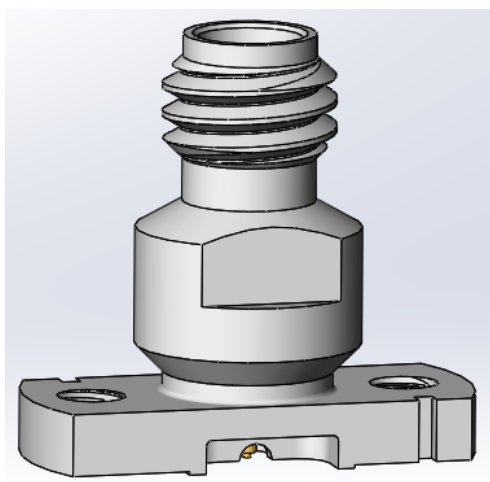




RF Characterization Report

100-J-P-VP-ST-CMM-X-X



Test Date: Jun 2026

Description:

50 Ohm 1.00 mm Jack, Vertical Compression Mount Microstrip

Series: 1.00 mm

Description: 50 Ohm 1.00 mm Jack, Vertical Compression Mount Microstrip

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Series: 1.00 mm

Description: 50 Ohm 1.00 mm Jack, Vertical Compression Mount Microstrip

Test Setup Information

Scope:

Provide standing wave ratio, return loss and insertion loss performance parameters for 1.00 mm compression mount Microstrip connector.

Instrument Setup & Test Accessories:

Network Analyzer	Keysight PNA N5227B PNA mm Test Set 5292A
Averaging Factor	1
Smoothing	Off
IF Bandwidth	1 KHz
Sweep Start	10 MHz
Sweep End	130 GHz
Points	13000
Test Cables	1.0mm LL130 Nitrowave Plug to Plug Cable Assembly (6")

Calibration Type:

A Keysight mechanical calibration is performed using the Keysight 1.00mm Mechanical Calibration kit 59059B.

Calibration Kit	Keysight 1.00mm MCAL 59059B
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Adapter Use:

PCB-114593-PRF-01 RF compression mount Microstrip board, was used for the measurements of 100-J-P-VP-ST-CMM-X-X.

Test System Description

The test fixture is composed of a six-layer TACHYON 100G material with 50 Ω signal trace. Optimization of the RF launch was performed using full wave simulation tools to minimize reflections. This launch design was implemented on PCB-114593-PRF-01.

Series: 1.00 mm

Description: 50 Ohm 1.00 mm Jack, Vertical Compression Mount Microstrip

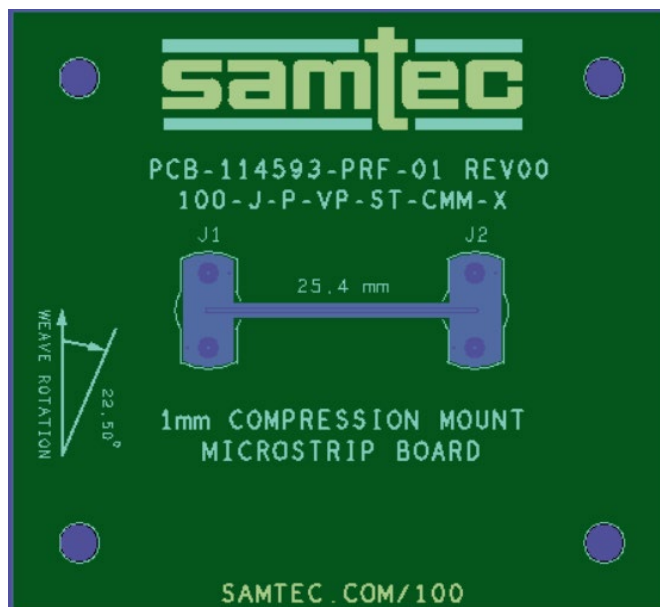
PCB-114593-PRF-01 Test Fixtures

Shown below is a photograph of the test board.



PCB-114593-PRF-01 PCB Layout

Artwork of the PCB design is shown below.



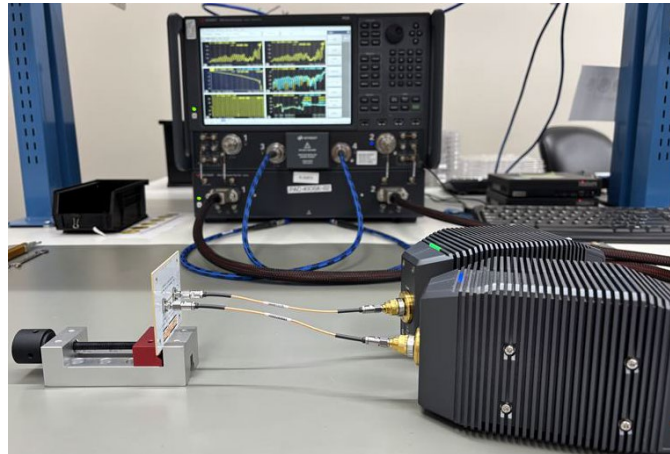
Series: 1.00 mm

Description: 50 Ohm 1.00 mm Jack, Vertical Compression Mount Microstrip

100-J-P-VP-ST-CMM-X-X Test Definition

Part Number	End 1
100-J-P-VP-ST-CMM-X-X	1.00 mm

Connector Under Test:



Series: 1.00 mm

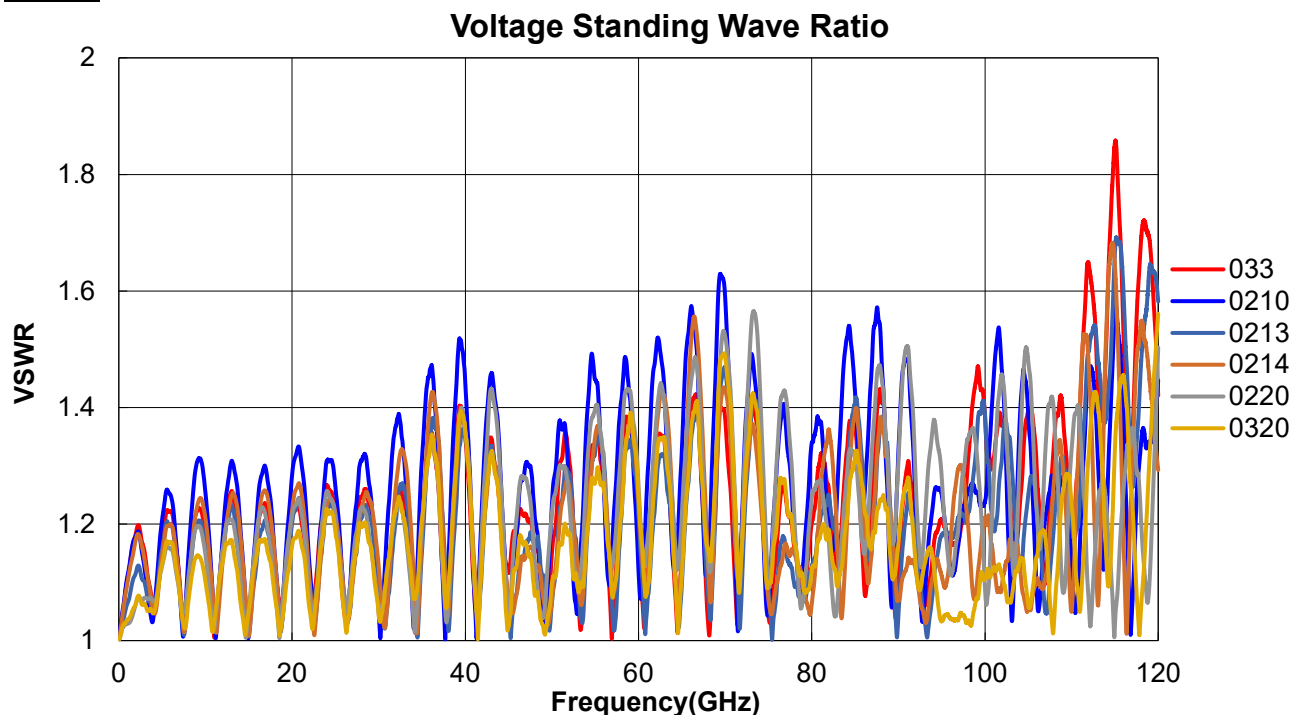
Description: 50 Ohm 1.00 mm Jack, Vertical Compression Mount Microstrip

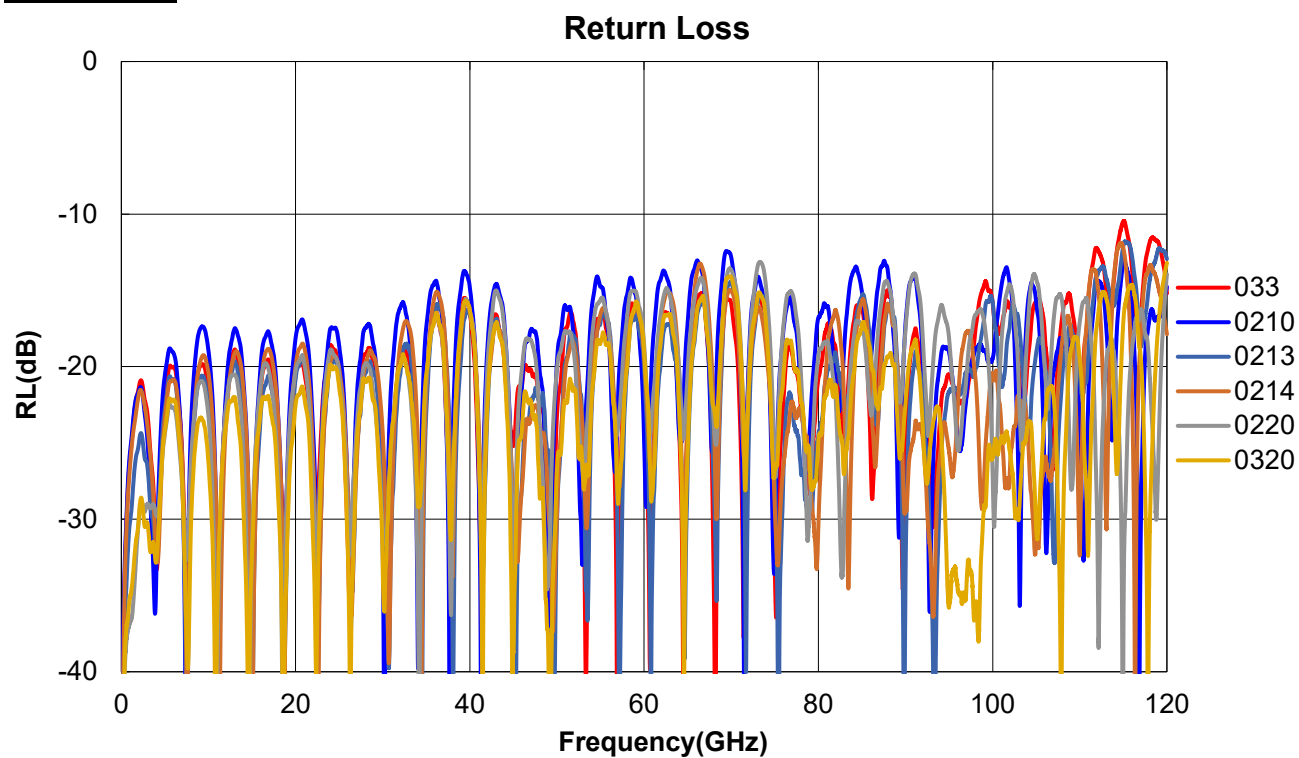
Results: 100-J-P-VP-ST-CMM-X-X

The results include the two 100-J-P-VP-ST-CMM-X-X connectors, launches, and 25.4 mm of PCB trace.

Description: 50 Ohm 1.00 mm Compression Mount Microstrip						
Sample	SWR (Max) DC-110 (GHz)	SWR (Max) 110-120 (GHz)	RL (dB, max) DC-110 (GHz)	RL (dB, max) 110-120 (GHz)	IL (dB, min) DC-110 (GHz)	IL (dB, min) 110-120 (GHz)
033	1.47@ 99.19GHz	1.86@ 115.07GHz	-14.40@ 99.19GHz	-10.45@ 115.07GHz	-4.75@ 108.76GHz	-5.97@ 119.85GHz
0210	1.63@ 69.45GHz	1.58@ 115.12GHz	-12.42@ 69.45GHz	-13.01@ 115.12GHz	-4.77@ 109.36GHz	-5.91@ 119.99GHz
0213	1.47@ 69.94GHz	1.69@ 115.16GHz	-14.42@ 69.94GHz	-11.79@ 115.16GHz	-4.97@ 109.45GHz	-5.80@ 119.96GHz
0214	1.56@ 66.44GHz	1.68@ 114.72GHz	-13.25@ 66.44GHz	-11.89@ 114.72GHz	-4.92@ 108.55GHz	-5.78@ 118.86GHz
0220	1.57@ 73.29GHz	1.50@ 120.00GHz	-13.14@ 73.29GHz	-13.94@ 120.00GHz	-4.75@ 110.00GHz	-5.93@ 120.00GHz
0320	1.49@ 69.90GHz	1.56@ 120.00GHz	-14.08@ 69.90GHz	-13.19@ 120.00GHz	-4.84@ 109.41GHz	-5.80@ 120.00GHz

VSWR



Series: 1.00 mm**Description:** 50 Ohm 1.00 mm Jack, Vertical Compression Mount MicrostripReturn LossInsertion Loss