

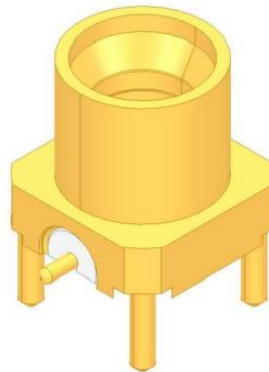


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## RF Characterization Report

**SMPM-PF-P-EG-ST-MT-1**

Test Date: Aug 2022



### **Description**

#### **50 Ohm SMPM Plugs, Mixed Technology**

**Series:** SMPM-MT

**Description:** 50 Ohm SMPM Plug, Mixed Technology

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**Series:** SMPM-MT

**Description:** 50 Ohm SMPM Plug, Mixed Technology

## Test Setup Information

### Scope:

Provide standing wave ratio, return loss and insertion loss performance parameters for SMPM Plug, Straight, Mixed Technology connector.

### Instrument Setup & Test Accessories:

Network Analyzer	Keysight PNA N5227B
Averaging Factor	1
Smoothing	Off
IF Bandwidth	700 Hz
Sweep Start	10 MHz
Sweep End	67 GHz
Points	6700
Test Cables	Gore 0F0CACB036.0-LF (DC to 67 GHz)

### Calibration Type:

A Keysight mechanical calibration is performed using the Keysight 1.85 mm Mechanical Calibration kit.

Calibration Kit	Keysight 85058E 1.85mm Mechanical Calibration kit
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### Adapter Use:

API 5299 1.85 mm Female to SMPM Female adapter was used for the measurements of SMPM-PF-P-EG-ST-MT-1. The adapter effects were removed from the measurement using the Fixture Removal method.

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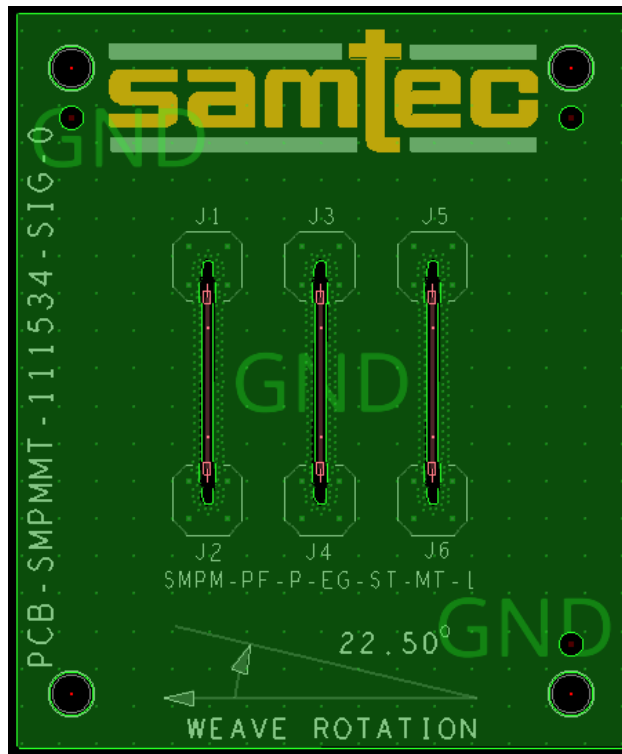
**PCB-111534-SIG-0 Test Fixtures**

Shown below is a photograph of the test board.



**PCB-111534-SIG-0 PCB Layout**

Artwork of the PCB design is shown below.



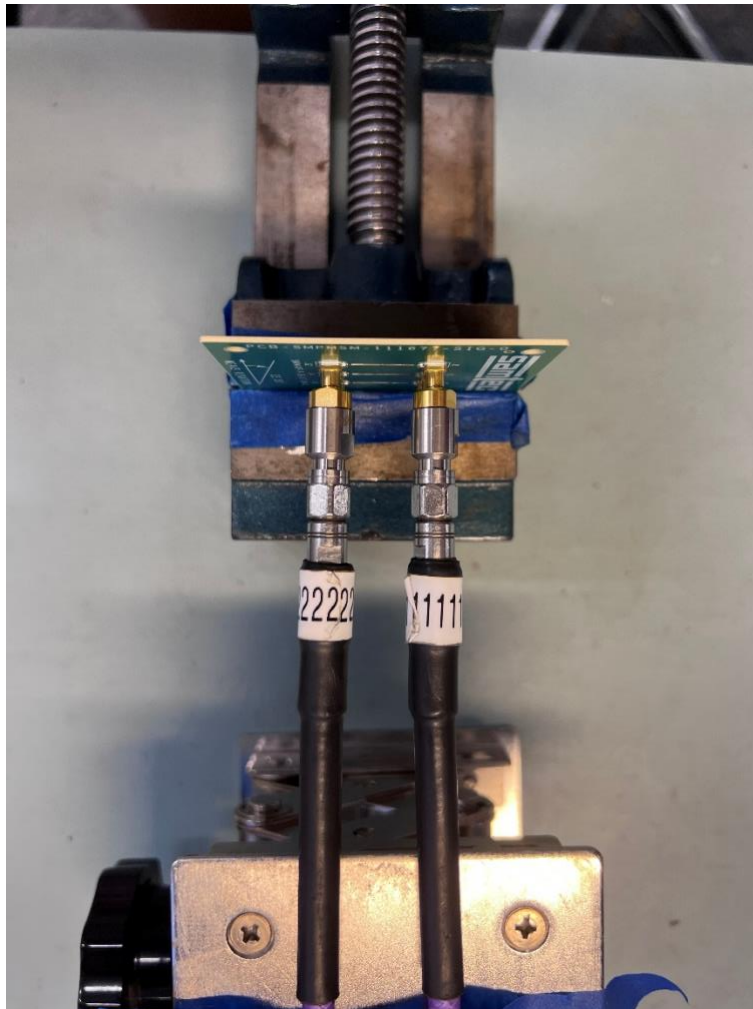
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### SMPM-PF-P-EG-ST-MT-1 Test Definition

Part Number	End 1
SMPM-PF-P-EG-ST-MT-1	SMPM Plug

### Connector Under Test:



Series: SMPM-MT

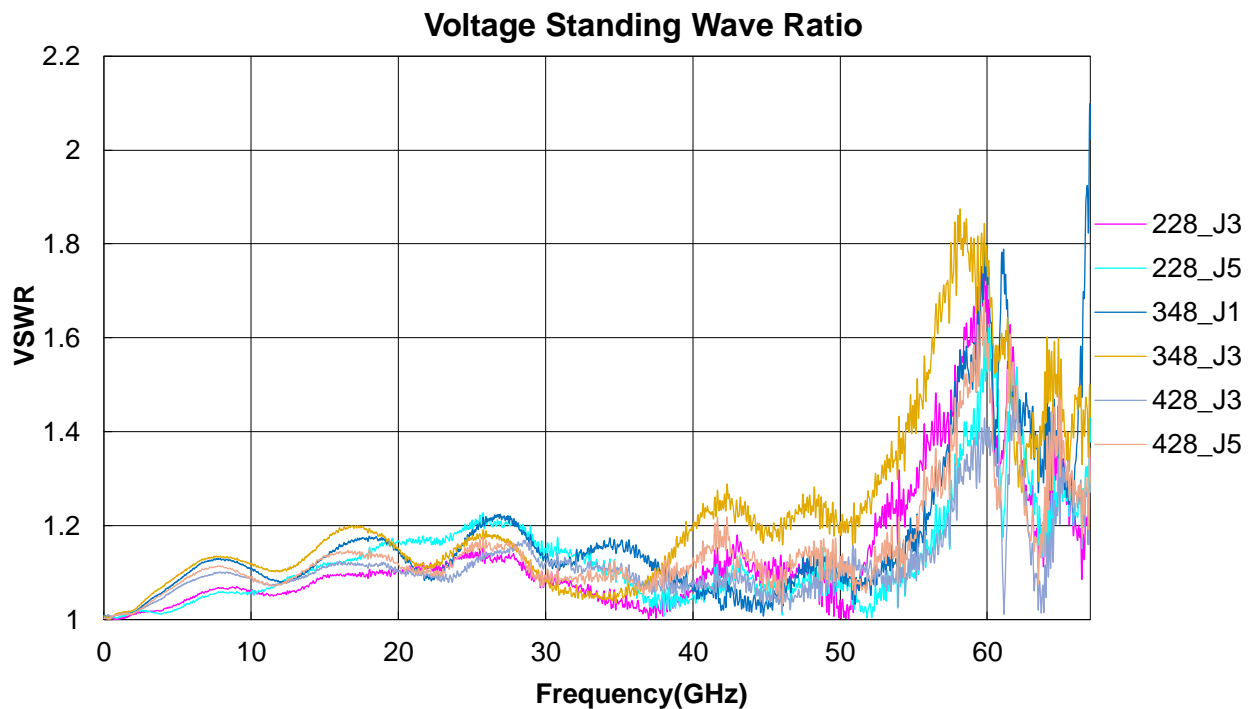
Description: 50 Ohm SMPM Plug, Mixed Technology

**Results: SMPM-PF-P-EG-ST-MT-1**

The results just include SMPM-PF-P-EG-ST-MT-1 connector, fixture removal method remove all adapters effects.

Description: 50 Ohm SMPM Plug, Mixed Technology			
Sample	SWR(max)	RL(max)	IL(min)
228_J3	1.78@59.79GHz	-11.02@59.79GHz	-6.54@60.76GHz
228_J5	1.63@60.30GHz	-12.43@60.30GHz	-4.98@60.77GHz
348_J1	2.10@66.96GHz	-9.01@66.96GHz	-4.07@61.08GHz
348_J3	1.87@58.15GHz	-10.33@58.15GHz	-5.51@60.89GHz
428_J3	1.49@62.02GHz	-14.16@62.02GHz	-4.79@60.98GHz
428_J5	1.68@59.79GHz	-11.91@59.79GHz	-5.24@60.86GHz

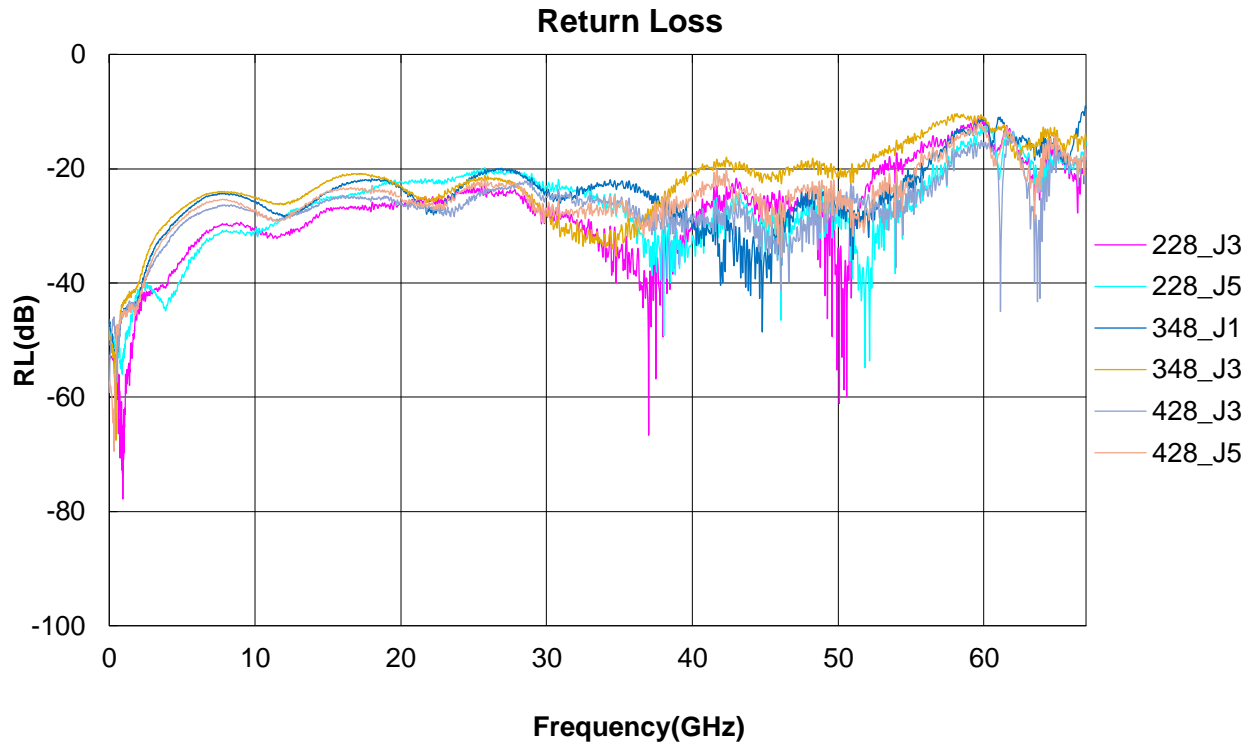
VSWR



Series: SMPM-MT

Description: 50 Ohm SMPM Plug, Mixed Technology

Return Loss



Insertion Loss

