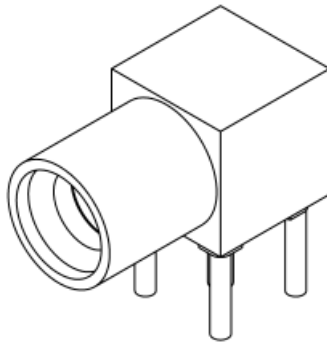




## RF Characterization Report

**SMPM-PF-P-HF-RA-TH-1**

Test Date: 18 May 2020



### **Description** **50 Ohm SMPM Plug, RA, Through Hole**

**Series:** SMPM-RA

**Description:** 50 Ohm SMPM Plug, RA, Through Hole

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**Series:** SMPM-RA

**Description:** 50 Ohm SMPM Plug, RA, Through Hole

## Test Setup Information

### Scope:

Provide standing wave ratio, return loss and insertion loss performance parameters for SMPM Plug, RA, Through hole connector.

### Instrument Setup & Test Accessories:

Network Analyzer	Keysight PNA N5227B
Averaging Factor	2
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:

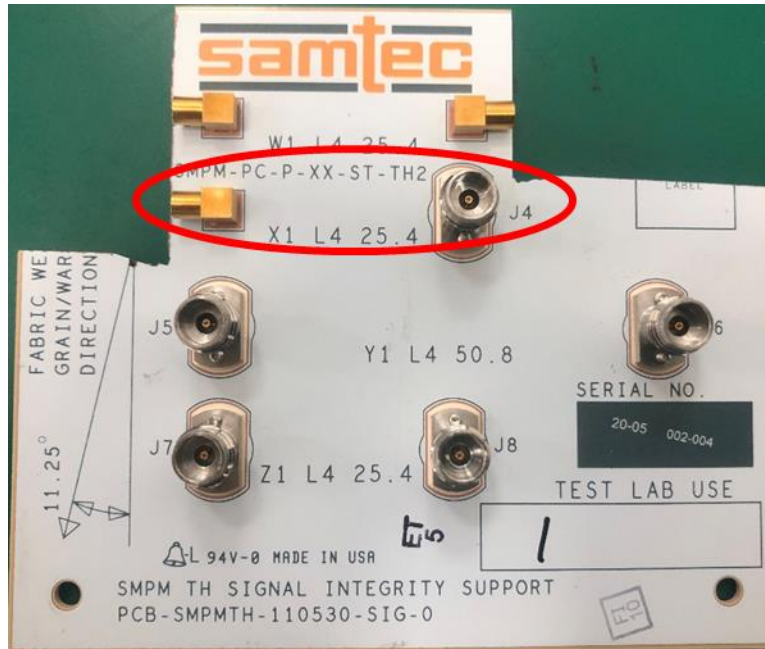
API 5299 1.85 mm Female to SMPM Female adapter was used for the measurements of SMPM-PF-P-XX-RA-TH-1. The adapter effects were removed from the measurement using the Fixture Removal method.

**Series:** SMPM-RA

**Description:** 50 Ohm SMPM Plug, RA, Through Hole

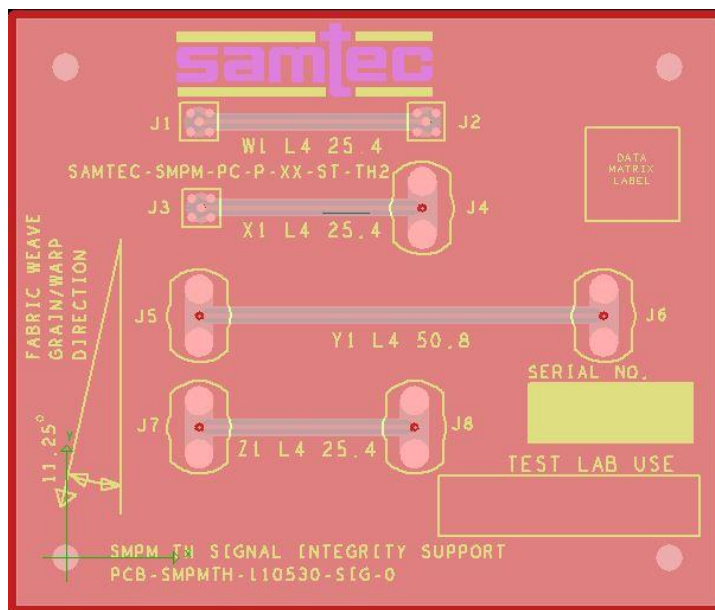
**PCB-SMPMTH-110530-SIG-0 Test Fixtures**

Shown below is a photograph of the test board.



**PCB-SMPMTH-110530-SIG-0 PCB Layout**

Artwork of the PCB design is shown below.



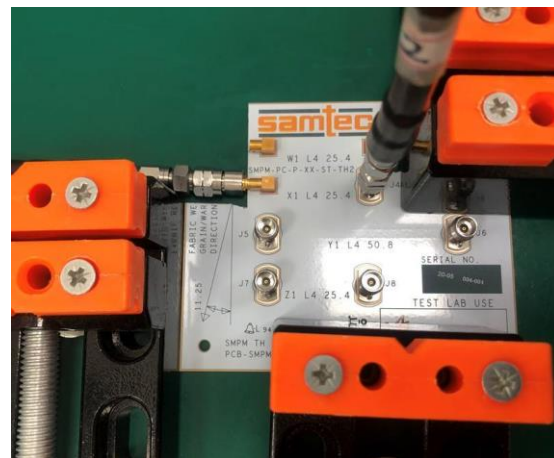
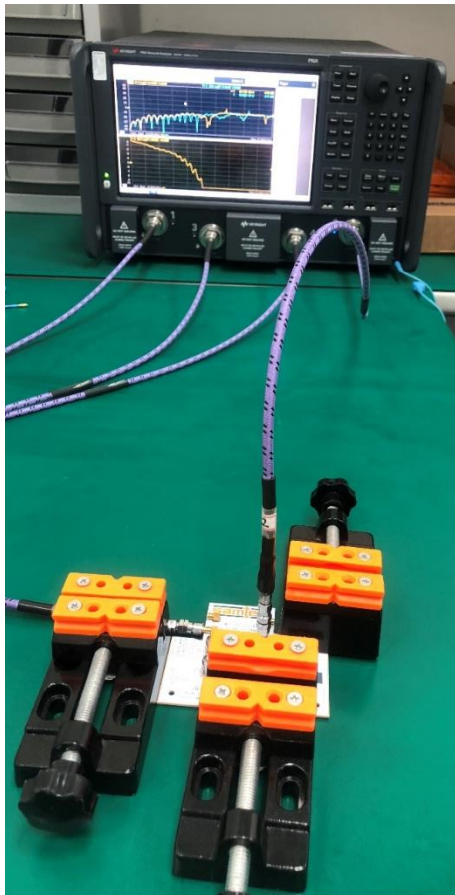
Series: SMPM-RA

Description: 50 Ohm SMPM Plug, RA, Through Hole

### SMPM-PF-P-HF-RA-TH-1 Test Definition

Part Number	End 1
SMPM-PF-P-HF-RA-TH-1	SMPM Plug

#### Connector Under Test:



Series: SMPM-RA

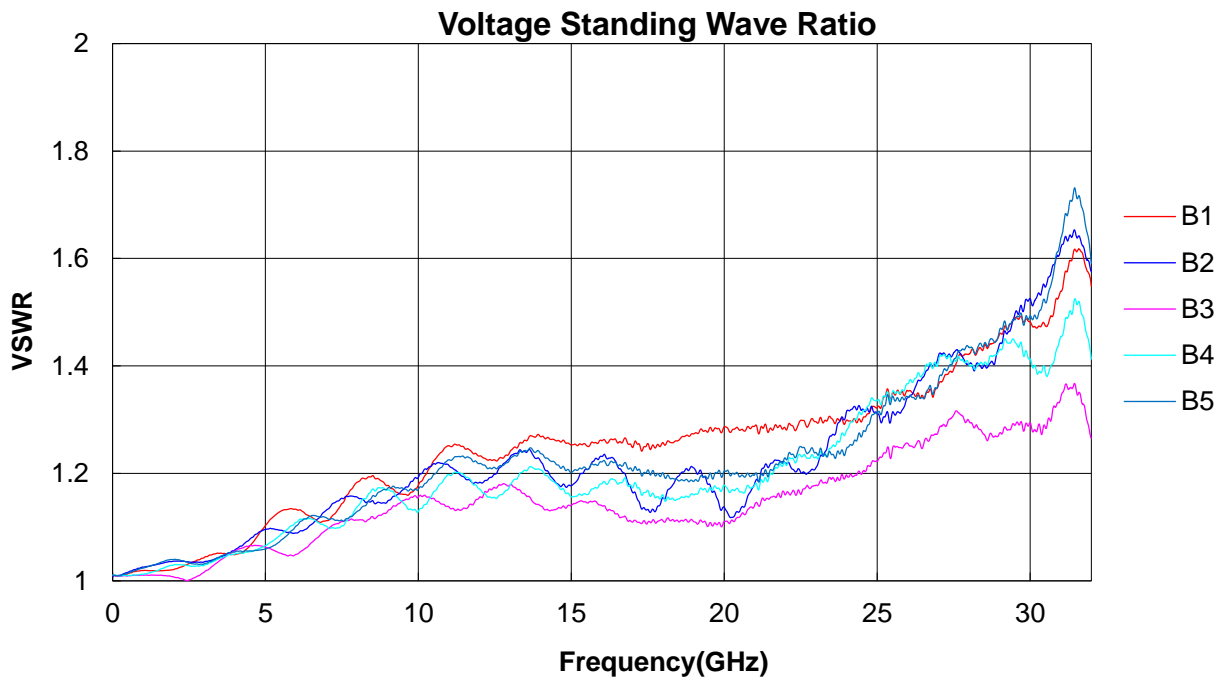
Description: 50 Ohm SMPM Plug, RA, Through Hole

Results: SMPM-PF-P-HF-RA-TH-1

The results just include SMPM-PF-P-HF-RA-TH-1 connector, fixture removal method remove all adapters effects.

Description: 50 Ohm SMPM Plug, RA, Through Hole			
Sample	SWR(max)	RL(max)	IL(min)
B1	1.62@31.59GHz	-12.54@31.59GHz	-3.26@32.0GHz
B2	1.65@31.45GHz	-12.17@31.45GHz	-3.58@32.0GHz
B3	1.37@31.45GHz	-16.18@31.45GHz	-3.14@32.0GHz
B4	1.53@31.47GHz	-13.64@31.47GHz	-3.14@32.0GHz
B5	1.73@31.45GHz	-11.44@31.45GHz	-3.52@32.0GHz

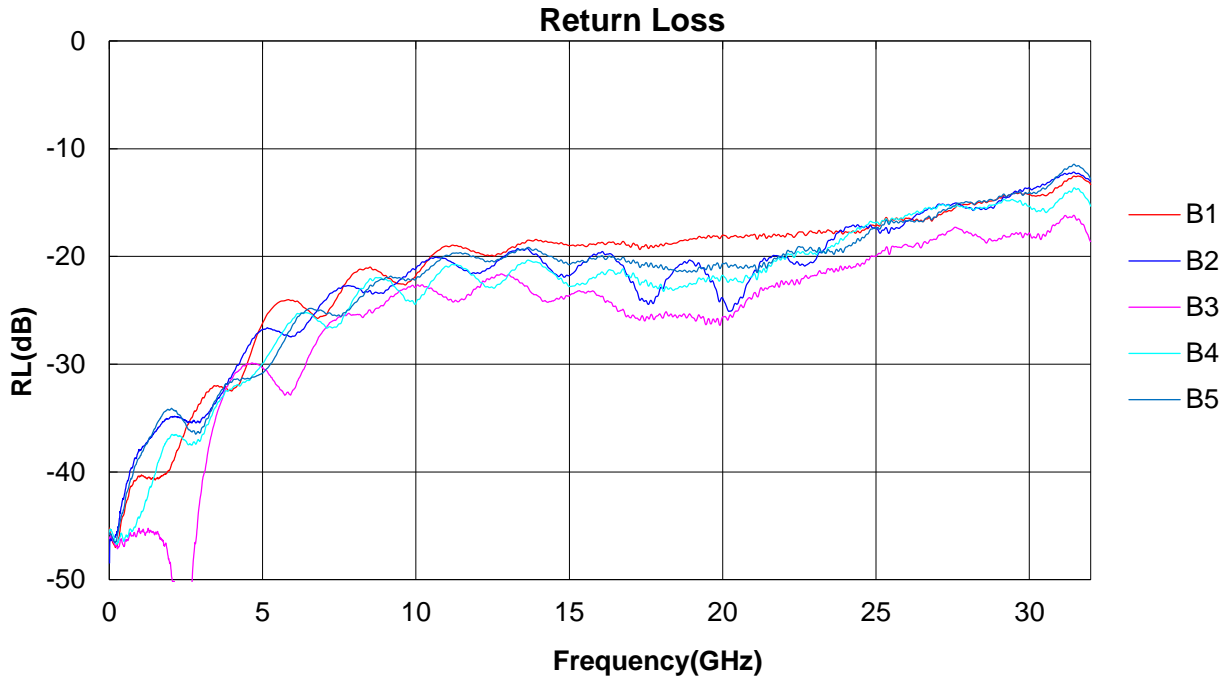
VSWR



Series: SMPM-RA

Description: 50 Ohm SMPM Plug, RA, Through Hole

### Return Loss



### Insertion Loss

