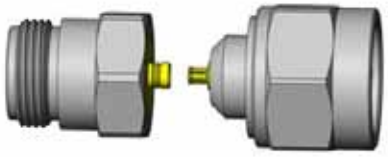
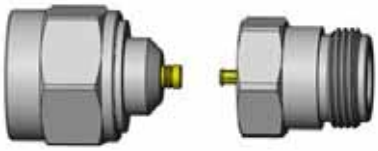
RF Characterization Report

ADP5 Series Adapters

ADP5-06SJ2-V3SJ1 Mating To ADP5-06SP2-V3SP1



ADP5-06SP2-V3SJ1 Mating To ADP5-06SJ2-V3SP1



ADP5-01SJ7-10SJ7 Mating To ADP5-01SJ7-10SP7

Description:
50Ω RF Adapter

Samtec Inc.
520 Park East Blvd.
New Albany IN 47151-1147 USA

WWW.SAMTEC.COM
1-800-SAMTEC-9 (US & Canada)
RF@samtec.com

Phone: 812-944-6733
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Report Revision: 11/28/2012

Series: ADP5
Description: 50Ω RF Adapter

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Series: ADP5
Description: 50Ω RF Adapter

Test Setup Information

Scope:

To perform characterization tests, Insertion Loss, Return Loss and Voltage Standing Wave Ratio.

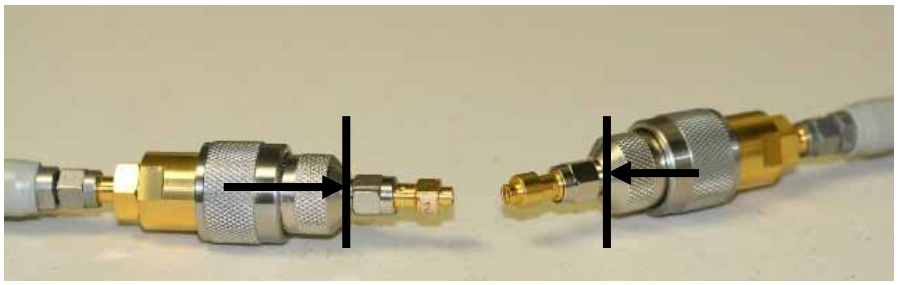
Product Description:

The table below presents a description of the different mated ADP5 series adapters that were tested.

Part Number	Termination – End 1	Termination – End 2
ADP5-06SJ2-V3SJ1 Mating To ADP5-06SP2-V3SP1	N Type, Straight, Jack N Type, Straight, Plug	MMCXV, Straight, Jack MMCXV, Straight, Plug
ADP5-06SP2-V3SJ1 Mating To ADP5-06SJ2-V3SP1	N Type, Straight, Plug N Type, Straight, Jack	MMCXV, Straight, Jack MMCXV, Straight, Plug
ADP5-01SJ7-10SJ7 Mating To ADP5-01SJ7-10SP7	SMA, Straight, Jack SMA, Straight, Jack	AFI, Straight, Jack AFI, Straight, Plug

Test Calibration:

Calibration is performed using Agilent mechanical calibration kit, PN 85052D to the calibration point below. Any adapters beyond this point are included in the measurements.



(Sample setup of adapters, actual setup not depicted.)

Adapter Use:

Each port uses at least one precision adapter capable of mating to the assembly under test. Any supplementary adapter will contribute additional electrical characteristics to the measured data. Any use of additional adapters is noted.

Series: ADP5
Description: 50Ω RF Adapter

Definition of Assembly under Test:

The performance characteristics include the interface with adapters.

Port Designations:

The connector attached to port 1 of the VNA is “End 1” from the part number callout. Insertion Loss is measured using S21 and Return Loss / VSWR is measured using S11.

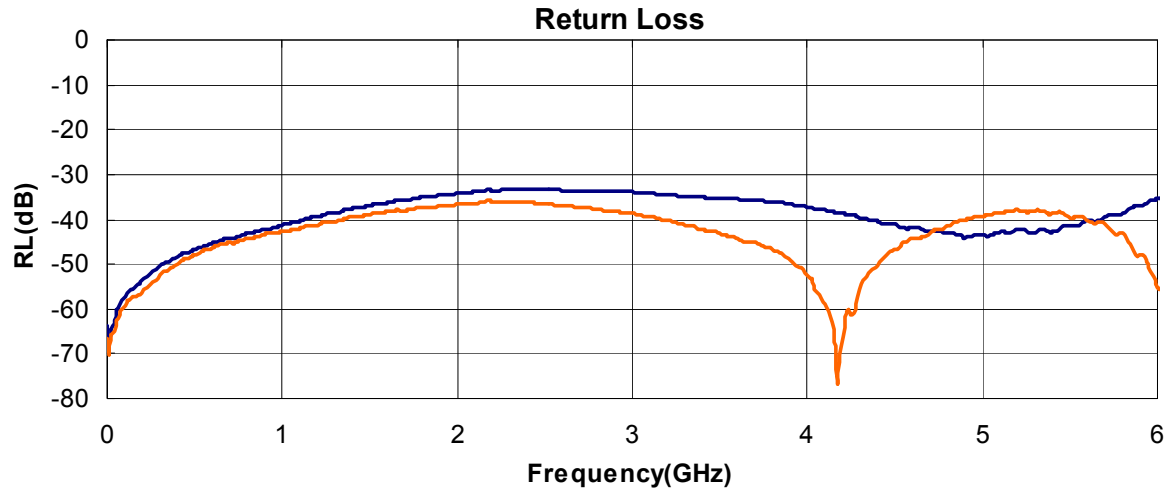
Legend for Plots:

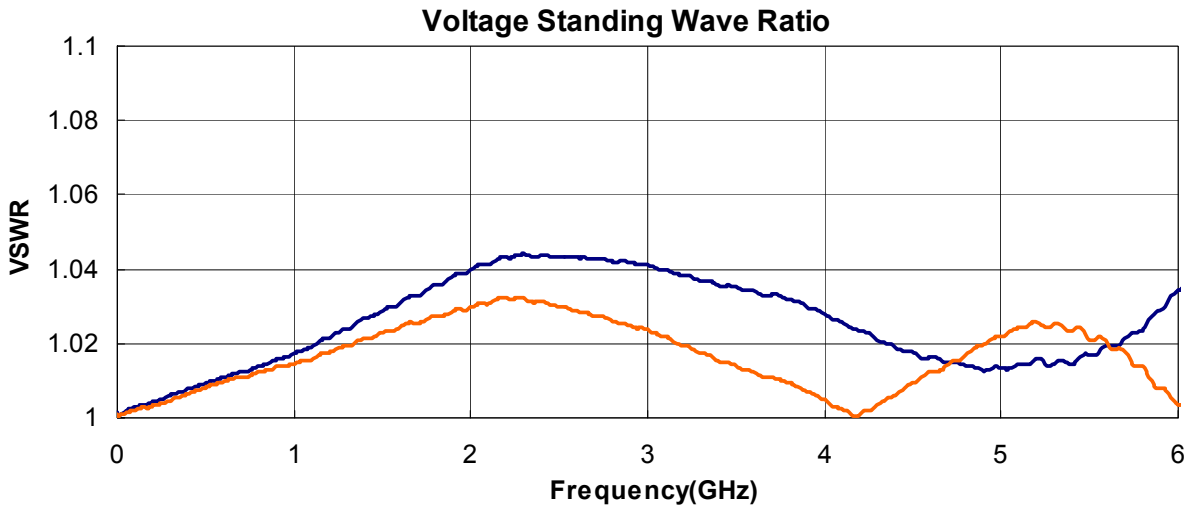
5 samples were tested. Base on the insertion loss, the min/max plots are shown for clarity in this report.

Series: ADP5
Description: 50Ω RF Adapter

Results Summary

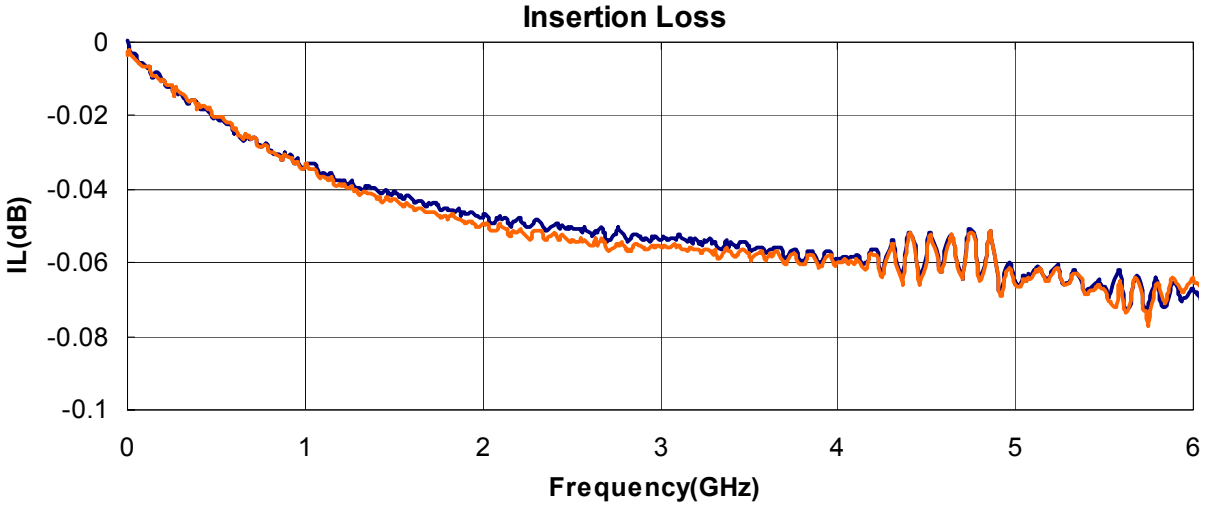
ADP5-06SJ2-V3SJ1 Mating To ADP5-06SP2-V3SP1

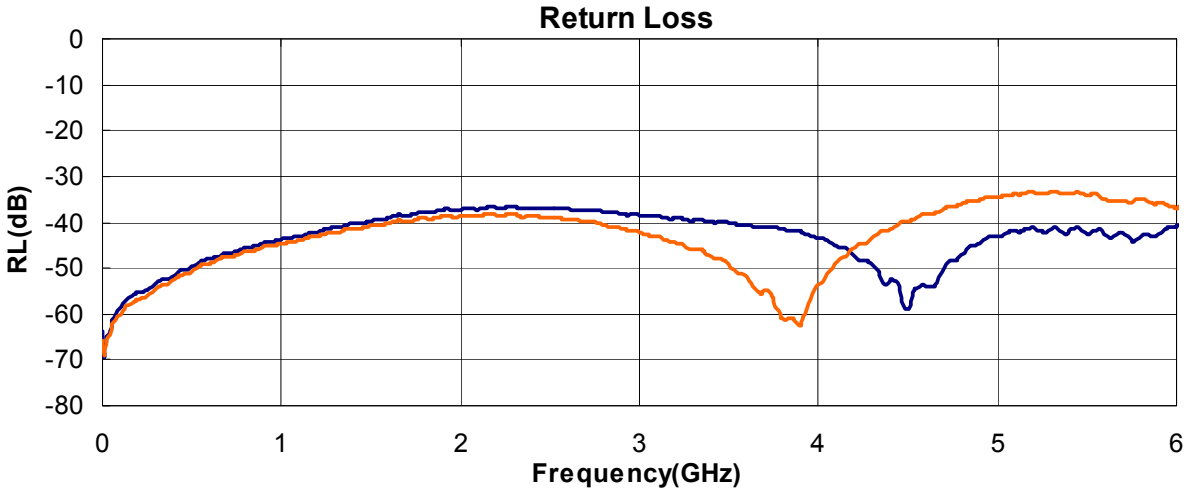


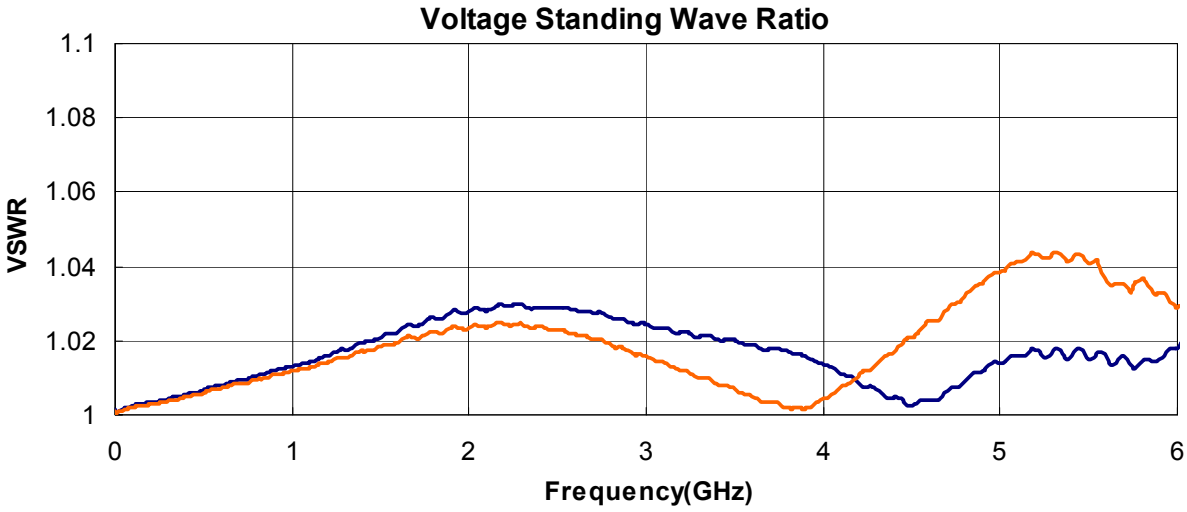


Series: ADP5
Description: 50Ω RF Adapter

ADP5-06SP2-V3SJ1 Mating To ADP5-06SJ2-V3SP1

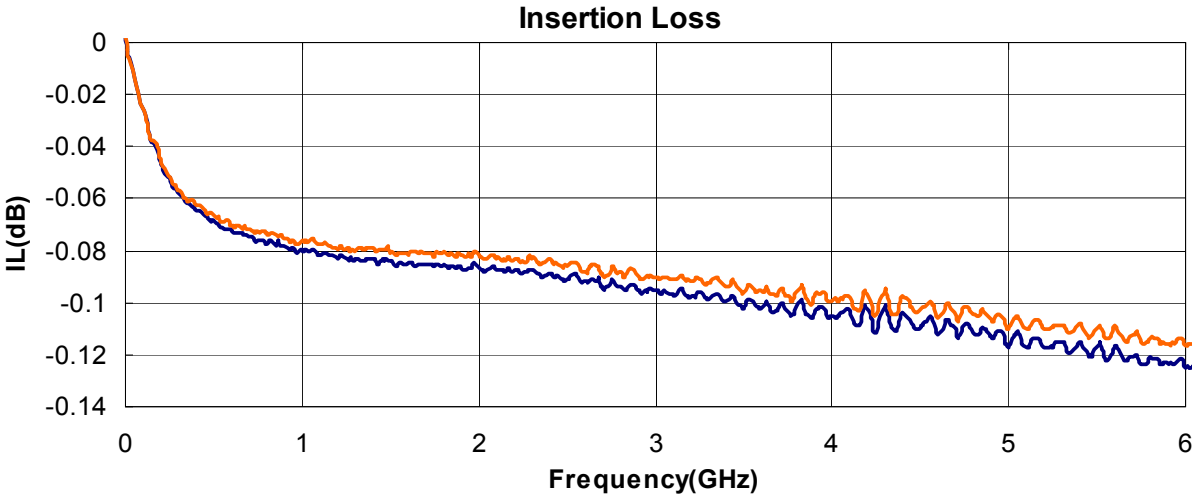


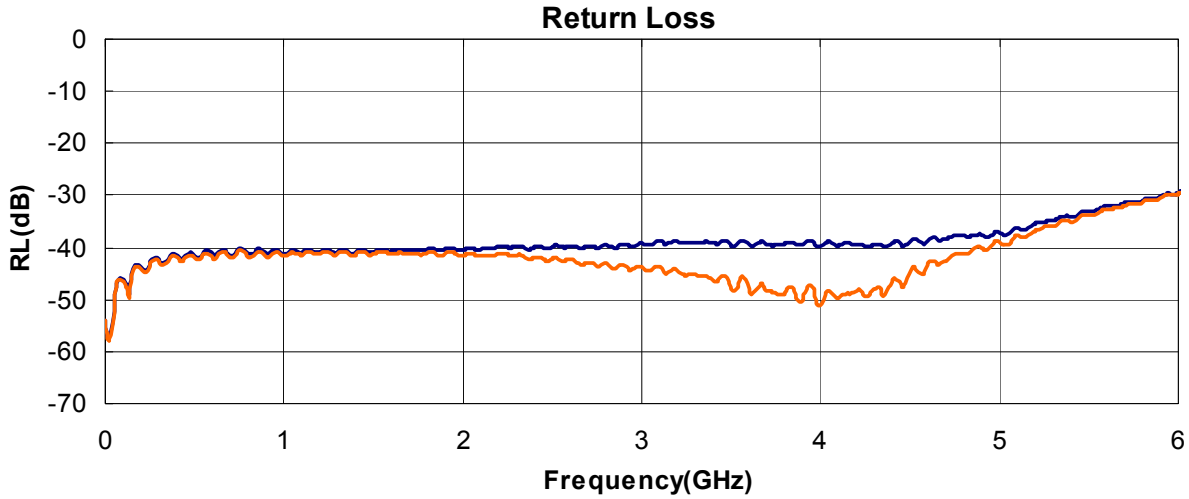


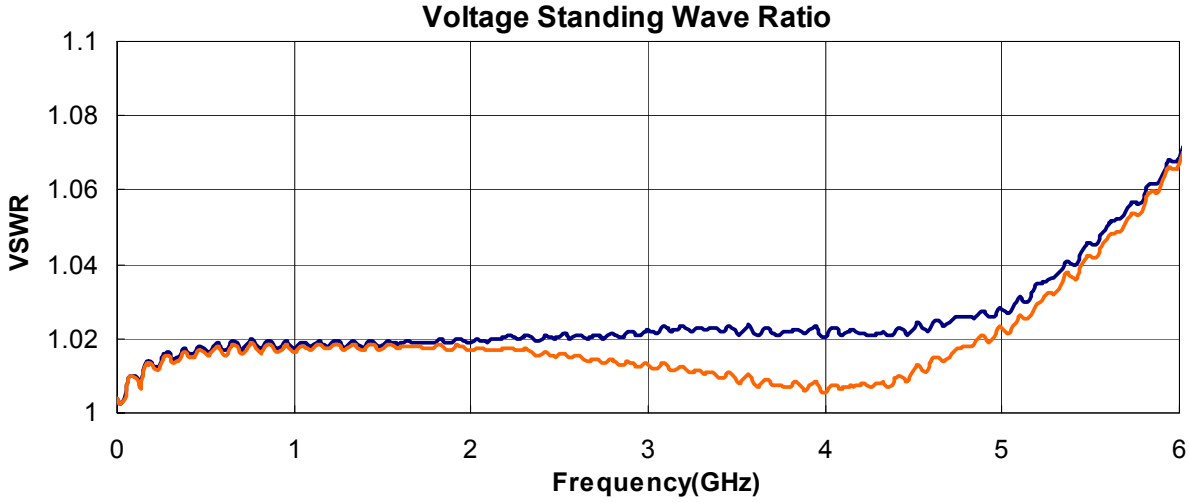


Series: ADP5
Description: 50Ω RF Adapter

ADP5-01SJ7-10SJ7 Mating To ADP5-01SJ7-10SP7







Series: ADP5
Description: 50Ω RF Adapter

Instrument Setup:

Network analyzer (Agilent N5230C) was used for the measurements and setup as below:

Network Analyzer	Agilent N5230C PNA-L Series (300 KHz - 20 GHz)
Mechanical Calibration Kit	85052D

Averaging Factor	0
Smoothing	Off
IF Bandwidth	1 KHz
Sweep Start	300 KHz
Sweep End	3 GHz
Points	1601

Test Fixtures:

N5230C (Typical set-up, actual part not depicted.)