CONBNC004

BNC Jack Panel Mount Connector

The CONBNC004 is a BNC jack panel-mount bulkhead connector which includes a washer and hex nut for installation. The CONBNC004 combines superior performance, compact size, and a convenient bayonet-style (push-twist) mating interface to provide a reliable, easy-to- use connector. Additionally, all Linx connectors meet RoHS and REACH lead free standards and are tested to meet requirements for corrosion resistance, vibration, mechanical and thermal shock

FEATURES

- BNC jack (female socket) connection
  - Gold plated brass center contact
  - Gold plated solder cup receptacle
  - Isolated ground enclosure design
- Brass hex nut and washer
- Bayonet-style (push-twist) connection
- Isolated ground

APPLICATIONS

- Audio/Video
- Broadcasting
- Test Equipment
- Surveillance Systems
- Ethernet
- Industrial, Commercial, Enterprise

ORDERING INFORMATION

Part Number	Description
CONBNC004	BNC jack (female socket) panel-mount connector

Available from Linx Technologies and select distributors and representatives.

PERFORMANCE

Table 1 shows the electrical specifications, insertion loss and VSWR values for the CONBNC004 connector at commonly used frequencies.

Band	Sub-1 GHz	2 GHz
Frequency Range	0 Hz to 1 GHz	1 GHz to 2 GHz
Insertion Loss (dB max.)	0.48	0.52
VSWR (max.)	1.3	1.3
Impedance	50 Ω	

Insertion loss is the loss of signal power (gain) resulting from the insertion of a device in a transmission line (Figure 1). VSWR (Figure 2) describes how efficiently power is transmitted through the connector. A lower VSWR value indicates better performance at a given frequency.

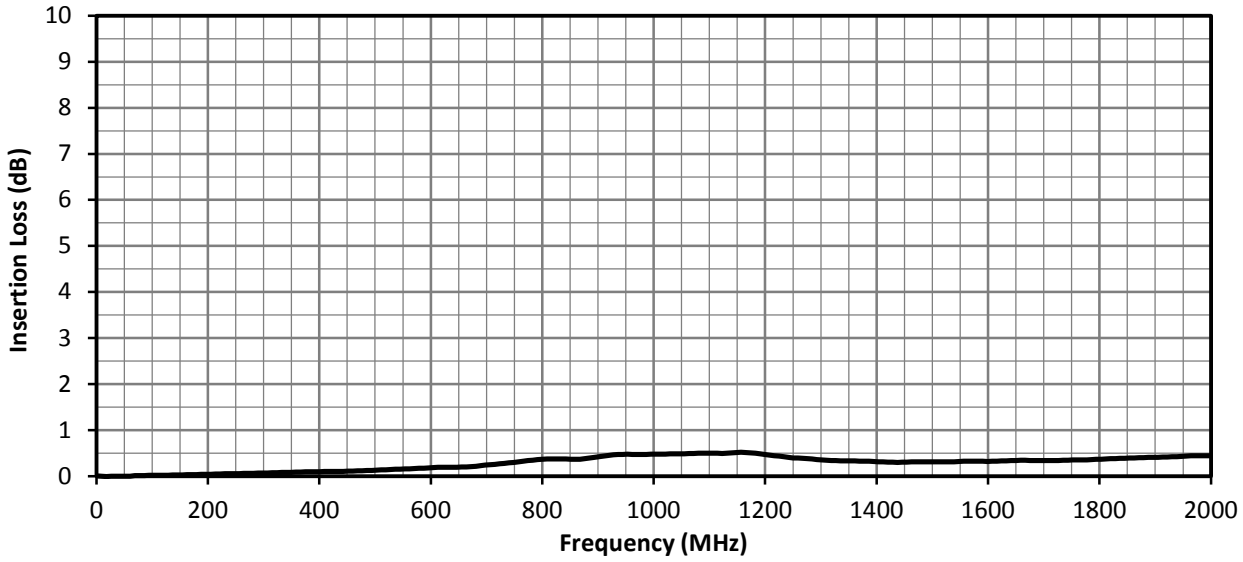

Figure 1. Insertion Loss for CONBNC004 Connector

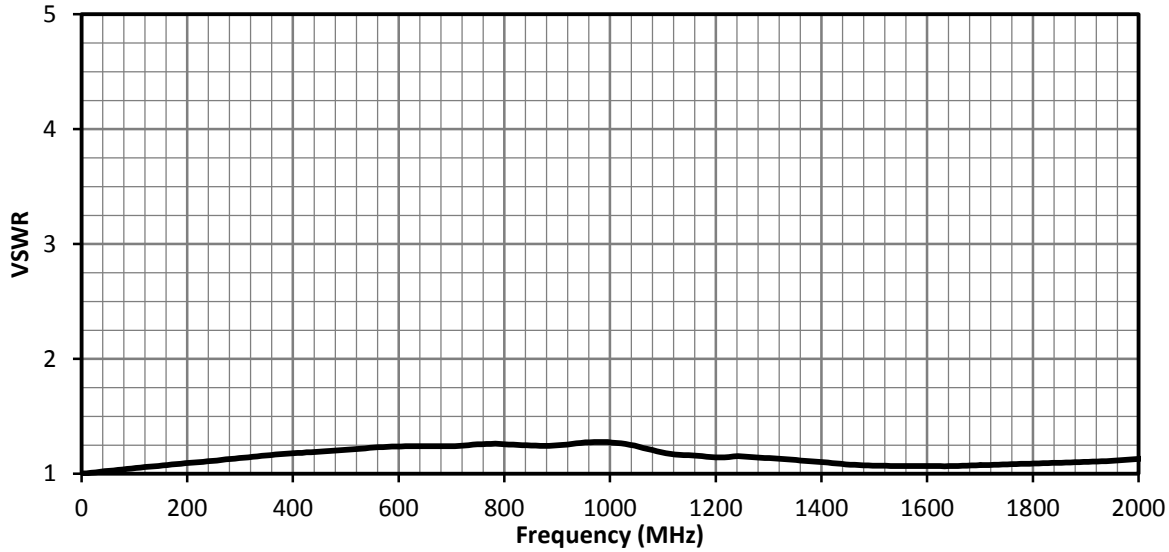

Figure 2. VSWR for the CONBNC002 Connector

TABLE 2. MECHANICAL SPECIFICATIONS

Parameter	Value
Mounting Type	Panel-Mount, Solder Cup
Fastening Type	Bayonet-style Coupling (Push/Twist)
Interface in Accordance with	MIL-STD-348B
Weight	6.8 g (0.24 oz)

TABLE 3. ENVIRONMENTAL SPECIFICATIONS

MIL-STD, Method, Test Condition	
Corrosion (Salt spray)	MIL-STD-202 Method 101 test condition B
Thermal Shock	MIL-STD-202 Method 107 test condition C
Vibration	MIL-STD-202 Method 204 test condition B
Mechanical Shock	MIL-STD-202 Method 213 test condition B
Moisture Resistance	MIL-STD-202 Method 106 test condition D
Temperature Range	-20 °C to +105 °C
Environmental Compliance	RoHS, REACH

PRODUCT DIMENSIONS

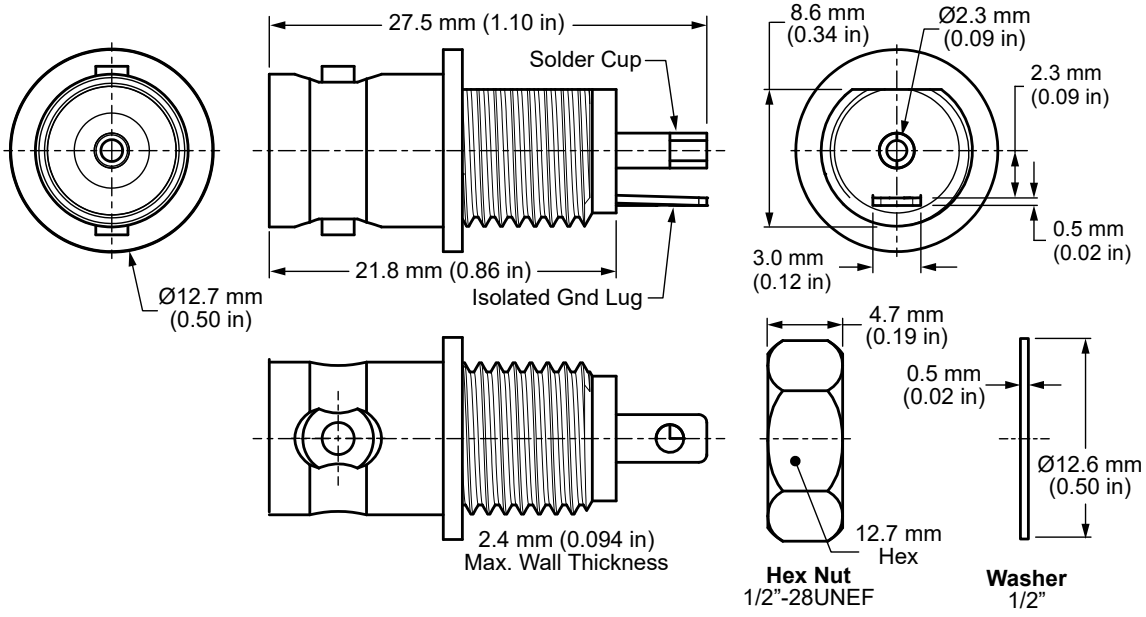

Figure 3. Product Dimensions for the CONBNC004 Connector

TABLE 4. CONNECTOR COMPONENTS

Parameter	Value	
Connector Part	**Material**	**Finish**
Connector Body	Brass	Nickel
Center Contact	Brass	Gold
Insulator	ABS	–
Washer	Brass	Nickel
Hex Nut	Brass	Nickel

RECOMMENDED MOUNTING DIMENSIONS

Figure 4 shows the recommended enclosure mounting dimensions. The maximum enclosure wall thickness should be no greater than 2.4 mm (0.94 in).

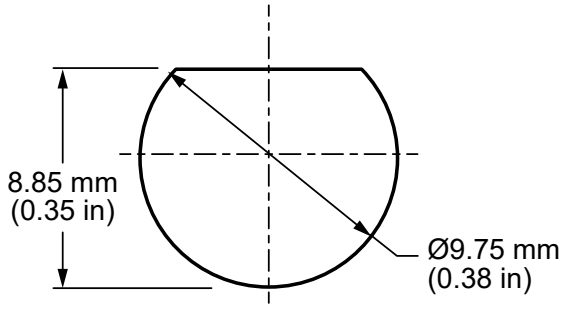

Figure 4. Recommended Mounting Dimensions

PACKAGING INFORMATION

The CONBNC004 connector is packaged in plastic bags of 100 pcs, 2500 Pcs per carton. Distribution channels may offer alternative packaging options.

CONNECTOR & ADAPTER DEFINITIONS AND USEFUL FORMULAS

VSWR - Voltage Standing Wave Ratio. VSWR is a unitless ratio that describes how efficiently power is transmitted through the connector. A lower VSWR value indicates better performance at a given frequency. VSWR is easily derived from Return Loss.

$$\mathrm{VSWR} = \frac{10^{\left[\frac{\text{Return Loss}}{20}\right]} + 1}{10^{\left[\frac{\text{Return Loss}}{20}\right]} - 1}$$

Insertion Loss - The loss of signal power (gain) resulting from the insertion of a device in a transmission line. Insertion loss can be derived from the power transmitted to the load before the insertion of the component P_T and the power transmitted to the load after the insertion of the component P_R.

$$\textit{Insertion Loss}\ (\mathrm{dB}) = 10 \log_{10} \frac{P_T}{P_R}$$

TE TECHNICAL SUPPORT CENTER

USA:	+1 (800) 522-6752
Canada:	+1 (905) 475-6222
Mexico:	+52 (0) 55-1106-0800
Latin/S. America:	+54 (0) 11-4733-2200
Germany:	+49 (0) 6251-133-1999
UK:	+44 (0) 800-267666
France:	+33 (0) 1-3420-8686
Netherlands:	+31 (0) 73-6246-999
China:	+86 (0) 400-820-6015

te.com

03/23 Original