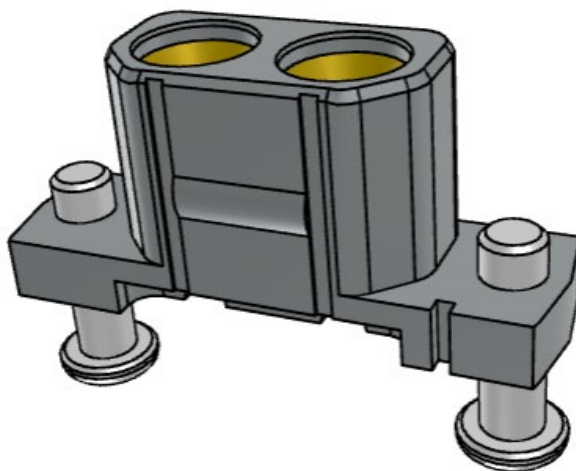




RF Characterization Report

GPPC-PF-1-02-EP-ST-CMM



Test Date: Jul 2023

Description

**Magnum RF™ Ganged, Multi-Position SMPM Block,
Compression Mount, 0.140" Pitch**

Series: GPPC**Description:** Magnum RF™ Ganged, Multi-Position SMPM Block, Compression Mount

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Series: GPPC

Description: Magnum RF™ Ganged, Multi-Position SMPM Block, Compression Mount

Test Setup Information

Scope:

Provide standing wave ratio, return loss and insertion loss parameters for SMPM Plug, GPPC Series Magnum RF™ Ganged, Multi-Position SMPM Block, Compression Mount.

Instrument Setup & Test Accessories:

Network Analyzer	Keysight PNA N5227B
Averaging Factor	1
Smoothing	Off
IF Bandwidth	1 KHz
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 85058B 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 GPPC-PF-1-02-EP-ST-CMM. The adapter effects were removed from the measurement using the Fixture Removal method.

Test Fixtures Description

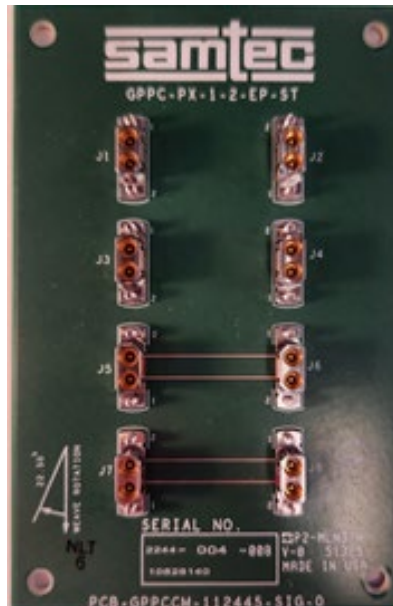
Both microstrip and stripline launch were implemented on the same test board PCB-GPPCCM-112445-SIG-0.

Series: GPPC

Description: Magnum RF™ Ganged, Multi-Position SMPM Block, Compression Mount

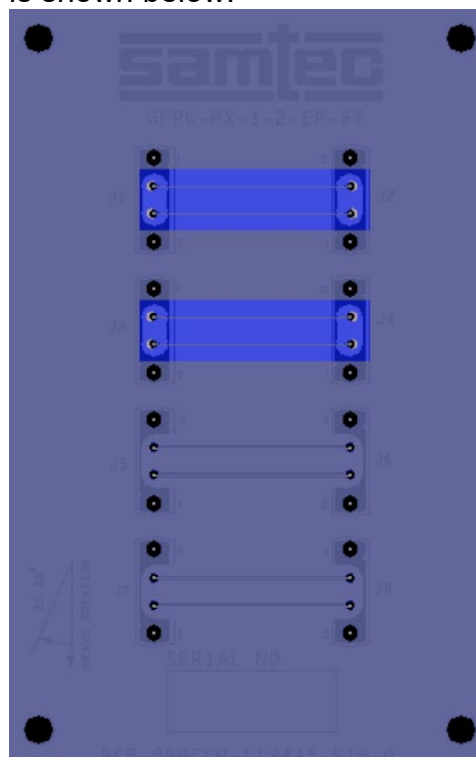
PCB-GPPCCM-112445-SIG-0 Test Fixtures

Shown below is a photograph of the test board.



PCB-GPPCCM-112445-SIG-0 PCB Layout

Artwork of the PCB design is shown below.



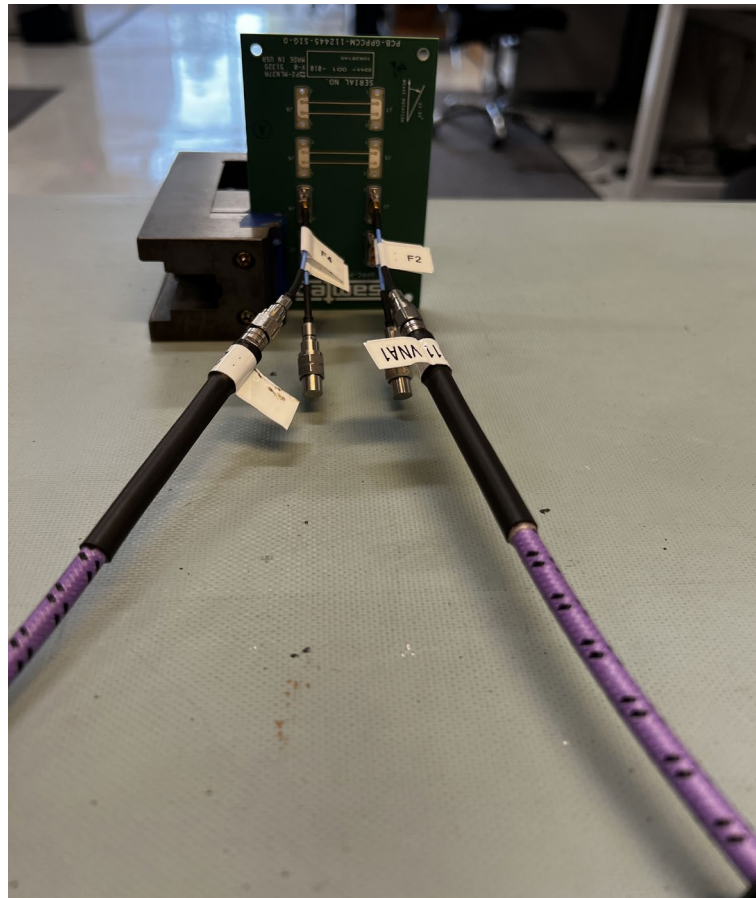
Series: GPPC

Description: Magnum RF™ Ganged, Multi-Position SMPM Block, Compression Mount

GPPC-PF-1-02-EP-ST-CMM Test Definition

Part Number	End 1
GPPC-PF-1-02-EP-ST-CMM	SMPM Plug

Connector Under Test:



Series: GPPC

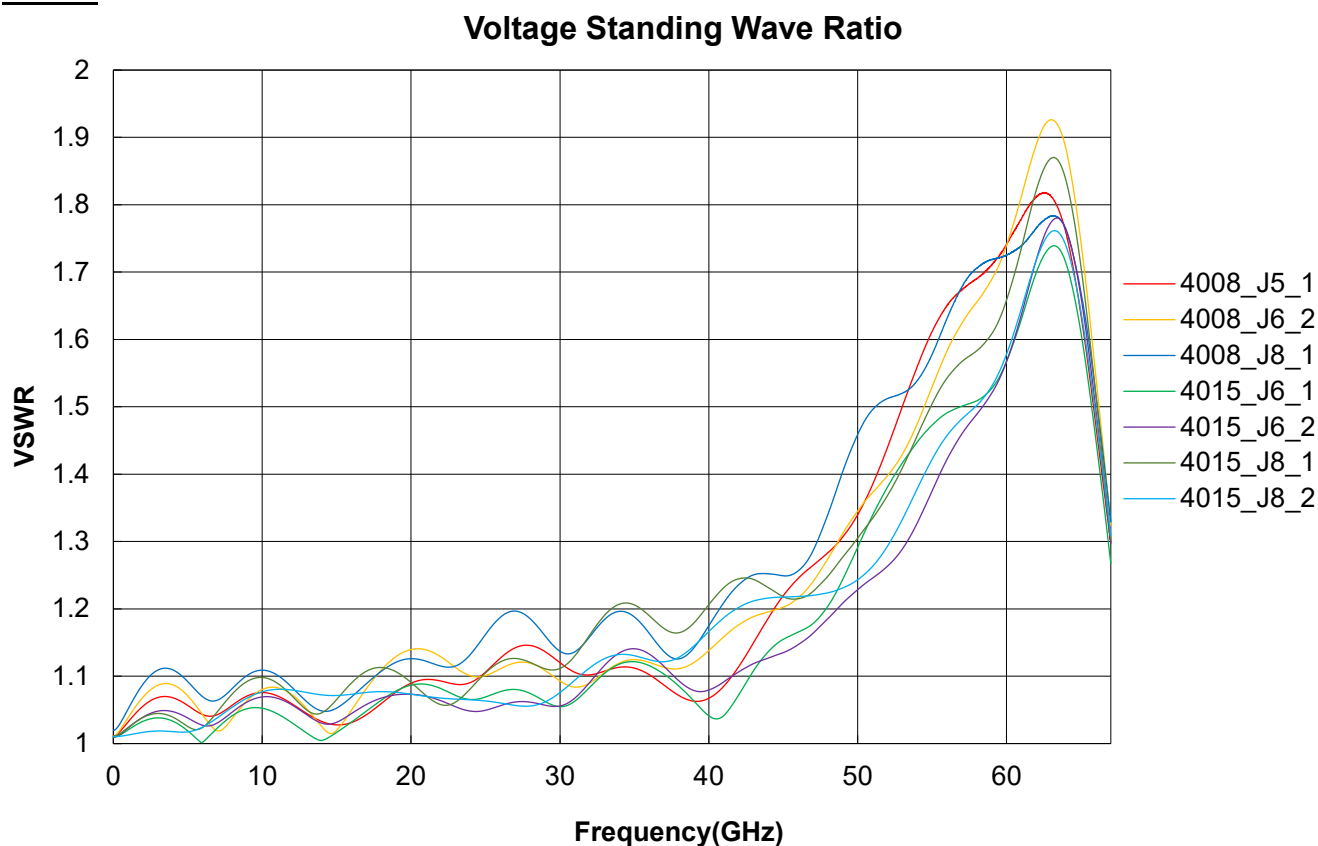
Description: Magnum RF™ Ganged, Multi-Position SMPM Block, Compression Mount

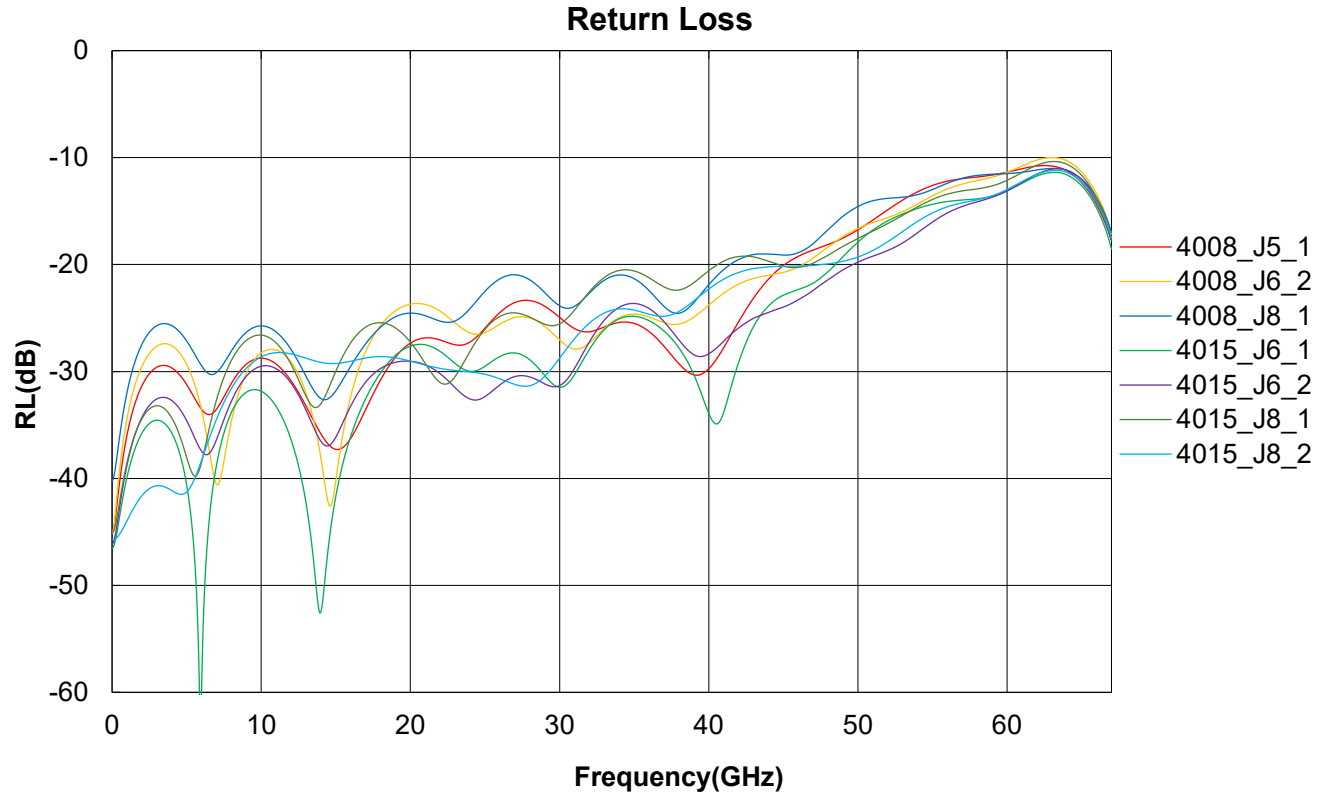
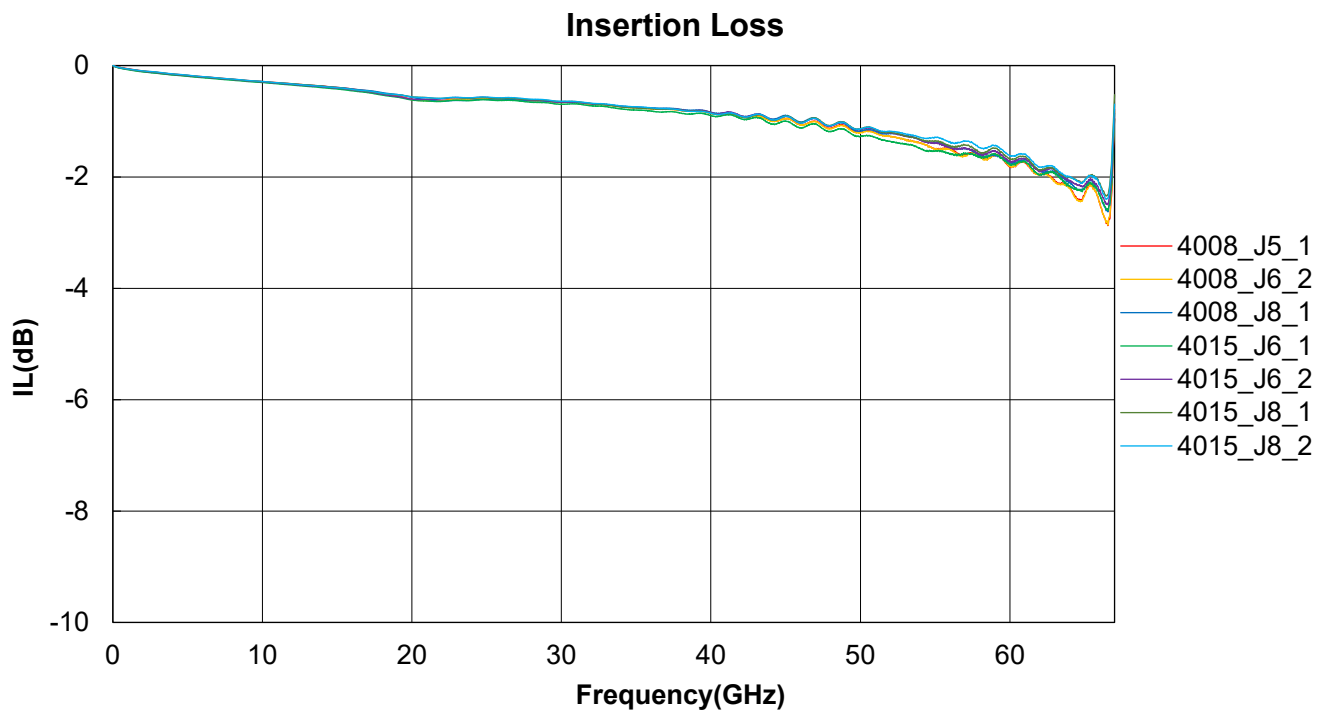
Results: GPPC-PF-1-02-EP-ST-CMM (Microstrip)

The post processed results include the GPPC-PF-1-02-EP-ST-CMM connector, launch, and 0.5" of PCB trace to minimize the effects of the test setup.

Description: 50 Ohm SMPM Plug			
Sample	SWR(max)	RL(dB, max)	IL(dB, min)
4008_J5_1	1.82@62.58GHz	-10.74@62.58GHz	-2.87@66.55GHz
4008_J6_2	1.93@62.96GHz	-9.99@62.96GHz	-2.86@66.56GHz
4008_J8_1	1.78@63.12GHz	-11.01@63.12GHz	-2.63@66.56GHz
4015_J6_1	1.74@63.21GHz	-11.38@63.21GHz	-2.60@66.57GHz
4015_J6_2	1.78@63.43GHz	-11.04@63.43GHz	-2.50@66.55GHz
4015_J8_1	1.87@63.19GHz	-10.37@63.19GHz	-2.35@66.44GHz
4015_J8_2	1.76@63.22GHz	-11.19@63.22GHz	-2.40@66.44GHz

VSWR



Series: GPPC**Description:** Magnum RF™ Ganged, Multi-Position SMPM Block, Compression MountReturn LossInsertion Loss

Series: GPPC

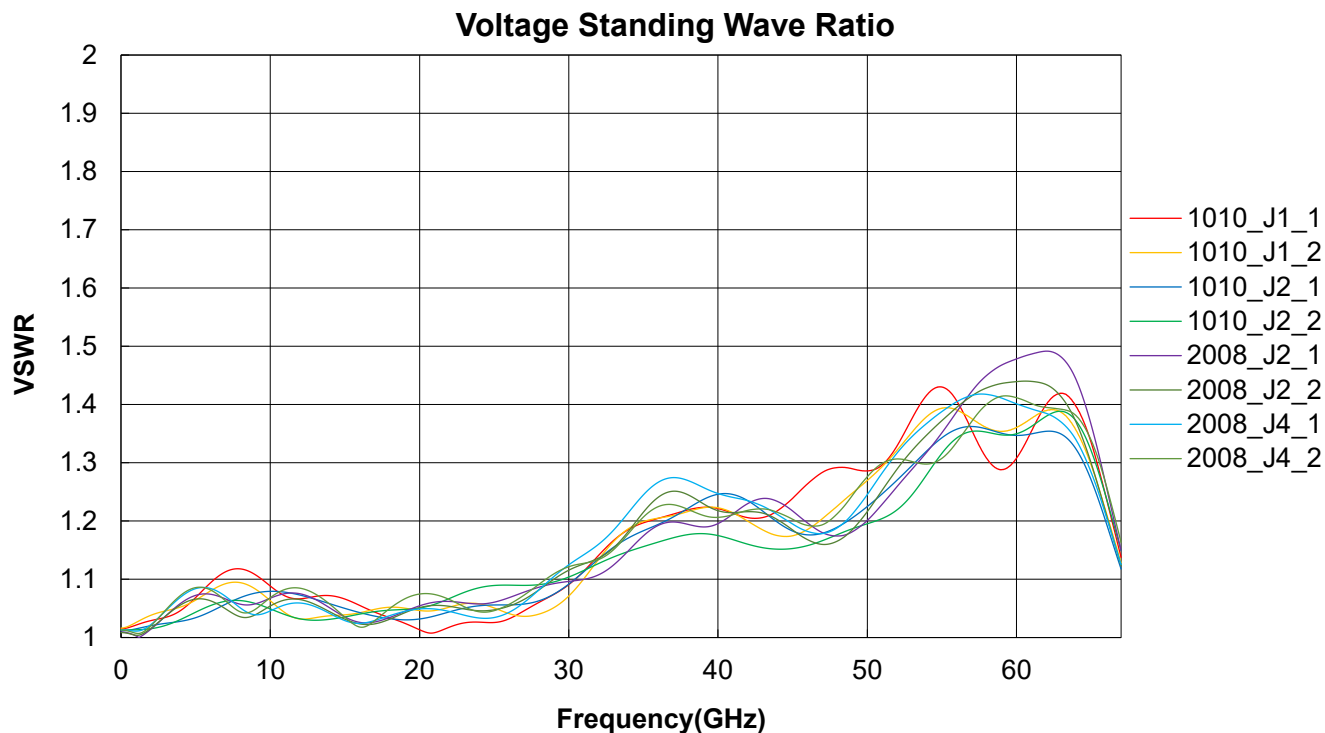
Description: Magnum RF™ Ganged, Multi-Position SMPM Block, Compression Mount

Results: GPPC-PF-1-02-EP-ST-CMM (Stripline)

The post processed results include the GPPC-PF-1-02-EP-ST-CMM connector, launch, and 0.5" of PCB trace to minimize the effects of the test setup.

Description: 50 Ohm SMPM Plug			
Sample	SWR(max)	RL(dB, max)	IL(dB, min)
1010_J1_1	1.43@54.89GHz	-15.03@54.89GHz	-2.56@66.82GHz
1010_J1_2	1.39@55.34GHz	-15.66@55.34GHz	-2.37@66.82GHz
1010_J2_1	1.36@56.95GHz	-16.82@56.95GHz	-2.37@66.82GHz
1010_J2_2	1.39@62.92GHz	-15.77@62.92GHz	-2.56@66.80GHz
2008_J2_1	1.49@61.97GHz	-14.10@61.97GHz	-2.23@66.83GHz
2008_J2_2	1.44@60.60GHz	-14.87@60.60GHz	-2.25@66.80GHz
2008_J4_1	1.42@57.62GHz	-15.24@57.62GHz	-2.28@66.85GHz
2008_J4_2	1.41@59.28GHz	-15.30@59.28GHz	-2.29@66.67GHz

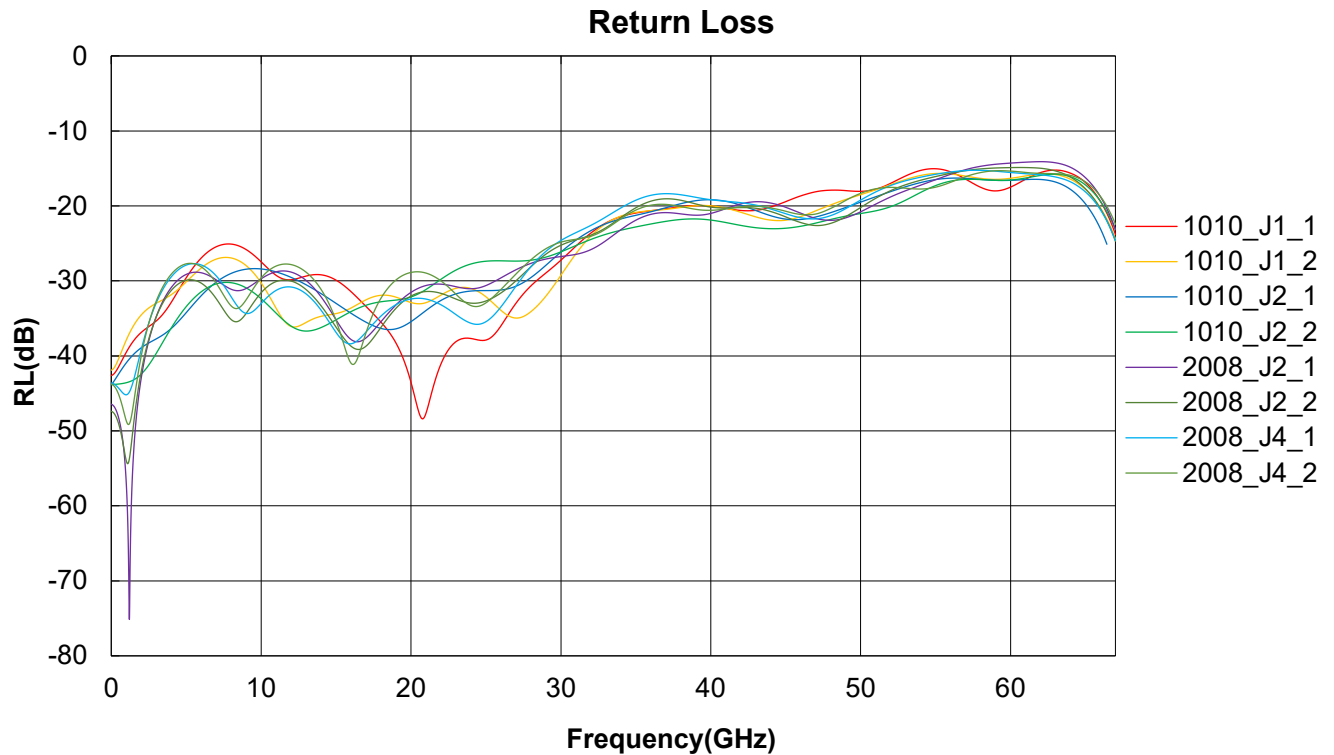
VSWR



Series: GPPC

Description: Magnum RF™ Ganged, Multi-Position SMPM Block, Compression Mount

Return Loss



Insertion Loss

