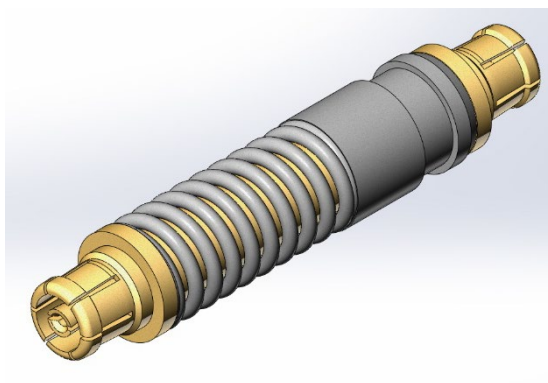




RF Characterization Report

PRFIA-SMPM-J-J-SP-2

Test Date: 3 Mar 2023



Description

50 Ohm .650" (16.50mm) SMPM Spring-Loaded Bullet Jack Assembly

Series: PRFIA-SMPM**Description:** 50 Ohm .650" (16.50 mm) SMPM Spring-Loaded Bullet Jack Assembly

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Series: PRFIA-SMPM**Description:** 50 Ohm .650" (16.50 mm) SMPM Spring-Loaded Bullet Jack Assembly

Test Setup Information

Scope:

Provide standing wave ratio and insertion loss performance parameters for .650" (16.50 mm) SMPM Bullet Jack Assembly.

Instrument Setup & Test Accessories:

Network Analyzer	Keysight PNA N5227B
Averaging Factor	1
Smoothing	Off
IF Bandwidth	1 KHz
Sweep Start	10 MHz
Sweep End	65 GHz
Points	6500
Test Cables	Gore 0F0CACB036.0-LF (DC to 67 GHz)

Calibration Type:

A Keysight electrical calibration is performed using the Keysight ECAL 1.85 mm N4694A Calibration kit.

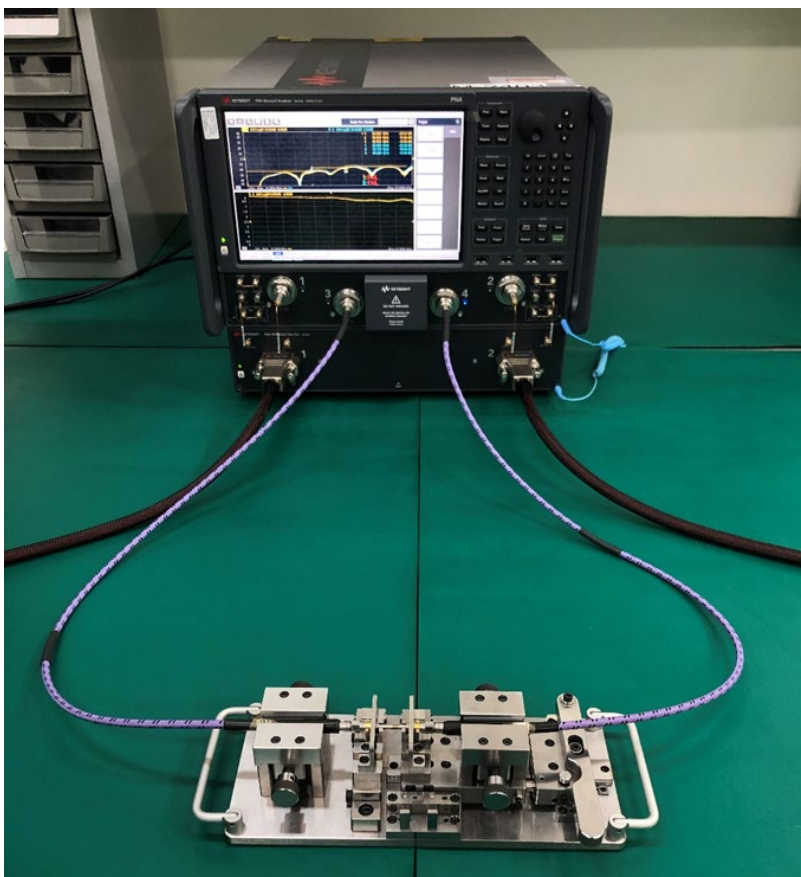
Calibration Kit	Keysight ECAL 1.85mm N4694A Calibration kit
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Adapter Use:

1.85 mm Female to SMPM Male adapters were used for the measurements of PRFIA-SMPM-J-J-SP-2. The adapters effects were removed from the measurement using the Fixture Removal method.

Series: PRFIA-SMPM**Description:** 50 Ohm .650" (16.50 mm) SMPM Spring-Loaded Bullet Jack Assembly**PRFIA-SMPM-J-J-SP-2 Test Definition**

Part Number	End 1	End 2
PRFIA-SMPM-J-J-SP-2	SMPM	SMPM

Connector Under Test:

This SMPM bullet is spring loaded, it can be compressed to varying lengths. The bullets were tested in three conditions, 0% compression, 50% compression and 100% compression.

0% compression corresponds to No Compression (full length).

50% compression corresponds to Half compression (medium length).

100% compression corresponds to Full compression (minimum length).

Series: PRFIA-SMPM

Description: 50 Ohm .650" (16.50 mm) SMPM Spring-Loaded Bullet Jack Assembly

Conclusion:

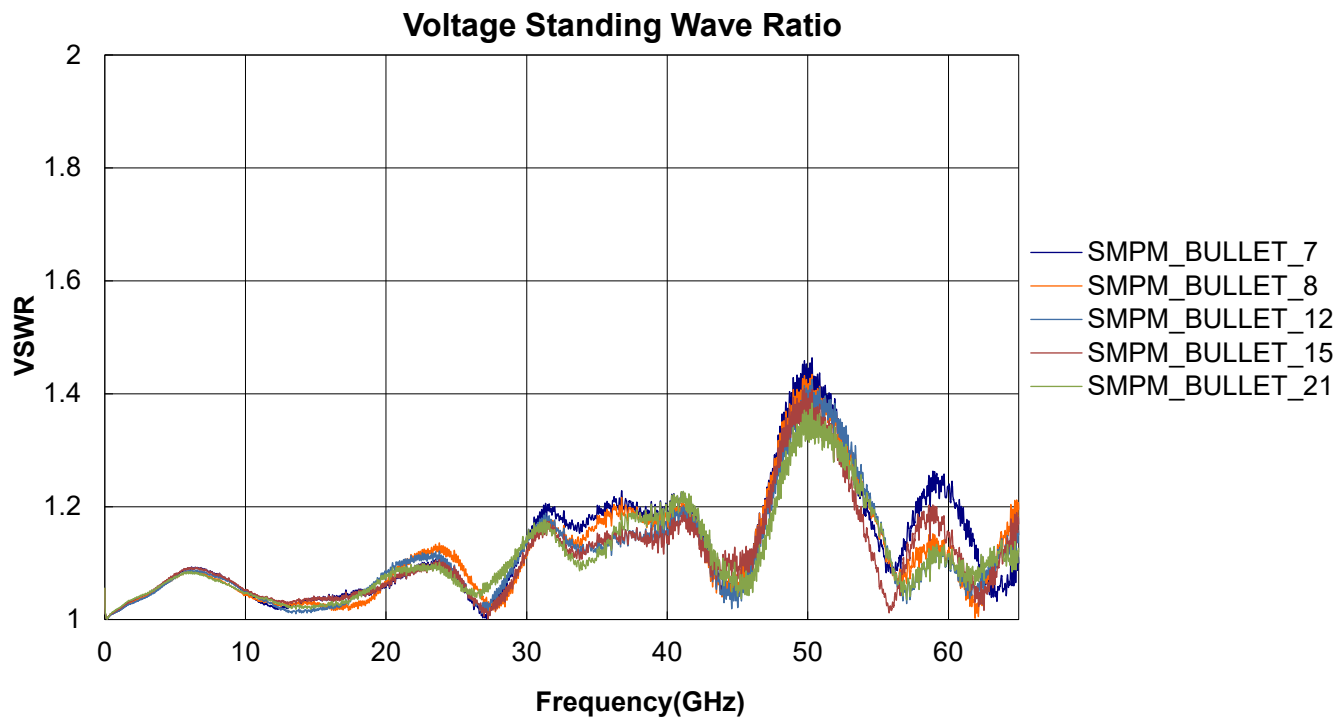
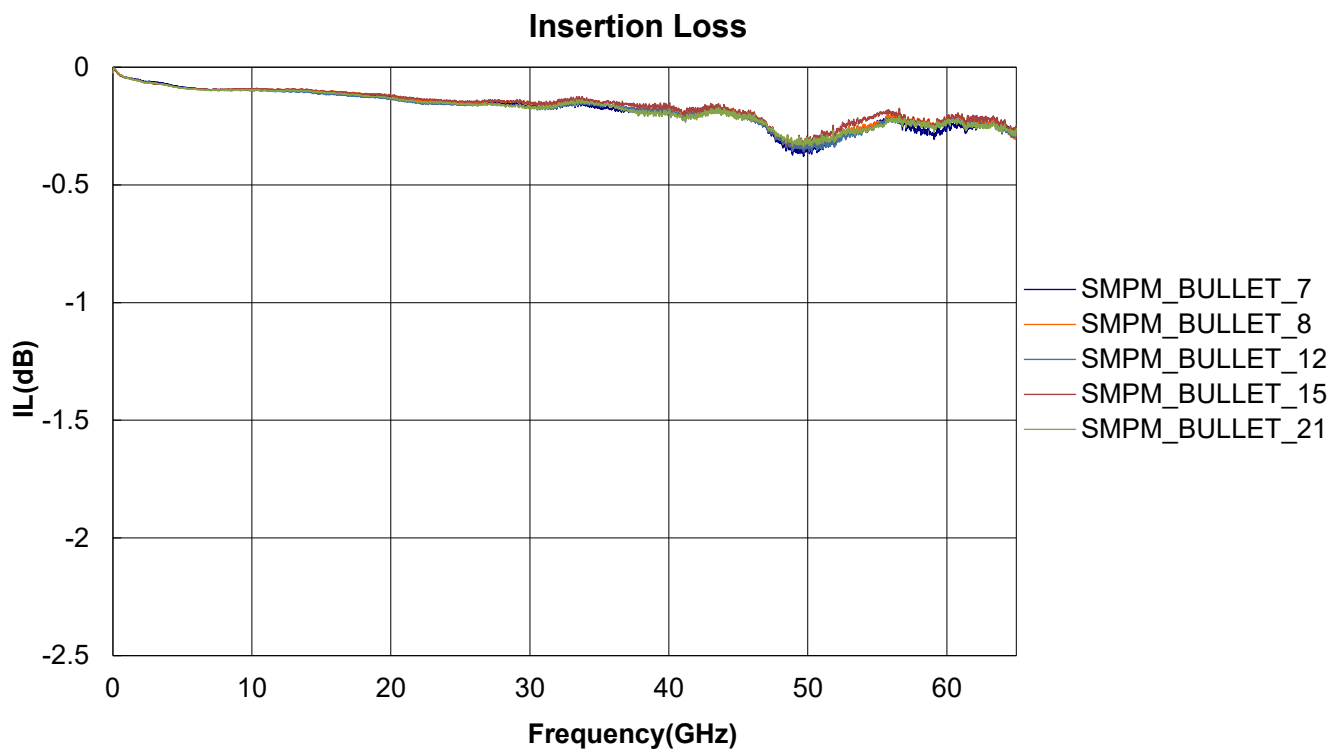
The maximum VSWR is specified as datasheet below.

Frequency	VSWR Max Spec
DC to 26.5 GHz	1.15
26.5 GHz to 40 GHz	1.35
40 GHz to 65 GHz	1.50

Results: PRFIA-SMPM-J-J-SP-2 of 0% compression

The results just include PRFIA-SMPM-J-J-SP-2 connector, fixture removal method removes all adapters effects.

Sample	SWR (Max) DC-26.5 (GHz)	SWR (Max) 26.5- 40(GHz)	SWR (Max) 40-65 (GHz)	IL (Min) DC-26.5 (GHz)	IL (Min) 26.5-40 (GHz)	IL (Min) 40-65 (GHz)
SMPM_BULLET_7	1.11	1.23	1.46	-0.15 dB	-0.20 dB	-0.37 dB
SMPM_BULLET_8	1.14	1.22	1.43	-0.15 dB	-0.19 dB	-0.35 dB
SMPM_BULLET_12	1.12	1.19	1.43	-0.16 dB	-0.20 dB	-0.36 dB
SMPM_BULLET_15	1.11	1.18	1.41	-0.14 dB	-0.17 dB	-0.33 dB
SMPM_BULLET_21	1.10	1.21	1.38	-0.16 dB	-0.21 dB	-0.33 dB

Series: PRFIA-SMPM**Description: 50 Ohm .650" (16.50 mm) SMPM Spring-Loaded Bullet Jack Assembly**VSWRInsertion Loss

Series: PRFIA-SMPM

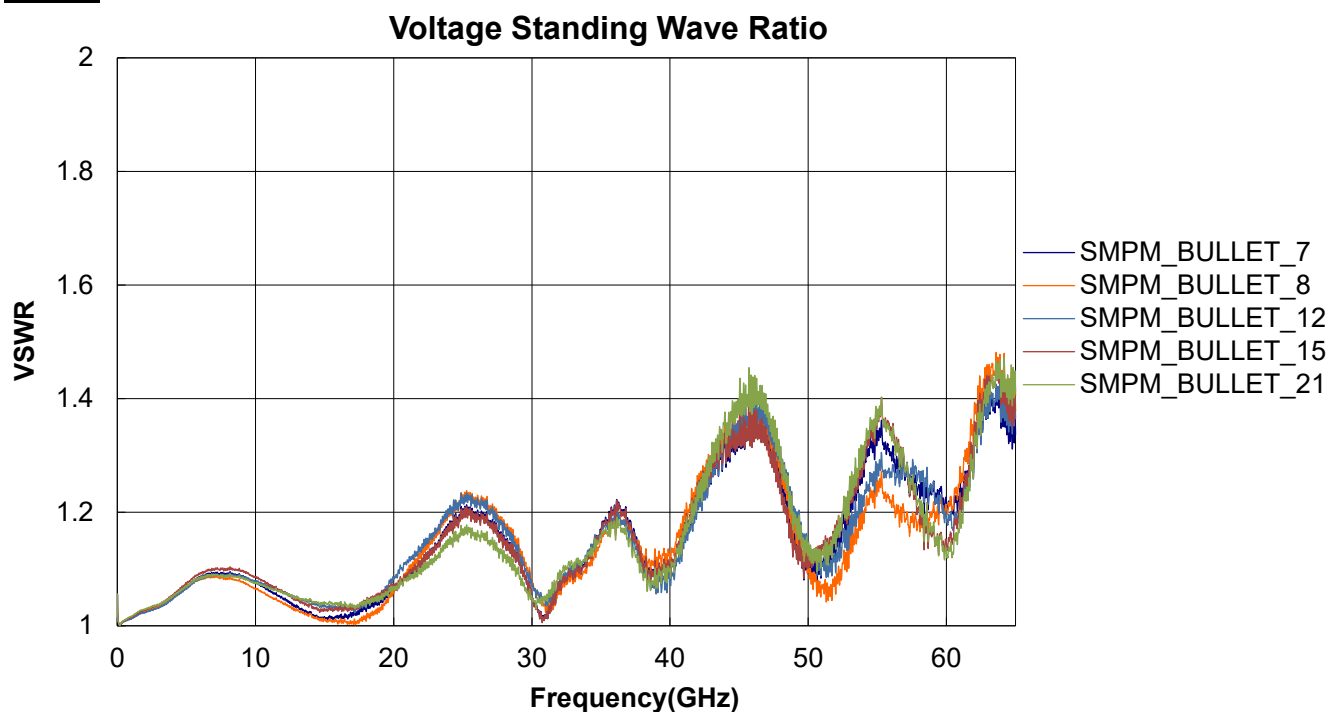
Description: 50 Ohm .650" (16.50 mm) SMPM Spring-Loaded Bullet Jack Assembly

Results: PRFIA-SMPM-J-J-SP-2 of 50% compression

The results just include PRFIA-SMPM-J-J-SP-2 connector, fixture removal method removes all adapters effects.

Sample	SWR (Max) DC-26.5 (GHz)	SWR (Max) 26.5- 40(GHz)	SWR (Max) 40-65 (GHz)	IL (Min) DC-26.5 (GHz)	IL (Min) 26.5-40 (GHz)	IL (Min) 40-65 (GHz)
SMPM_BULLET_7	1.21	1.22	1.42	-0.17 dB	-0.17 dB	-0.50 dB
SMPM_BULLET_8	1.24	1.23	1.48	-0.18 dB	-0.19 dB	-0.57 dB
SMPM_BULLET_12	1.23	1.22	1.43	-0.19 dB	-0.19 dB	-0.68 dB
SMPM_BULLET_15	1.21	1.22	1.46	-0.16 dB	-0.17 dB	-0.56 dB
SMPM_BULLET_21	1.18	1.19	1.47	-0.17 dB	-0.23 dB	-0.49 dB

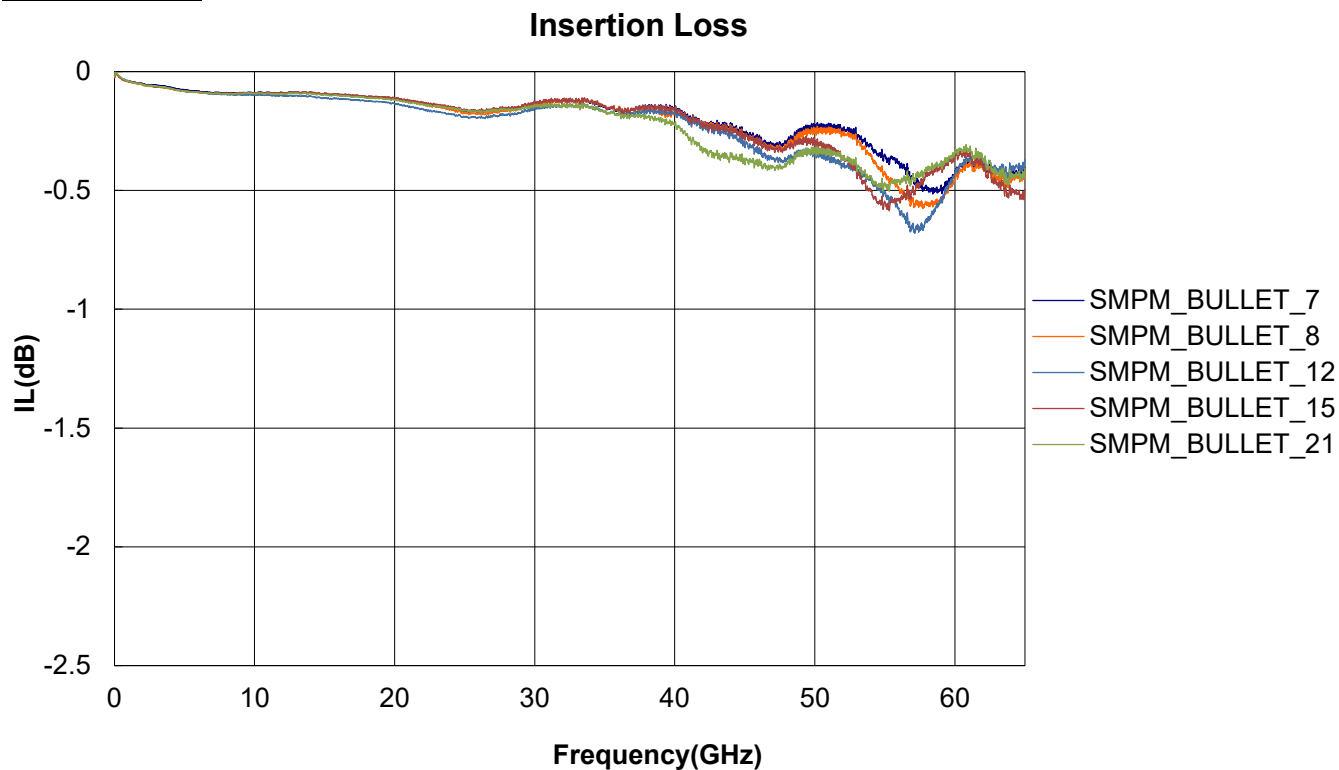
VSWR



Series: PRFIA-SMPM

Description: 50 Ohm .650" (16.50 mm) SMPM Spring-Loaded Bullet Jack Assembly

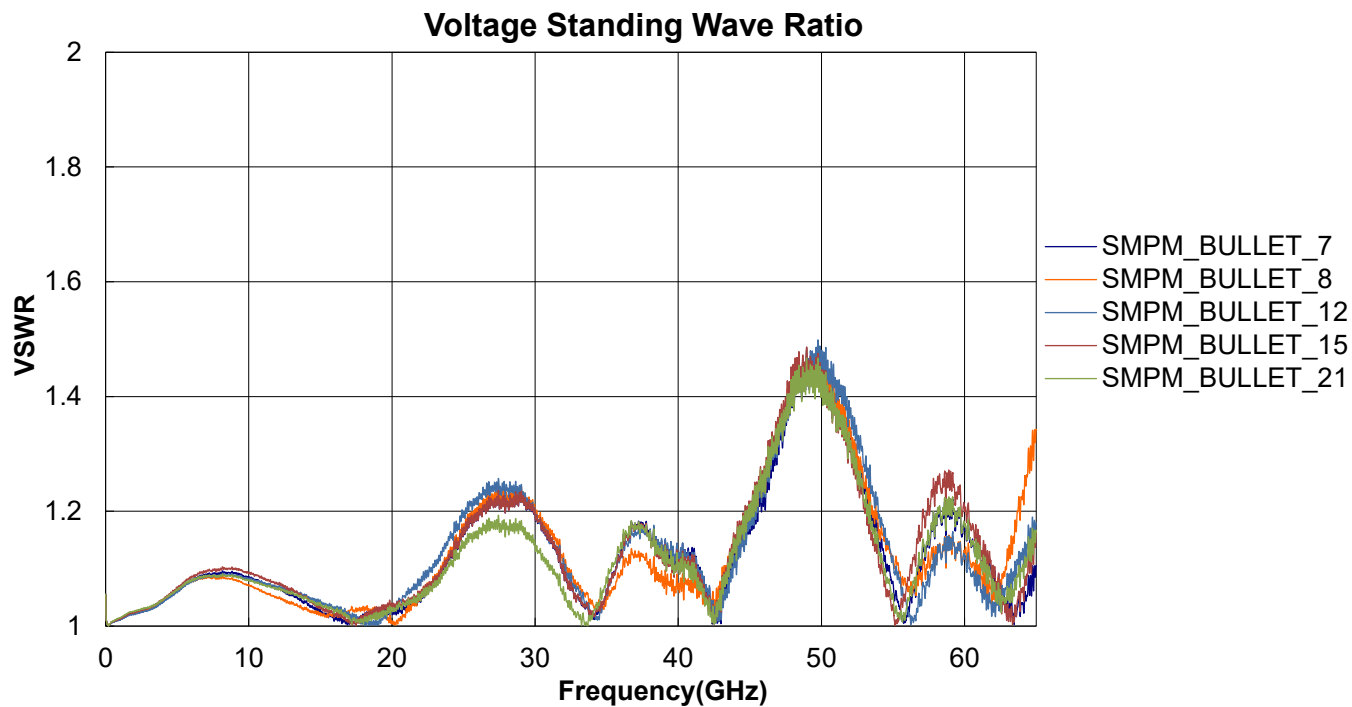
Insertion Loss



Results: PRFIA-SMPM-J-J-SP-2 of 100% compression

The results just include PRFIA-SMPM-J-J-SP-2 connector, fixture removal method removes all adapters effects.

Sample	SWR (Max) DC-26.5 (GHz)	SWR (Max) 26.5- 40(GHz)	SWR (Max) 40-65 (GHz)	IL (Min) DC-26.5 (GHz)	IL (Min) 26.5-40 (GHz)	IL (Min) 40-65 (GHz)
SMPM_BULLET_7	1.21	1.24	1.48	-0.16 dB	-0.17 dB	-0.69 dB
SMPM_BULLET_8	1.22	1.25	1.48	-0.17 dB	-0.18 dB	-0.63 dB
SMPM_BULLET_12	1.24	1.26	1.50	-0.20 dB	-0.21 dB	-0.67 dB
SMPM_BULLET_15	1.21	1.24	1.49	-0.15 dB	-0.16 dB	-0.66 dB
SMPM_BULLET_21	1.18	1.19	1.47	-0.16 dB	-0.17 dB	-0.63 dB

Series: PRFIA-SMPM**Description: 50 Ohm .650" (16.50 mm) SMPM Spring-Loaded Bullet Jack Assembly**VSWRInsertion Loss