



## ADP-SMPF-SMPF-G

### SMP Jack to SMP Jack Adapter

The ADP-SMPF-SMPF-G is an SMP jack to SMP jack adapter. Operating from 0 GHz to 26.5 GHz, the ADP-SMPF-SMPF-G combines superior performance, compact size, and a convenient snap-on mating interface to provide a reliable, easy-to-use adapter. Linx SMP adapters are ideal for making board-to-board connections. 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 26.5 GHz operation
- Gold plating
  - Superior corrosion resistance
- SMP jack (female socket) connection
  - Gold plated beryllium copper center contact
- Ideal for board-to-board connections

#### 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

#### ORDERING INFORMATION

Part Number	Description
ADP-SMPF-SMPF-G	SMP jack (female socket) to SMP jack (female socket) adapter

Available from Linx Technologies and select distributors and representatives.

## TABLE 1. ELECTRICAL SPECIFICATIONS

Frequency Range	0 to 26.5 GHz	
Impedance	50 $\Omega$	
Frequency Range	0 to 26.5 GHz	
Voltage Rating	500 V RMS	
Contact Resistance	Center: $\leq 6.0$ m $\Omega$ Outer: $\leq 3.0$ m $\Omega$	
Select Frequencies	1.1 GHz to 5 GHz	12 GHz to 18 GHz
Insertion Loss (dB max.)	0.10	0.28
VSWR (max.)	1.0	1.5

## PRODUCT DIMENSIONS

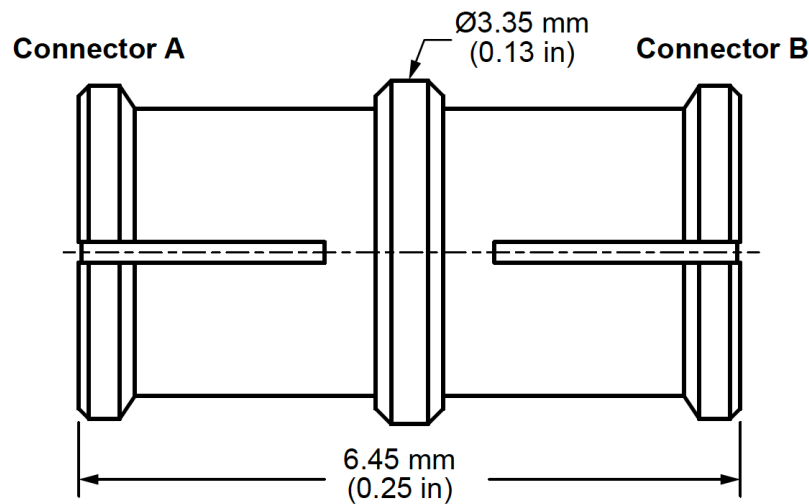


Figure 1. Product Dimensions for the ADP-SMPF-SMPF-G Adapter

## TABLE 2. ADAPTER COMPONENTS

ADP-SMPF-SMPF-G	Connector A SMP jack (female socket)		Connector B SMP jack (female socket)	
	Material	Finish	Material	Finish
Connector Part				
Body	Beryllium Copper	Gold	Beryllium Copper	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-SMPF-SMPF-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-SMPF-SMPF-G ADAPTER

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.)	0.05	0.10	0.11	0.28
VSWR (max.)	1.0	1.0	1.1	1.5

**TABLE 4. MECHANICAL SPECIFICATIONS**

ADP-SMPF-SMPF-G	Connector A SMP jack (female socket)	Connector B SMP jack (female socket)
Mounting Type	Inline, Free-hanging	
Fastening Type	Snap-on Coupling	Snap-on Coupling
Interface in Accordance with	MIL-STD-348B	MIL-STD-348B
Durability	100 cycles min.	100 cycles min.
Weight	0.18 g (0.006 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 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 ADP-SMPF-SMPF-G adapter is sealed in a plastic bag of 100 pcs. Distribution channels may offer alternative packaging options.

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