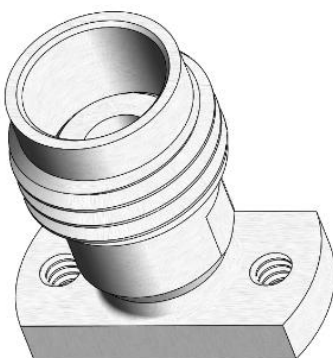




RF Characterization Report

240-J-P-EP-ST-CM-X

Test Date: 01 May 2020



Description

50 Ohm 2.4 mm Vertical Stripline Compression Mount

Series: 2.4 mm

Description: 50 Ohm 2.4 mm Vertical Stripline Compression Mount

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Series: 2.4 mm

Description: 50 Ohm 2.4 mm Vertical Stripline Compression Mount

Test Setup Information

Scope:

Provide standing wave ratio, return loss and insertion loss performance parameters for 2.4 mm vertical compression mount connector.

Instrument Setup & Test Accessories:

Network Analyzer	Keysight PNA N5227A
Averaging Factor	1
Smoothing	Off
IF Bandwidth	700 Hz
Sweep Start	10 MHz
Sweep End	50 GHz
Points	5000
Test Cables	Gore 0F0CACB036.0-LF (DC to 67 GHz)

Calibration Type:

A Keysight mechanical calibration is performed using the Maury 85056D 2.4mm Mechanical Calibration kit.

Calibration Kit	Maury 85056D 2.4mm Mechanical Calibration kit
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Adapter Use:

BE40A calibration board, PCB-108523-SIG, was used for the measurements of 240-J-P-EP-ST-CM-X P. The trace effects were removed from the measurement using the Fixture Removal method.

Test System Description

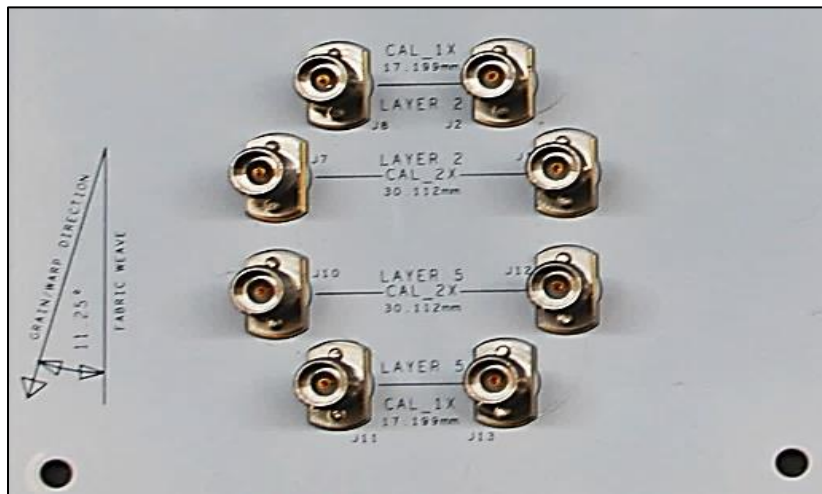
The test fixture is composed of a six-layer Isola material with 50 Ω signal trace and varying launch designs to reflect performance on different routing layers. Optimization of the RF launch was performed using full wave simulation tools to minimize reflections. These launch designs were implemented on PCB-108523-SIG. 50 GHz Calibration standards specific to the aforementioned PCB were used for 240-J-P-EP-ST-CM-X P measurements.

Series: 2.4 mm

Description: 50 Ohm 2.4 mm Vertical Stripline Compression Mount

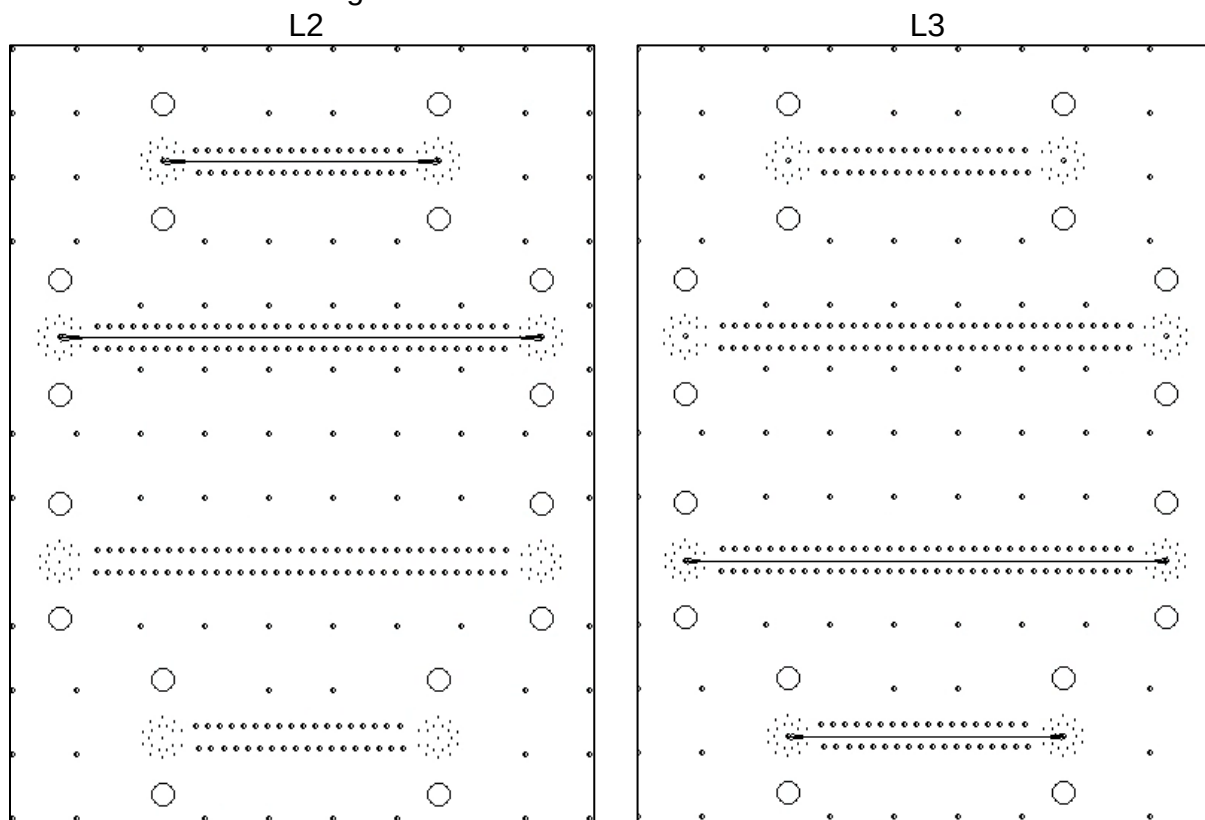
PCB-108523-SIG-01 Test Fixtures

Shown below is a photograph of the test board.



PCB-108523-SIG-01 PCB Layout

Artwork of the PCB design is shown below.



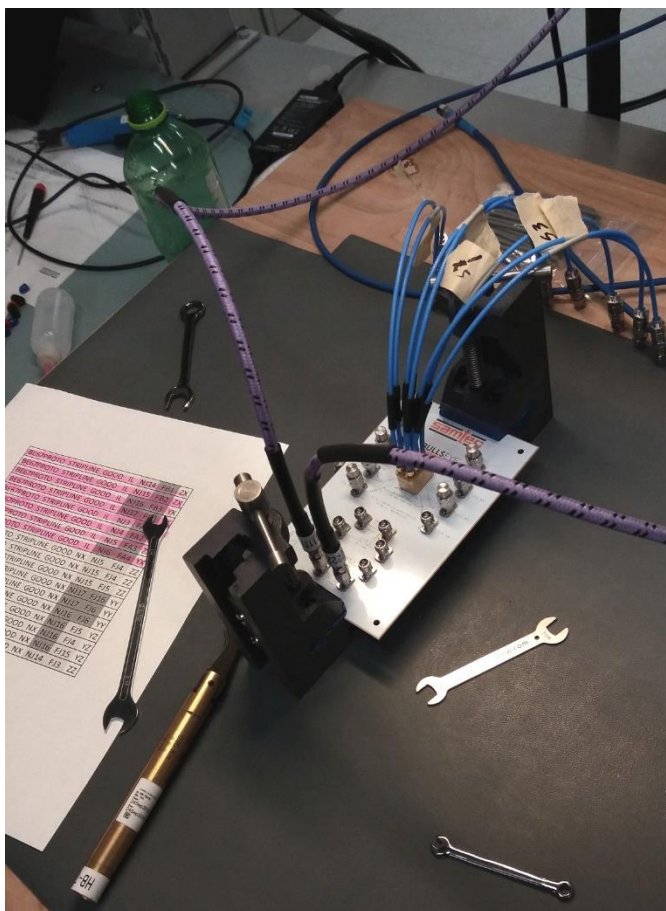
Series: 2.4 mm

Description: 50 Ohm 2.4 mm Vertical Stripline Compression Mount

240-J-P-EP-ST-CM-X Test Definition

Part Number	End 1
240-J-P-EP-ST-CM-X	2.4 mm

Connector Under Test:



Series: 2.4 mm

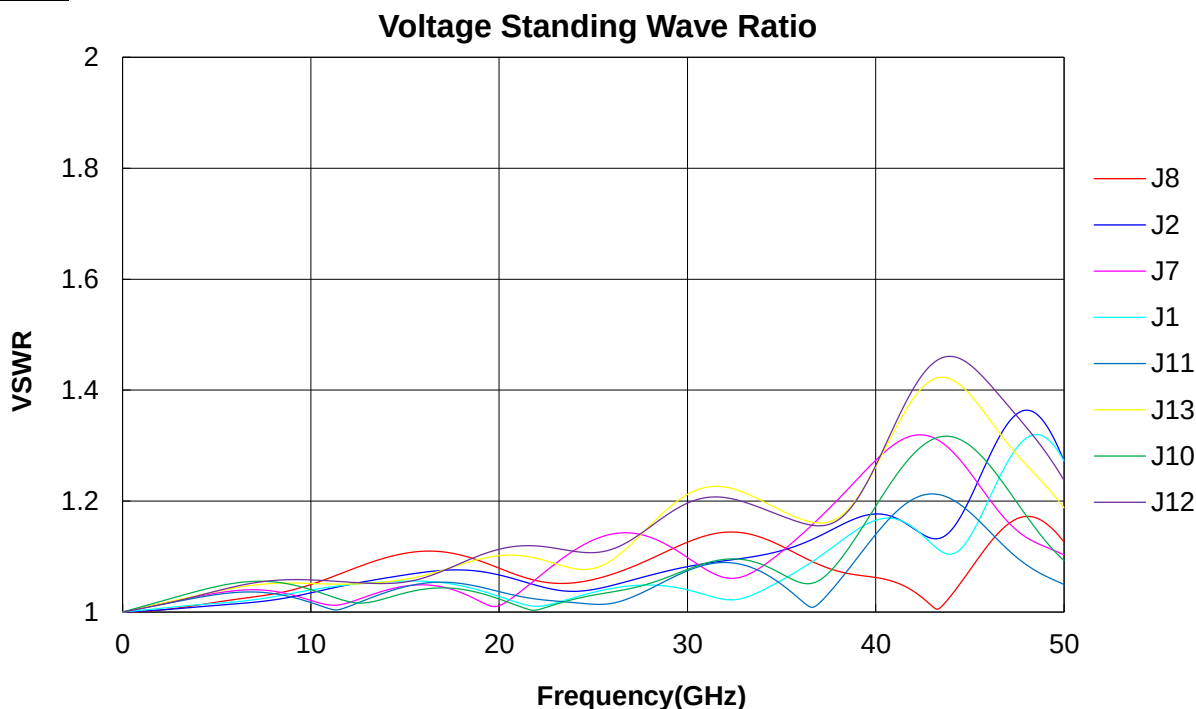
Description: 50 Ohm 2.4 mm Vertical Stripline Compression Mount

Results: 240-J-P-EP-ST-CM-X

The post processed results include the 240-J-P-EP-ST-CM-X connector, launch, and ~100 mils of PCB trace to minimize the effects of the test setup.

Description: 50 Ohm 2.4 mm Vertical Compression Mount			
Sample	VSWR(max)	RL(max)	IL(min)
J8	1.17@48.08GHz	-22.0@48.08GHz	-0.88@49.14GHz
J2	1.36@48.02GHz	-16.3@48.02GHz	-0.88@49.14GHz
J7	1.32@42.35GHz	-17.2@42.35GHz	-0.80@49.30GHz
J1	1.32@48.53GHz	-17.2@48.53GHz	-0.82@49.30GHz
J11	1.21@42.99GHz	-20.3@42.99GHz	-0.82@49.23GHz
J13	1.42@43.53GHz	-15.2@43.53GHz	-0.81@49.23GHz
J10	1.32@43.77GHz	-17.3@43.77GHz	-0.81@48.80GHz
J12	1.46@43.93GHz	-14.6@43.93GHz	-0.80@49.81GHz

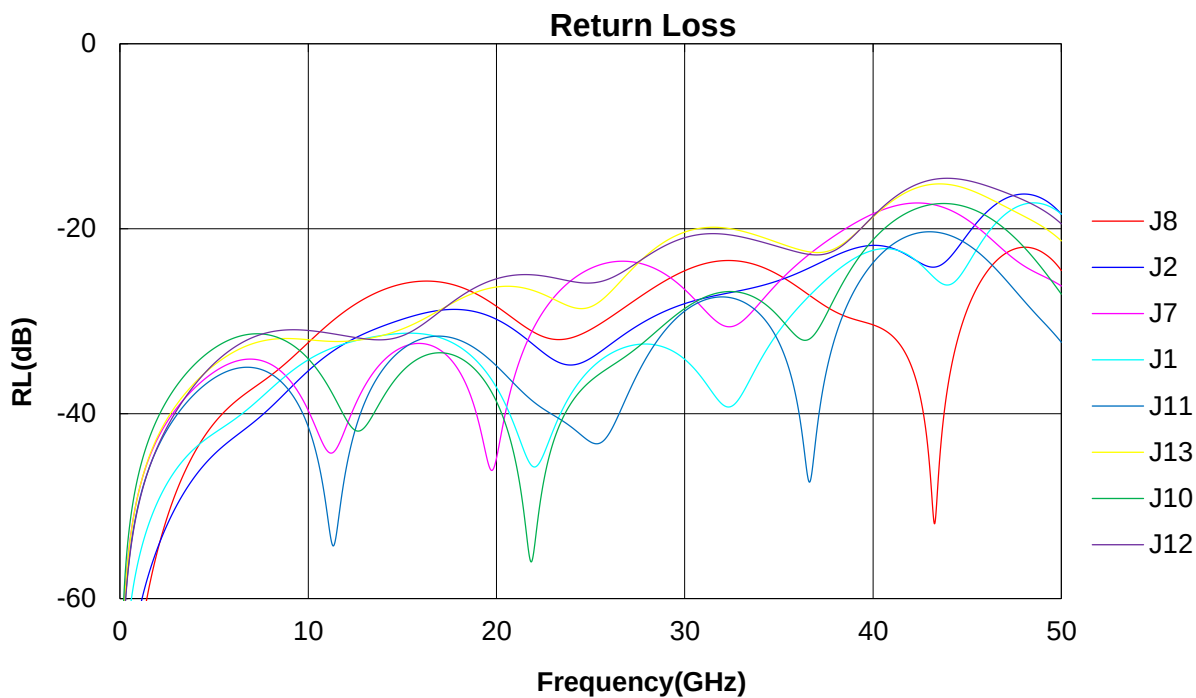
VSWR



Series: 2.4 mm

Description: 50 Ohm 2.4 mm Vertical Stripline Compression Mount

Return Loss



Insertion Loss

