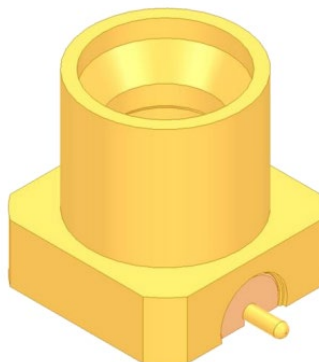




RF Characterization Report

SMPM-PF-P-EG-ST-SM-1

Test Date: Aug 2022



Description **50 Ohm SMPM Plug, Straight (Vertical), Surface Mount**

Series: SMPM-SM

Description: 50 Ohm SMPM Plug, Straight (Vertical), Surface Mount

Table of Contents

Test Setup Information	1
Scope:	1
Instrument Setup & Test Accessories:	1
Calibration Type:	1
Adapter Use:	1
PCB-111677-SIG-0 Test Fixtures	2
PCB-111677-SIG-0 PCB Layout	2
SMPM-PF-P-EG-ST-SM-1 Test Definition	3
Connector Under Test:	3
Results: SMPM-PF-P-EG-ST-SM-1	4
VSWR	4
Return Loss	5
Insertion Loss	6

Series: SMPM-SM

Description: 50 Ohm SMPM Plug, Straight (Vertical), Surface Mount

Test Setup Information

Scope:

Provide standing wave ratio, return loss and insertion loss performance parameters for SMPM Plug, Straight, Surface Mount 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-SM-1. The adapter effects were removed from the measurement using the Fixture Removal method.

Series: SMPM-SM

Description: 50 Ohm SMPM Plug, Straight (Vertical), Surface Mount

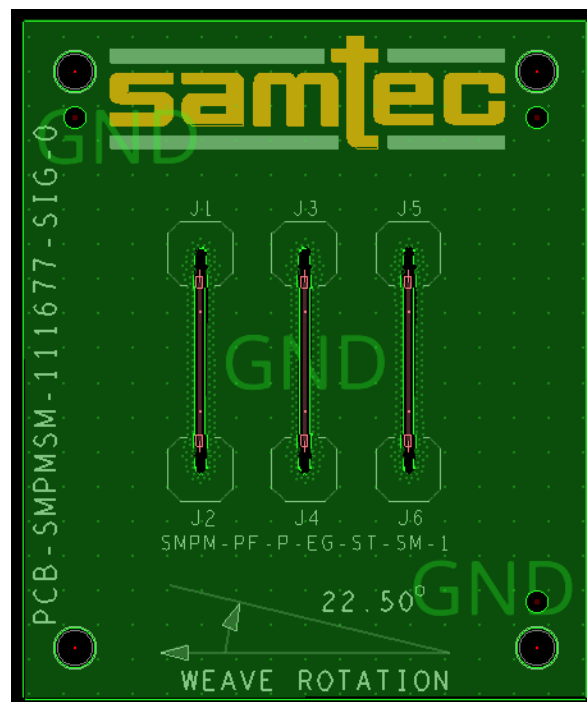
PCB-111677-SIG-0 Test Fixtures

Shown below is a photograph of the test board.



PCB-111677-SIG-0 PCB Layout

Artwork of the PCB design is shown below.



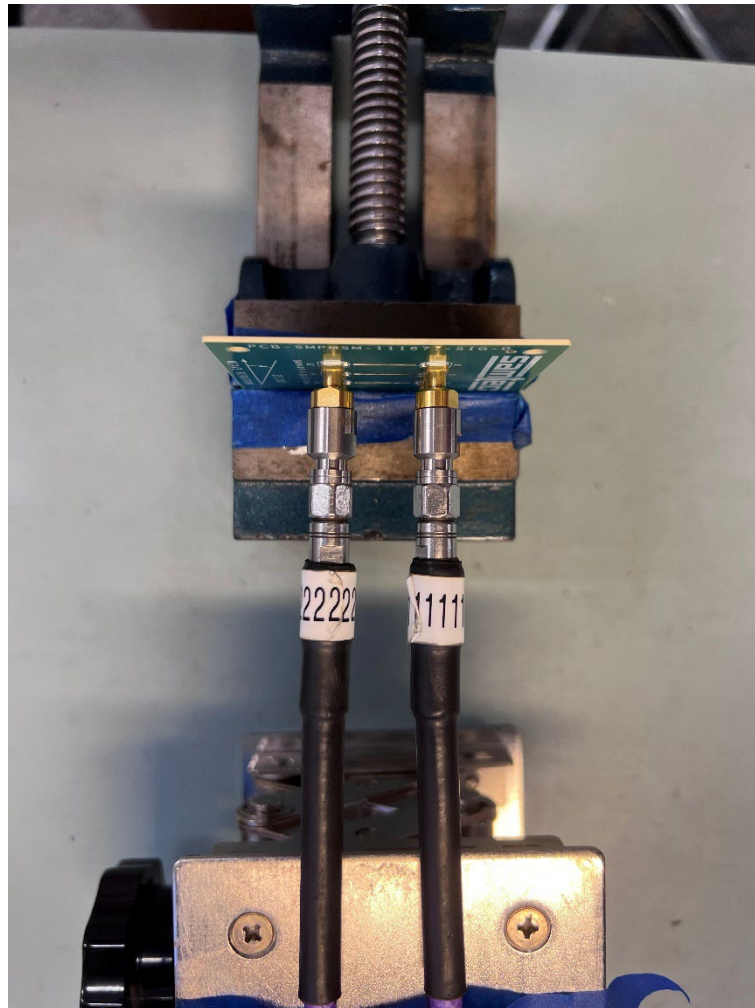
Series: SMPM-SM

Description: 50 Ohm SMPM Plug, Straight (Vertical), Surface Mount

SMPM-PF-P-EG-ST-SM-1 Test Definition

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

Connector Under Test:



Series: SMPM-SM

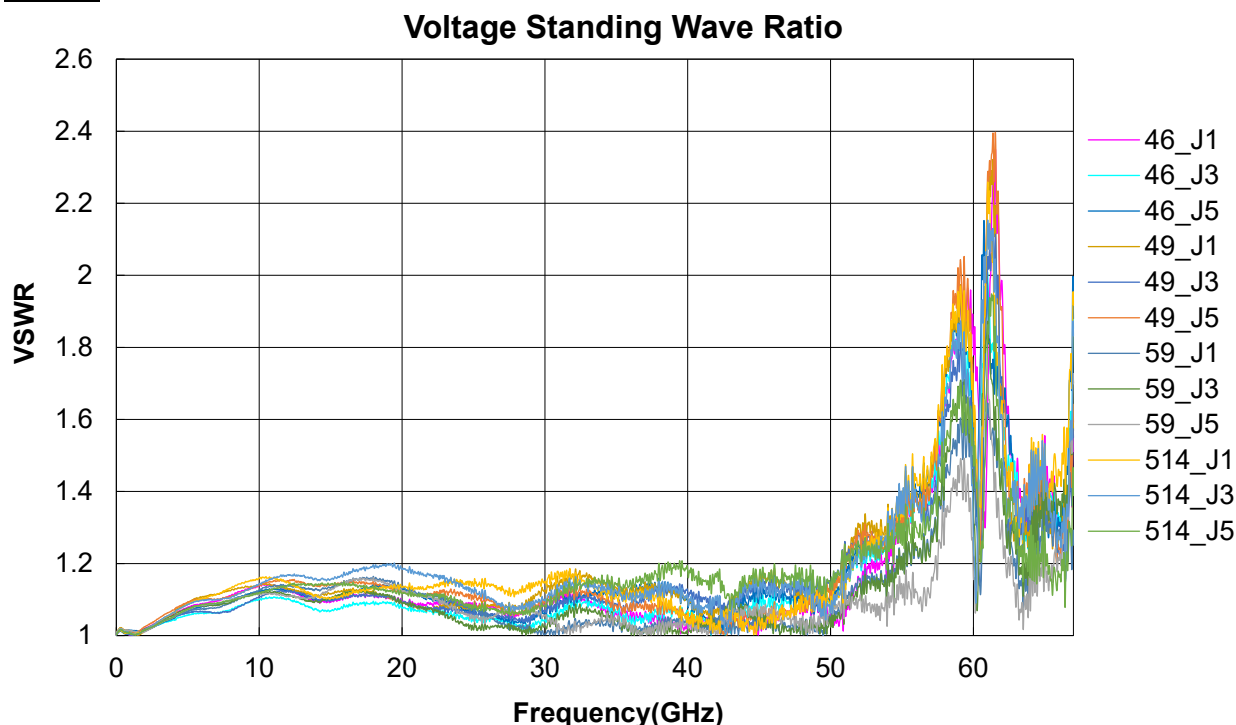
Description: 50 Ohm SMPM Plug, Straight (Vertical), Surface Mount

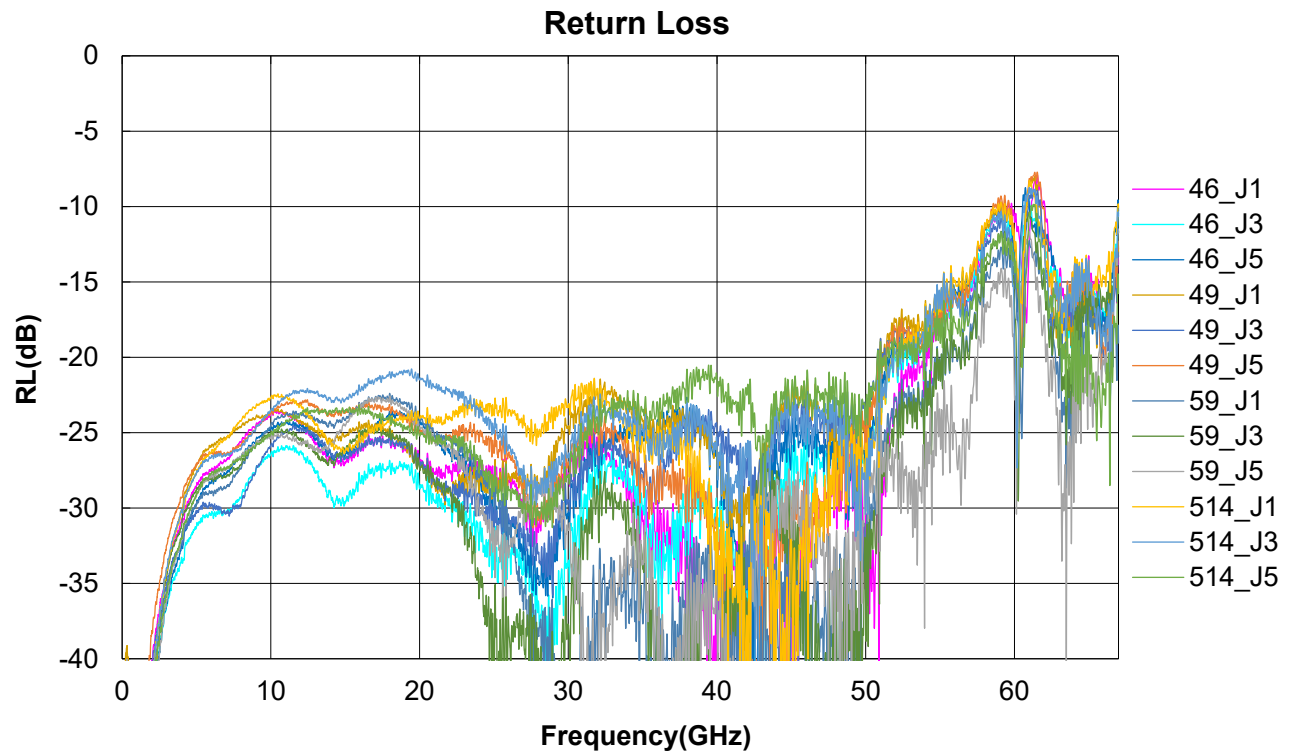
Results: SMPM-PF-P-EG-ST-SM-1

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

Description: 50 Ohm SMPM Plug, <u>Straight</u> , Surface Mount			
Sample	SWR(max)	RL(dB, max)	IL(dB, min)
46_J1	2.35@61.54GHz	-7.90@61.54GHz	-6.02@61.39GHz
46_J3	2.01@60.99GHz	-9.49@60.99GHz	-5.94@60.86GHz
46_J5	2.15@60.74GHz	-8.74@60.74GHz	-5.69@60.73GHz
49_J1	2.32@61.37GHz	-8.00@61.37GHz	-4.72@61.26GHz
49_J3	2.12@61.38GHz	-8.91@61.38GHz	-3.85@61.53GHz
49_J5	2.40@61.53GHz	-7.72@61.53GHz	-4.72@61.51GHz
59_J1	1.65@61.00GHz	-12.25@61.00GHz	-5.09@60.95GHz
59_J3	1.87@61.00GHz	-10.35@61.00GHz	-4.00@60.99GHz
59_J5	1.73@66.98GHz	-11.48@66.98GHz	-3.45@61.09GHz
514_J1	2.26@61.00GHz	-8.26@61.00GHz	-4.80@61.08GHz
514_J3	2.15@61.00GHz	-8.74@61.00GHz	-4.30@61.26GHz
514_J5	1.95@61.27GHz	-9.85@61.27GHz	-4.81@61.26GHz

VSWR



Series: SMPM-SM**Description:** 50 Ohm SMPM Plug, Straight (Vertical), Surface MountReturn Loss

Series: SMPM-SM**Description:** 50 Ohm SMPM Plug, Straight (Vertical), Surface MountInsertion Loss