BNP002/004 Series

Block-type BNP002 filters completely eliminate noise from extremely wide frequency bands. The BNP002 is ideal for eliminating noise in logic signal circuits and is designed to perform superbly through the use of through-type barrier layer capacitors, and bead inductors.

Each block contains a number of compact EMI suppression filters. In addition, the input/output terminals and the grounding terminal are aligned in the same direction, thus permitting fast and easy assembly on any type of PC board.

FEATURES

- The EMIFIL BNP002 incorporates feed-thru type barrier layer capacitors in Pi circuits, obtaining significantly large insertion losses over an extremely wide frequency range — from 15MHz up to 1GHz.
- The cut-off frequency is designed to be at several MHz, which is ideal for eliminating noise from any circuit in which the signal frequency and the noise frequency are relatively close together.

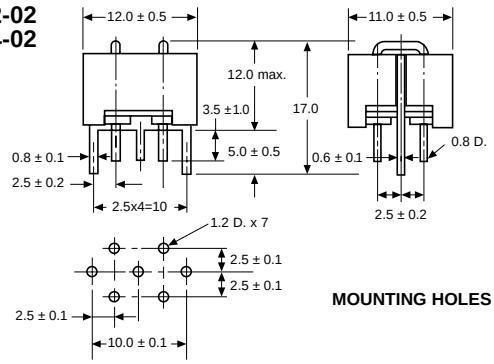
APPLICATIONS

Noise elimination from signal lines and DC power sources in engine control units, digital equipment and computer terminals.

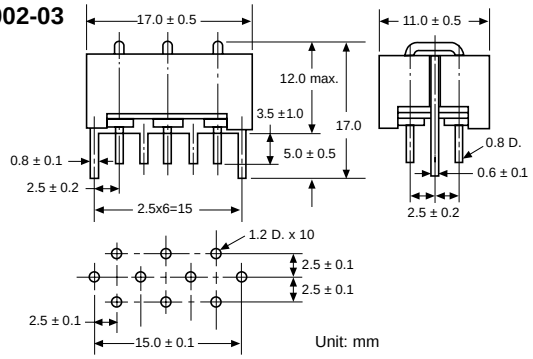
- Since all noise in parallel signal lines can be eliminated by one filter block, minimum board space is utilized.
- There are no connections in the feed-thru current circuits, thus ensuring highly reliable performance.
- Both the input/output terminals and the grounding terminal are aligned in the same direction, permitting fast and easy installation on any type of PC board.

DIMENSIONS: mm

BNP002-02
BNP004-02



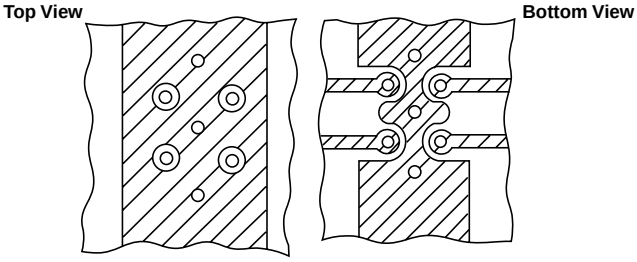
BNP002-03



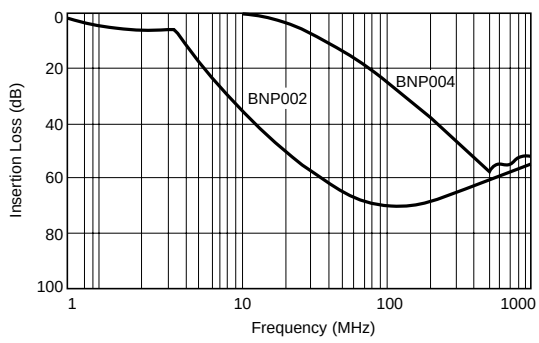
SPECIFICATIONS

Item	Specifications		
Part Number	★BNP002-02	★BNP002-03	★BNP004-02
Number of Circuits	2	3	2
Circuit Construction	π		
Operating Temperature Range	−40°C to +100°C		
Rated Voltage	50VDC		
Withstand Voltage	300VDC		125VDC
Maximum Current Capacity	10ADC		
Insulation Resistance	1000M Ohms min.		
DC Resistance	0.05 Ohms max., (20°C to 25°C)		
Insertion Loss	20MHz to 500MHz: 40dB (20°C to 25°C) min.		300MHz to 1GHz 40dB min.

RECOMMENDED P.C. BOARD PATTERN

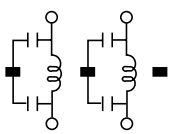


TYPICAL INSERTION LOSS CHARACTERISTICS



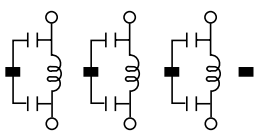
EQUIVALENT CIRCUIT

BNP002-02
BNP004-02



Capacitance value of each circuit (π) is 6600 pF min.

BNP002-03



■ : Ground Terminal
Non-Directional

★Available as standard through authorized Murata Electronics Distributors.