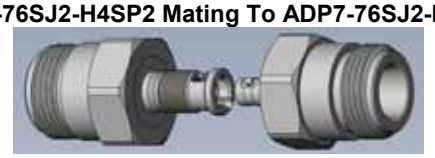
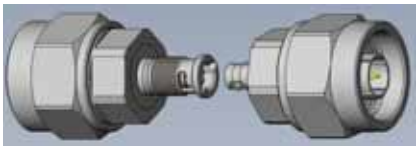
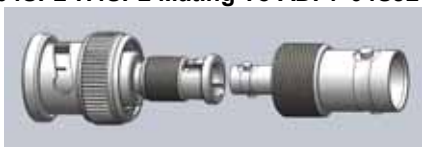
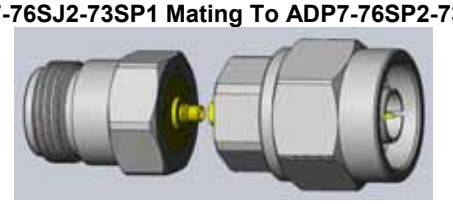
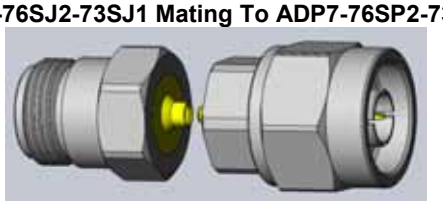
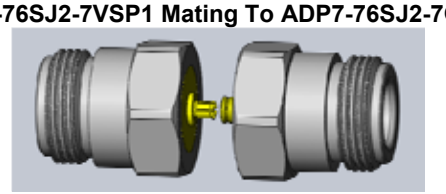
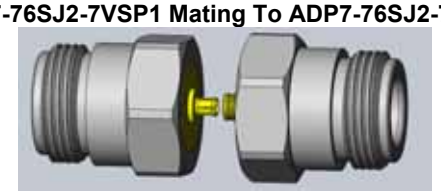
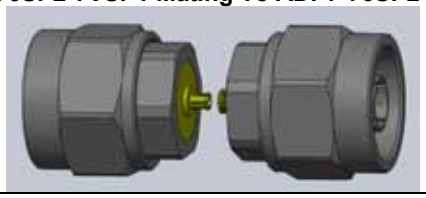
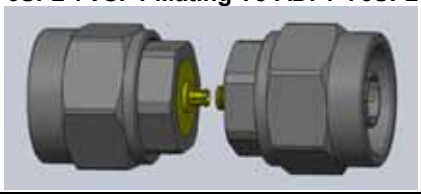
RF Characterization Report

ADP7 Series Adapters

ADP7-76SJ2-H4SP2 Mating To ADP7-76SJ2-H4SJ2 	**ADP7-76SP2-H4SP2 Mating To ADP7-76SP2-H4SJ2** 
ADP7-04SP2-H4SJ2 Mating To ADP7-04SJ2-H4SP2 	**ADP7-04SP2-H4SP2 Mating To ADP7-04SJ2-H4SJ2** 
ADP7-76SJ2-73SP1 Mating To ADP7-76SP2-73SJ1 	**ADP7-76SJ2-73SJ1 Mating To ADP7-76SP2-73SP1** 
ADP7-76SJ2-7VSP1 Mating To ADP7-76SJ2-7GSJ1 	**ADP7-76SJ2-7VSP1 Mating To ADP7-76SJ2-7VSJ1** 
ADP7-76SP2-7VSP1 Mating To ADP7-76SP2-7GSJ1 	**ADP7-76SP2-7VSP1 Mating To ADP7-76SP2-7VSJ1** 

Description:
75Ω RF Adapter

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Report Revision: 10/8/2012
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Series: ADP7
Description: 75Ω RF Adapter

Table of Contents

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Series: ADP7
Description: 75Ω RF Adapter

Test Setup Information

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

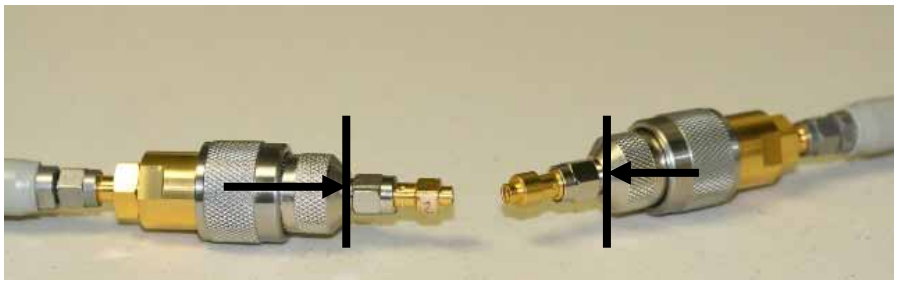
Product Description:
The table below presents a description of the different mated ADP7 series adapters that were tested.

Part Number	Termination – End 1	Termination – End 2
ADP7-76SJ2-H4SJ2	N Type, Straight, Jack	HD BNC, Straight, Jack
Mating To		
ADP7-76SJ2-H4SP2	N Type, Straight, Jack	HD BNC, Straight, Plug
ADP7-76SP2-H4SJ2	N Type, Straight, Plug	HD BNC, Straight, Jack
Mating To		
ADP7-76SP2-H4SP2	N Type, Straight, Plug	HD BNC, Straight, Plug
ADP7-04SP2-H4SJ2	BNC, Straight, Plug	HD BNC, Straight, Jack
Mating To		
ADP7-04SJ2-H4SP2	BNC, Straight, Jack	HD BNC, Straight, Plug
ADP7-04SP2-H4SP2	BNC, Straight, Plug	HD BNC, Straight, Plug
Mating To		
ADP7-04SJ2-H4SJ2	BNC, Straight, Jack	HD BNC, Straight, Jack
ADP7-76SJ2-73SP1	N Type, Straight, Jack	MMCX, Straight, Plug
Mating To		
ADP7-76SP2-73SJ1	N Type, Straight, Plug	MMCX, Straight, Jack
ADP7-76SJ2-73SJ1	N Type, Straight, Jack	MMCX, Straight, Jack
Mating To		
ADP7-76SP2-73SP1	N Type, Straight, Plug	MMCX, Straight, Plug
ADP7-76SJ2-7VSP1	N Type, Straight, Jack	GRF7V,Straight,Plug
Mating To		
ADP7-76SJ2-7GSJ1	N Type, Straight, Jack	GRF7,Straight,Jack
ADP7-76SJ2-7VSP1	N Type, Straight, Jack	GRF7V,Straight,Plug
Mating To		
ADP7-76SJ2-7VSJ1	N Type, Straight, Jack	GRF7V,Straight,Jack
ADP7-76SP2-7VSP1	N Type, Straight, Plug	GRF7V,Straight,Plug
Mating To		
ADP7-76SP2-7GSJ1	N Type, Straight, Plug	GRF7,Straight,Jack
ADP7-76SP2-7VSP1	N Type, Straight, Plug	GRF7V,Straight,Plug
Mating To		
ADP7-76SP2-7VSJ1	N Type, Straight, Plug	GRF7V,Straight,Jack

Series: ADP7
Description: 75Ω RF Adapter

Test Calibration:

Calibration is performed using Agilent mechanical calibration kit, PN 85036B 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.

Product Part Number	Used Adapter Part Number	Adapter End 1	Adapter End 2	Vender	Used Quantity
ADP7-04SP2-H4SJ2	1250-1536	N Jack	BNC Jack	Agilent	1
Mating To ADP7-04SJ2-H4SP2	1250-1534	N Jack	BNC Plug	Agilent	1
ADP7-04SP2-H4SP2	1250-1536	N Jack	BNC Jack	Agilent	1
Mating To ADP7-04SJ2-H4SJ2	1250-1534	N Jack	**BNC Plug**	Agilent	1

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.

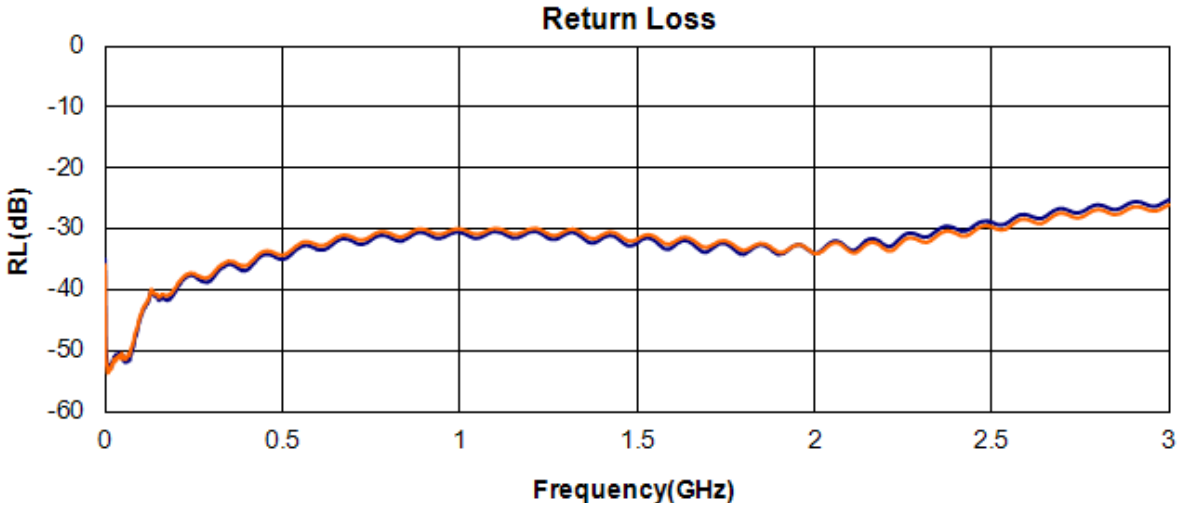
Legend for Plots:

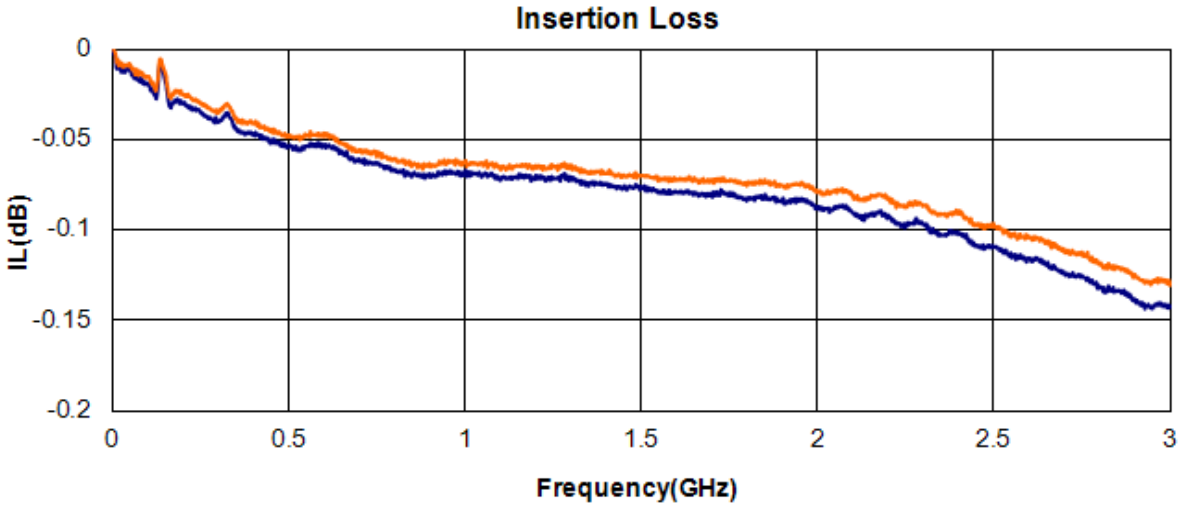
Five samples were tested. Base on the insertion loss, the min/max plots are shown for clarity in this report.

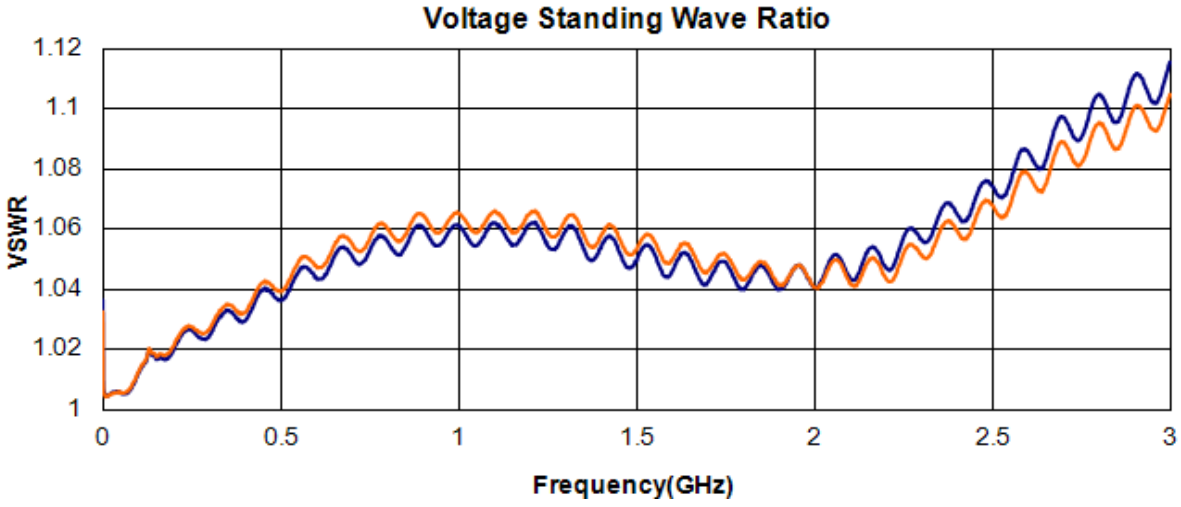
Series: ADP7
Description: 75Ω RF Adapter

Results Summary

ADP7-76SJ2-H4SJ2 Mating To ADP7-76SJ2-H4SP2

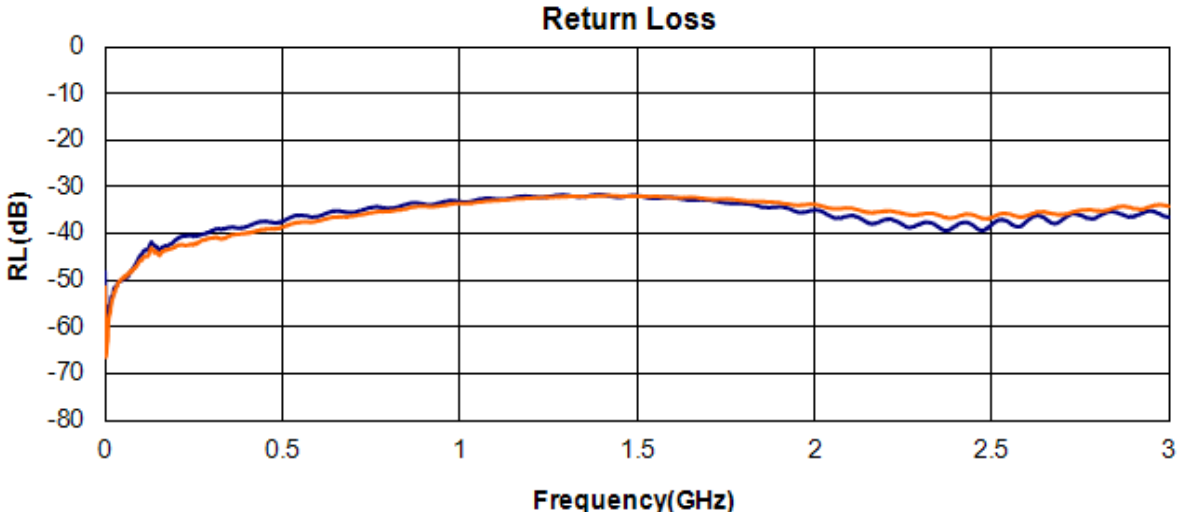


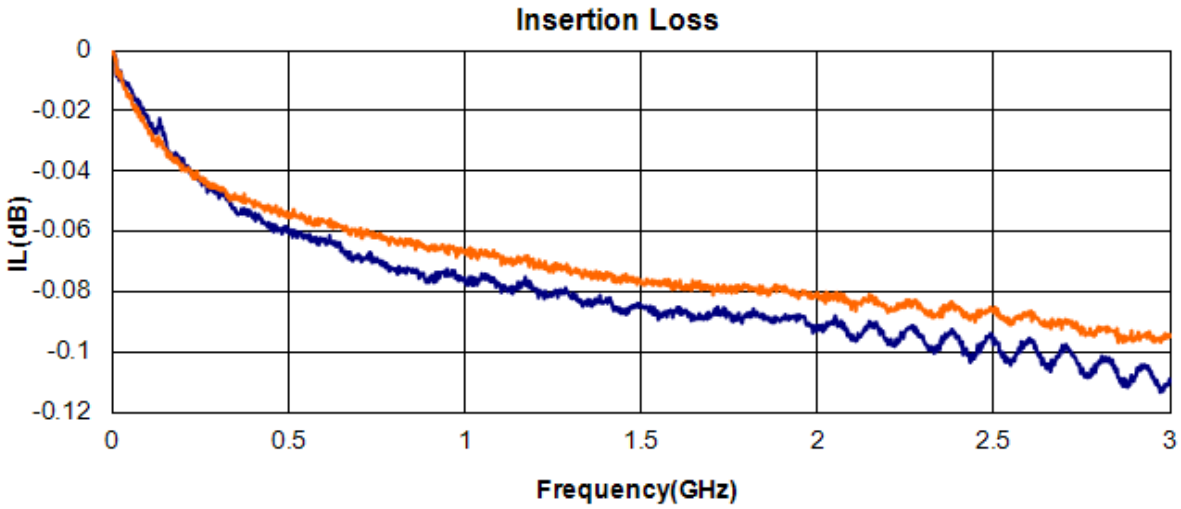


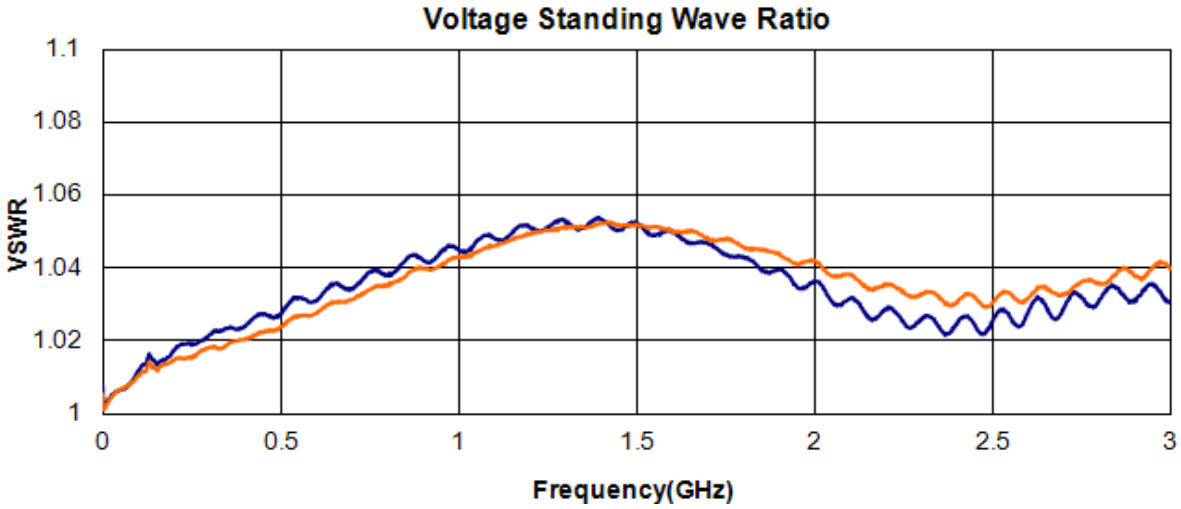


Series: ADP7
Description: 75Ω RF Adapter

ADP7-76SP2-H4SJ2 Mating To ADP7-76SP2-H4SP2

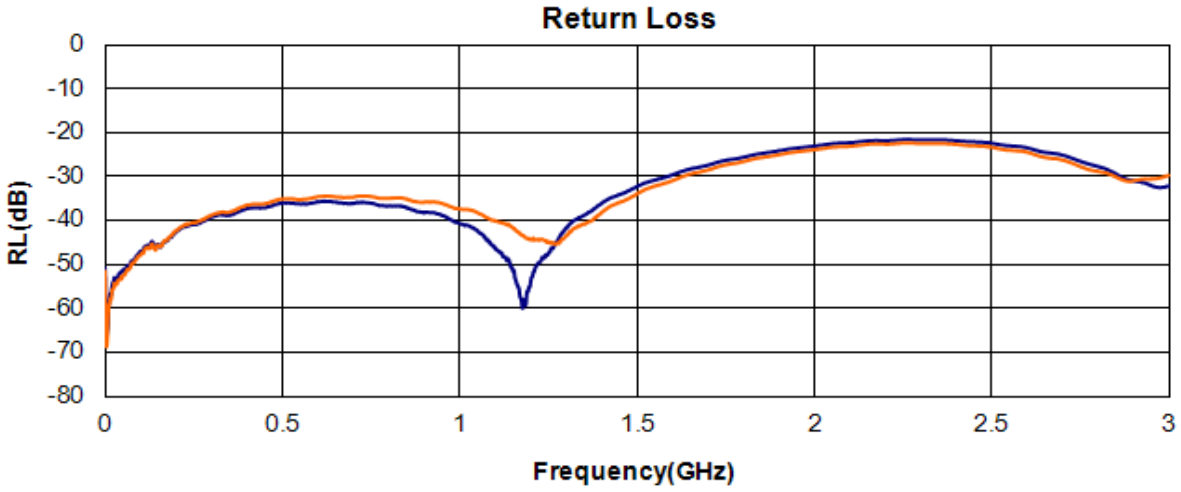


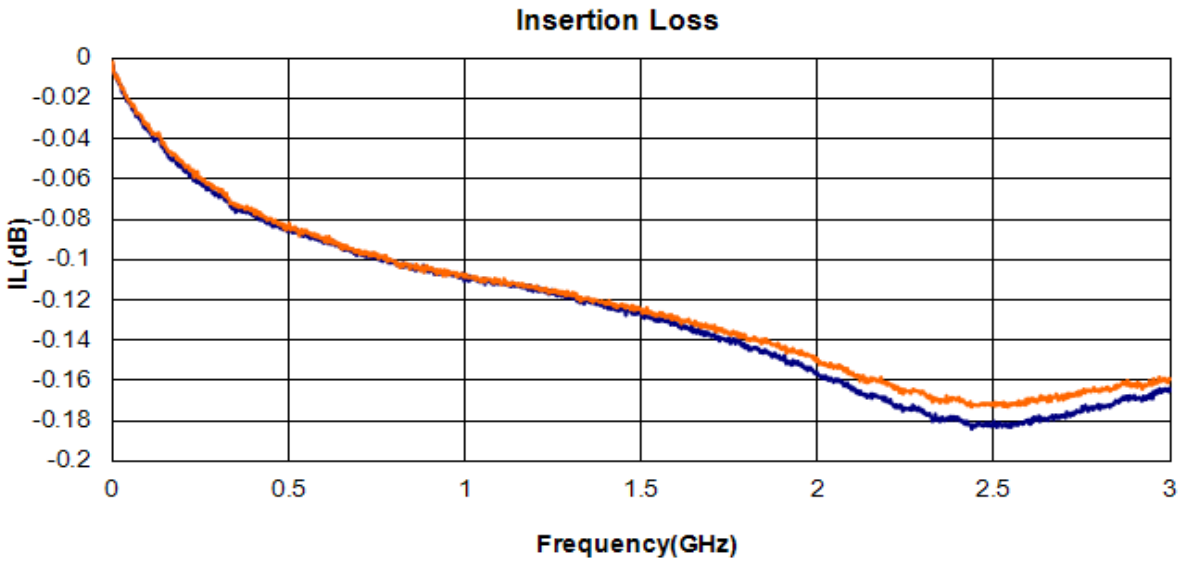


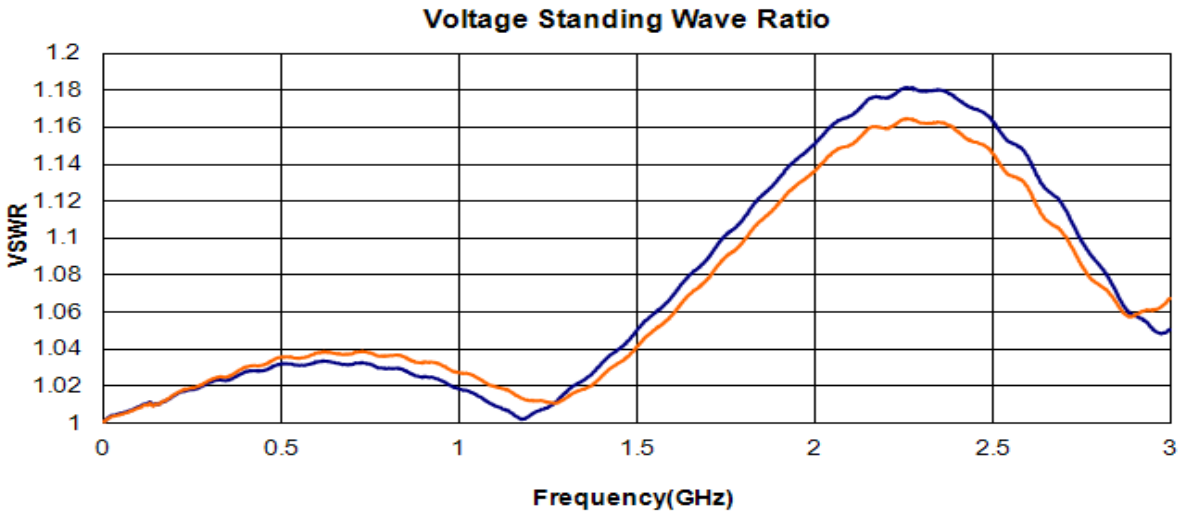


Series: ADP7
Description: 75Ω RF Adapter

ADP7-04SP2-H4SJ2 Mating To ADP7-04SJ2-H4SP2

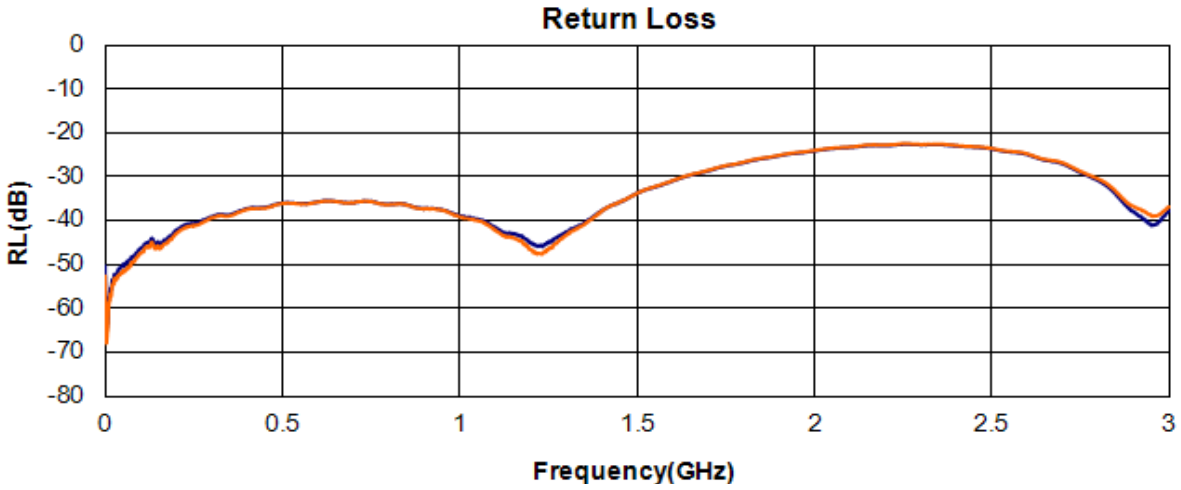


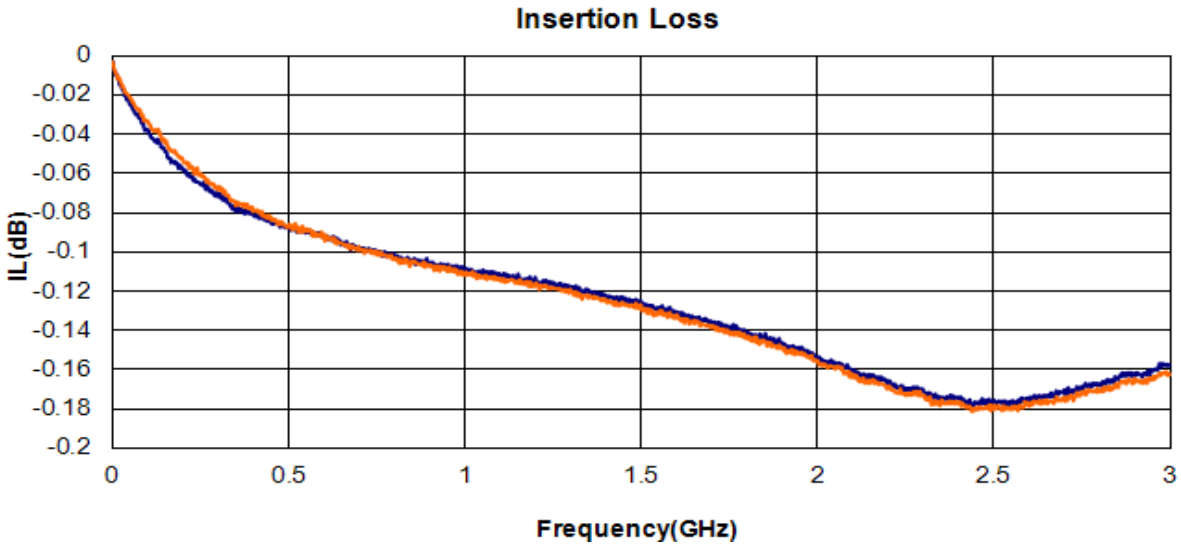


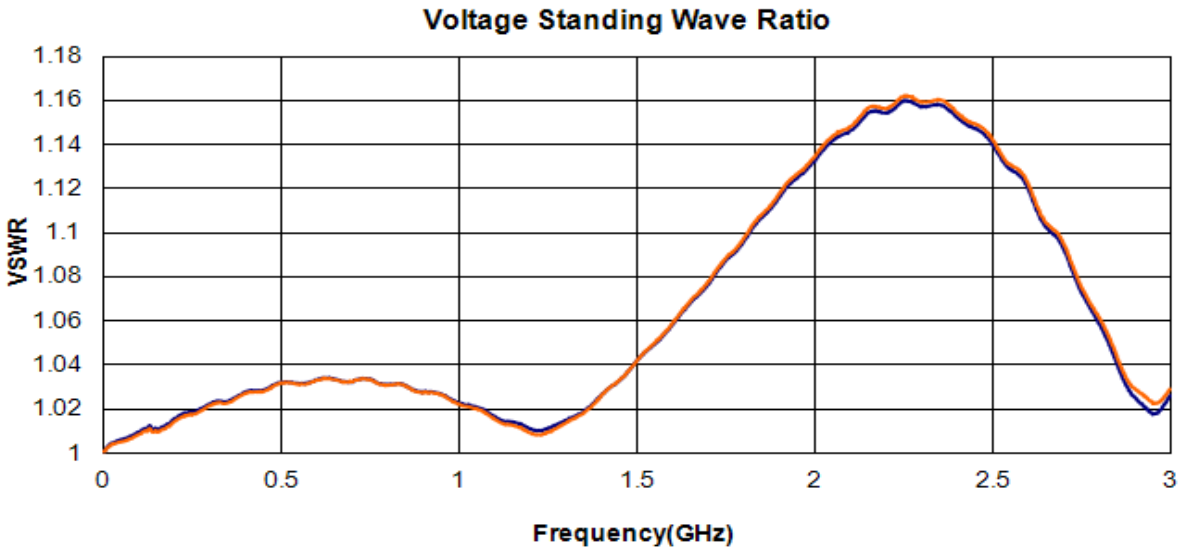


Series: ADP7
Description: 75Ω RF Adapter

ADP7-04SP2-H4SP2 Mating To ADP7-04SJ2-H4SJ2

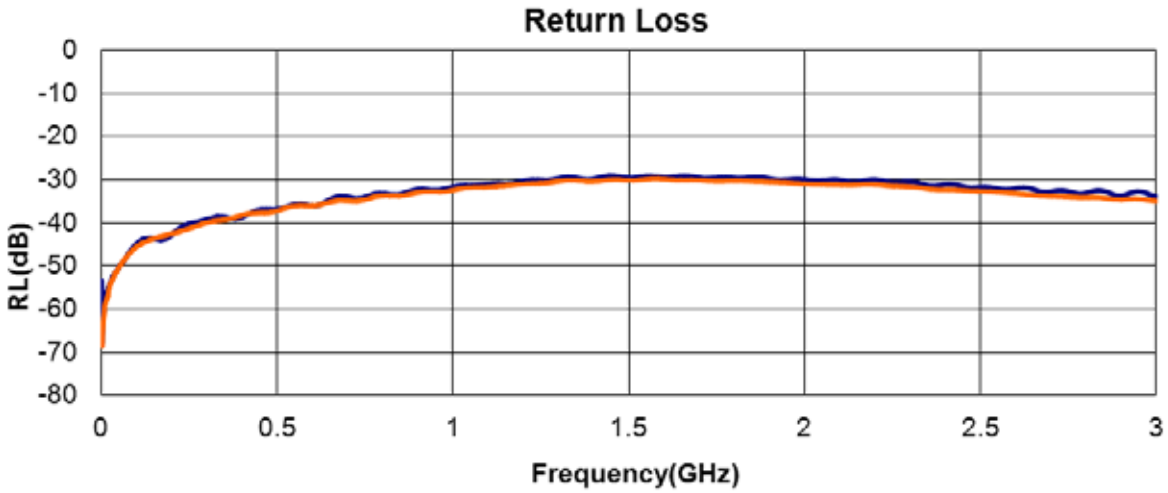


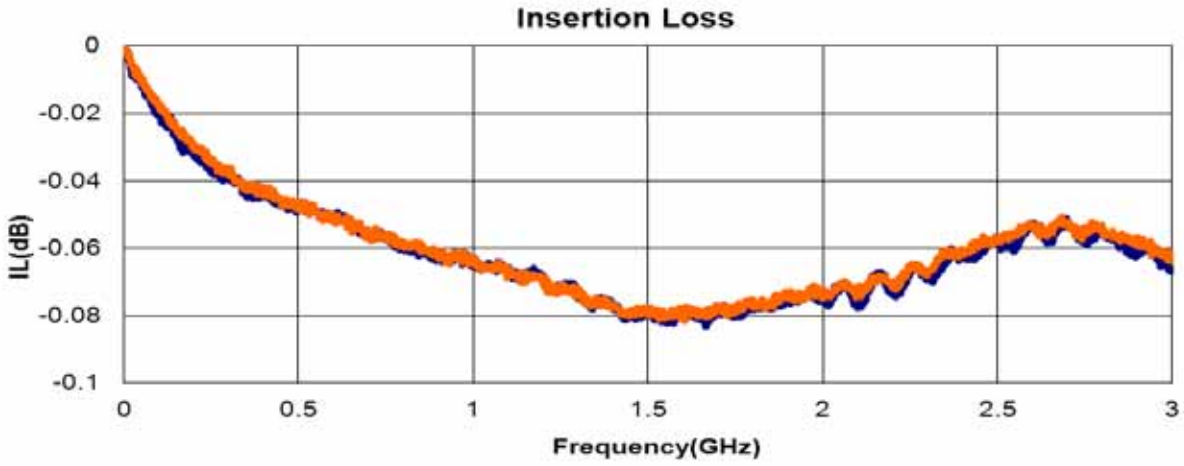


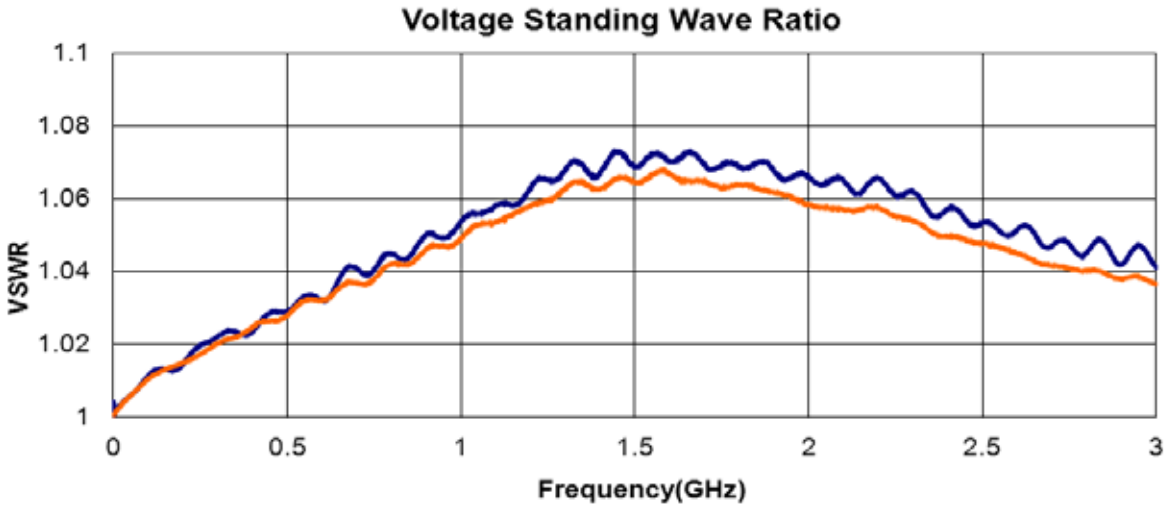


Series: ADP7
Description: 75Ω RF Adapter

ADP7-76SJ2-73SP1 Mating To ADP7-76SP2-73SJ1

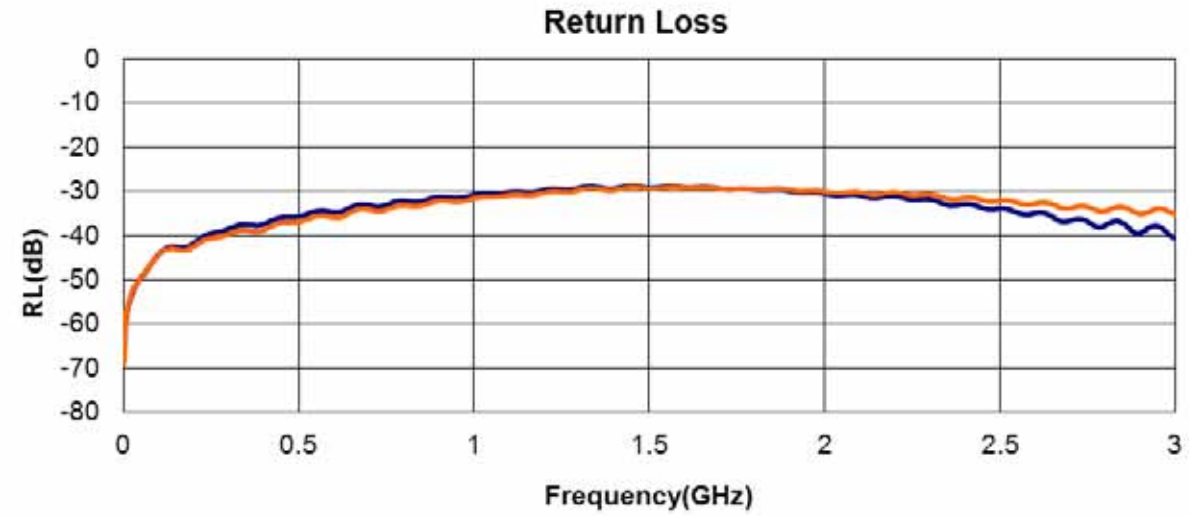


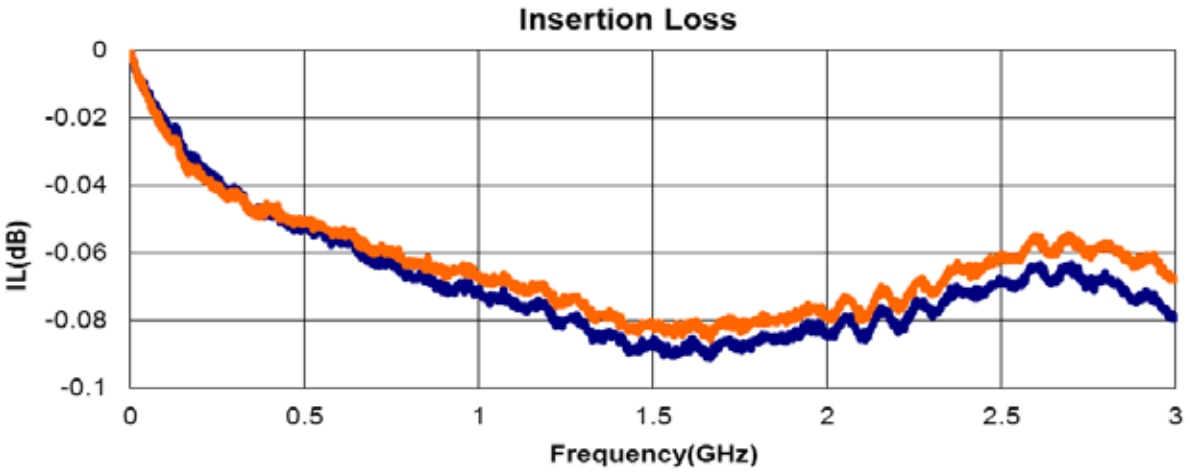


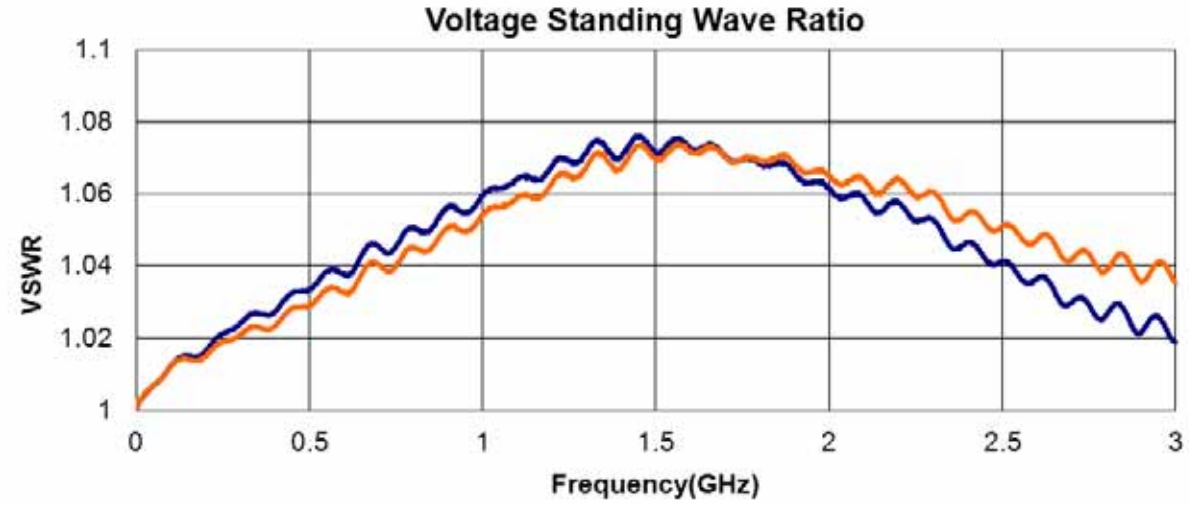


Series: ADP7
Description: 75Ω RF Adapter

ADP7-76SJ2-73SJ1 Mating To ADP7-76SP2-73SP1

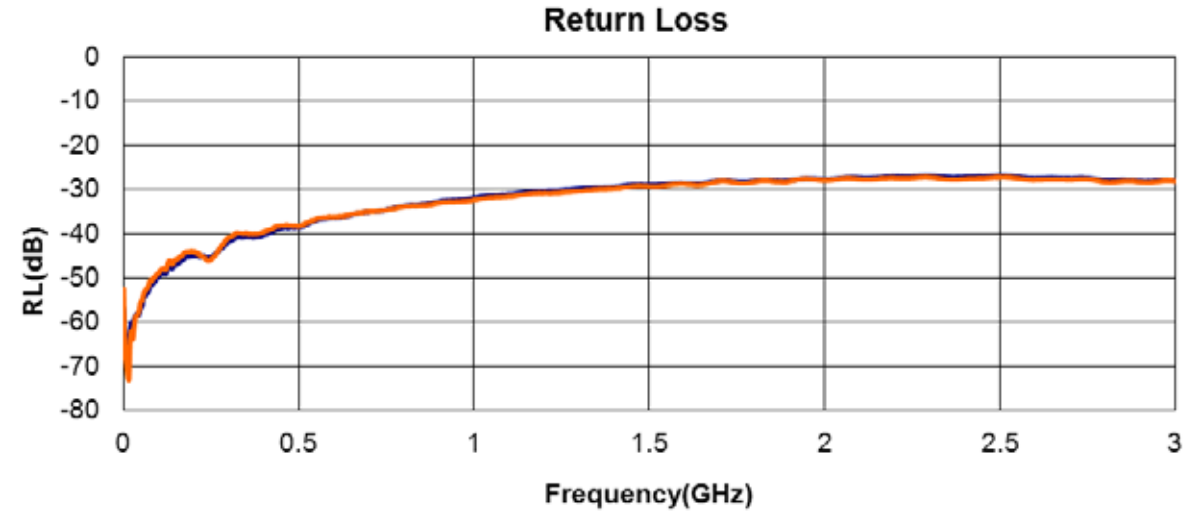


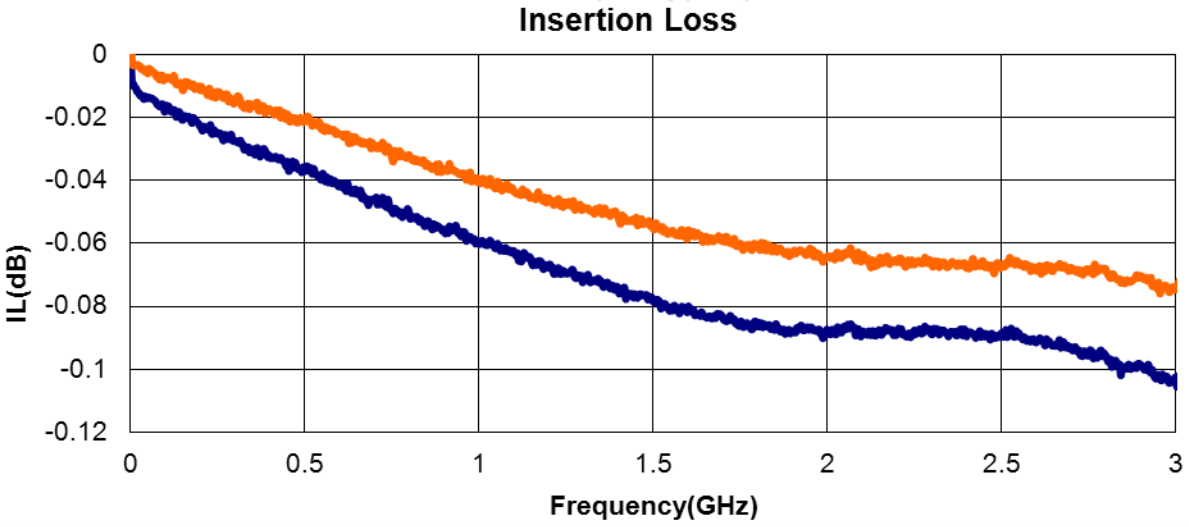


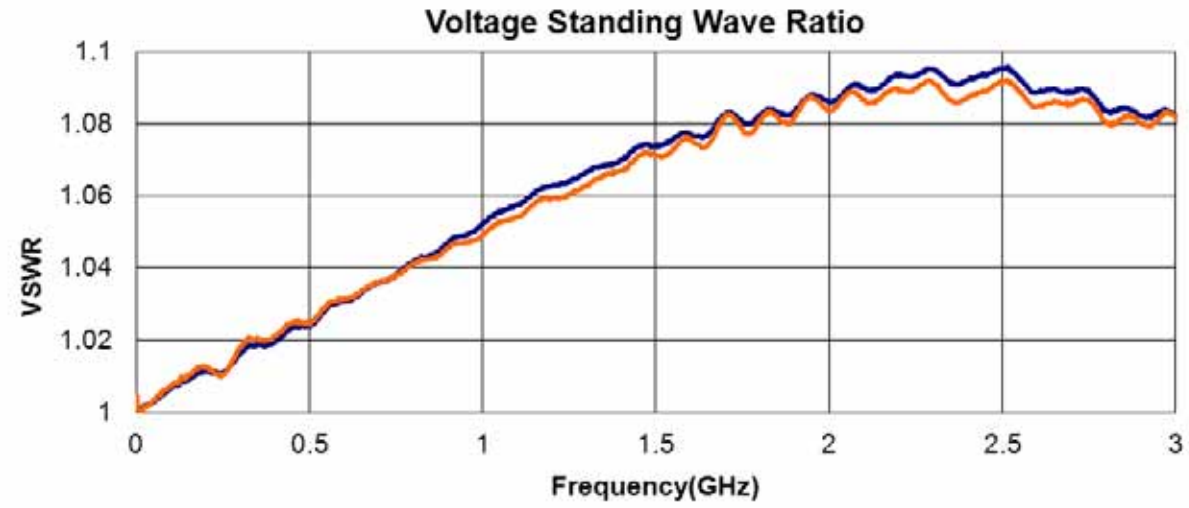


Series: ADP7
Description: 75Ω RF Adapter

ADP7-76SJ2-7VSP1 Mating To ADP7-76SJ2-7GSJ1

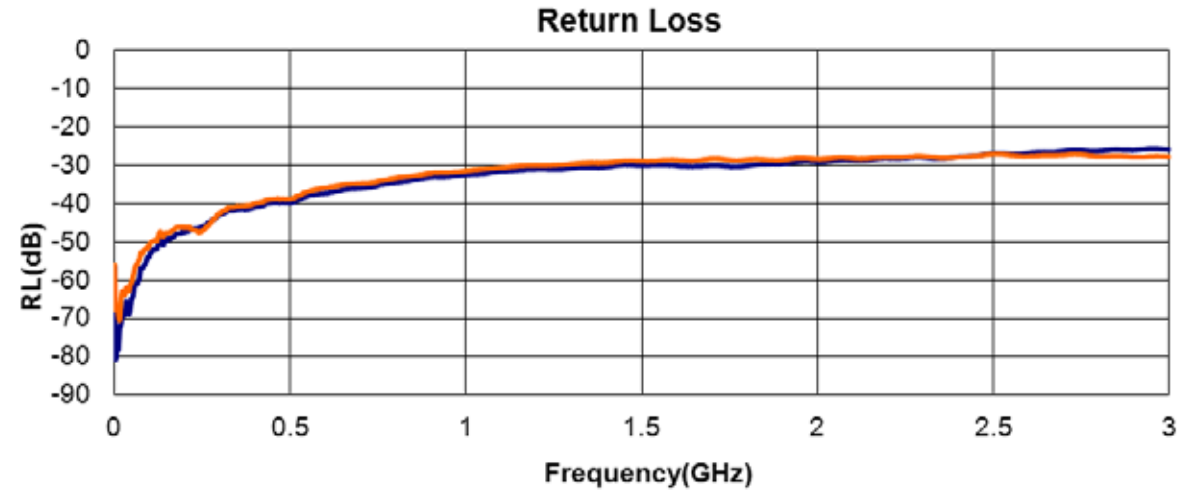


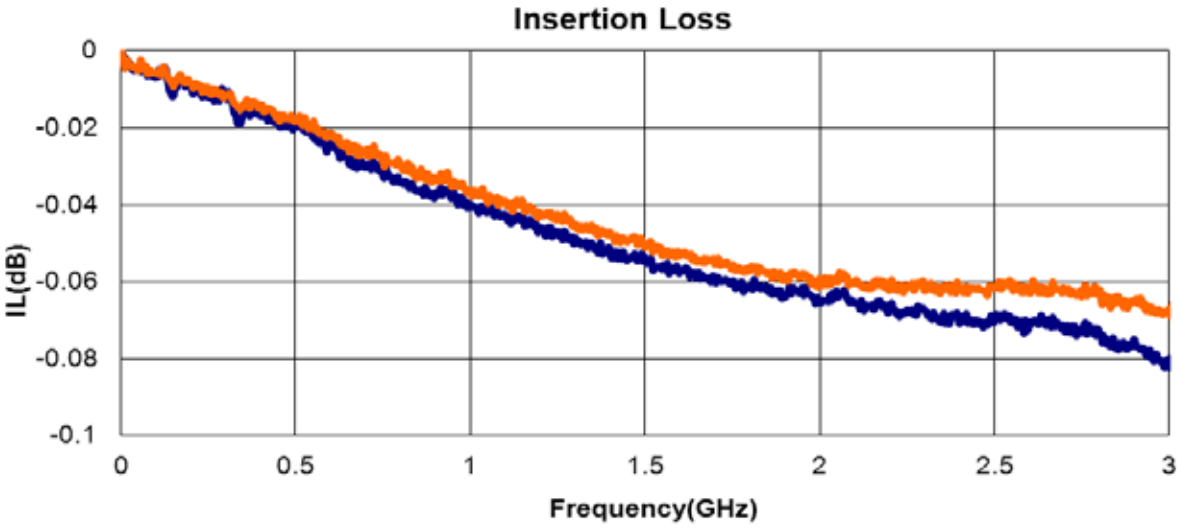


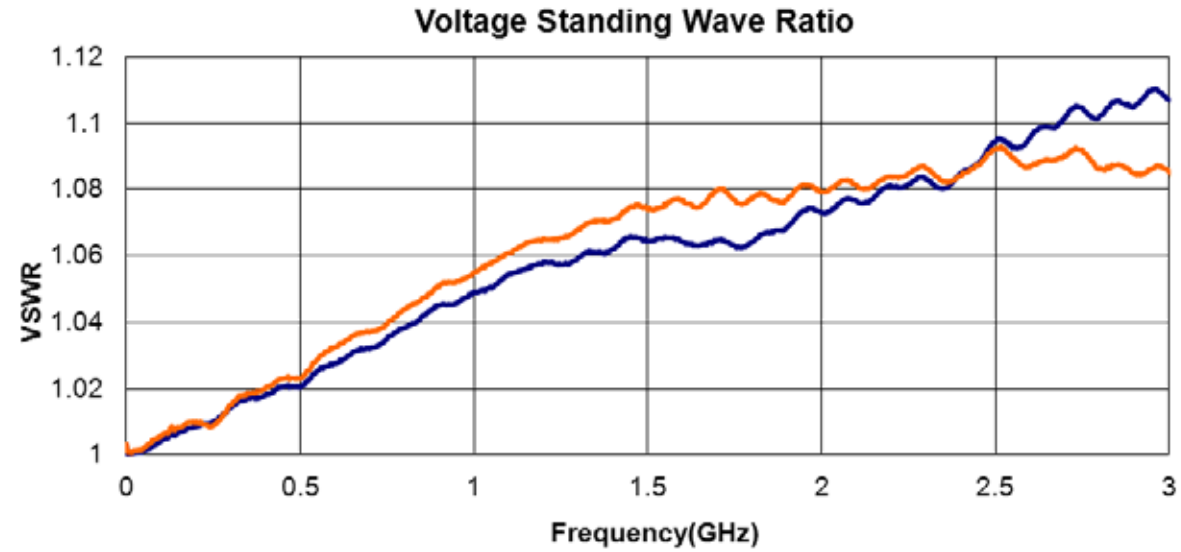


Series: ADP7
Description: 75Ω RF Adapter

ADP7-76SJ2-7VSP1 Mating To ADP7-76SJ2-7VSJ1

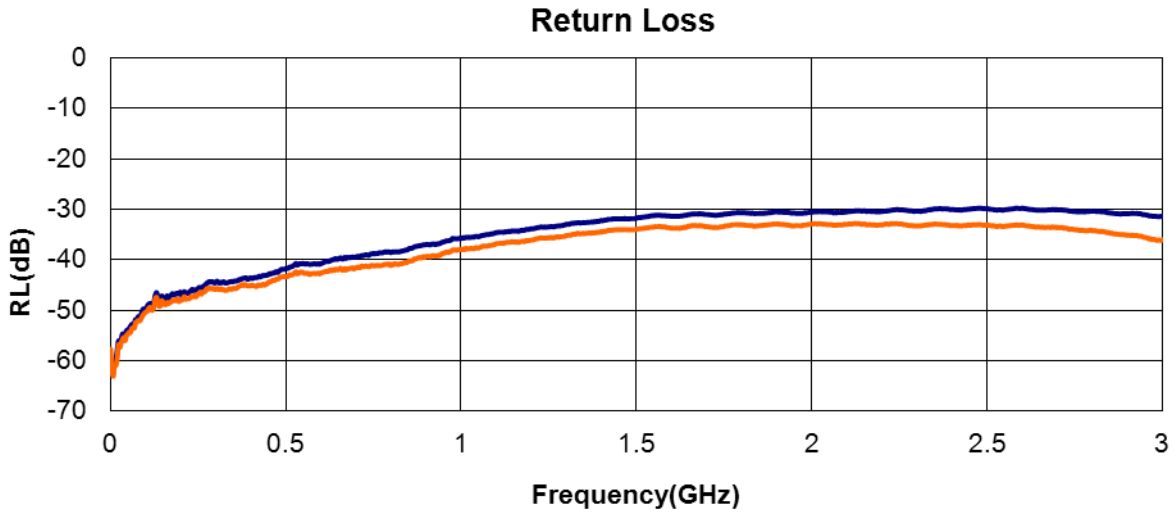


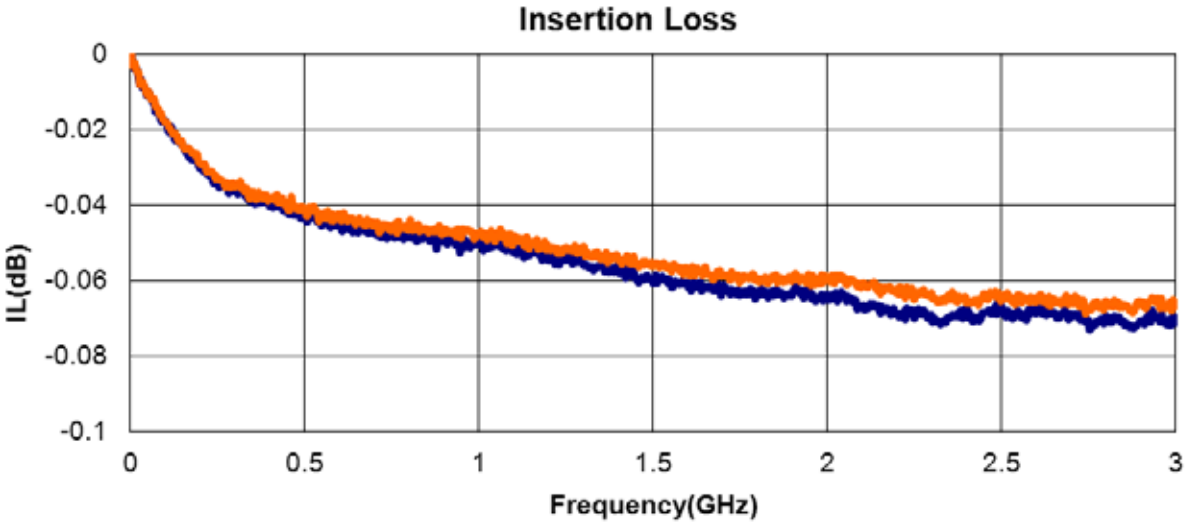


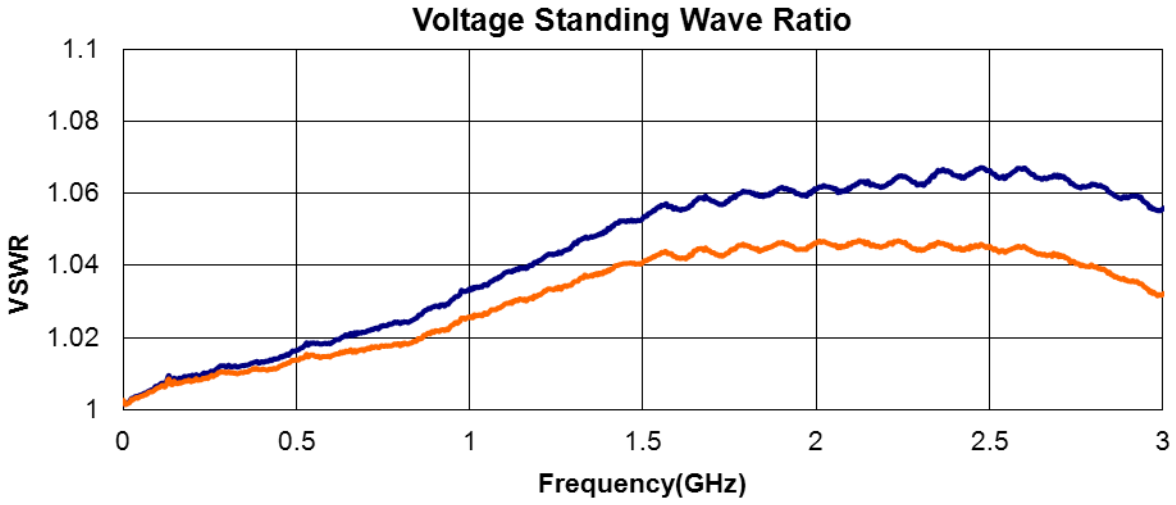


Series: ADP7
Description: 75Ω RF Adapter

ADP7-76SP2-7VSP1 Mating To ADP7-76SP2-7GSJ1

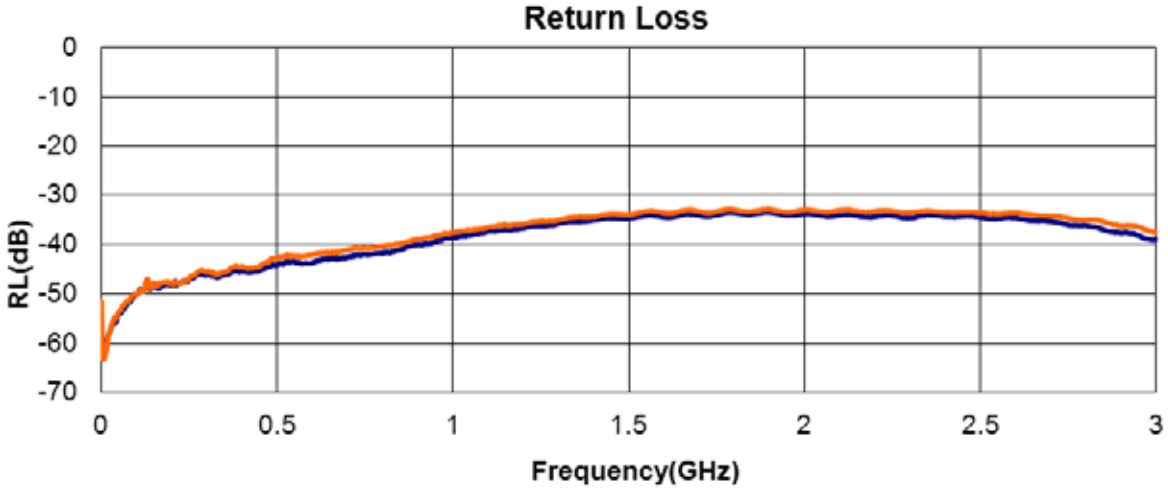


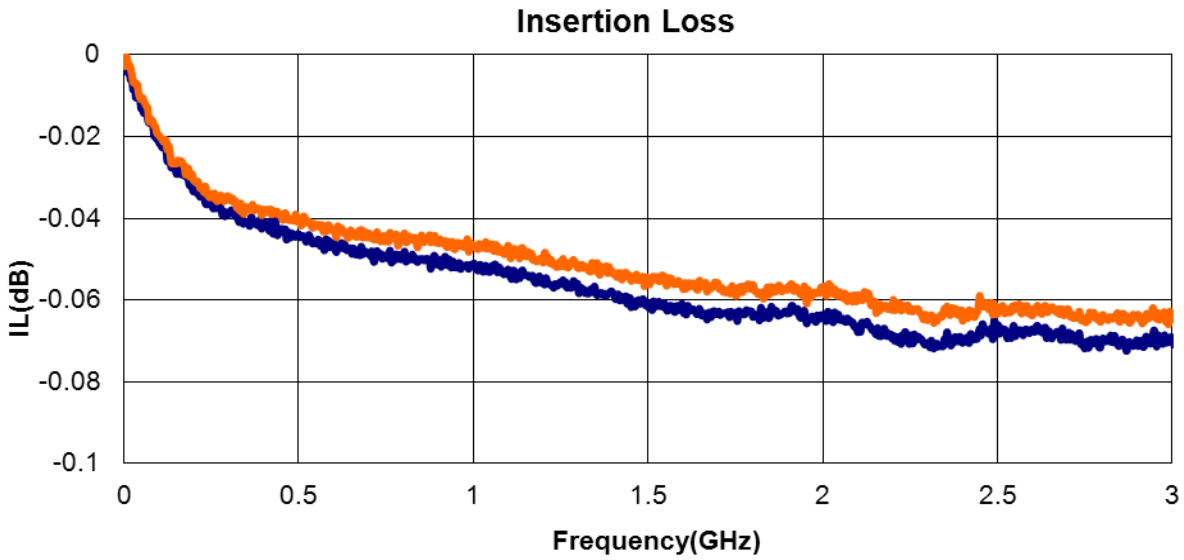


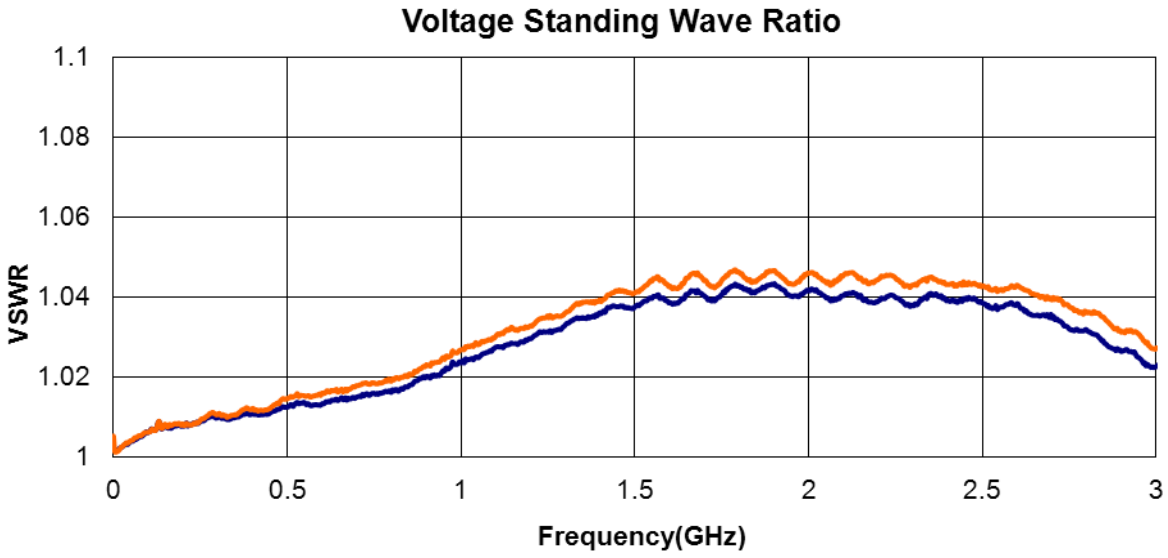


Series: ADP7
Description: 75Ω RF Adapter

ADP7-76SP2-7VSP1 Mating To ADP7-76SP2-7VSJ1







Series: ADP7
Description: 75Ω 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	85036B

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.)