CONBNC002

BNC Jack PCB Through-Hole Connector

The CONBNC002 is a BNC right-angle panel- mount jack PCB through-hole connector designed for reflow-solder mounting directly to a printed circuit board. The CONBNC002 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
  - Bayonet-style (push-twist) connection
- Direct PCB attachment
- Reflow- or hand-solder assembly
- Isolated ground

APPLICATIONS

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

ORDERING INFORMATION

Part Number	Description
CONBNC002	BNC jack (female socket) right-angle PCB through-hole connector

Available from Linx Technologies and select distributors and representatives.

PERFORMANCE

Table 1 shows the electrical specifications, insertion loss and VSWR values for the CONBNC002 connector across the operating frequency range.

TABLE 1. ELECTRICAL SPECIFICATIONS

Band	Sub-1 GHz
Frequency Range	0 Hz to 1 GHz
Insertion Loss (dB max.)	0.89
VSWR (max.)	1.9
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.

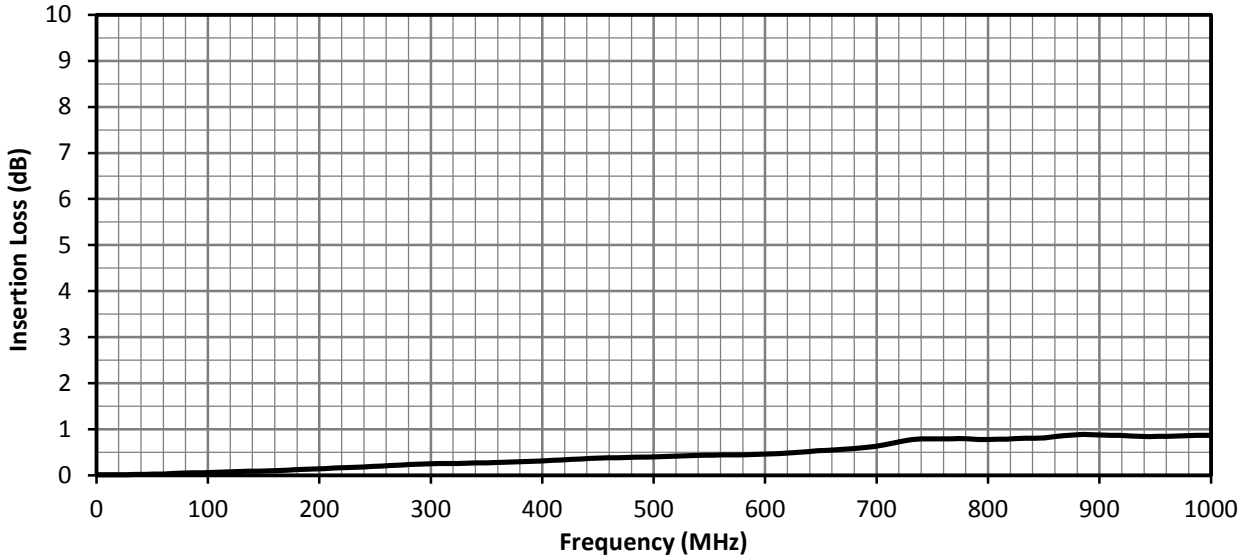

Figure 1. Insertion Loss for CONBNC002 Connector

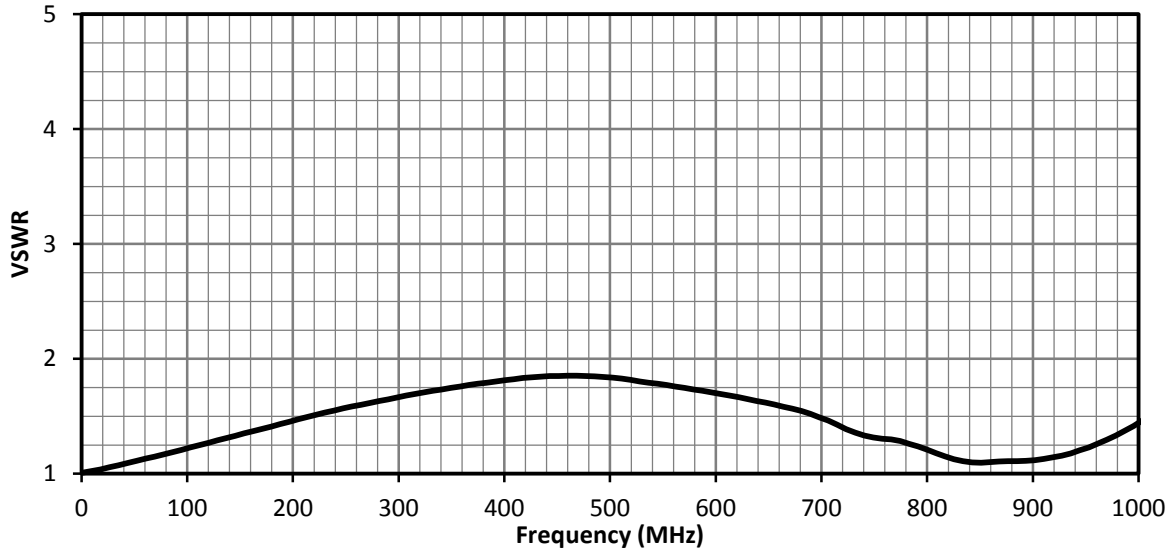

Figure 2. VSWR for the CONBNC002 Connector

TABLE 2. MECHANICAL SPECIFICATIONS

Parameter	Value
Mounting Type	PCB Through-Hole
Fastening Type	Bayonet-style Coupling (Push/Twist)
Interface in Accordance with	MIL-STD-348B
Weight	11.3 g (0.40 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	-60 °C to +165 °C
Environmental Compliance	RoHS, REACH

PRODUCT DIMENSIONS

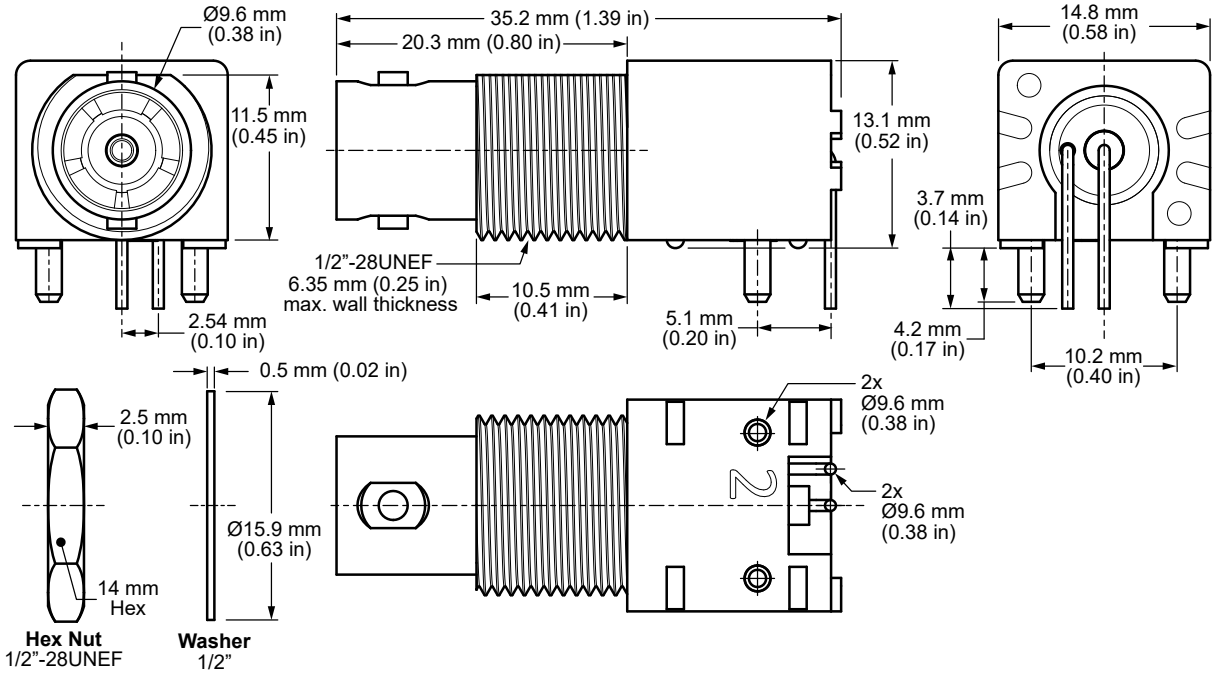

Figure 3. Product Dimensions for the CONBNC002 Connector

Parameter	Value	
Connector Part	Material	Finish
Body	Zinc	Nickel
Center Contact	Phosphor Bronze	Gold
Insulator	Polypropylene (PP)	–
Washer	Steel	Nickel
Nut	Brass	Nickel

RECOMMENDED PCB FOOTPRINT AND MOUNTING DIMENSIONS

Figure 4 shows the recommended PCB footprint for the CONBNC002 connector. Figure 5 shows the recommended enclosure mounting dimensions. The maximum enclosure wall thickness should be no greater than 6.35 mm (0.25 in).

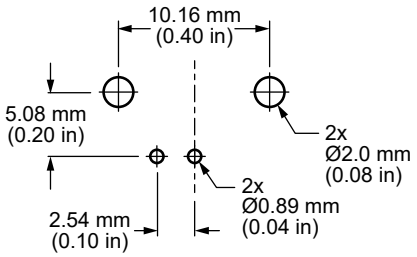

Figure 4. Recommended PCB Footprint

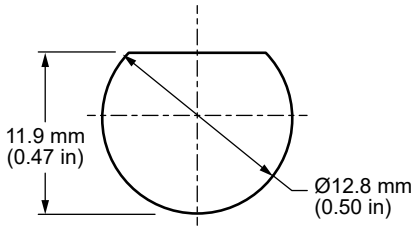

Figure 5. Recommended Mounting Dimensions

REFLOW SOLDER PROFILE

Figure 6 shows the time and temperature data for reflow soldering the connector to a PCB.

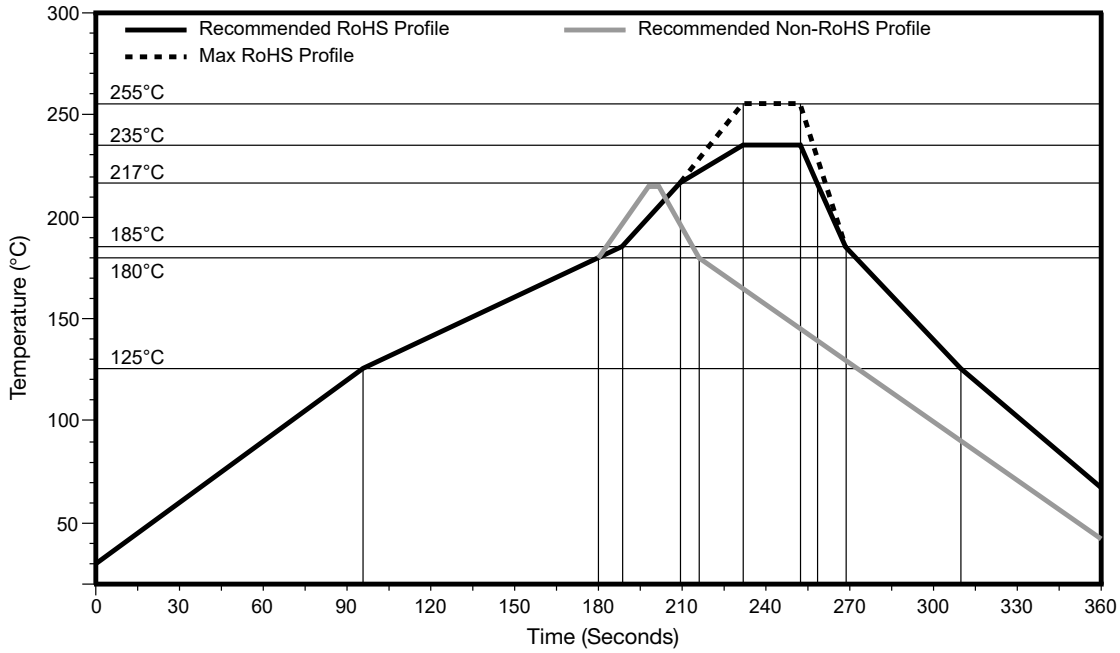

Figure 6. Recommended Reflow Solder Profile

PACKAGING INFORMATION

The CONBNC002 connector is packaged in a plastic bag of 100 pcs, 1000 Pcs per carton. Carton size is 325 mm x 260 mm x 260 mm (12.80 in x 10.24 in x 10.24 in) 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

10/22 Original

X-ON Electronics

Largest Supplier of Electrical and Electronic Components

Click to view similar products for RF Connectors / Coaxial Connectors ***category:***

Click to view products by Linx Technologies ***manufacturer:***

Other Similar products are found below :

8915-1511-000 89674-0827 6002-7051-003 6059674-1 619550-1 630059-000 M39030/3-01N 6501-1071-002 6769 7002-1541-010 7002-1572-002 7003-1542-011 7004-1512-000 7009-1511-004 7101-1541-010 7101-1571-002 7105-1521-002 7203-1571-003 7209-1511-011 7210-1511-040 7242-1511-000 73216-2241 73404-2300 7405-1521-005 7405-1521-802 8527 8547 FS11V 877931 8808-1511-001 9074-9513-000 910A205F PL40-36 PL71-9 980-8666-005 1200690078 1-201144-1 120919 R107003010W R112186000 R113053000W R113236000 R113240000 R113240097 R114073000W R114083000 R114670000W R123415000W R124076320 R124076450