



CON292001-1

2.92 mm Jack PCB Compression Surface-Mount Connector

The CON292001-1 is a 2.92 mm jack (female socket) PCB solderless surface-mount connector designed for installation directly to a printed circuit board using the provided split washers and screws.

Operating from 0 Hz to 40 GHz, the CON292001-1 combines superior performance, compact size, and a convenient threaded mating interface to provide a reliable, easy-to-use connector. Additionally, all Linx connectors meet RoHS lead free standards and are tested to meet requirements for corrosion resistance, vibration, mechanical and thermal shock.

FEATURES

- 0 Hz to 40 GHz operation
- Passivated stainless steel body for superior corrosion resistance
- Gold plated beryllium copper center contact
- All mounting hardware provided
 - 2x split washers
 - 2x pan-head machine screws
- Direct PCB attachment
- Solderless compression-mount design

APPLICATIONS

- Satellite communications
- Test and measurement
- Radar
- Experimental

TABLE 1. ELECTRICAL SPECIFICATIONS

Parameter	Value
Impedance	50 Ω
Frequency Range	0 Hz to 50 GHz
Dielectric Withstanding Voltage	750 V RMS
Contact Resistance	Center: ≤ 3.0 m Ω Outer: ≤ 2.0 m Ω
Insulation Resistance	5000 M Ω min.
Insertion Loss (dB max)	0.1
VSWR (max)	1.1

ORDERING INFORMATION

Part Number	Description
CON292001-1	2.92 mm jack (female socket) PCB solderless surface-mount connector with split washers and pan-head 0-80UNF-2A screws

Available from Linx Technologies and select distributors and representatives.

PRODUCT DIMENSIONS

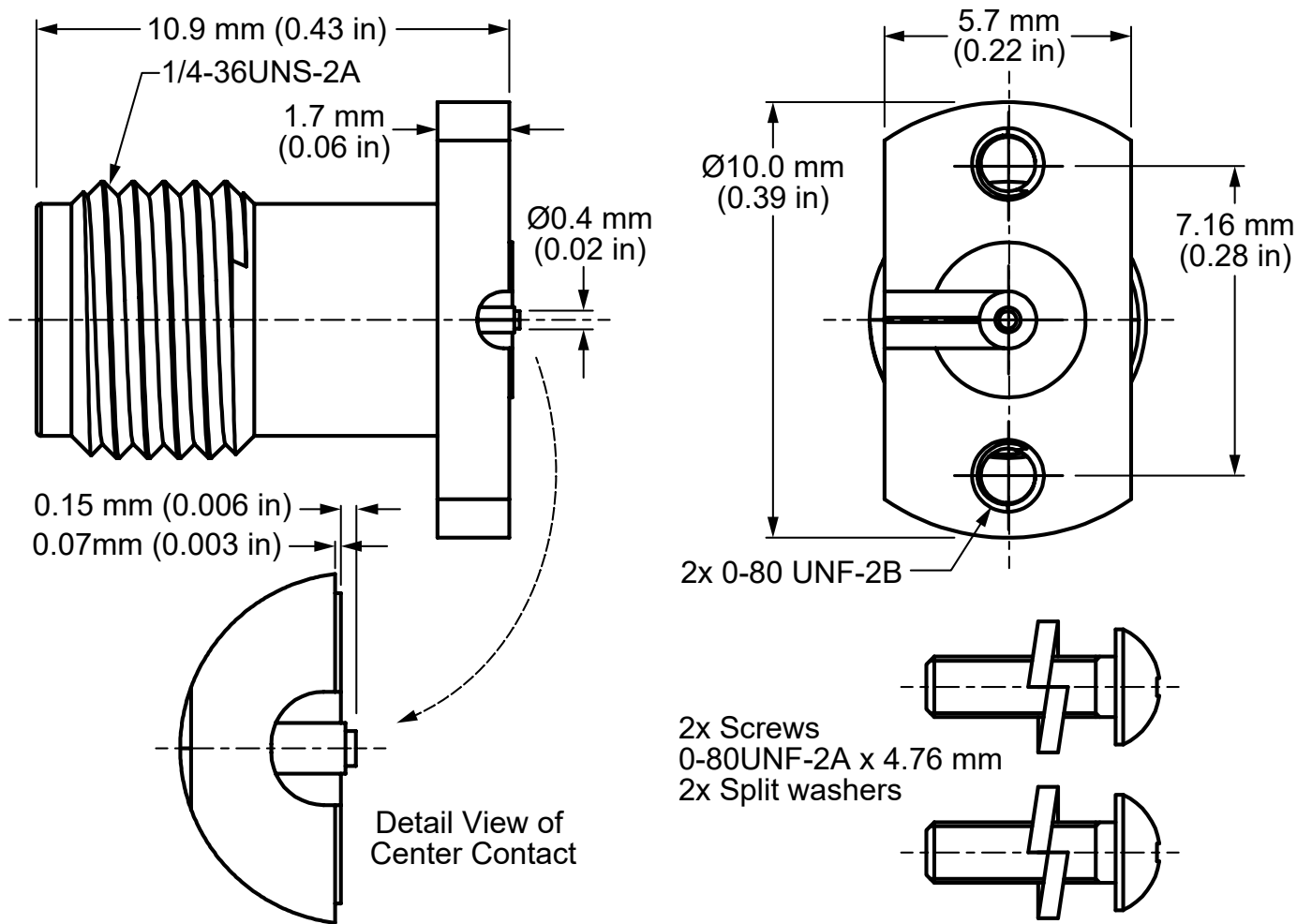


Figure 1: Product Dimensions for the CON292001-1 Connector

TABLE 2. CONNECTOR COMPONENTS

Model	CON24001-1	
Connector Part	Material	Finish
Connector Body	Stainless Steel	Passivated
Center Contact (female socket)	Beryllium Copper	Gold
Split Washer (2x)	Stainless Steel	Passivated
Screw, PHP (2x) 0-80UNF-2A	Stainless Steel	Passivated

RECOMMENDED PCB FOOTPRINT

Figure 2 shows the connectors recommended PCB footprint and mounting requirements. The provided split washers and screws should be tightened to a torque setting not to exceed 0.09N:m (12 in-oz).

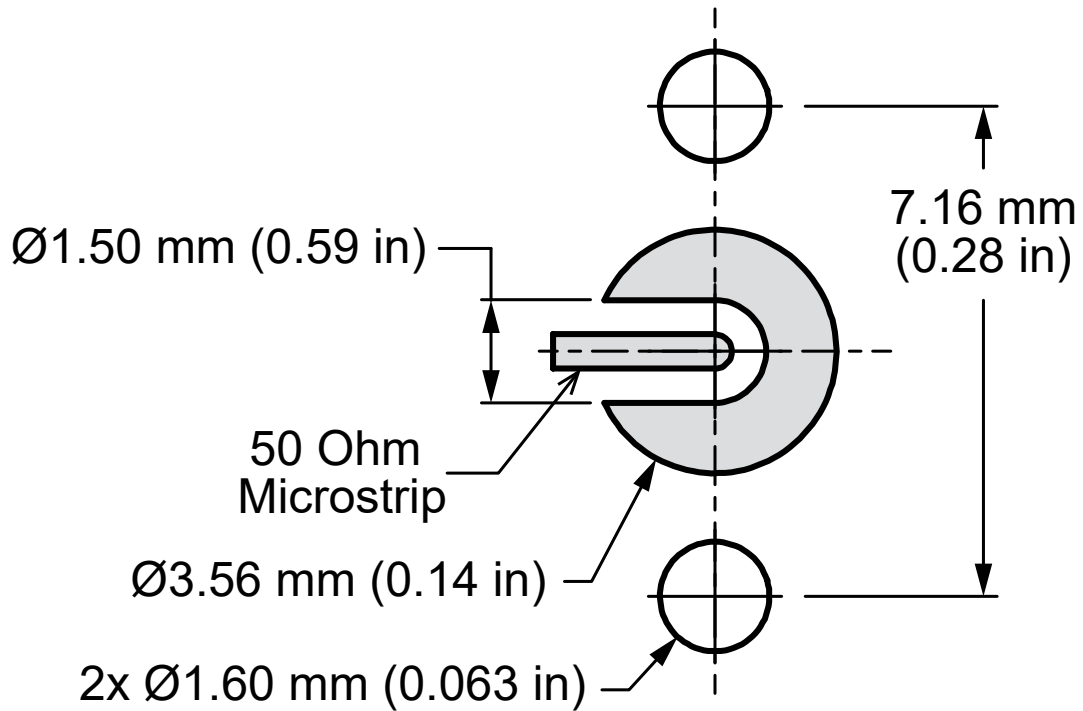


Figure 2: Recommended PCB Dimensions for the CON292001-1

TABLE 3. MECHANICAL SPECIFICATIONS

Model	CON292001-1
Mounting Type	Solderless PCB Surface-Mount design
Fastening Type	Type IAW M7 Threaded Coupling
Interface in Accordance with	MIL-STD-348B
Connector Durability	500 cycles min.
Recommended torque	8.0 in. -lbs
Weight	2.0 g (0.07 oz)

INSERTION LOSS

Figure 3 shows the Insertion Loss for the CON292001-1 connector. Insertion loss is the loss of signal power (gain) resulting from the insertion of a device in a transmission line.

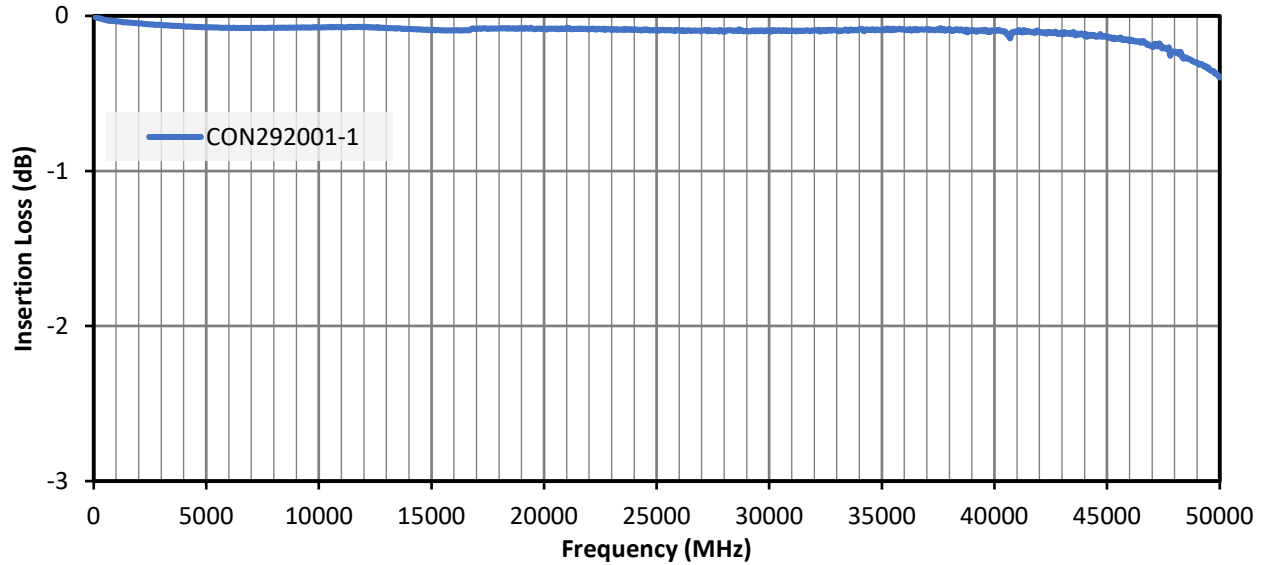


Figure 3: Insertion Loss for the CON292001-1 Connector

VSWR

Figure 4 provides the voltage standing wave ratio (VSWR) across the adapter's bandwidth for the CON292001-1 connector. VSWR describes how efficiently power is transmitted. A lower VSWR value indicates better performance at a given frequency.

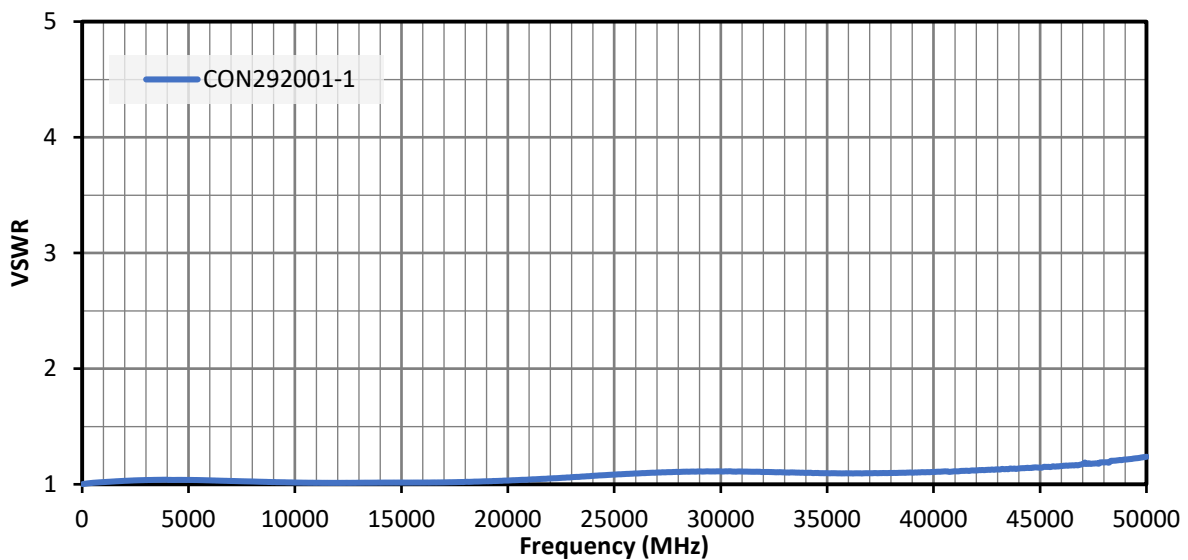


Figure 4: VSWR for the CON292001-1 Connector

PACKAGING INFORMATION

The CON292001-1 connector is individually placed in a clear anti-static polyethylene bag. 25 pcs are packaged in a larger anti-static polyethylene bag. 100 pcs are packaged in a shipping carton (370 mm x 330 mm x 240 mm). 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.

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

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 .

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

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

TE Connectivity, TE, TE connectivity (logo), Linx and Linx Technologies are trademarks owned or licensed by the TE Connectivity Ltd. family of companies. All other logos, products and/or company names referred to herein might be trademarks of their respective owners.

The information given herein, including drawings, illustrations and schematics which are intended for illustration purposes only, is believed to be reliable. However, TE Connectivity makes no warranties as to its accuracy or completeness and disclaims any liability in connection with its use. TE Connectivity's obligations shall only be as set forth in TE Connectivity's Standard Terms and Conditions of Sale for this product and in no case will TE Connectivity be liable for any incidental, indirect or consequential damages arising out of the sale, resale, use or misuse of the product. Users of TE Connectivity products should make their own evaluation to determine the suitability of each such product for the specific application.

TE Connectivity warrants to the original end user customer of its products that its products are free from defects in material and workmanship. Subject to conditions and limitations TE Connectivity will, at its option, either repair or replace any part of its products that prove defective because of improper workmanship or materials. This limited warranty is in force for the useful lifetime of the original end product into which the TE Connectivity product is installed. Useful lifetime of the original end product may vary but is not warranted to exceed one (1) year from the original date of the end product purchase.

©2023 TE Connectivity. All Rights Reserved.

1/23 Original