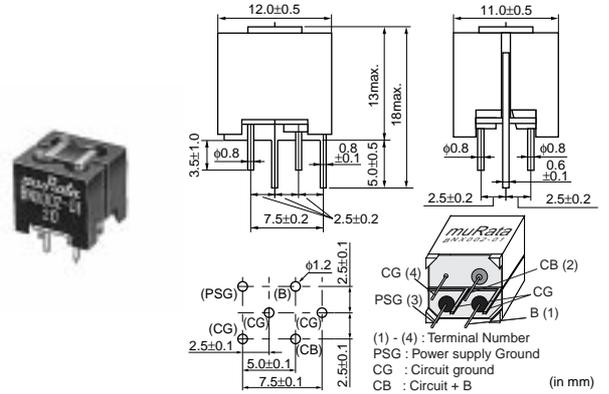


BNX Series

■ Features

1. The "EMIFIL" BNX002 incorporates a through-type barrier layer capacitor and a four-terminal capacitor which are interconnected. This combination enables the BNX002 to achieve a significantly large insertion loss throughout the extremely wide frequency range of 0.5MHz to 1GHz which covers the AM and UHF-TV broadcast frequency bands.
2. The filter is extremely compact since only one filter block is needed to completely eliminate noise from both the positive and negative lines.
3. There are no connection routes in the current circuits, thus ensuring highly reliable performance.
4. Both the input/output terminals and the grounding terminal are aligned in the same direction, permitting fast and easy installation on any type of P.C. board.
5. BNX003-01 features high dielectric constant, that is the rated voltage 150V.



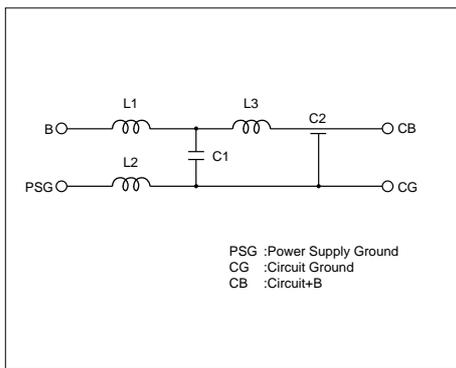
■ Application

Noise elimination from DC power sources in a variety of switching power sources, engine control units, digital equipment and computer terminals.

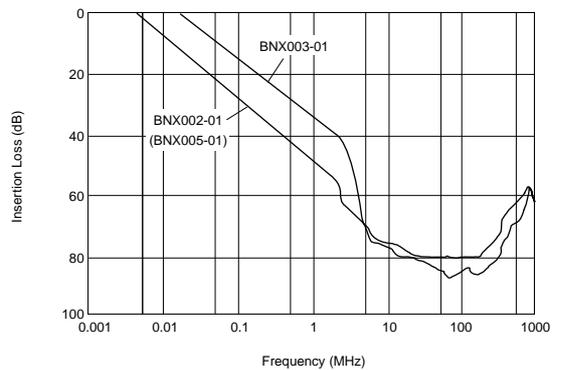
Part Number	Rated Voltage (Vdc)	Withstand Voltage (Vdc)	Rated Current (A)	Insulation Resistance(min.) (M ohm)	Insertion Loss
BNX002-01	50	125	10	100	1MHz to 1GHz:40dB min.(20 to 25°C line impedance=50 ohm)
BNX003-01	150	375	10	100	5MHz to 1GHz:40dB min.(20 to 25°C line impedance=50 ohm)
BNX005-01	50	125	15	100	1MHz to 1GHz:40dB min.(20 to 25°C line impedance=50 ohm)

Operating Temperature Range : -30°C to 85°C

■ Equivalent Circuit

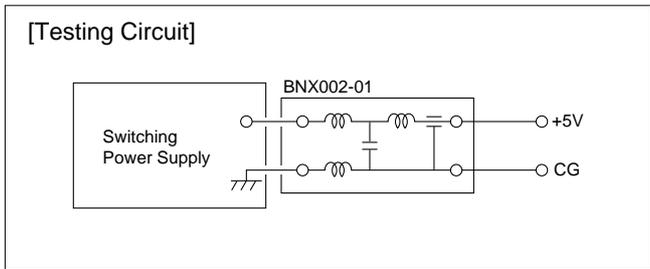


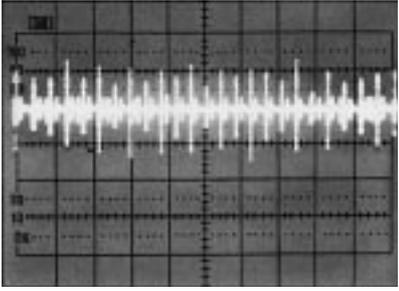
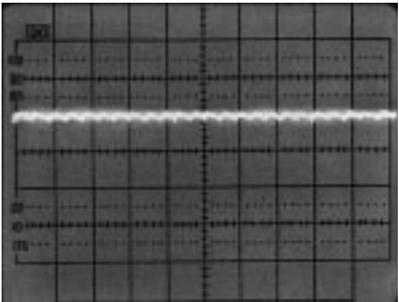
■ Insertion Loss Characteristics (Typical)



Noise Suppression Effect of BNX Series

■ Suppression of DC Side Ripple of the Switching Power Supply



Type of Filter	EMI Suppression Effect	Description
When BNX002 is not used	<p>+5.0V → 50μs/div 0.2V/div</p> 	High frequency noise, max. 0.5V, can be seen.
When BNX002 is used	<p>+5.0V → 50μs/div 0.2V/div</p> 	Noise can be almost suppressed by BNX002.

⚠ Note:**1. Export Control**

⟨For customers outside Japan⟩

Murata products should not be used or sold for use in the development, production, stockpiling or utilization of any conventional weapons or mass-destructive weapons (nuclear weapons, chemical or biological weapons, or missiles), or any other weapons.

⟨For customers in Japan⟩

For products which are controlled items subject to the "Foreign Exchange and Foreign Trade Law" of Japan, the export license specified by the law is required for export.

2. Please contact our sales representatives or product engineers before using our products listed in this catalog for the applications listed below which require especially high reliability for the prevention of defects which might directly cause damage to the third party's life, body or property, or when intending to use one of our products for other applications than specified in this catalog.

- ① Aircraft equipment
- ② Aerospace equipment
- ③ Undersea equipment
- ④ Power plant equipment
- ⑤ Medical equipment
- ⑥ Transportation equipment (vehicles, trains, ships, etc.)
- ⑦ Traffic signal equipment
- ⑧ Disaster prevention / crime prevention equipment
- ⑨ Data-processing equipment
- ⑩ Application of similar complexity and/or reliability requirements to the applications listed in the above

3. Product specifications in this catalog are as of April 2001. They 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 your ordering. If there are any questions, please contact our sales representatives or product engineers.**4. The parts numbers and specifications listed in this catalog are for information only. You are requested to approve our product specification or to transact the approval sheet for product specification, before your ordering.****5. Please note that unless otherwise specified, we shall assume no responsibility whatsoever for any conflict or dispute that may occur in connection with the effect of our and/or third party's intellectual property rights and other related rights in consideration of your using our products and/or information described or contained in our catalogs. In this connection, no representation shall be made to the effect that any third parties are authorized to use the rights mentioned above under licenses without our consent.****6. None of ozone depleting substances (ODS) under the Montreal Protocol is used in manufacturing process of us.****Murata Manufacturing Co., Ltd.**<http://www.murata.co.jp/products/>**Head Office**

2-26-10, Tenjin Nagaokakyo-shi, Kyoto 617-8555, Japan Phone:81-75-951-9111

International Division3-29-12, Shibuya, Shibuya-ku, Tokyo 150-0002, Japan
Phone:81-3-5469-6123 Fax:81-3-5469-6155 E-mail:intl@murata.co.jp