

# NFW31SP106X1E4#

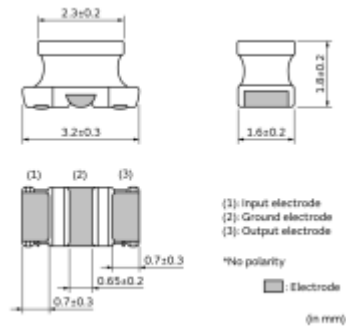
"#" indicates a package specification code.



< List of part numbers with package codes >

NFW31SP106X1E4L NFW31SP106X1E4K

## Appearance & Shape



## Packaging Information

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

## Applications

Other Usage	For general
-------------	-------------

**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.

# NFW31SP106X1E4#

“#” indicates a package specification code.

## 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.

### 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.

# NFW31SP106X1E4#

"#" indicates a package specification code.



## 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	10MHz
Insertion Loss	6dB max.(at 10MHz),5dB min.(at 20MHz),25dB min.(at 50MHz),25dB min.(at 100MHz),25dB min.(at 200MHz),30dB min.(at 500MHz),30dB min.(at 1000MHz)

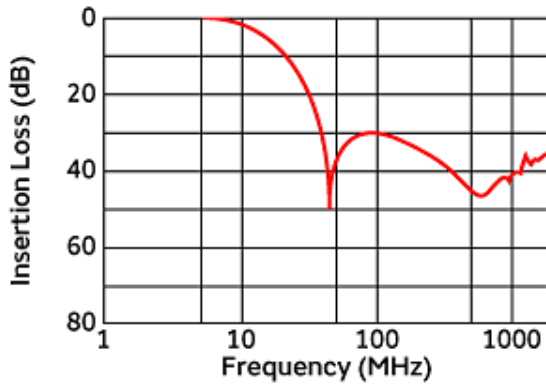
### Attention

- 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.

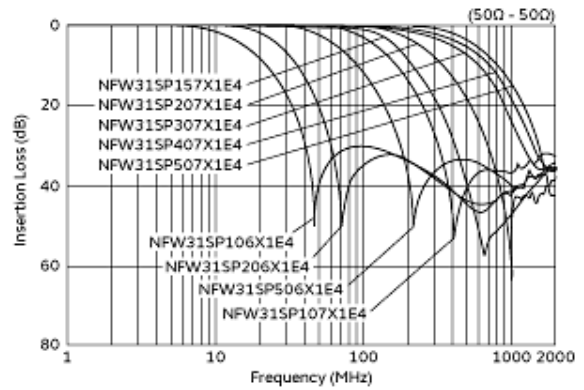
# NFW31SP106X1E4#

"#" indicates a package specification code.

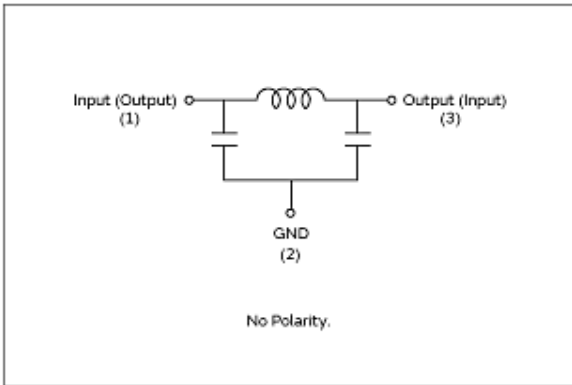
## Product Data



Insertion Loss Characteristics



Insertion Loss Characteristics (Main Items)



Equivalent Circuit

**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.