

CONSMB012-G SMB Plug Cable-Mount Connector

The CONSMB012-G is an SMB plug right angle connector designed for use with RG-174, 316 or equivalent coaxial cable using the provided crimp ferrule and heat shrink tubing. Operating from 0 GHz to 12 GHz, the CONSMB012-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 12 GHz operation
- Right angle design for connection in tight spaces
- Gold plating
 - Superior corrosion resistance
- SMB plug (female socket) connection
 - Gold plated beryllium copper center contact
- Crimp type coaxial cable mount for use with
 - RG-174, 316
 - Crimp ferrule and heat shrink tubing provided

Applications

- LPWA
 - LoRaWAN®, Sigfox®, WiFi HaLow™ (802.11ah)
- Cellular IoT
 - LTE-M (Cat-M1), NB-IoT
- Cellular
 - 5G/4G LTE/3G/2G
- GNSS
 - GPS, Galileo, GLONASS, BeiDou, QZSS
- Industrial/Commercial/Enterprise
- ISM

Table 1. Electrical Specifications

Impedance	50 Ω	
Frequency Range	0 to 12 GHz	
Voltage Rating	750 V RMS	
Contact Resistance	Center: ≤ 6.0 mΩ Outer: ≤ 1.0 mΩ	
Select Frequencies	400 MHz to 960 MHz	2.4 GHz
Insertion Loss (dB max)	-0.15	-0.24
VSWR (max)	1.1	1.1

Ordering Information

Part Number	Description
CONSMB012-G	SMB plug (female socket) cable-mount connector

Available from Linx Technologies and select distributors and representatives.

Product Dimensions

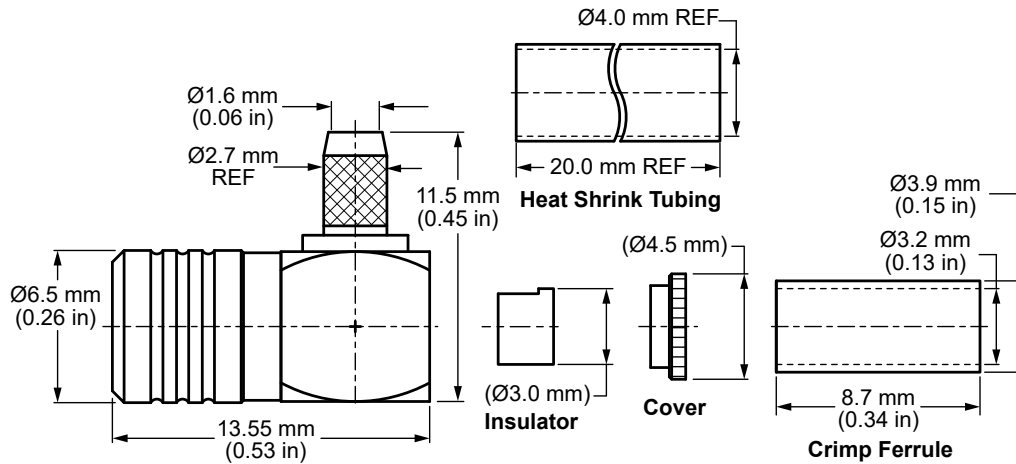


Figure 1. Product Dimensions for the CONSMB012-G Connector

Table 2. Connector Components

Model	CONSMB012-G	
Connector Part	Material	Finish
Connector Body	Brass	Gold
Center Contact (socket)	Beryllium Copper	Gold
Insulator	PTFE	-
Crimp Ferrule	Brass	Gold

Coaxial Cable Installation

The CONSMB012-G provides a crimp type coaxial cable retention system for installation to the connector using the provided crimp ferrule and heat shrink tubing. The coaxial cable trim dimensions are provided below in Table 3 for supported coaxial cable types, and recommended hex crimp tool sizes for CONSMB012-G are shown in Table 4.

Table 3. Coaxial Cable Trim Dimensions for the CONSMB012-G Connector

Coaxial Cable Types	A	B	C
RG-174/U, 316	1.0 mm (0.04 in)	4.5 mm (0.18 in)	9.0 mm (0.35 in)

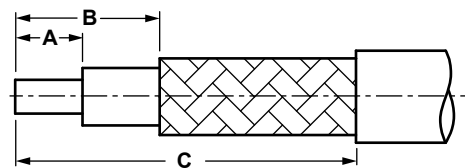


Table 4. Recommended Hex Crimp Tool Sizes for the CONSMB012-G

Connector Part	Crimp Tool Size
Crimp Ferrule	3.25 mm (0.128 in)
Center Contact	Crimping not recommended

Connector Performance

Table 5 shows insertion loss and VSWR values for the CONSMB012-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 5. Insertion Loss and VSWR for the CONSMB012-G Connector

Band	Low-Band Cellular/ ISM/LPWA	Midband Cellular/ GNSS	WiFi/ISM	WiFi 6
Frequency Range	400 MHz to 960 MHz	1164 MHz to 5000 MHz	2.4 GHz	5 GHz to 7.125 GHz
Insertion Loss (dB max)	-0.15	-0.36	-0.24	-0.64
VSWR (max)	1.1	1.2	1.1	1.5

Table 6. Mechanical Specifications

Model	CONSMB012-G
Mounting Type	Cable Mount (crimp type)
Fastening Type	Snap-on Coupling
Interface in Accordance with	MIL-STD-348A
Connector Durability	500 cycles min.
Weight	3.4 g (0.12 oz)

Table 7. 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 B
Vibration	MIL-STD-202 Method 204 test condition B
Mechanical Shock	MIL-STD-202 Method 213 test condition I
Temperature Range	-65 °C to +165 °C
Environmental Compliance	RoHS

Packaging Information

The CONSMB012-G connector is placed in a clear plastic bag. Individual bags are sealed in a bulk plastic bag of 50 pcs. Bulk bags are packaged in a carton (800 pcs). Distribution channels may offer alternative packaging options.

Website: <http://linxtechnologies.com>
Linx Offices: 159 Ort Lane, Merlin, OR, US 97532
Phone: +1 (541) 471-6256
E-MAIL: info@linxtechnologies.com

Linx Technologies reserves the right to make changes to the product(s) or information contained herein without notice. No liability is assumed as a result of their use or application. No rights under any patent accompany the sale of any such product(s) or information.

Wireless Made Simple is a registered trademark of Linx Acquisitions LLC. LoRaWAN is a registered trademark of Semtech Corporation. Sigfox is a registered trademark of SIGFOX. Other product and brand names may be trademarks or registered trademarks of their respective owners.

Copyright © 2020 Linx Technologies

All Rights Reserved

Doc# DS20339-136CON



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](#) [6001-7071-019](#) [6002-7051-003](#) [6002-7551-202](#) [6059674-1](#) [619550-1](#) [630059-000](#) [M39030/3-01N](#) [6500-7071-046](#) [6769](#) [CX050L2AQ](#) [7002-1542-011](#) [7004-1512-000](#) [7009-1511-004](#) [7010-1511-000](#) [7029-1511-060](#) [7101-1541-010](#) [7101-1571-002](#) [7105-1521-002](#) [7145-1521-002](#) [7203-1571-003](#) [7209-1511-011](#) [7210-1511-015](#) [7210-1511-019](#) [73137-5015](#) [73216-2241](#) [73404-2300](#) [7405-1521-005](#) [7405-1521-802](#) [8527](#) [8547](#) [FS11V](#) [8808-1511-001](#) [9049-9513-000](#) [9074-9513-000](#) [9101-9573-002](#) [910A205F](#) [9130-9573-002](#) [PL11SC-026](#) [PL375-33](#) [PL40-5](#) [PL74C-221](#) [PL75MC-217](#) [PL803-7](#) [1200690078](#) [1-201144-1](#) [R107003010W](#) [R110A172100](#) [R112186000](#)