

# NFG0QHB542HS2#

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

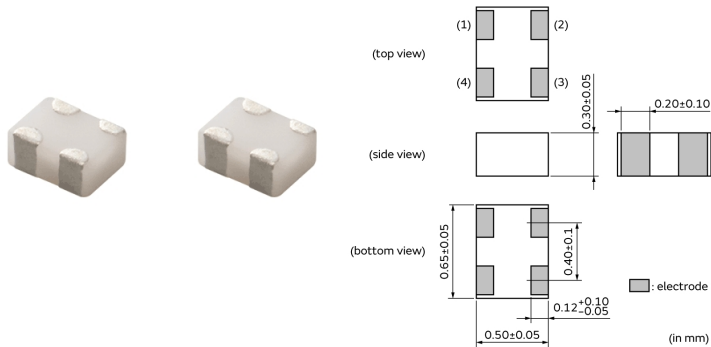


< List of part numbers with package codes >  
NFG0QHB542HS2B      NFG0QHB542HS2D

## Applications

Unsuitable Applications	Please be sure to read and comply with these "Precautions for use."
Specific Applications	Consumer Electronics - Differential Transmission, Medical equipment [GHTF A/B/C] except for implant & surgery & auto injector, Industrial equipment except for transportation & facility & energy equipment 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.
Recommended Applications	Consumer equipment, USB2.0, USB3.1 Gen1, USB3.1 Gen2, MIPI D-PHY Ver1.1, MIPI D-PHY Ver1.2, MIPI M-PHY Ver3.1, HDMI 1.4b, HDMI 2.0, Displayport 1.4, HDMI 2.1

## Appearance & Shape



## Packaging Information

Packaging	Specifications	Standard Packing Quantity
B	Bulk(Bag)	500
D	180mm Paper Tape	15000

### 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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## Features

1. Small size and tight dimensional tolerance

Size: 0.65x0.50x0.30mm

Tolerance: +-0.05mm

2. Common mode noise suppression effect

(The effect become maximum at 2.4GHz, 3.7GHz and 5.4GHz)

3. Prevents signal damaging in high speed differential lines.

4. Designed to match line impedance.

### ■Application

High speed differential signal lines.

HDMI,DVI,DisplayPort,USB3.0 etc.

1. Note PCs

2. Cellular phones

3. Digital Still Cameras, Digital Video Cameras

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## Specifications

Shape	SMD
Size Code (in mm)	0605
Size Code (in inch)	025020
Length	0.65mm
Length Tolerance	±0.05mm
Width	0.5mm
Width Tolerance	±0.05mm
Thickness	0.3mm
Thickness Tolerance	±0.05mm
Common Mode Impedance (at 100MHz)	5Ω
Common Mode Impedance (at 100MHz) Tolerance	(Typ.)
Common Mode Insertion Loss Characteristic	27dB Typ.(5.4GHz)
Rated Current	100mA
Derating of Rated Current	No
Rated Voltage	5Vdc
Withstanding Voltage	12.5Vdc
DC Resistance(max.)	1.625Ω
DC Resistance	1.3Ω±25%
Insulation Resistance(min.)	100MΩ
Cut-off Frequency	18GHz (Typ.)
Operating Temperature Range	-40°C to 85°C
Mass(typ.)	0.0003g
Number of Circuit	1

Operating Temperature Range(Self-temperature rise is included)	No
Brand	Murata

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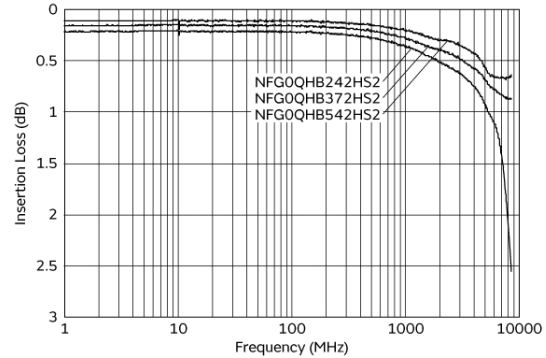
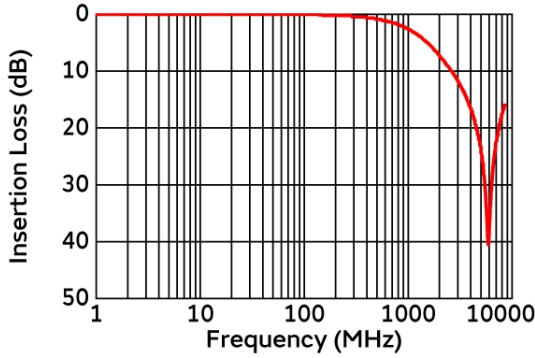
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## Product Data



Common Mode Insertion Loss Characteristic  
(Typical Value)

Differential Mode Transmission Characteristics  
(Typical Value)

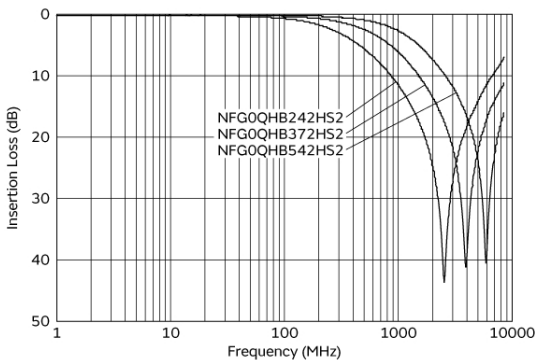
### Equivalent Circuit (Note 1)



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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