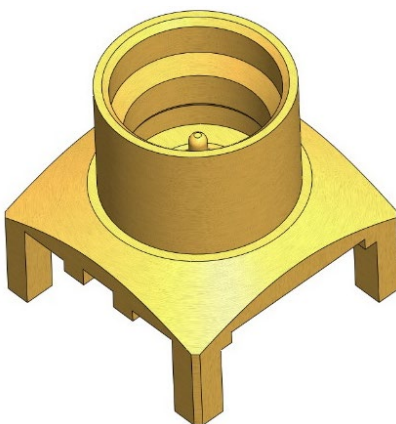




RF Characterization Report

SMP-PX-P-XX-ST-MT1



Test Date: Jul 2023

Description:

50 Ohm SMP Plug, Mixed Technology

Series: SMP-MT**Description:** 50 Ohm SMP Plug, Mixed Technology

Table of Contents

Test Setup Information	1
Scope:	1
Instrument Setup & Test Accessories:.....	1
Calibration Type:.....	1
Adapter Use:.....	1
PCB-SMPMT-112548-SIG-0 Test Fixtures for SMP-PX-P-XX-ST-MT1	2
PCB-SMPMT-112548-SIG-0 PCB Layout	2
SMP-PX-P-XX-ST-MT1 Test Definition	3
Connector Under Test:	3
Results: SMP-PX-P-XX-ST-MT1	4
VSWR	4
Return Loss.....	5
Insertion Loss.....	5

Series: SMP-MT

Description: 50 Ohm SMP Plug, Mixed Technology

Test Setup Information

Scope:

Provide standing wave ratio, return loss and insertion loss performance parameters for SMP Plug, Straight, Mixed Technology connector (0.063" PCB option).

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 85056D 2.4 mm Mechanical Calibration kit
-----------------	---

Adapter Use:

Fairview Microwave SM8861 2.4 mm Female to SMP Female adapter was used for the measurements of SMP-PX-P-XX-ST-MT1. The adapter effects were removed from the measurement using the Fixture Removal method.

Series: SMP-MT

Description: 50 Ohm SMP Plug, Mixed Technology

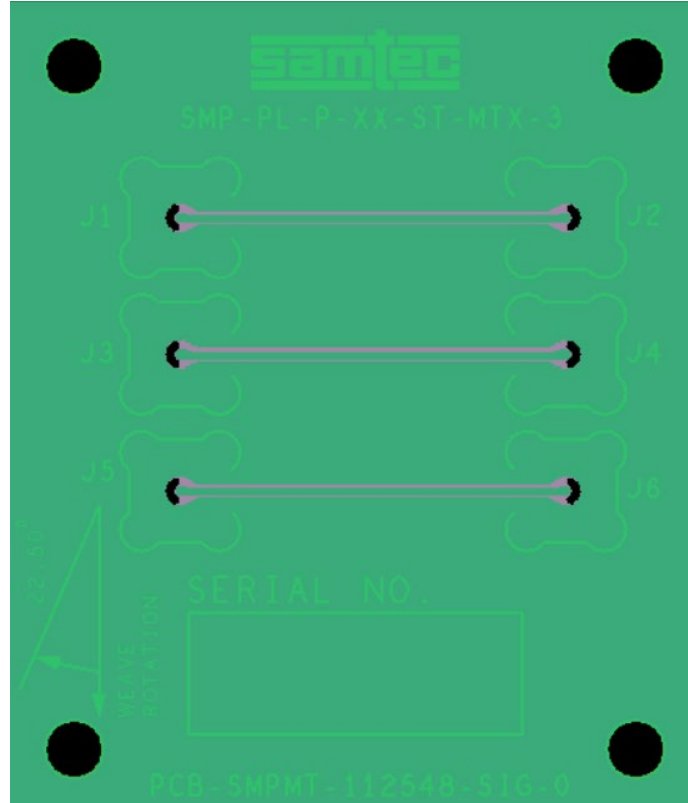
PCB-SMPMT-112548-SIG-0 Test Fixtures for SMP-PX-P-XX-ST-MT1

Shown below is a photograph of the test board.



PCB-SMPMT-112548-SIG-0 PCB Layout

Artwork of the PCB design is shown below.



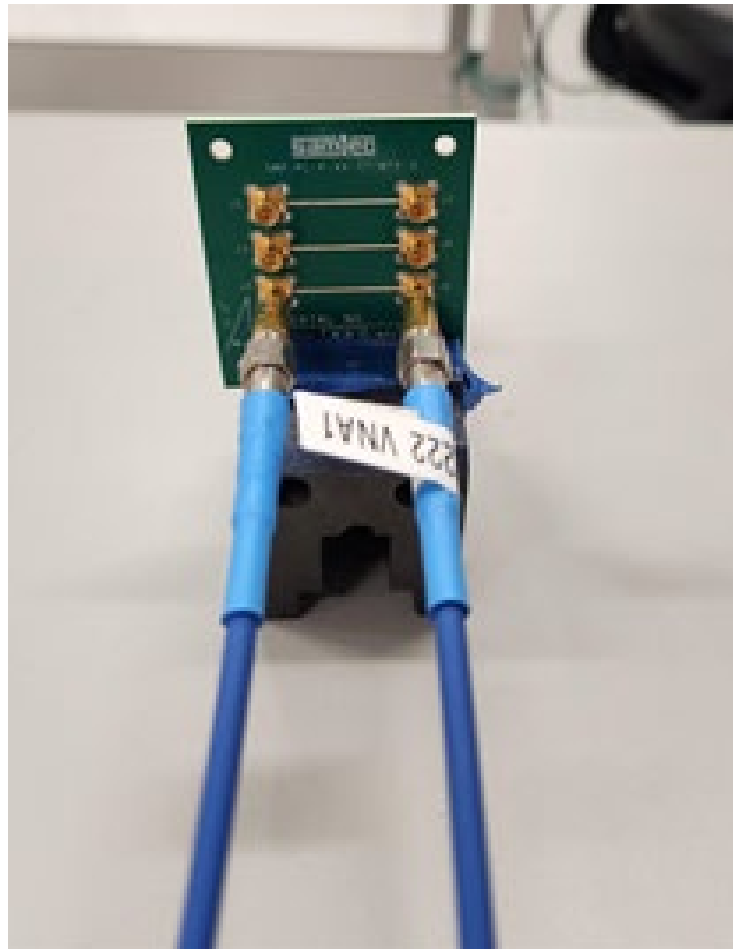
Series: SMP-MT

Description: 50 Ohm SMP Plug, Mixed Technology

SMP-PX-P-XX-ST-MT1 Test Definition

Part Number	End 1
SMP-PX-P-XX-ST-MT1	SMP Plug

Connector Under Test:



SMP-PX-P-XX-ST-MTX

Series: SMP-MT

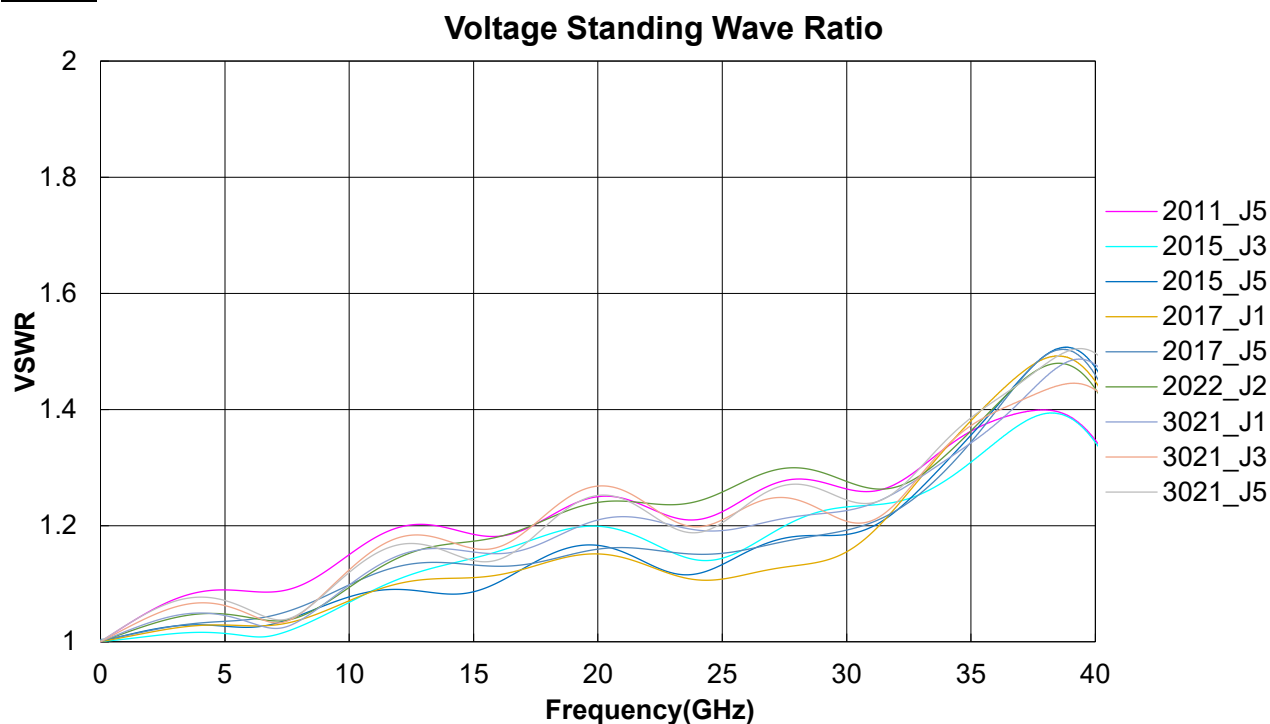
Description: 50 Ohm SMP Plug, Mixed Technology

Results: SMP-PX-P-XX-ST-MT1

The post processed results include one SMP-PX-P-XX-ST-MT1 connector, launch, and 0.5" of PCB trace to minimize the effects of the test setup.

Description: 50 Ohm SMP Plug, Mixed Technology (0.063" PCB)			
Sample	SWR(max)	RL(dB, max)	IL(dB, min)
2011_J5	1.40@37.79GHz	-15.57@37.79GHz	-1.10@40GHz
2015_J3	1.39@38.22GHz	-15.67@38.22GHz	-1.04@40GHz
2015_J5	1.51@38.79GHz	-13.88@38.79GHz	-1.08@40GHz
2017_J1	1.49@38.43GHz	-14.09@38.43GHz	-1.05@40GHz
2017_J5	1.50@38.65GHz	-13.93@38.65GHz	-1.02@40GHz
2022_J2	1.48@38.53GHz	-14.27@38.53GHz	-0.99@40GHz
3021_J1	1.49@39.32GHz	-14.17@39.32GHz	-1.05@40GHz
3021_J3	1.45@39.16GHz	-14.79@39.16GHz	-0.98@40GHz
3021_J5	1.50@39.39GHz	-13.91@39.39GHz	-0.99@40GHz

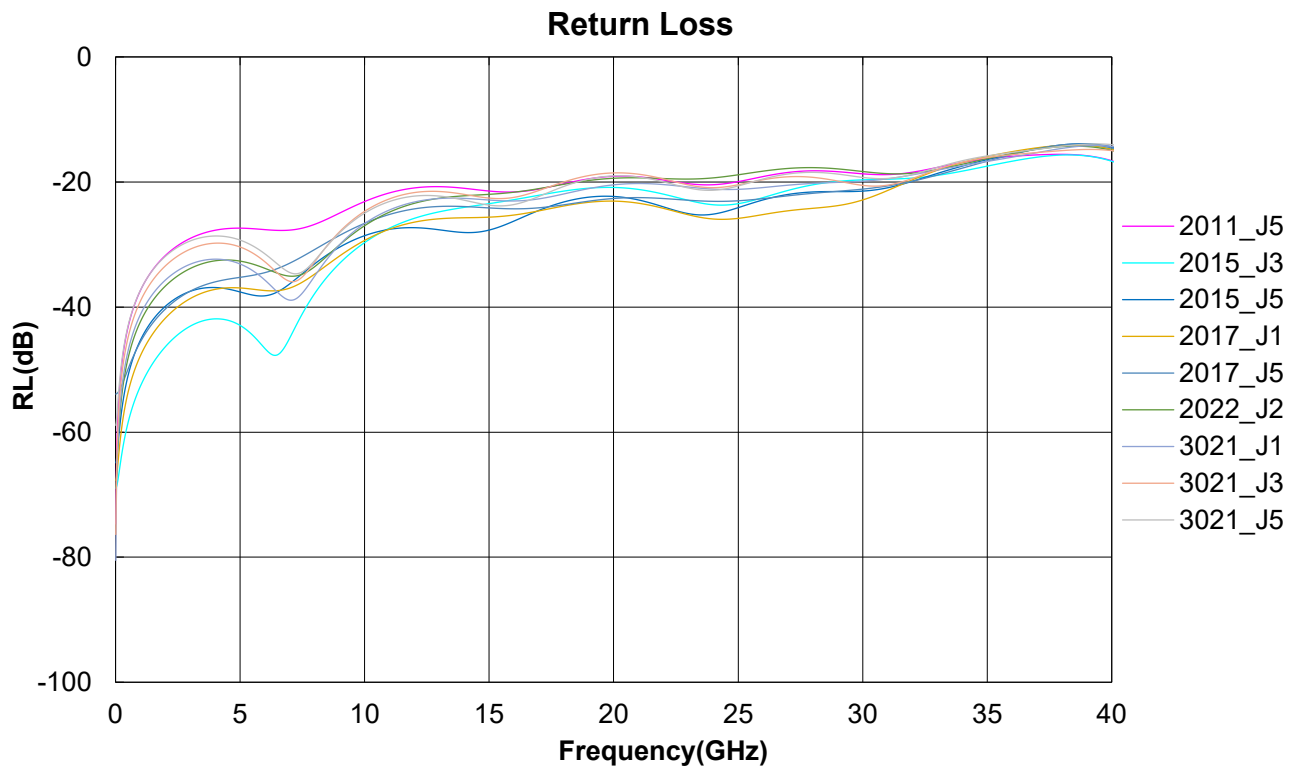
VSWR



Series: SMP-MT

Description: 50 Ohm SMP Plug, Mixed Technology

Return Loss



Insertion Loss

