

# NFW31SP506X1E4#

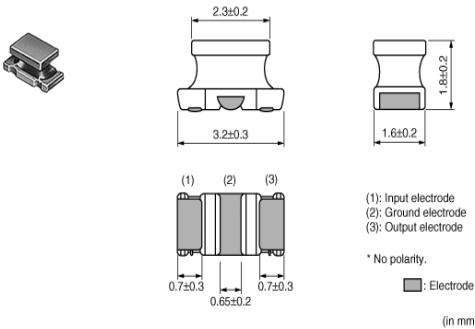
"#" indicates a package specification code.



< List of part numbers with package codes >

NFW31SP506X1E4L NFW31SP506X1E4K

## 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
K	330mm Embossed Tape	7500
L	180mm Embossed Tape	2000

### Attention

1. This datasheet is downloaded from the website of Murata Manufacturing Co., Ltd. Therefore, its specifications are subject to change or our products 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	200.0mA
Operating Temperature Range	-40°C to 85°C
Mass(Typ.)	0.031g
Number of Circuit	1
Rated Voltage	25Vdc
Nominal Cut-off Frequency	50.0MHz
Insertion Loss	6dBmax.(at 50MHz) 10dBmin.(at 100MHz) 30dBmin.(at 200MHz) 30dBmin.(at 500MHz) 30dBmin.(at 1000MHz)

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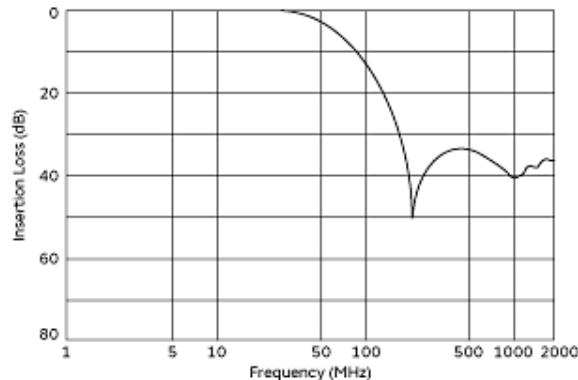
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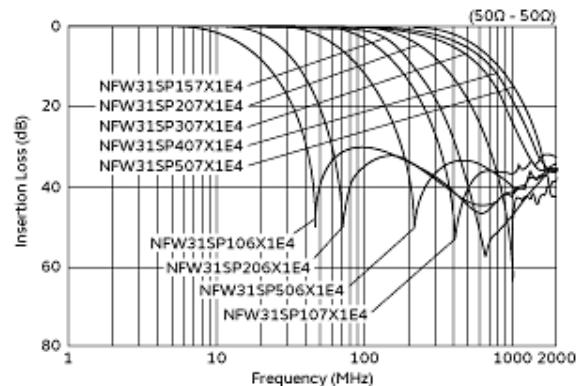
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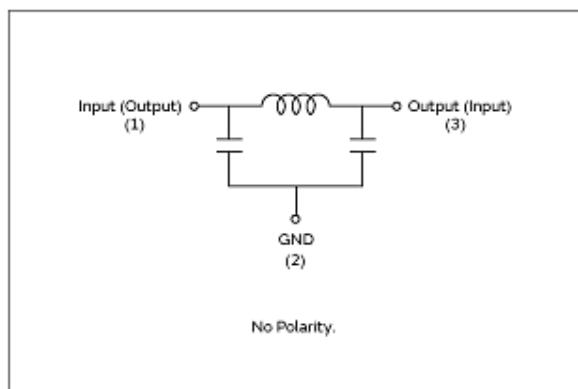
## Product Data



Insertion Loss Characteristics



Insertion Loss Characteristics (Main Items)



Equivalent Circuit

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