





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, BeiDou, QZSS
- Radar, Satellite Communications, Experimental
- Industrial, Commercial, Enterprise

TABLE 1. ELECTRICAL SPECIFICATIONS

| Parameter | Va | lue |
|--------------------------|----------------------------------|--------------------|
| Impedance | 50 |) Ω |
| Frequency Range | 0 to 26 | 6.5 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

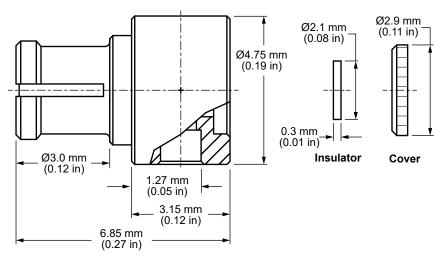


Figure 1. Product Dimensions for the CONSMP005-G Connector

2. CONNECTOR COMPONENTS

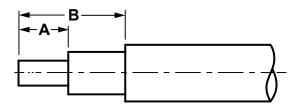
| Connector Body | Beryllium Copper | Gold |
|--------------------------------|------------------|------|
| Center Contact (female socket) | Beryllium Copper | Gold |
| Insulator | PTFE | - |
| Cover | Brass | Gold |

RECOMMENDED PCB FOOTPRINT

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 CONSMPOOS-G CONNECTOR

| Coaxial Cable Types | A | В |
|---------------------|------------------|------------------|
| .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 CONSMPOOS-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.

TE TECHNICAL SUPPORT CENTER

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