Datasheet

# CONSMP005-G
# SMP Jack Cable-Mount Connector

The CONSMP005-G is an SMP right angle jack (fenale socket) connector designed for use with .047, or equivalent semi-rigid coaxial cable. Operating from 0 GHz to 26.5 GHz, the CONSMP005-G combines superior performance, compact size, and a convenient snap-on 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 to 26.5 GHz operation
- Gold plating
  - Superior corrosion resistance
- SMP jack (female socket) connection
  - Gold plated beryllium copper center contact
- Right angle body
- Solder type coaxial cable-mount for use with .047 semi-rigid cable

## Applications

- Cellular IoT
  - LTE-M (Cat-M1), NB-IoT
- Cellular
  - 5G/4G LTE/3G/2G
- WiFi/WLAN
  - WiFi 6/6E
- GNSS
  - GPS, Galileo, GLONASS, BeiDou, QZSS
- Radar, Satellite Communications, Experimental
- Industrial, Commercial, Enterprise

**Table 1. Electrical Specifications**

| | | |
|---|---|---|
| **Impedance** | 50 Ω | |
| **Frequency Range** | 0 to 26.5 GHz | |
| **Voltage Rating** | 500 V RMS | |
| **Contact Resistance** | Center: ≤ 6.0 mΩ Outer: ≤ 2.0 mΩ | |
| **Select Frequencies** | **0 GHz to 18 GHz** | **18 GHz to 26.5 GHz** |
| **Insertion Loss (dB max.)** | 0.62 | 1.29 |
| **VSWR (max.)** | 1.9 | 2.7 |

## Ordering Information

| Part Number | Description |
|---|---|
| **CONSMP005-G** | SMP right-angle jack (female socket) cable-mount connector |

Available from Linx Technologies and select distributors and representatives.

## Product Dimensions

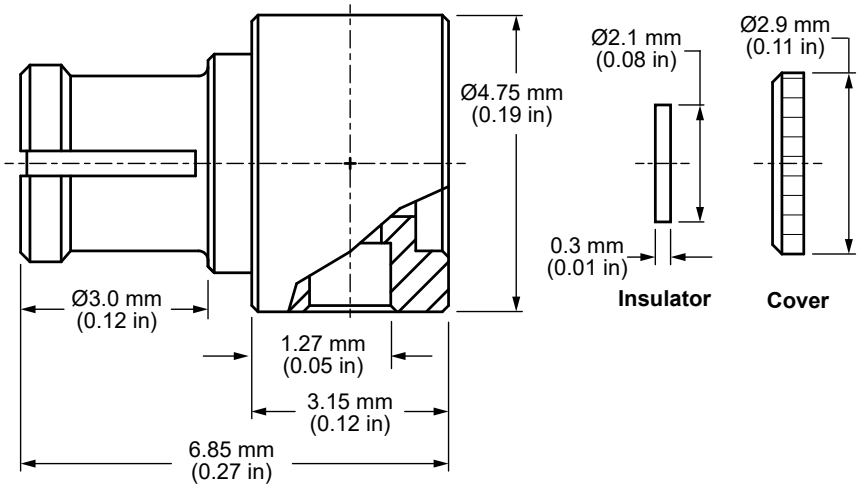



**Figure 1. Product Dimensions for the CONSMP005-G Connector**

**Table 2. Connector Components**

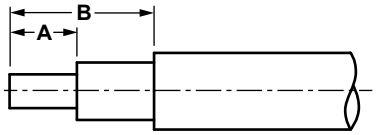
| Connector Body | Beryllium Copper | Gold |
|---|---|---|
| **Center Contact (female socket)** | Beryllium Copper | Gold |
| **Insulator** | PTFE | – |
| **Cover** | Brass | Gold |

## Coaxial Cable Installation

The CONSMP005-G provides a solder type coaxial cable retention system for installation to the connector. The coaxial cable trim dimensions are provided below in Table 3.

**Table 3. Coaxial Cable Trim Dimensions for the CONSMP005-G Connector**

| Coaxial Cable Types | A | B |
|---|---|---|
| **.047 semi-rigid** | 0.7 mm (0.03 in) | 1.6 mm (0.06 in) |



## Connector Performance

Table 4 shows insertion loss and VSWR values for the CONSMP005-G connector at commonly used frequencies.

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

**Table 4. Insertion Loss and VSWR for the CONSMP005-G Connector**

| Band | Low-Band Cellular/ ISM/LPWA | GNSS, Midband Cellular, Wifi | WiFi 6E | Ku |
|---|---|---|---|---|
| **Frequency Range** | 400 MHz to 960 MHz | 1.1 GHz to 5 GHz | 5 GHz to 7.125 GHz | 12 GHz to 18 GHz |
| **Insertion Loss (dB max.)** | 0.11 | 0.23 | 0.29 | 0.62 |
| **VSWR (max.)** | 1.0 | 1.1 | 1.3 | 1.9 |

**Table 5. Mechanical Specifications**

| Model | CONSMP005-G |
|---|---|
| **Mounting Type** | Cable Mount (solder type) |
| **Fastening Type** | Snap-on Coupling |
| **Interface in Accordance with** | MIL-STD-348B |
| **Connector Durability** | 100 cycles min. |
| **Weight** | 0.5 g (0.02 oz) |

**Table 6. 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** | -65 °C to +165 ° C |
| **Environmental Compliance** | RoHS |

## Packaging Information

The CONSMP005-G connector is placed in sealed plastic bags of 100 pcs. Distribution channels may offer alternative packaging options.

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