

# BNX012H01

In Production

AEC-Q200

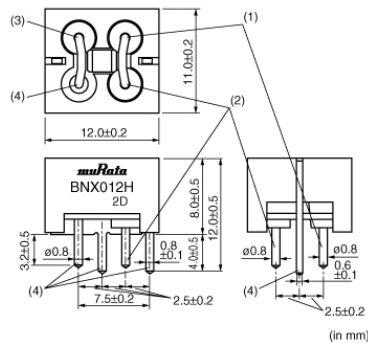
RoHS

REACH

## Applications

|                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|--------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Unsuitable Applications  | Please be sure to read and comply with these "Precautions for use."                                                                                                                                                                                                                                                                                                                                                                                                              |
| Specific Applications    | Automotive powertrain/safety equipment, Automotive infotainment/comfort equipment, Consumer equipment, Medical equipment [GHTF A/B/C] except for implant & surgery & auto injector, Industrial Equipment<br>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 | Automotive powertrain/safety equipment                                                                                                                                                                                                                                                                                                                                                                                                                                           |

## Appearance & Shape



## Packaging Information

| Packaging | Specifications | Standard Packing Quantity |
|-----------|----------------|---------------------------|
| -         | Box            | 150                       |

## Features

BNX012H series is noise suppression filter and ESD surge protection filter for Automotive. Suitable for the power supply circuits which is large current and wide frequency range.

### Features

1. Large rated current(15A)
2. High insertion loss characteristic over a wide frequency range  
1MHz to 1GHz: 40dB min
3. Low profile (height: 8.0mm except lead terminal)

### Applications

Noise suppression and ESD surge protection for power lines such as ECU, DC-DC Converters , and Inverter circuits.

### 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.

# BNX012H01



## Specifications

|                             |                                                |
|-----------------------------|------------------------------------------------|
| Shape                       | Lead                                           |
| Length                      | 12.0mm                                         |
| Length Tolerance            | ±0.2mm                                         |
| Width                       | 11.0mm                                         |
| Width Tolerance             | ±0.2mm                                         |
| Thickness                   | 8.0mm                                          |
| Thickness Tolerance         | ±0.5mm                                         |
| Rated Current               | 15A                                            |
| Operating Temperature Range | -55°C to 125°C                                 |
| Mass(typ.)                  | 2.0g                                           |
| Rated Voltage               | 50Vdc                                          |
| Withstanding Voltage        | 125Vdc                                         |
| Insulation Resistance(min.) | 500MΩ                                          |
| Insertion Loss              | 1MHz to 1GHz:40dB min.<br>(Line impedance=50Ω) |

### Attention

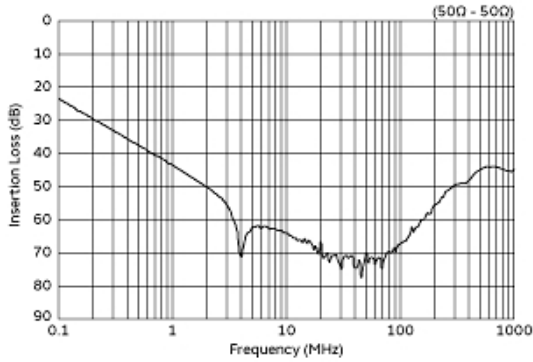
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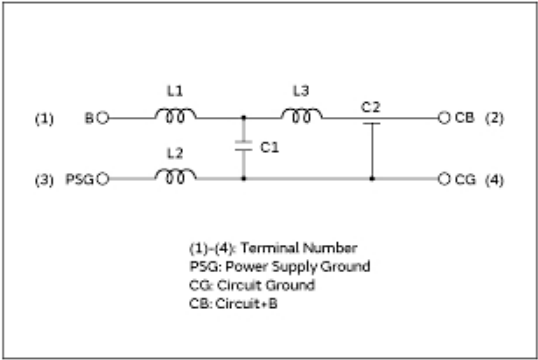
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## Product Data



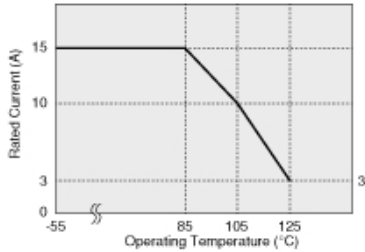
Insertion Loss Characteristics



Equivalent Circuit

In operating temperatures exceeding +85°C, derating of current is necessary for BNX012H series. Please apply the derating curve shown in chart according to the operating temperature.

Derating of Rated Current



Derating of Rated Current

In case of using  $\pm$  power line, please connect to each terminal as shown.

| Power Supply<br>(BNX Input) | BNX    | Circuit<br>(BNX Output) |
|-----------------------------|--------|-------------------------|
| Power Supply + Bias -       | B CB   | - Load Circuit + Bias   |
| Power Supply Ground -       | PSG CG | - Load Circuit Ground   |
| Power Supply - Bias -       | B CB   | - Load Circuit - Bias   |
| Power Supply Ground -       | PSG CG | - Load Circuit Ground   |

Derating of Rated Current

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