ADP-SMAM-SMBM-G

SMA Plug to SMB Plug Adapter

The ADP-SMAM-SMBM-G is an SMA plug to SMB plug adapter. Operating from 0 GHz to 4 GHz, the ADP-SMAM-SMBM-G combines superior performance, compact size, and a convenient snap-on mating interface to provide a reliable, easy-to-use adapter. Additionally, all Linx adapters meet RoHS lead free standards and are tested to meet requirements for corrosion resistance, vibration, mechanical and thermal shock.

FEATURES

- 0 to 5 GHz operation
- Gold plating
  - Superior corrosion resistance
- SMA plug (male pin) connection
  - Gold plated beryllium copper center contact
- SMB plug (female socket) connection
  - Gold plated beryllium copper center contact

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

ORDERING INFORMATION

Part Number	Description
ADP-SMAM-SMBM-G	SMA plug (male pin) to SMB plug (female socket) adapter

Available from Linx Technologies and select distributors and representatives.

TABLE 1. ELECTRICAL SPECIFICATIONS

Frequency Range		
Impedance	50 Ω	
Frequency Range	0 to 4 GHz	
Voltage Rating	750 V RMS	
Contact Resistance	Center: ≤ 6.0 mΩ Outer: ≤ 2.0 mΩ	
Select Frequencies	400 MHz to 960 MHz	2.4 GHz
Insertion Loss (dB max.)	-0.10	-0.16
VSWR (max.)	1.0	1.1

PRODUCT DIMENSIONS

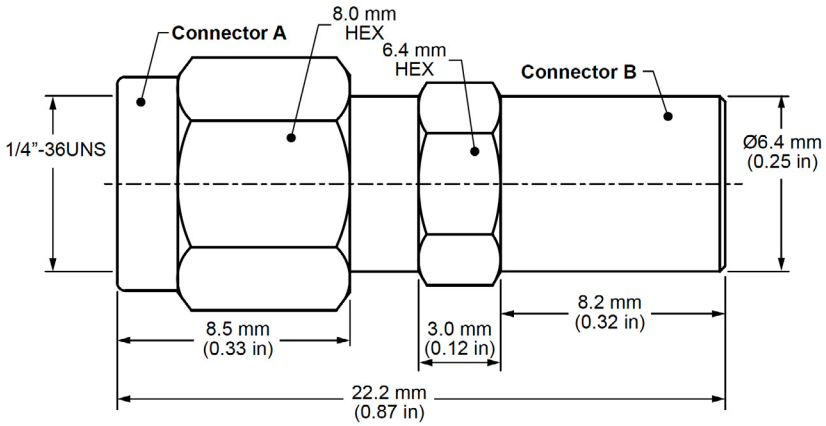

Figure 1. Product Dimensions for the ADP-SMAM-SMBM-G Adapter

TABLE 2. ADAPTER COMPONENTS

ADP-SMAM-SMBM-G	Connector A SMA plug (male pin)		Connector B SMB plug (female socket)	
Connector Part	Material	Finish	Material	Finish
Body	Brass	Gold	Brass	Gold
Center Contact	Beryllium Copper	Gold	Beryllium Copper	Gold
Insulator	PTFE	–	PTFE	–

ADAPTER PERFORMANCE

Table 3 shows insertion loss and VSWR values for the ADP-SMAM-SMBM-G adapter 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 adapter. A lower VSWR value indicates better performance at a given frequency.

TABLE 3. INSERTION LOSS AND VSWR FOR THE ADP-SMAM-SMBM-G ADAPTER

Band	Low-Band Cellular/ ISM/LPWA	GNSS	Midband Cellular	WiFi/ISM
Frequency Range	400 MHz to 960 MHz	1164 MHz to 1609 MHz	1427 MHz to 5000 MHz	2.4 GHz
Insertion Loss (dB max.)	-0.10	-0.13	-0.25	-0.16
VSWR (max.)	1.0	1.0	1.3	1.1

TABLE 4. MECHANICAL SPECIFICATIONS

ADP-SMAM-SMBF-G	Connector A SMP jack (female socket)	Connector B SMP jack (female socket)
Mounting Type	Inline, Free-hanging	
Fastening Type	1/4”-36UNS Threaded Coupling	Snap-on Coupling
Interface in Accordance with	MIL-STD-348A	MIL-STD-348A
Recommended Torque	0.57 N·m (5.0 in·lbs)	n/a
Coupling Nut Retention	60 lbs min.	n/a
Durability	500 cycles min.	500 cycles min.
Weight	3.0 g (0.11 oz)	

TABLE 5. 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 ADP-SMAM-SMBM-G adapter is sealed in a plastic bag of 50 pcs. Bags are placed in cartons (4000 pcs.) Distribution channels may offer alternative packaging options.

TE TECHNICAL SUPPORT CENTER

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