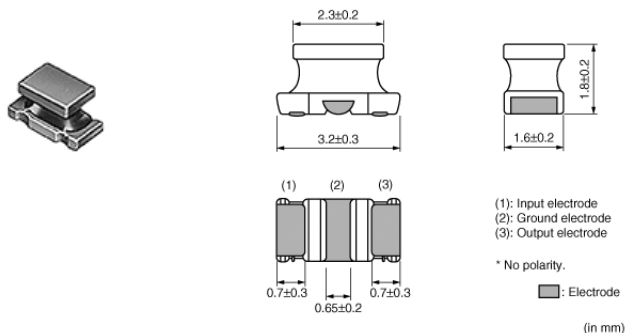
“#” indicates a package specification code.

In Production RoHS REACH

< List of part numbers with package codes >

NFW31SP407X1E4L NFW31SP407X1E4K

## Appearance & Shape



## Features

The signal line chip EMI filter NFW31SP series consists of high performance EMI suppression filters. They are designed for noise suppression in high speed signal digital circuits in which the signal harmonics are prone to becoming noise sources. These filters achieve a 100dB/dec. (typ.) damping characteristic with Murata's innovative circuit design. This makes these chips effective in applications where the signal and noise frequencies are close to each other.

### Features

1. Suppresses signal noise with little or no attenuation of the signal itself.
2. Murata's original internal structure design enables excellent noise suppression up to high frequencies (40dB at 1GHz typ.).
3. NFW31SP series is available in 9 different values of cut-off frequency ranging from 10MHz up to 500MHz.

## Applications

Other Usage For general

## Packaging Information

| Packaging | Specifications      | Minimum Order Quantity |
|-----------|---------------------|------------------------|
| L         | 180mm Embossed Tape | 2000                   |
| K         | 330mm Embossed Tape | 7500                   |

### Attention

1.This datasheet is downloaded from the website of Murata Manufacturing Co., Ltd. Therefore, it's specifications are subject to change or our products in it may be discontinued without advance notice. Please check with our sales representatives or product engineers before ordering.  
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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## Specifications

|                             |                                              |
|-----------------------------|----------------------------------------------|
| Shape                       | SMD                                          |
| Size Code (in mm)           | 3216                                         |
| Size Code (in inch)         | 1206                                         |
| Length                      | 3.2mm                                        |
| Length Tolerance            | ±0.3mm                                       |
| Width                       | 1.6mm                                        |
| Width Tolerance             | ±0.2mm                                       |
| Thickness                   | 1.8mm                                        |
| Thickness Tolerance         | ±0.2mm                                       |
| Rated Current               | 200mA                                        |
| Operating Temperature Range | -40°C to 85°C                                |
| Mass(typ.)                  | 0.03g                                        |
| Number of Circuit           | 1                                            |
| Rated Voltage               | 25Vdc                                        |
| Nominal Cut-off Frequency   | 400MHz                                       |
| Insertion Loss              | 6dB max.(at 400MHz)<br>10dB min.(at 1000MHz) |

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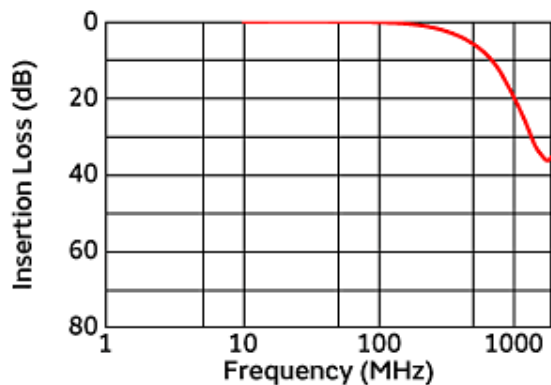
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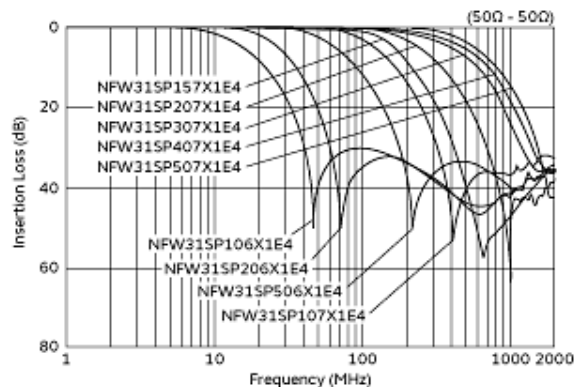
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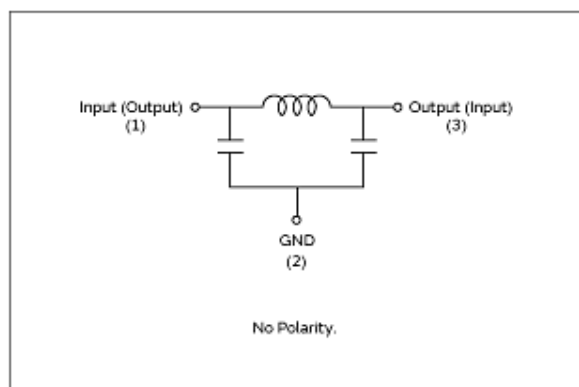
## Product Data



Insertion Loss Characteristics



Insertion Loss Characteristics (Main Items)



Equivalent Circuit

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