



RF Characterization Report

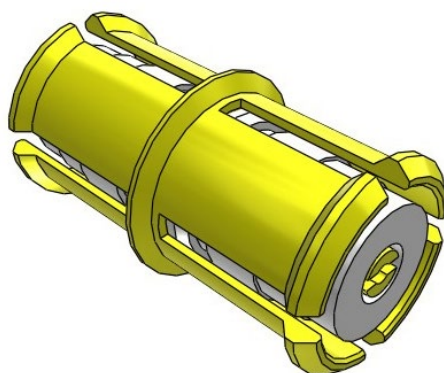
SMP-J-B-HG-ST-0625

SMP-J-B-HG-ST-0725

SMP-J-B-HG-ST-0825

SMP-J-B-HG-ST-0925

SMP-J-B-HG-ST-1325



Test Date: Oct 2024

Description:

50 Ohm SMP Jack, Bullet Adaptor,

6.25mm Length

7.25mm Length

8.25mm Length

9.25mm Length

13.25mm Length

Series: SMP Bullet**Description:** 50 Ohm SMP Jack, Bullet Adaptor

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Series: SMP Bullet

Description: 50 Ohm SMP Jack, Bullet Adaptor

Test Setup Information

Scope:

Provide standing wave ratio, return loss and insertion loss performance parameters for 5 different lengths of the SMP Jack Bullet Adapter.

Instrument Setup & Test Accessories:

Network Analyzer	Keysight PNA N5227B
Averaging Factor	1
Smoothing	Off
IF Bandwidth	1 KHz
Sweep Start	10 MHz
Sweep End	40 GHz
Points	4000
Test Cables	Gore 0F0CACB036.0-LF (DC to 67 GHz)

Calibration Type:

A Keysight mechanical calibration is performed using the Keysight 2.4 mm Mechanical Calibration Kit.

Calibration Kit	Keysight 85056A 2.4 mm Mechanical Calibration kit
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Adapter Use:

MADP-5478 adapter was used for the measurements of SMP-J-B-HG-ST-XXXX.
The adapter effects were removed from the measurement using Keysight AFR in PLTS.

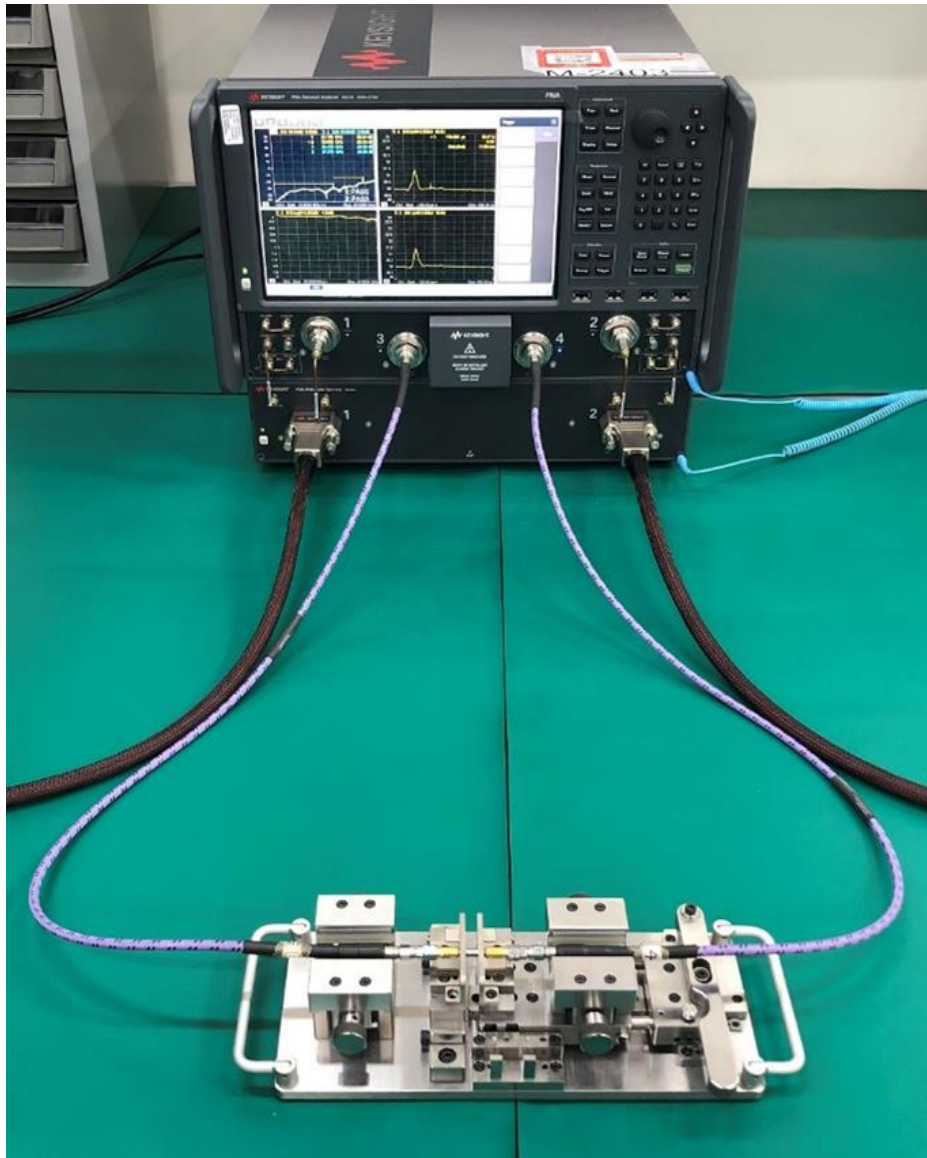
Series: SMP Bullet

Description: 50 Ohm SMP Jack, Bullet Adaptor

SMP-J-B-HG-ST-XXXX Test Definition

Part Number	End 1	End 2
SMP-J-B-HG-ST-XXXX	SMP Jack	SMP Jack

Connector Under Test:



Series: SMP Bullet

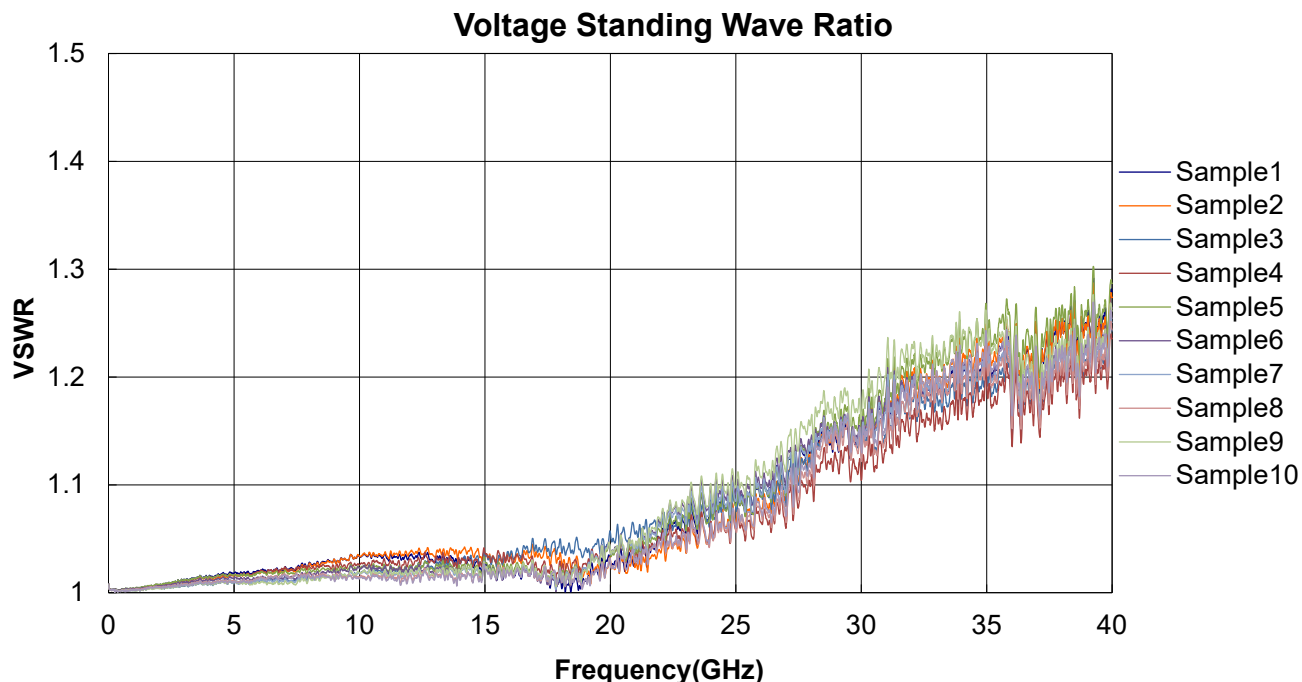
Description: 50 Ohm SMP Jack, Bullet Adaptor

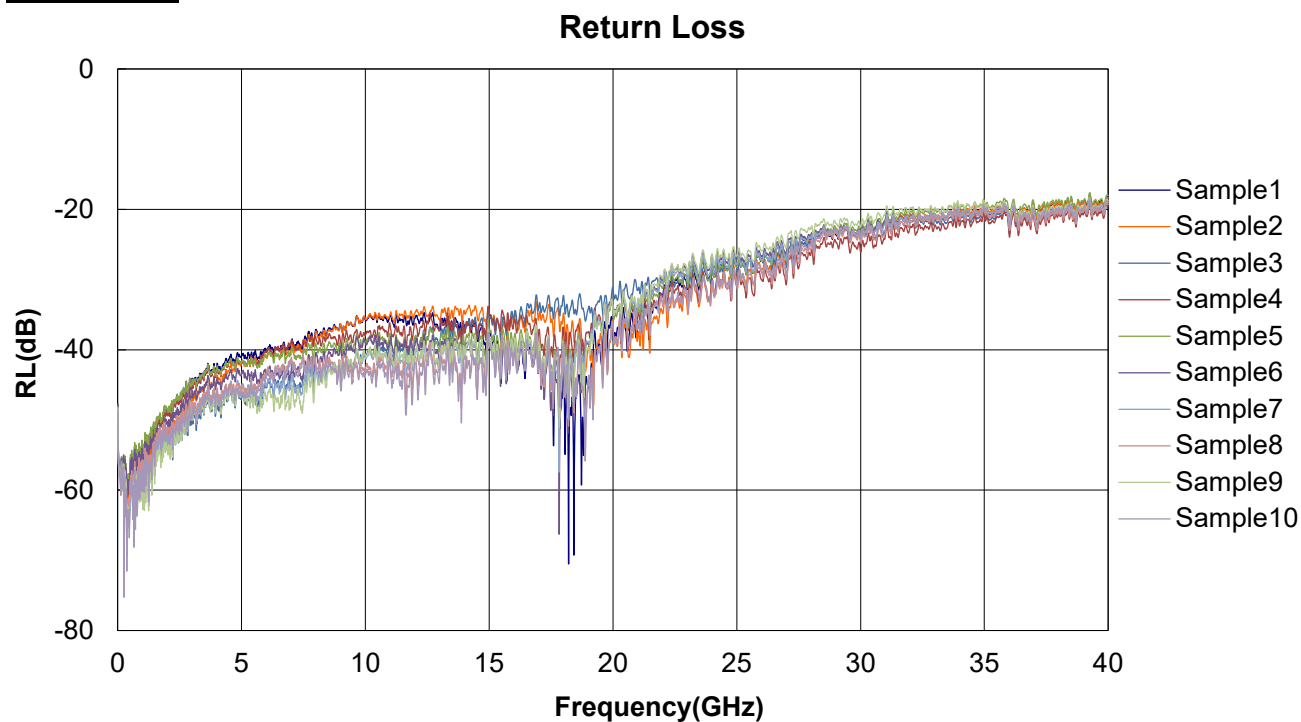
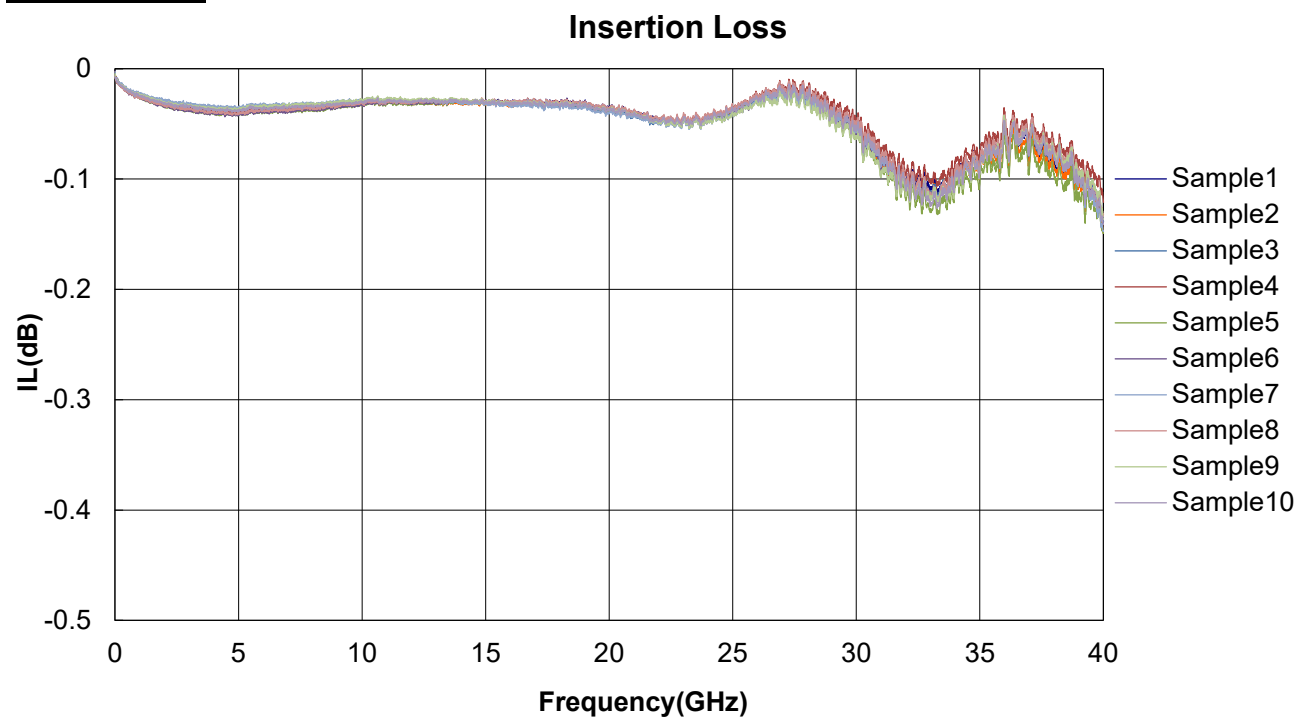
Results: SMP-J-B-HG-ST-0625

The results include the SMP-J-B-HG-ST-0625 bullet. The adapter effects were removed using AFR.

Sample	SWR(max)	RL(dB, max)	IL(dB, min)
Sample1	1.29@39.27GHz	-17.91@39.27GHz	-0.14@39.98GHz
Sample2	1.29@39.25GHz	-18.02@39.25GHz	-0.15@39.98GHz
Sample3	1.26@39.24GHz	-18.89@39.24GHz	-0.14@39.98GHz
Sample4	1.25@39.25GHz	-19.21@39.25GHz	-0.12@39.98GHz
Sample5	1.30@39.25GHz	-17.63@39.25GHz	-0.15@39.98GHz
Sample6	1.27@39.25GHz	-18.40@39.25GHz	-0.14@39.98GHz
Sample7	1.27@39.25GHz	-18.60@39.25GHz	-0.15@39.98GHz
Sample8	1.26@39.25GHz	-18.89@39.25GHz	-0.13@39.98GHz
Sample9	1.28@39.24GHz	-18.32@39.24GHz	-0.14@39.98GHz
Sample10	1.27@39.25GHz	-18.51@39.25GHz	-0.14@39.98GHz

VSWR



Series: SMP Bullet**Description:** 50 Ohm SMP Jack, Bullet AdaptorReturn LossInsertion Loss

Series: SMP Bullet

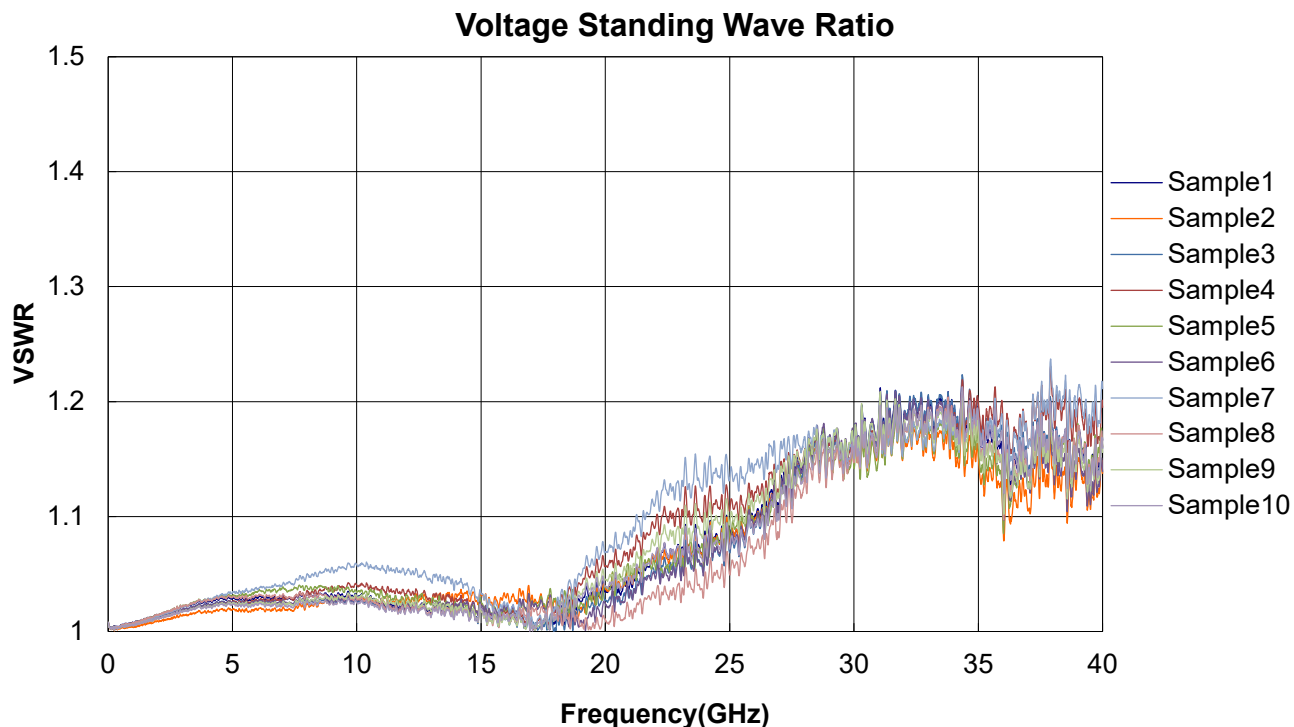
Description: 50 Ohm SMP Jack, Bullet Adaptor

Results: SMP-J-B-HG-ST-0725

The results include the SMP-J-B-HG-ST-0725 bullet. The adapter effects were removed using AFR.

Sample	SWR(max)	RL(dB, max)	IL(dB, min)
Sample1	1.22@34.35GHz	-20.15@34.35GHz	-0.11@32.67GHz
Sample2	1.19@31.06GHz	-21.21@31.06GHz	-0.10@32.19GHz
Sample3	1.22@34.35GHz	-19.96@34.35GHz	-0.11@32.66GHz
Sample4	1.23@37.91GHz	-19.71@37.91GHz	-0.10@32.67GHz
Sample5	1.20@34.35GHz	-21.01@34.35GHz	-0.10@32.67GHz
Sample6	1.21@34.35GHz	-20.38@34.35GHz	-0.10@32.19GHz
Sample7	1.24@37.91GHz	-19.49@37.91GHz	-0.12@39.12GHz
Sample8	1.21@34.35GHz	-20.51@34.35GHz	-0.10@32.66GHz
Sample9	1.21@31.06GHz	-20.50@31.06GHz	-0.10@32.67GHz
Sample10	1.21@34.36GHz	-20.34@34.36GHz	-0.10@32.67GHz

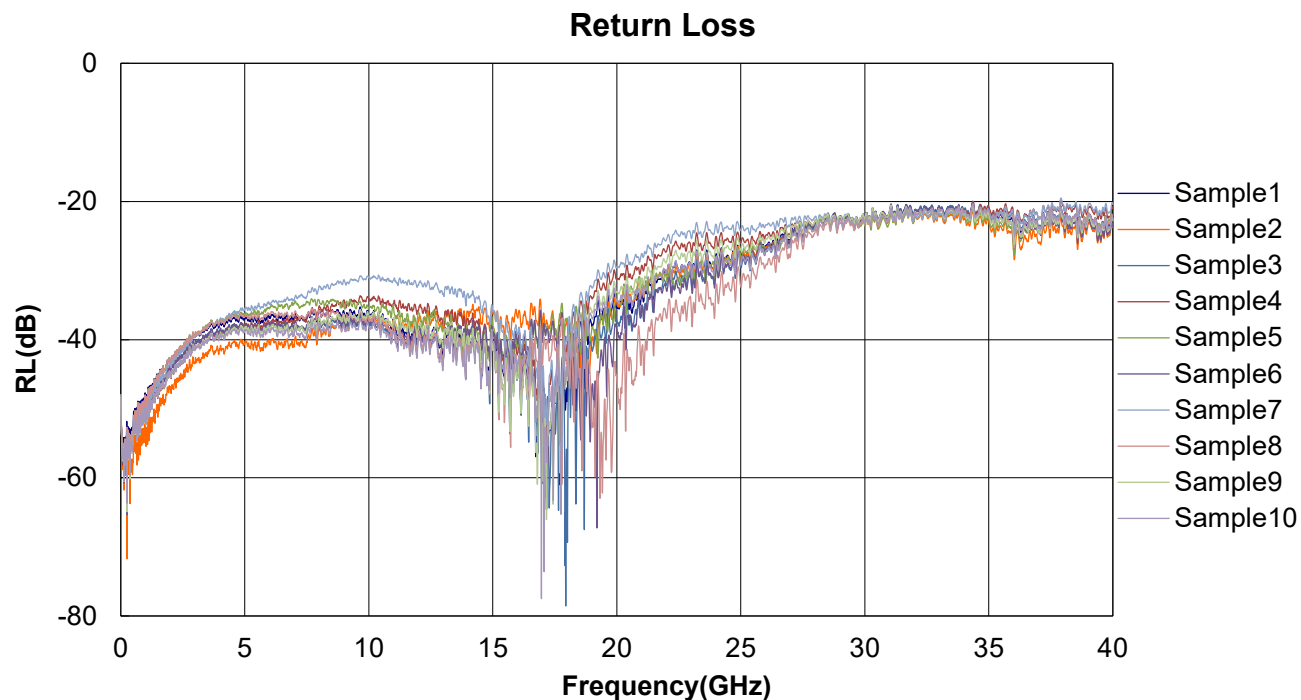
VSWR



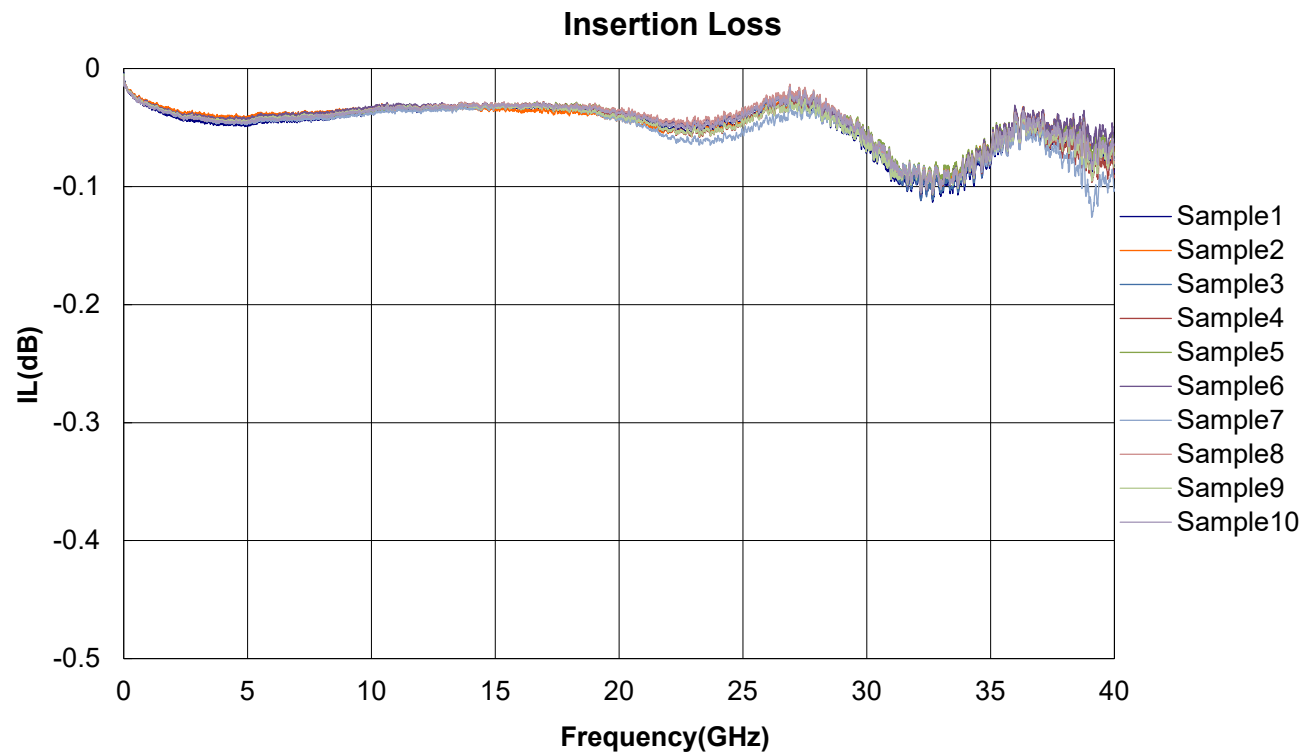
Series: SMP Bullet

Description: 50 Ohm SMP Jack, Bullet Adaptor

Return Loss



Insertion Loss



Series: SMP Bullet

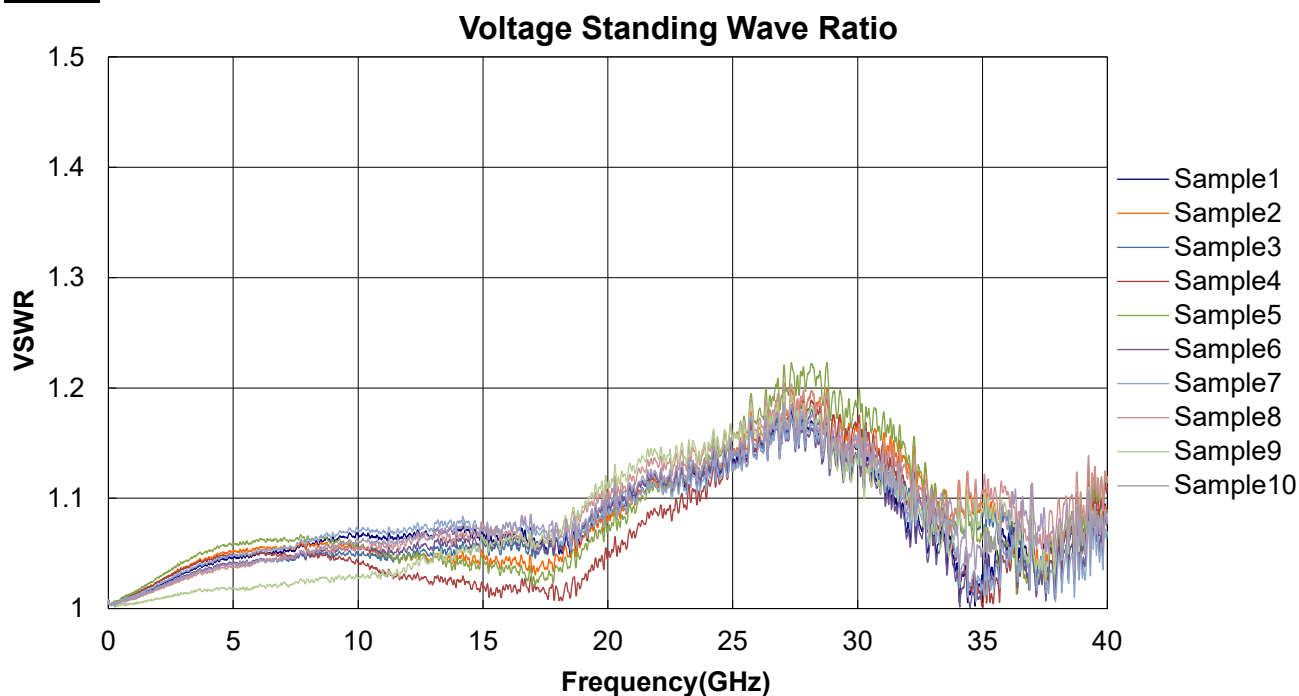
Description: 50 Ohm SMP Jack, Bullet Adaptor

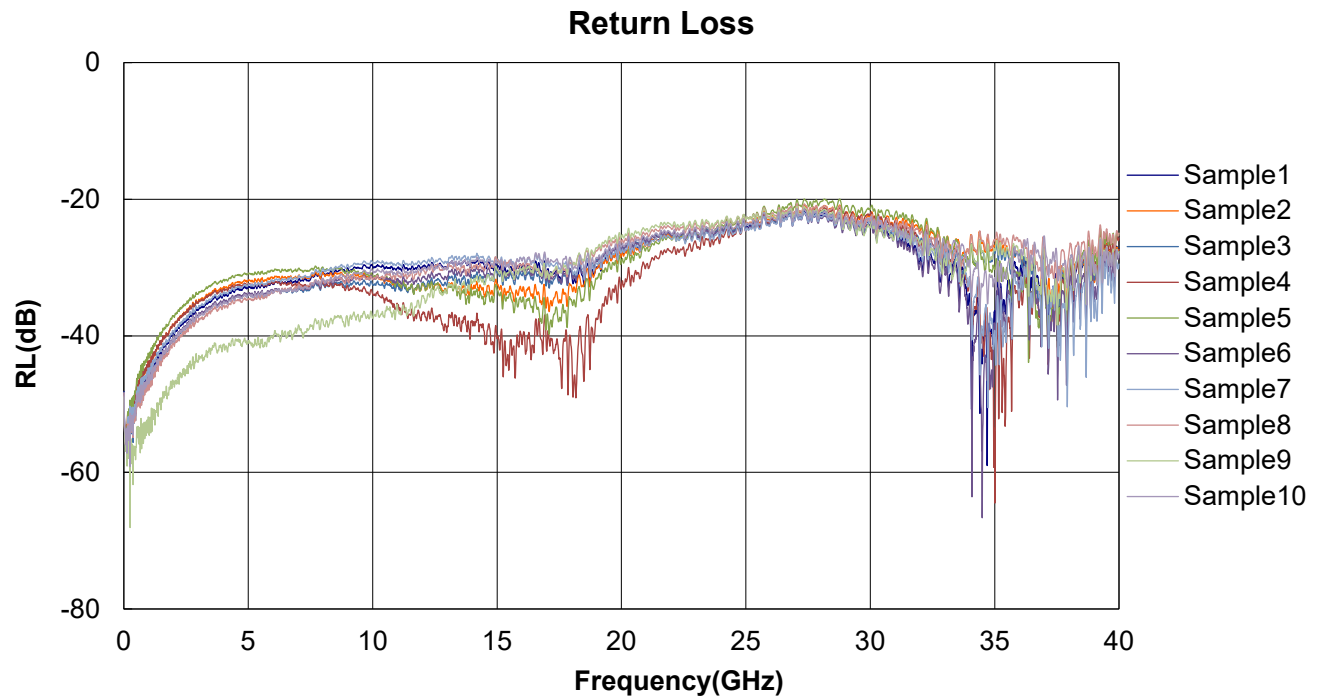
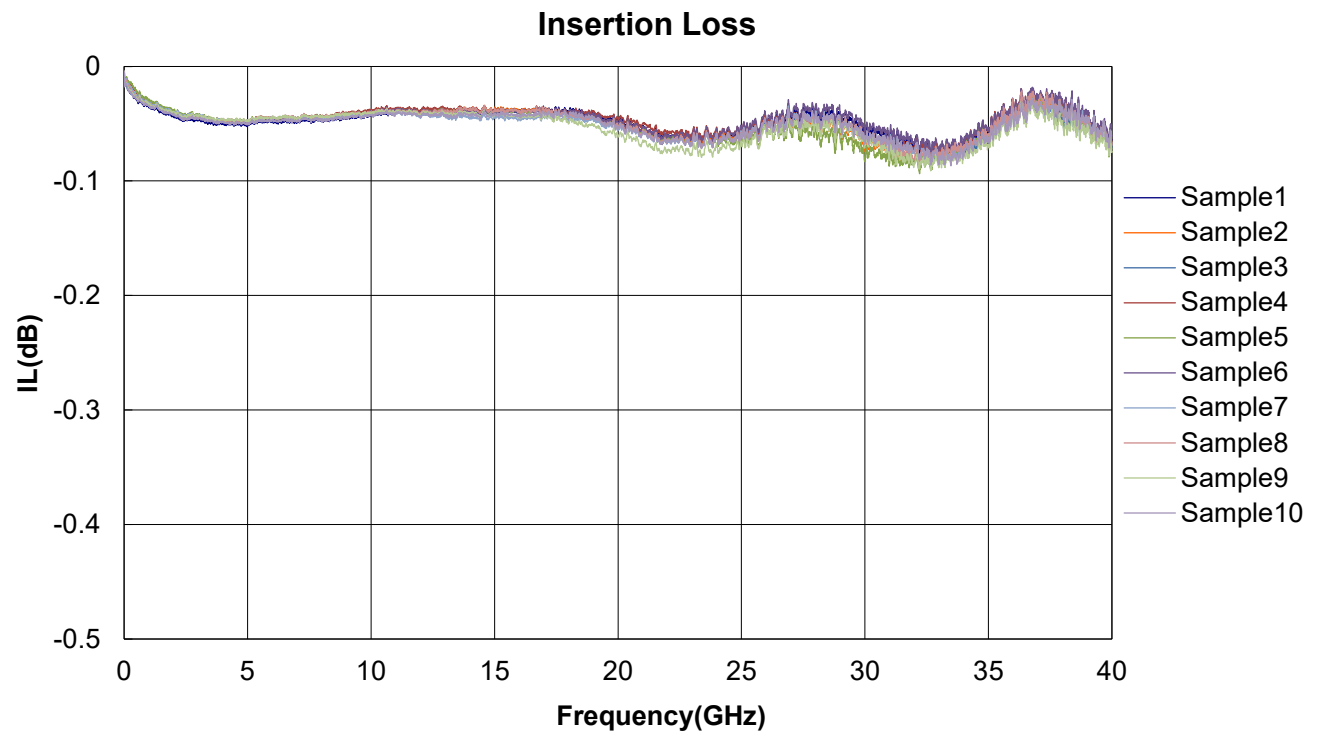
Results: SMP-J-B-HG-ST-0825

The results include the SMP-J-B-HG-ST-0825 bullet. The adapter effects were removed using AFR.

Sample	SWR(max)	RL(dB, max)	IL(dB, min)
Sample1	1.18@27.05GHz	-21.66@27.05GHz	-0.07@33.23GHz
Sample2	1.20@27.35GHz	-20.81@27.35GHz	-0.08@32.21GHz
Sample3	1.18@27.35GHz	-21.45@27.35GHz	-0.08@32.67GHz
Sample4	1.19@27.35GHz	-21.15@27.35GHz	-0.07@32.21GHz
Sample5	1.22@27.35GHz	-19.97@27.35GHz	-0.08@32.21GHz
Sample6	1.17@27.05GHz	-21.91@27.05GHz	-0.07@33.23GHz
Sample7	1.18@27.05GHz	-21.83@27.05GHz	-0.08@32.23GHz
Sample8	1.20@27.06GHz	-20.67@27.06GHz	-0.08@32.67GHz
Sample9	1.19@27.05GHz	-21.04@27.05GHz	-0.08@32.70GHz
Sample10	1.19@27.05GHz	-21.38@27.05GHz	-0.08@33.48GHz

VSWR



Series: SMP Bullet**Description:** 50 Ohm SMP Jack, Bullet AdaptorReturn LossInsertion Loss

Series: SMP Bullet

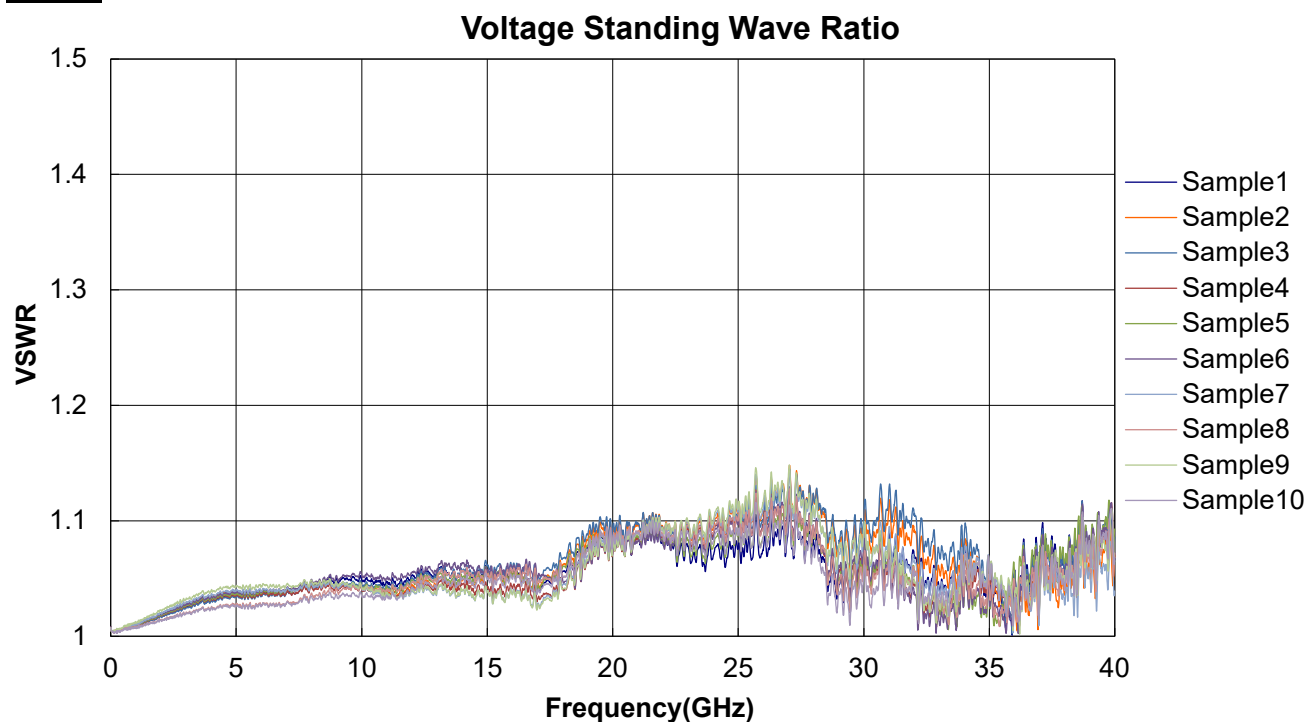
Description: 50 Ohm SMP Jack, Bullet Adaptor

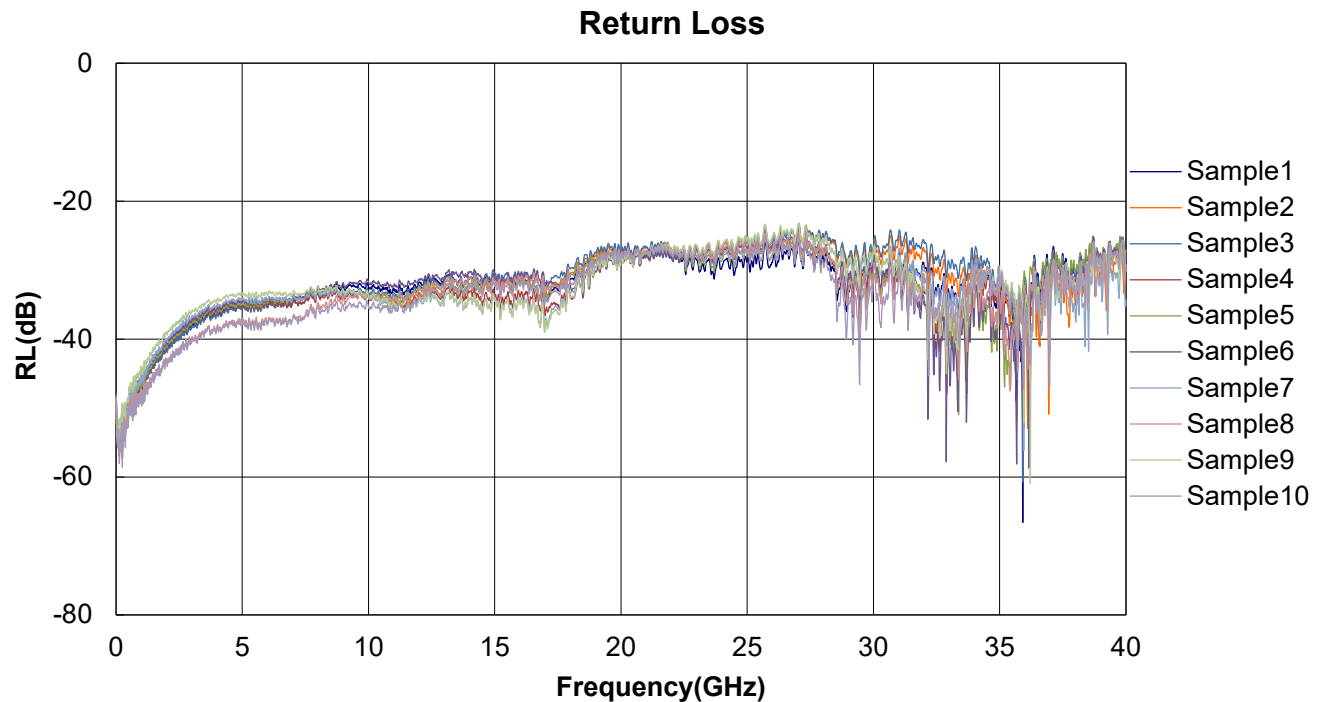
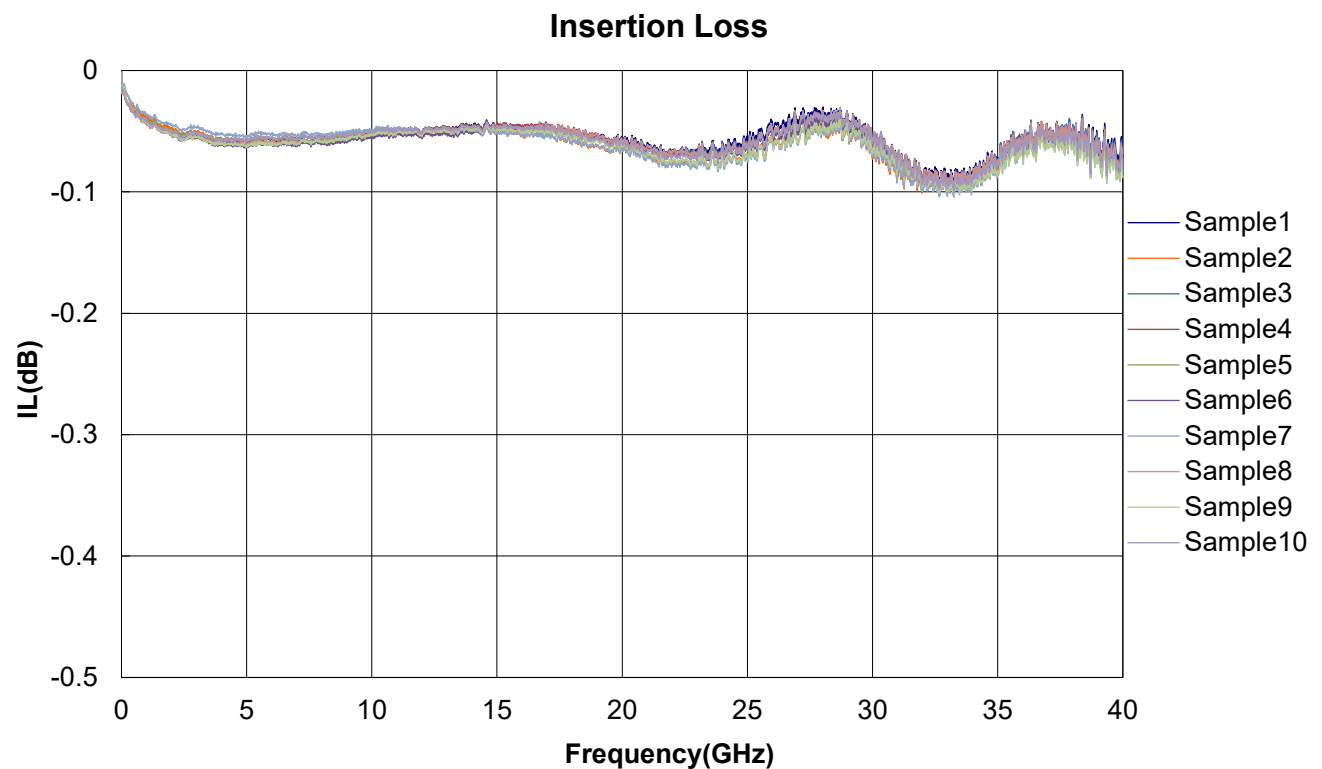
Results: SMP-J-B-HG-ST-0925

The results include the SMP-J-B-HG-ST-0925 bullet. The adapter effects were removed using AFR.

Sample	SWR(max)	RL(dB, max)	IL(dB, min)
Sample1	1.12@38.70GHz	-25.13@38.70GHz	-0.09@32.67GHz
Sample2	1.15@27.05GHz	-23.24@27.05GHz	-0.10@32.67GHz
Sample3	1.14@27.05GHz	-23.43@27.05GHz	-0.09@31.98GHz
Sample4	1.13@27.04GHz	-24.39@27.04GHz	-0.09@33.23GHz
Sample5	1.12@27.04GHz	-24.89@27.04GHz	-0.09@32.67GHz
Sample6	1.13@27.04GHz	-24.32@27.04GHz	-0.09@33.20GHz
Sample7	1.15@27.04GHz	-23.40@27.04GHz	-0.10@32.67GHz
Sample8	1.13@27.05GHz	-24.44@27.05GHz	-0.09@32.67GHz
Sample9	1.15@27.03GHz	-23.22@27.03GHz	-0.09@33.20GHz
Sample10	1.12@25.70GHz	-25.23@25.70GHz	-0.09@32.64GHz

VSWR



Series: SMP Bullet**Description:** 50 Ohm SMP Jack, Bullet AdaptorReturn LossInsertion Loss

Series: SMP Bullet

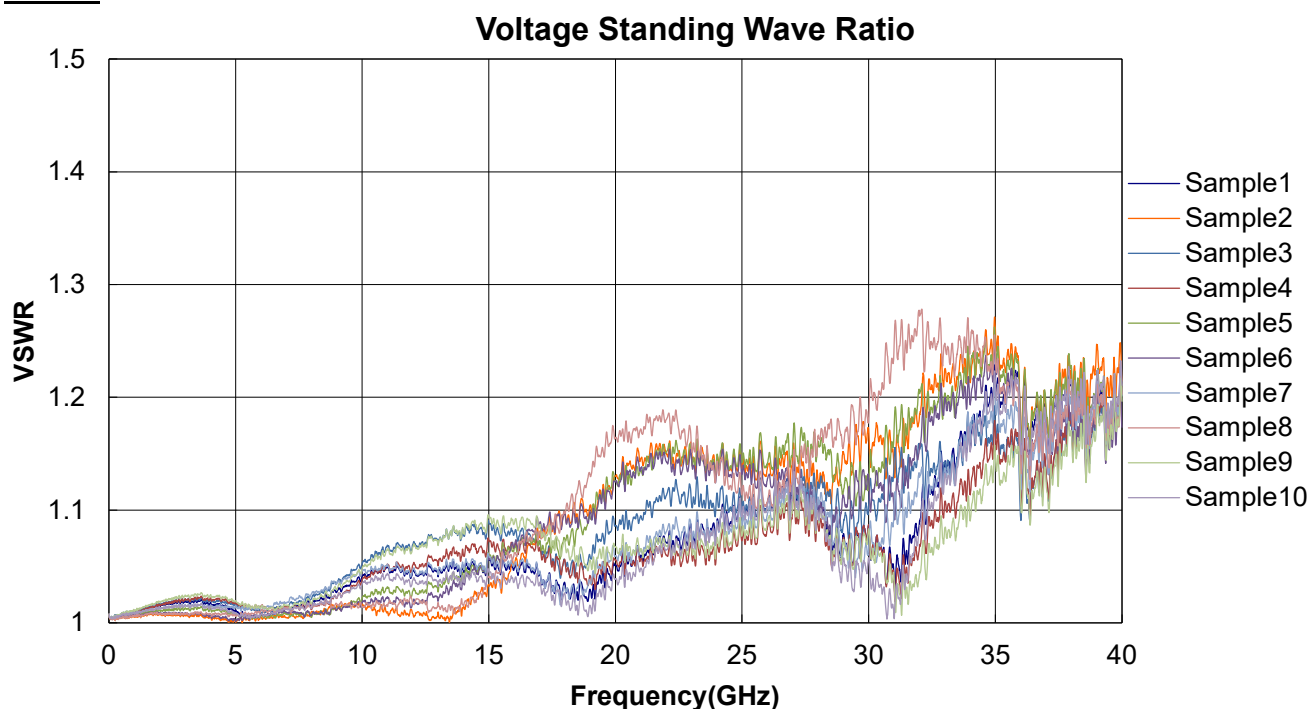
Description: 50 Ohm SMP Jack, Bullet Adaptor

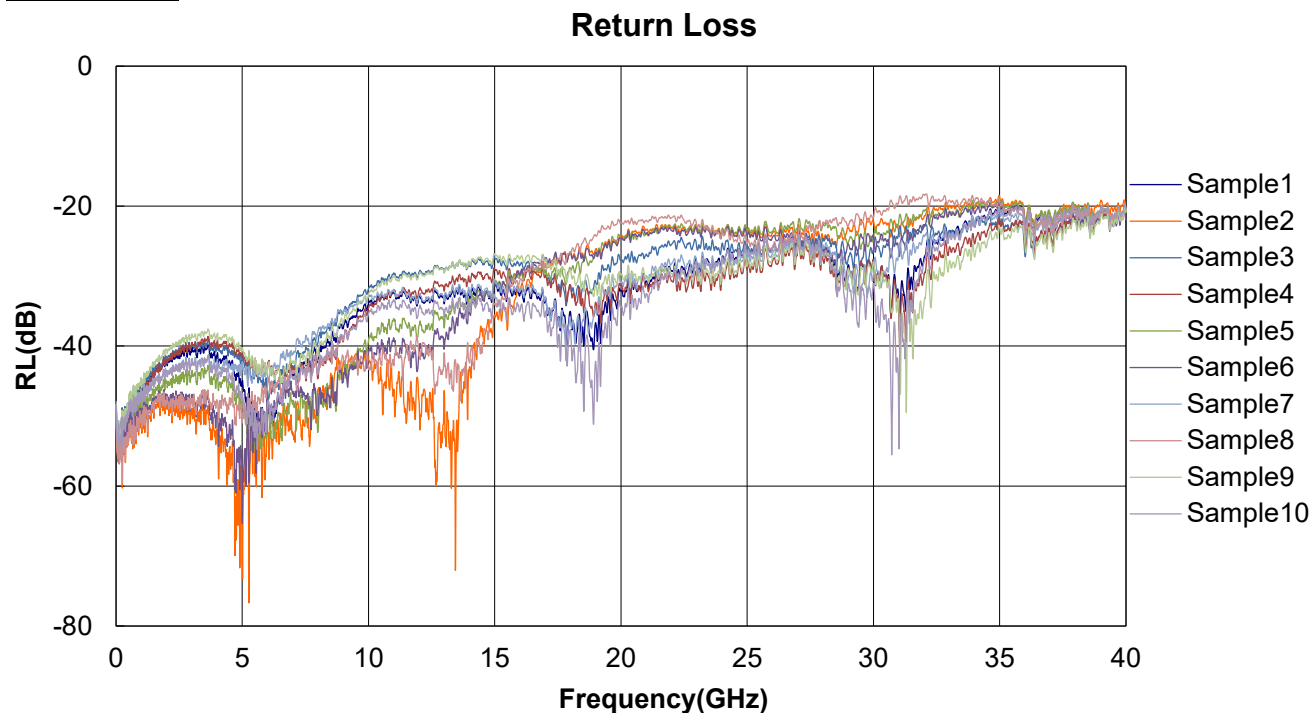
Results: SMP-J-B-HG-ST-1325

The results include the SMP-J-B-HG-ST-1325 bullet. The adapter effects were removed using AFR.

Sample	SWR(max)	RL(dB, max)	IL(dB, min)
Sample1	1.23@39.95GHz	-19.73@39.95GHz	-0.16@39.98GHz
Sample2	1.27@34.97GHz	-18.46@34.97GHz	-0.18@33.65GHz
Sample3	1.22@39.96GHz	-20.01@39.96GHz	-0.15@39.98GHz
Sample4	1.23@39.95GHz	-19.84@39.95GHz	-0.15@39.98GHz
Sample5	1.26@34.97GHz	-18.71@34.97GHz	-0.17@33.92GHz
Sample6	1.25@34.97GHz	-19.15@34.97GHz	-0.19@33.65GHz
Sample7	1.22@39.96GHz	-19.91@39.96GHz	-0.15@39.98GHz
Sample8	1.28@32.10GHz	-18.26@32.10GHz	-0.18@32.02GHz
Sample9	1.22@39.96GHz	-20.18@39.96GHz	-0.15@39.98GHz
Sample10	1.23@39.96GHz	-19.65@39.96GHz	-0.15@39.98GHz

VSWR



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