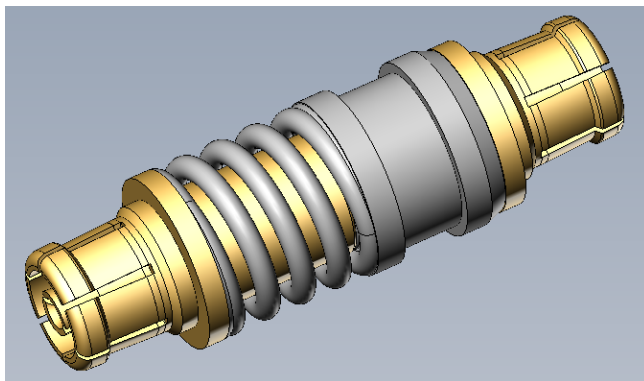




RF Characterization Report

PRFIA-SMPM-J-J-SP-1

Test Date: May 2023



Description

50 Ohm .412" (10.45 mm) SMPM Spring-Loaded Bullet Jack Assembly

Series: PRFIA-SMPM**Description:** 50 Ohm .412" (10.45 mm) SMPM Spring-Loaded Bullet Jack Assembly

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Series: PRFIA-SMPM**Description:** 50 Ohm .412" (10.45 mm) SMPM Spring-Loaded Bullet Jack Assembly

Test Setup Information

Scope:

Provide standing wave ratio and insertion loss performance parameters for .412" (10.45 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.

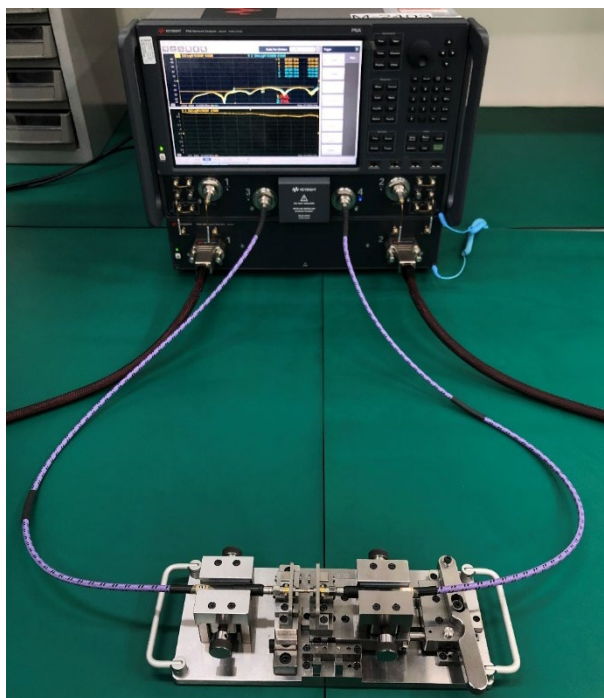
Calibration Kit	Keysight ECAL 1.85mm N4694A Calibration kit
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Adapter Use:

1.85 mm Female to SMPM Male adapters were used for the measurements of PRFIA-SMPM-J-J-SP-1. The adapters effects were removed from the measurement using the Fixture Removal method.

Series: PRFIA-SMPM**Description:** 50 Ohm .412" (10.45 mm) SMPM Spring-Loaded Bullet Jack Assembly**PRFIA-SMPM-J-J-SP-1 Test Definition**

Part Number	End 1	End 2
PRFIA-SMPM-J-J-SP-1	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 .412" (10.45 mm) SMPM Spring-Loaded Bullet Jack Assembly

Conclusion:

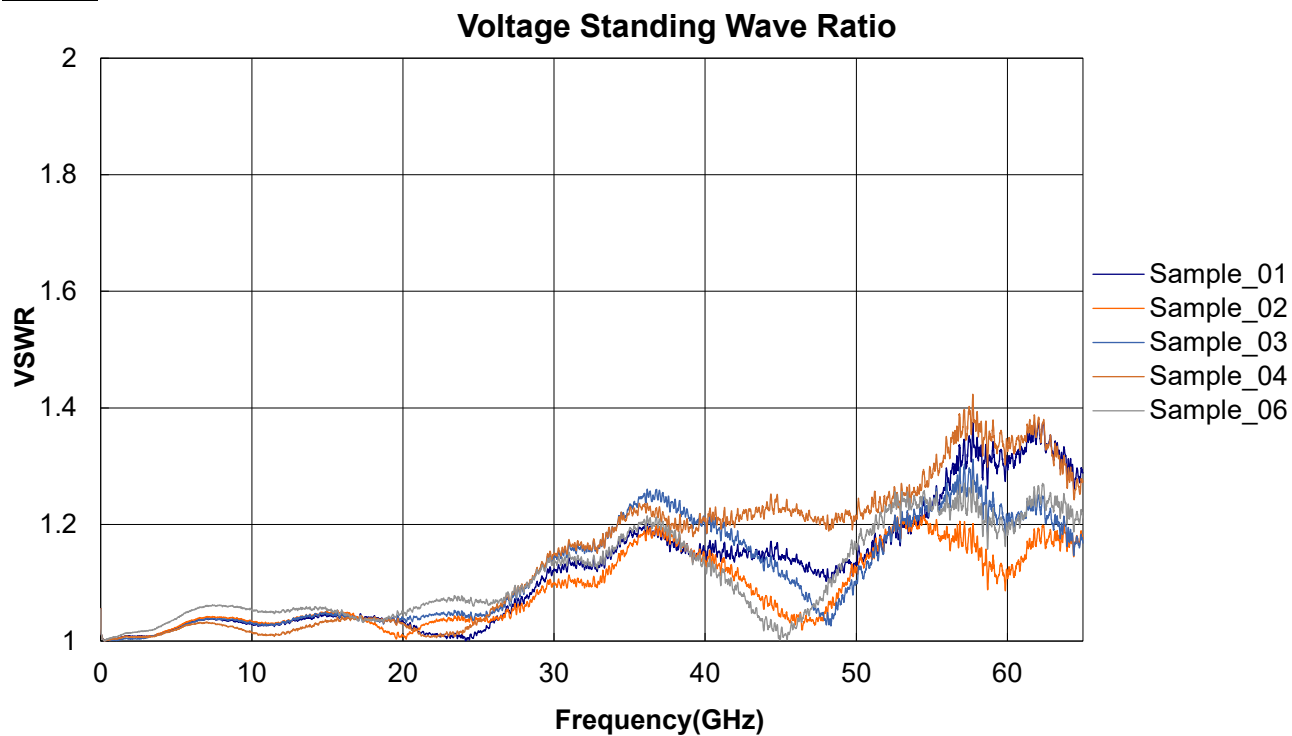
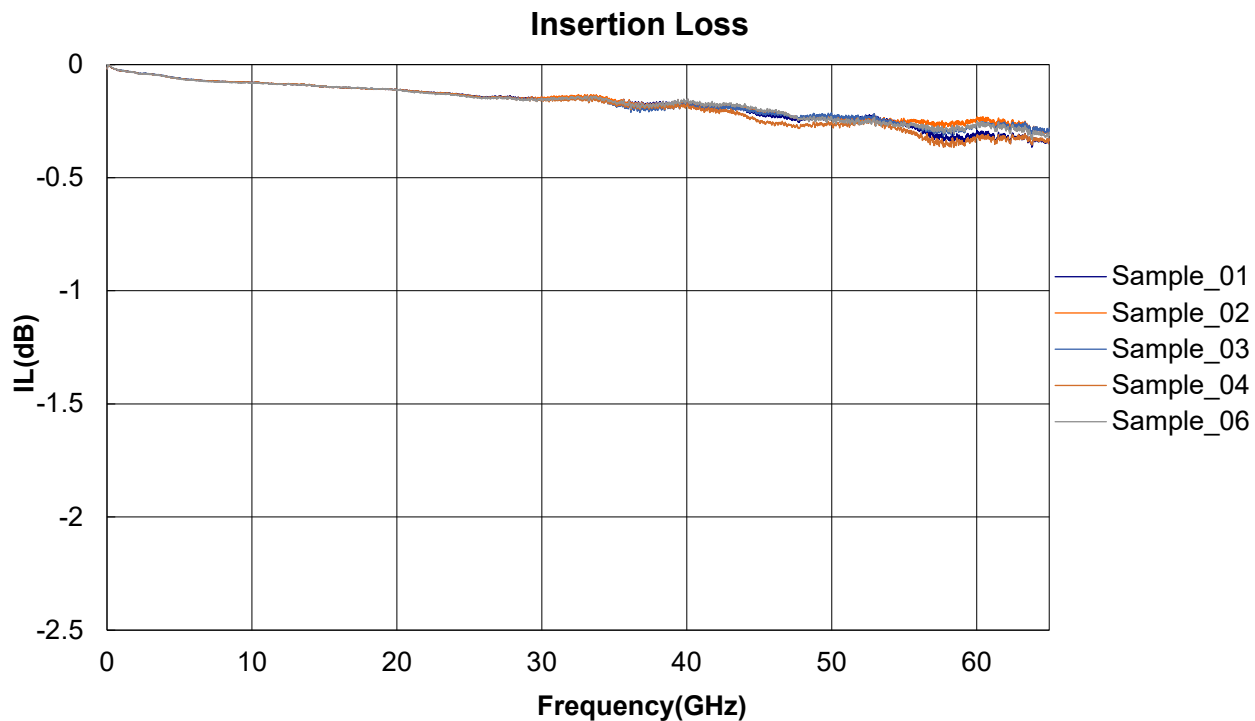
The maximum VSWR is specified as datasheet below.

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-1 of 0% compression

The results just include PRFIA-SMPM-J-J-SP-1 connector, fixture removal method remove 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)
Sample_01	1.06	1.20	1.38	-0.14 dB	-0.18 dB	-0.35 dB
Sample_02	1.06	1.20	1.22	-0.14 dB	-0.18 dB	-0.30 dB
Sample_03	1.06	1.26	1.31	-0.14 dB	-0.21 dB	-0.30 dB
Sample_04	1.07	1.24	1.42	-0.14 dB	-0.19 dB	-0.36 dB
Sample_06	1.08	1.21	1.28	-0.15 dB	-0.19 dB	-0.32 dB

Series: PRFIA-SMPM**Description: 50 Ohm .412" (10.45 mm) SMPM Spring-Loaded Bullet Jack Assembly**VSWRInsertion Loss

Series: PRFIA-SMPM

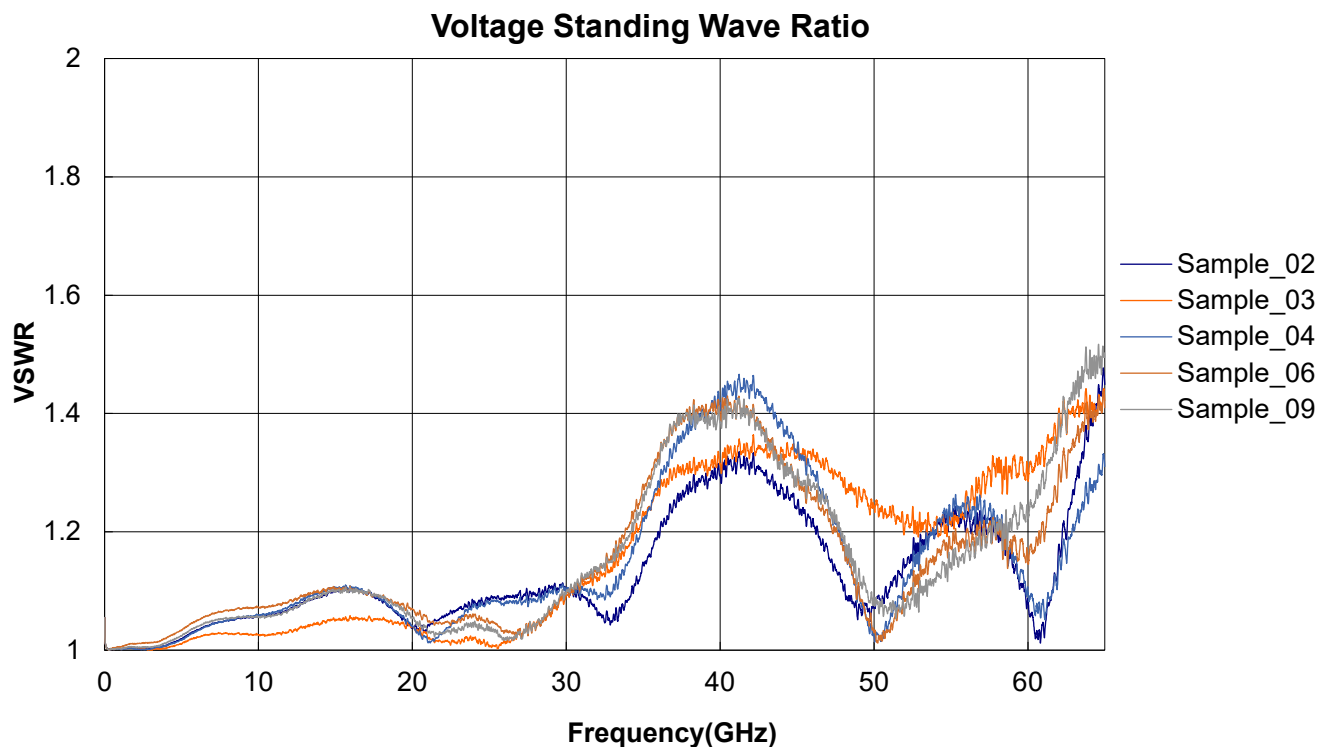
Description: 50 Ohm .412" (10.45 mm) SMPM Spring-Loaded Bullet Jack Assembly

Results: PRFIA-SMPM-J-J-SP-1 of 50% compression

The results just include PRFIA-SMPM-J-J-SP-1 connector, fixture removal method remove 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)
Sample_02	1.11	1.32	1.48	-0.15 dB	-0.24 dB	-0.62 dB
Sample_03	1.06	1.34	1.44	-0.14 dB	-0.25 dB	-0.87 dB
Sample_04	1.11	1.44	1.47	-0.15 dB	-0.36 dB	-0.70 dB
Sample_06	1.11	1.42	1.44	-0.14 dB	-0.30 dB	-0.50 dB
Sample_09	1.11	1.41	1.52	-0.13 dB	-0.28 dB	-0.53 dB

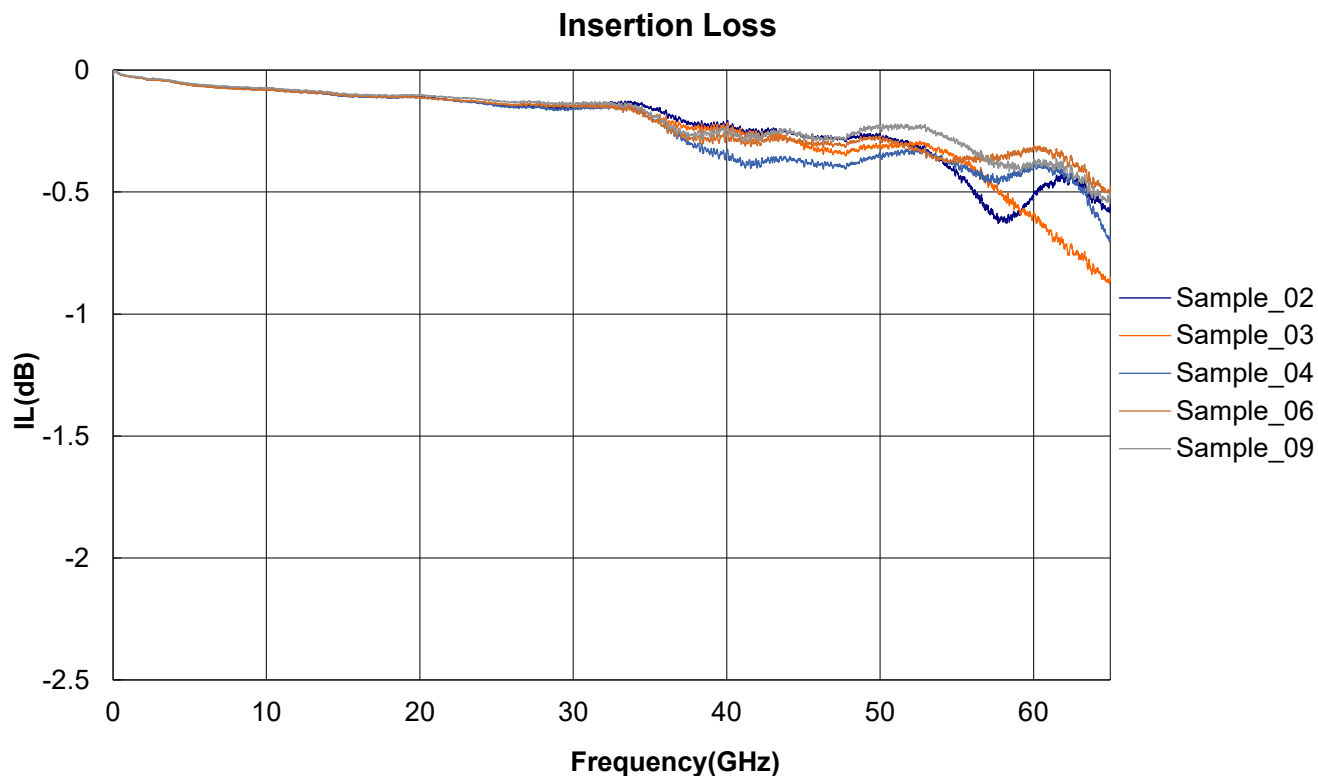
VSWR



Series: PRFIA-SMPM

Description: 50 Ohm .412" (10.45 mm) SMPM Spring-Loaded Bullet Jack Assembly

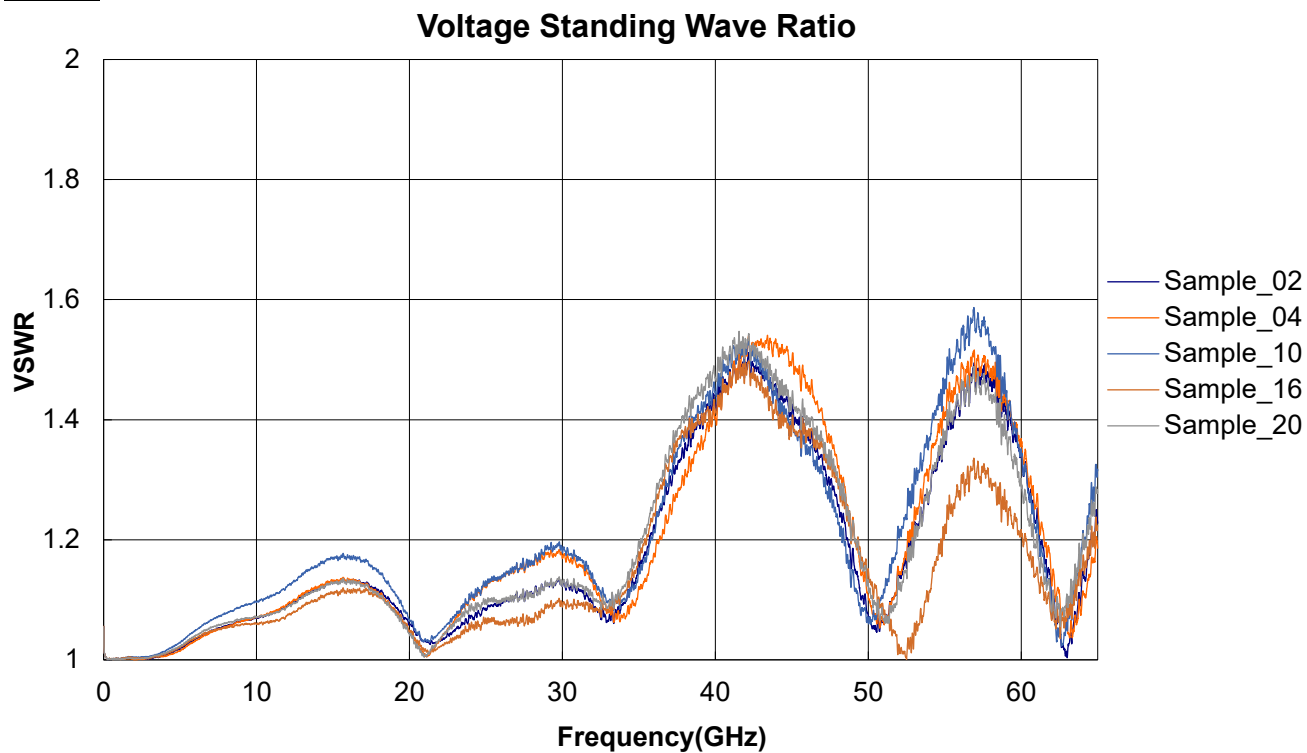
Insertion Loss



Results: PRFIA-SMPM-J-J-SP-1 of 100% compression

The results just include PRFIA-SMPM-J-J-SP-1 connector, fixture removal method remove 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)
Sample_02	1.14	1.44	1.51	-0.15 dB	-0.39 dB	-0.66 dB
Sample_04	1.15	1.42	1.54	-0.16 dB	-0.39 dB	-0.50 dB
Sample_10	1.18	1.46	1.59	-0.15 dB	-0.30 dB	-0.66 dB
Sample_16	1.12	1.43	1.51	-0.11 dB	-0.28 dB	-0.52 dB
Sample_20	1.14	1.49	1.55	-0.15 dB	-0.37 dB	-0.56 dB

Series: PRFIA-SMPM**Description: 50 Ohm .412" (10.45 mm) SMPM Spring-Loaded Bullet Jack Assembly**VSWRInsertion Loss