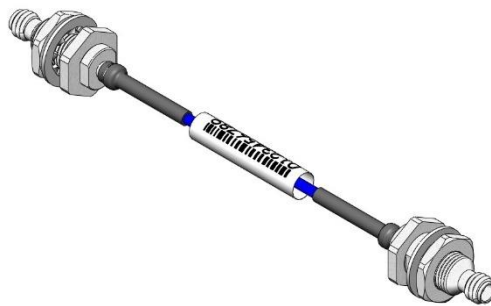




RF Characterization Report

RF047-A-10BJ-10BJ-XXXX



RF047-A-10SP-10SP-XXXX



Test Date: Jun 2023

Description:
50 Ohm, .047" RF Millimeter Wave Cable Assembly,
1.0mm End Options

Series: RF047-A

Description: 50 Ohm, .047" RF Millimeter Wave Cable Assembly, 1.0mm End Options

Table of Contents

Test Setup Information	1
Scope:	1
Instrument Setup & Test Accessories:.....	1
Calibration Type:.....	1
Adapter Use:.....	1
RF047-A-10XX-10XX-XXXX Test Definition	2
Cable Under Test:.....	2
Results: RF047-A-10BJ-10BJ-0152.....	3
VSWR	3
Return Loss.....	4
Insertion Loss.....	4
Results: RF047-A-10BJ-10BJ-1000.....	5
VSWR	5
Return Loss.....	6
Insertion Loss.....	6
Results: RF047-A-10SP-10SP-0152	7
VSWR	7
Return Loss.....	8
Insertion Loss.....	8
Results: RF047-A-10SP-10SP-1000	9
VSWR	9
Return Loss.....	10
Insertion Loss.....	10

Series: RF047-A

Description: 50 Ohm, .047" RF Millimeter Wave Cable Assembly, 1.0mm End Options

Test Setup Information

Scope:

Provide standing wave ratio, return loss and insertion loss performance parameters for RF047-A high frequency RF cable assembly with 1.0mm connector end options.

Instrument Setup & Test Accessories:

Network Analyzer	Keysight PNA N5227B
Averaging Factor	1
Smoothing	Off
IF Bandwidth	1 KHz
Sweep Start	10 MHz
Sweep End	110 GHz
Points	11000
Test Cables	Keysight N5293AX01 (110GHz Extenders)

Calibration Type:

A Keysight mechanical calibration is performed for N5227B using the Keysight 1.0mm MCAL 85059B.

Calibration Kit	Keysight MCAL 85059B
-----------------	----------------------

Adapter Use:

Keysight 1.0 mm to 1.0 mm adapter were used, but the adapters effect was removed from the measurement by MCAL.

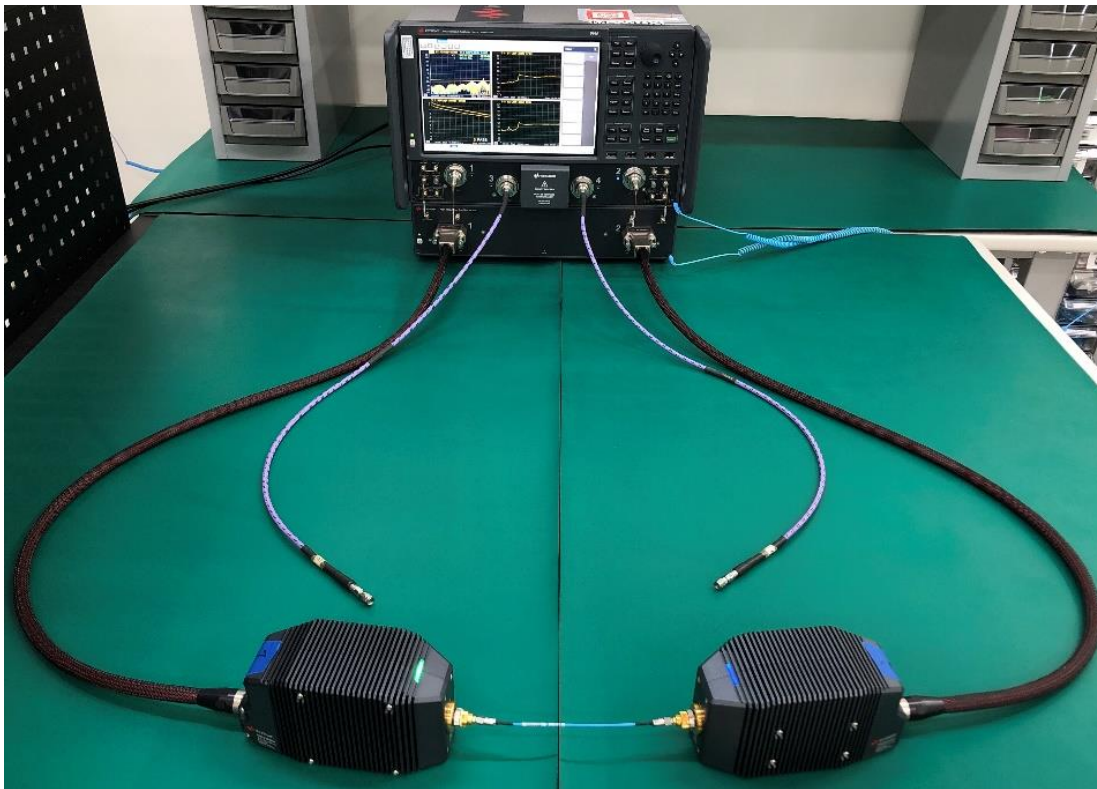
Series: RF047-A

Description: 50 Ohm, .047" RF Millimeter Wave Cable Assembly, 1.0mm End Options

RF047-A-10XX-10XX-XXXX Test Definition

Part Number	End 1	End 2
RF047-A-10BJ-10BJ-0152	1.00mm Bulkhead Straight Jack	1.00mm Bulkhead Straight Jack
RF047-A-10BJ-10BJ-1000	1.00mm Bulkhead Straight Jack	1.00mm Bulkhead Straight Jack
RF047-A-10SP-10SP-0152	1.00mm Straight Plug	1.00mm Straight Plug
RF047-A-10SP-10SP-1000	1.00mm Straight Plug	1.00mm Straight Plug

Cable Under Test:



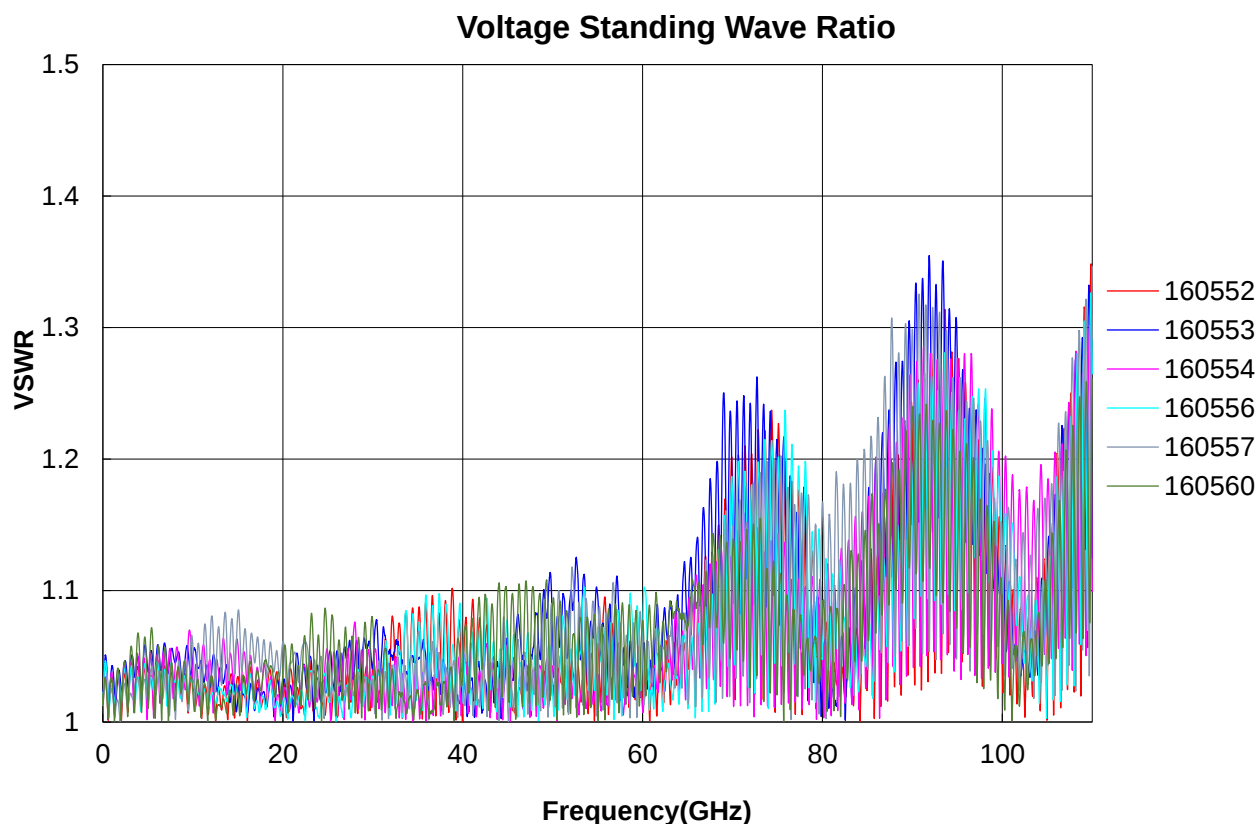
Series: RF047-A

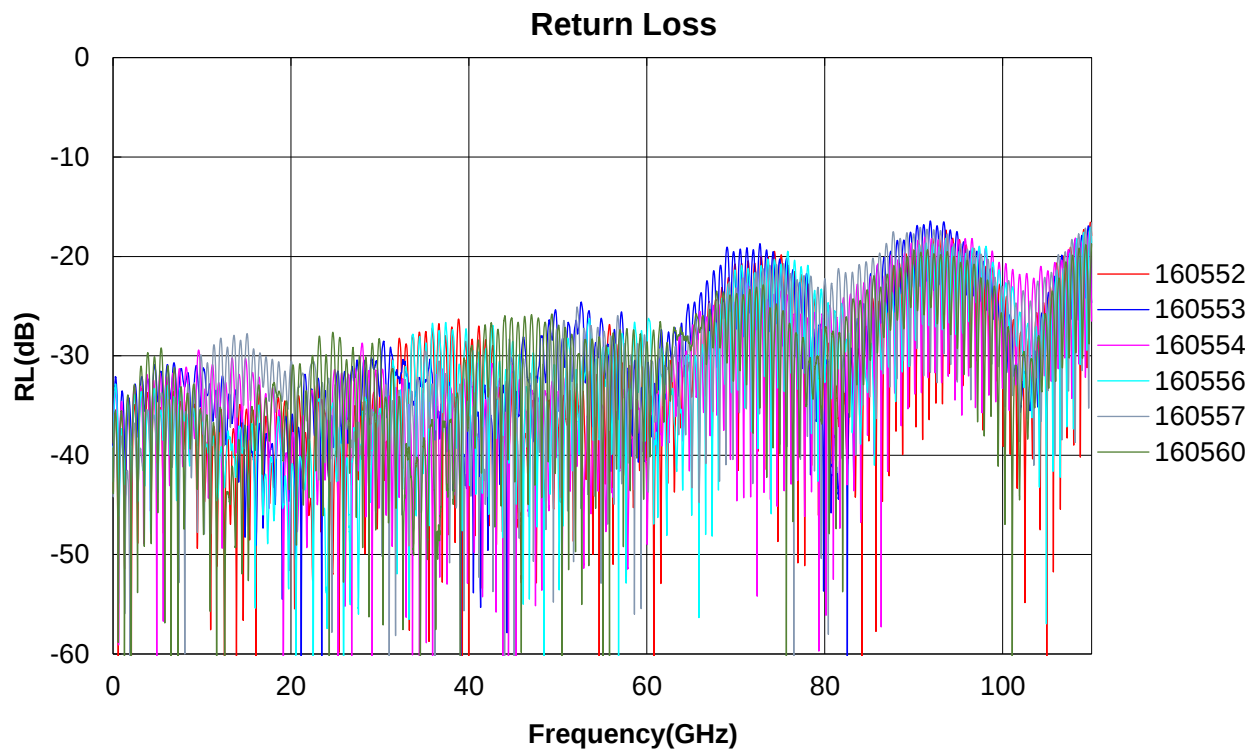
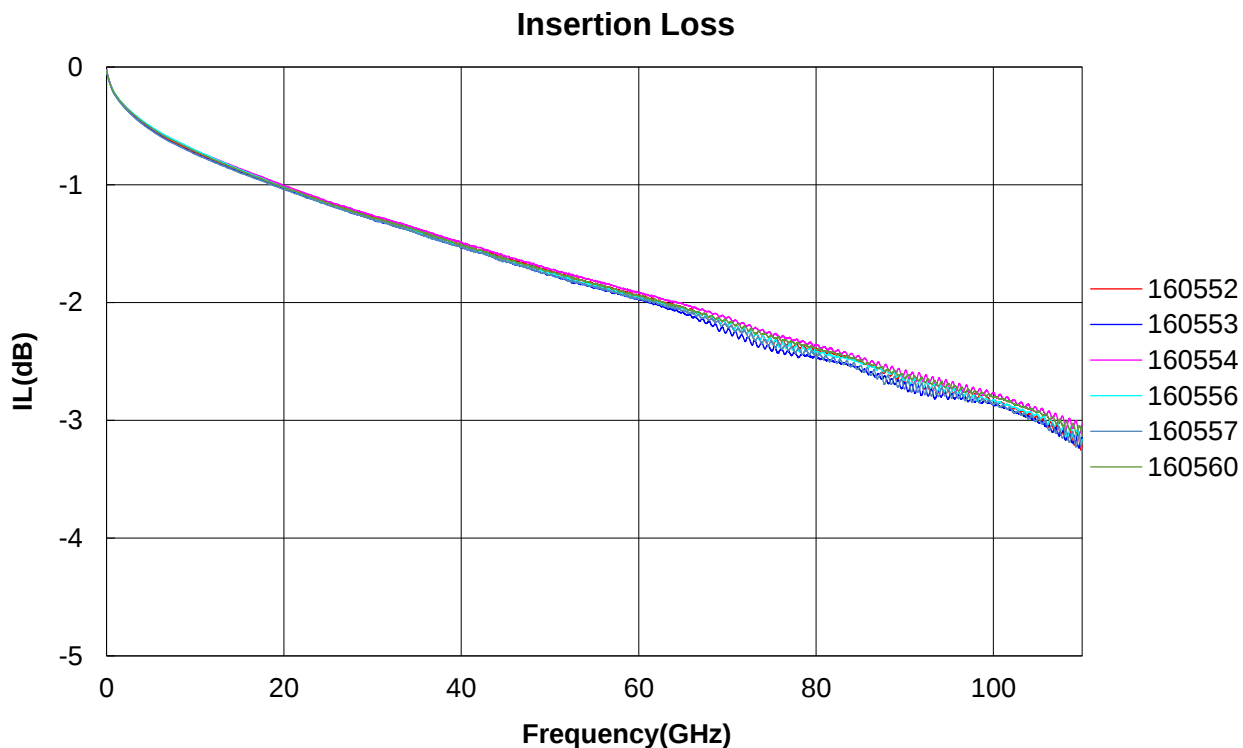
Description: 50 Ohm, .047" RF Millimeter Wave Cable Assembly, 1.0mm End Options

Results: RF047-A-10BJ-10BJ-0152

Description: RF047-A High Frequency RF Cable Assembly			
Sample	VSWR(max)	RL (dB, max)	IL(dB, min)
160552	1.35@109.86GHz	-16.57@109.86GHz	-3.25@109.89GHz
160553	1.35@91.88GHz	-16.44@91.88GHz	-3.24@109.62GHz
160554	1.30@109.70GHz	-17.65@109.70GHz	-3.11@109.68GHz
160556	1.33@109.86GHz	-17.06@109.86GHz	-3.20@109.84GHz
160557	1.35@110.00GHz	-16.61@110.00GHz	-3.27@110.00GHz
160560	1.26@110.00GHz	-18.76@110.00GHz	-3.13@110.00GHz

VSWR



Series: RF047-A**Description:** 50 Ohm, .047" RF Millimeter Wave Cable Assembly, 1.0mm End OptionsReturn LossInsertion Loss

Series: RF047-A

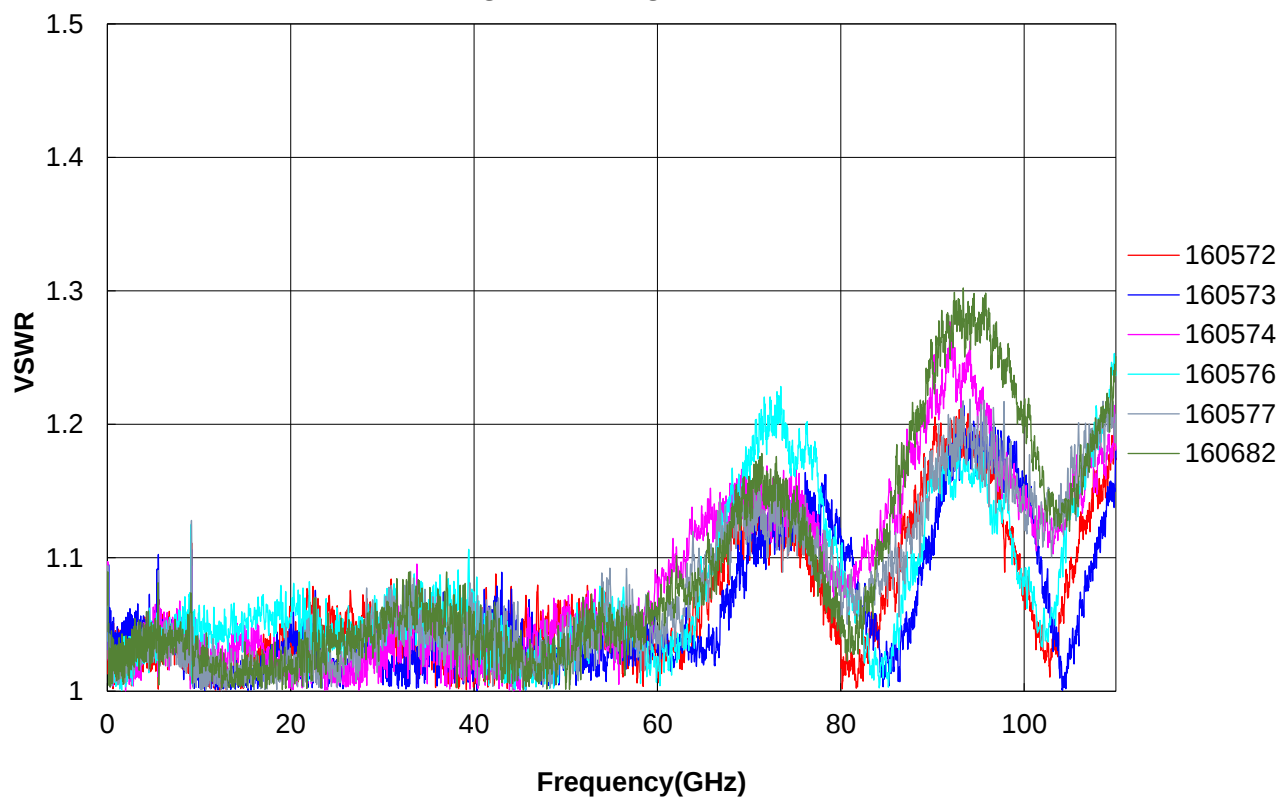
Description: 50 Ohm, .047" RF Millimeter Wave Cable Assembly, 1.0mm End Options

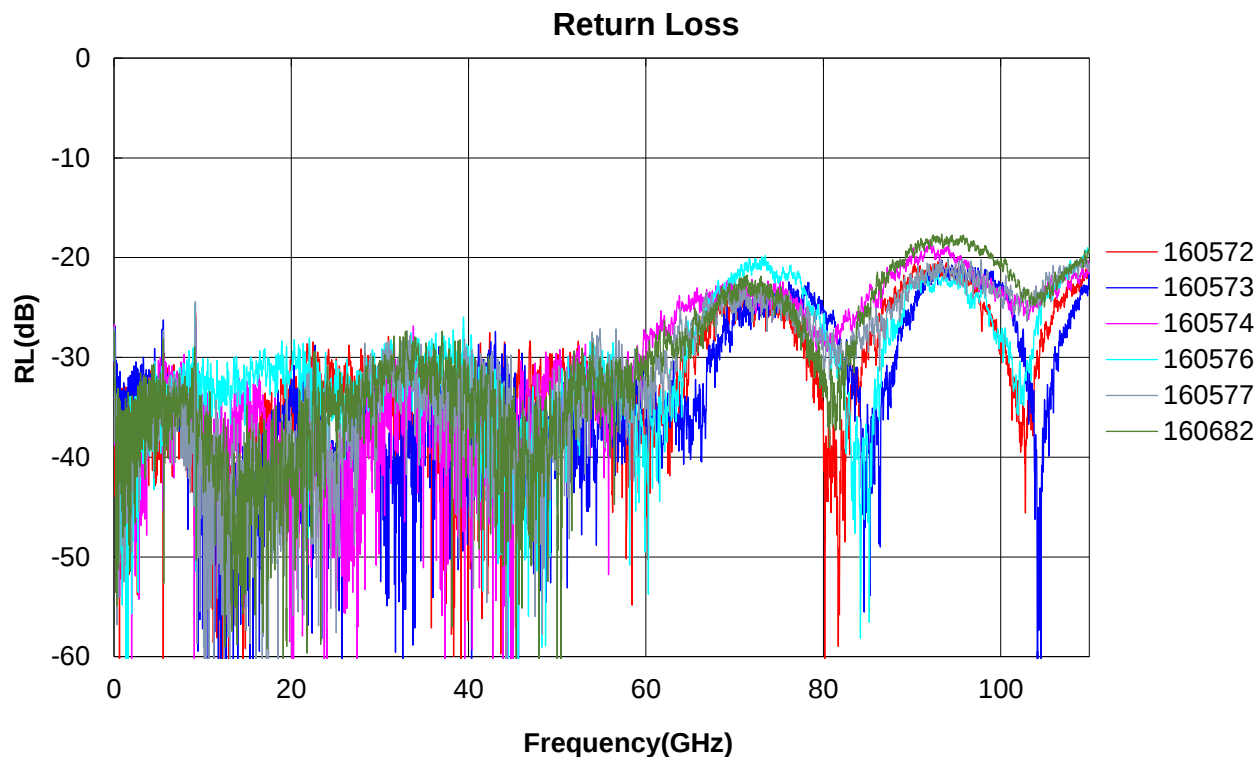
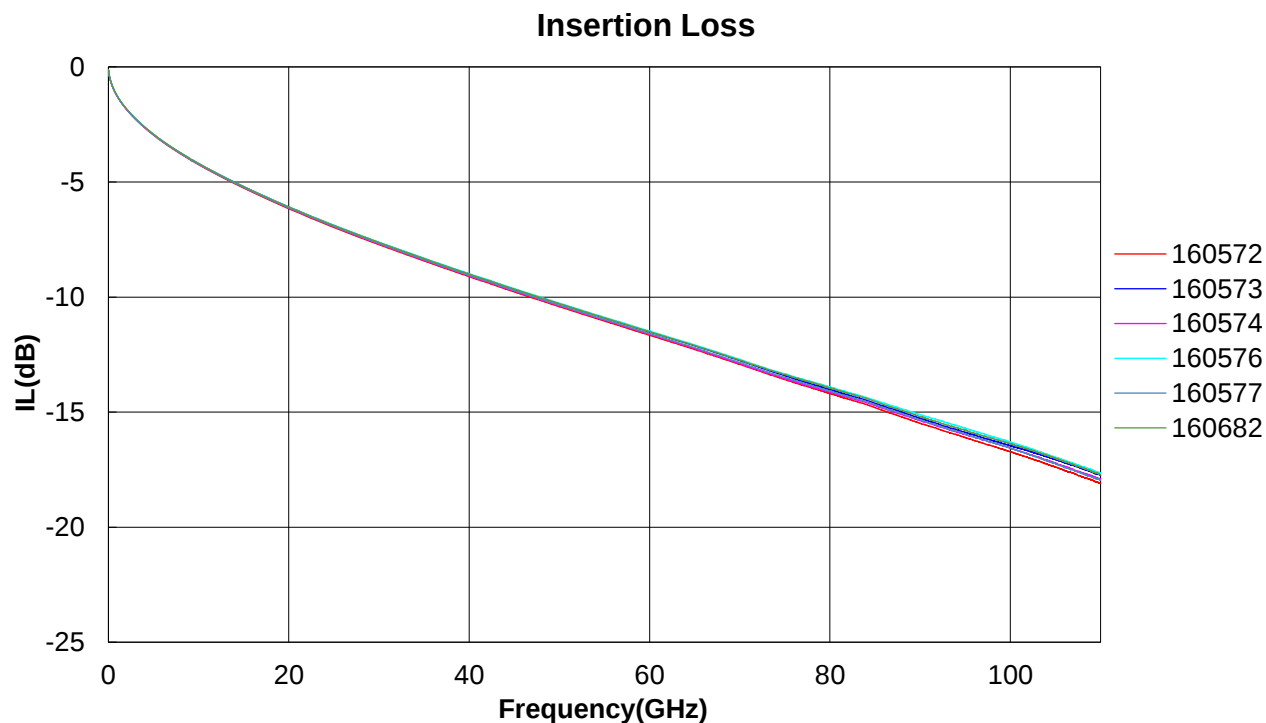
Results: RF047-A-10BJ-10BJ-1000

Description: RF047-A High Frequency RF Cable Assembly			
Sample	VSWR(max)	RL (dB, max)	IL(dB, min)
160572	1.21@92.92GHz	-20.41@92.92GHz	-18.10@109.90GHz
160573	1.21@93.41GHz	-20.29@93.41GHz	-17.76@109.96GHz
160574	1.28@91.89GHz	-18.30@91.89GHz	-17.91@110.00GHz
160576	1.25@109.83GHz	-18.99@109.83GHz	-17.65@109.97GHz
160577	1.22@109.44GHz	-20.01@109.44GHz	-17.96@110.00GHz
160682	1.30@93.36GHz	-17.64@93.36GHz	-17.73@110.00GHz

VSWR

Voltage Standing Wave Ratio



Series: RF047-A**Description:** 50 Ohm, .047" RF Millimeter Wave Cable Assembly, 1.0mm End OptionsReturn LossInsertion Loss

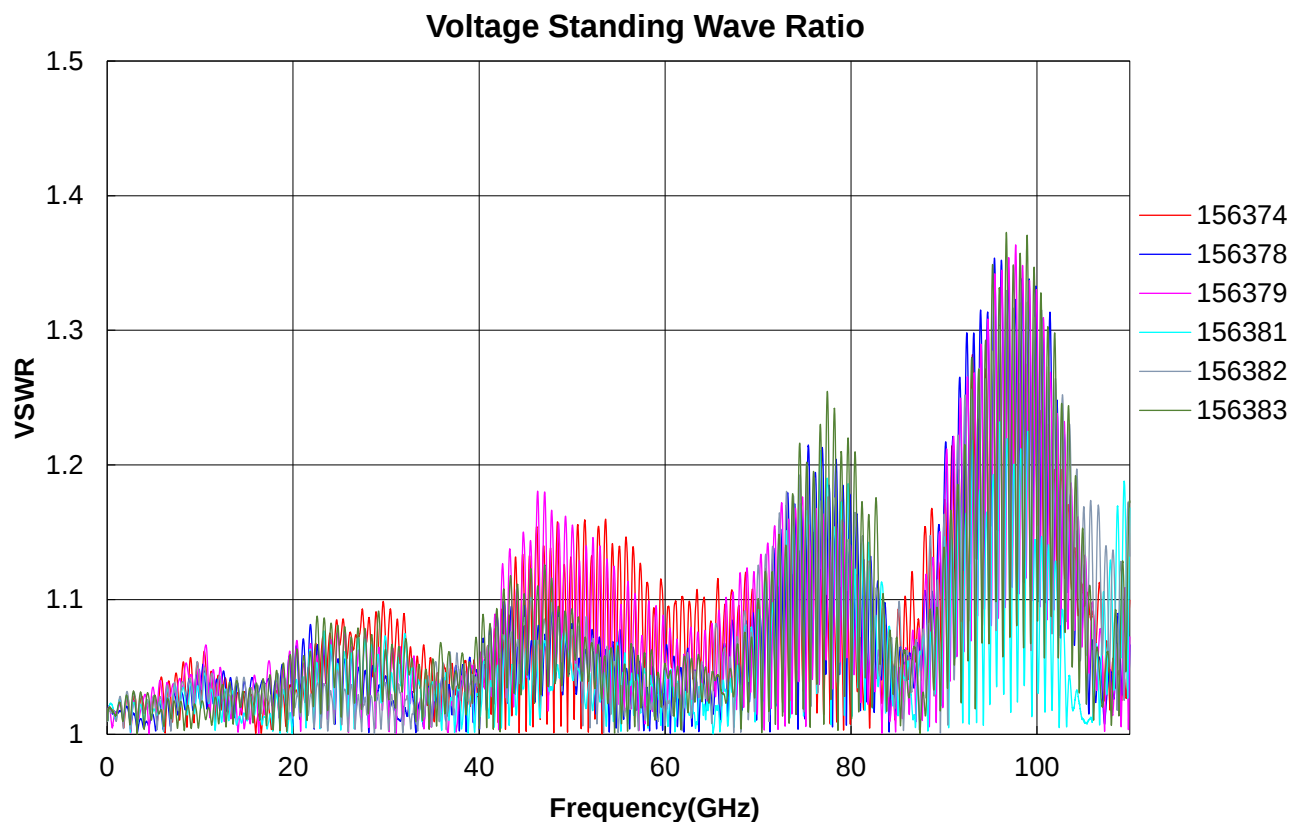
Series: RF047-A

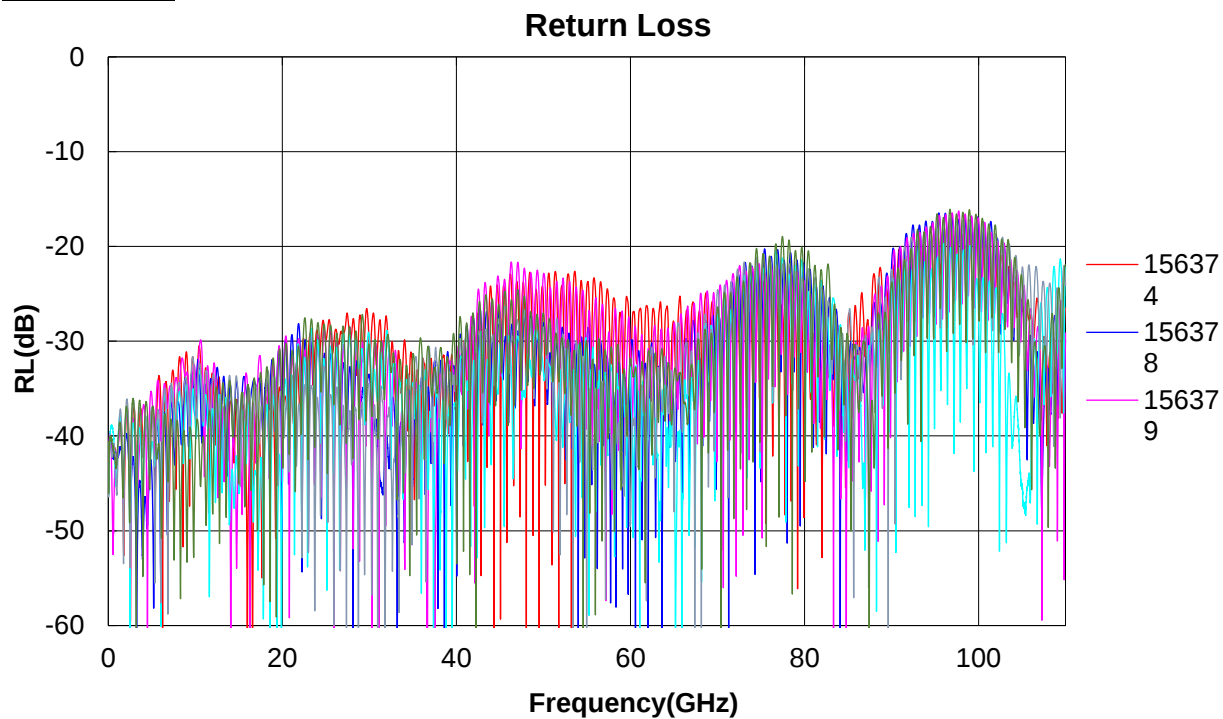
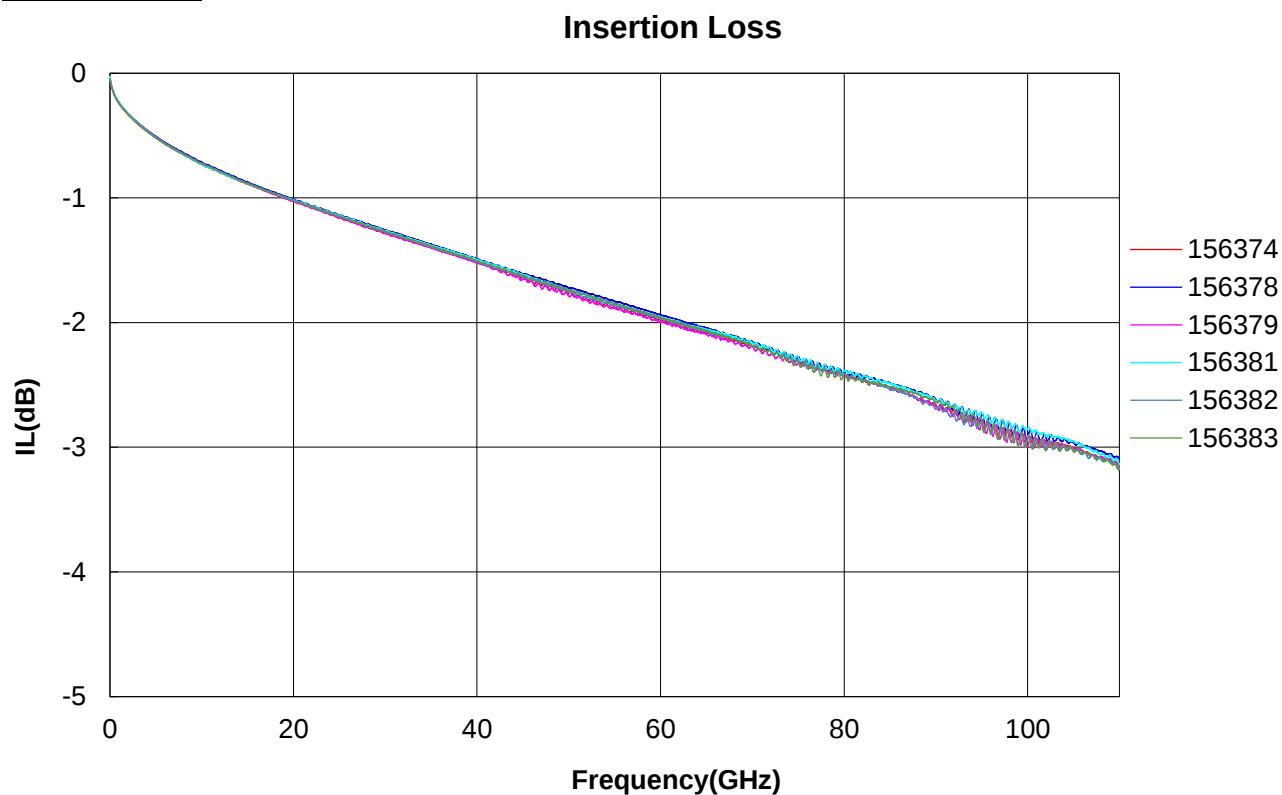
Description: 50 Ohm, .047" RF Millimeter Wave Cable Assembly, 1.0mm End Options

Results: RF047-A-10SP-10SP-0152

Description: RF047-A High Frequency RF Cable Assembly			
Sample	VSWR(max)	RL (dB, max)	IL(dB, min)
156374	1.32@99.75GHz	-17.30@99.75GHz	-3.15@109.99GHz
156378	1.35@95.44GHz	-16.46@95.44GHz	-3.10@110.00GHz
156379	1.36@97.72GHz	-16.26@97.72GHz	-3.15@109.99GHz
156381	1.23@96.06GHz	-19.65@96.06GHz	-3.14@110.00GHz
156382	1.33@96.75GHz	-16.99@96.75GHz	-3.18@109.80GHz
156383	1.37@96.72GHz	-16.08@96.72GHz	-3.18@109.92GHz

VSWR



Series: RF047-A**Description:** 50 Ohm, .047" RF Millimeter Wave Cable Assembly, 1.0mm End OptionsReturn LossInsertion Loss

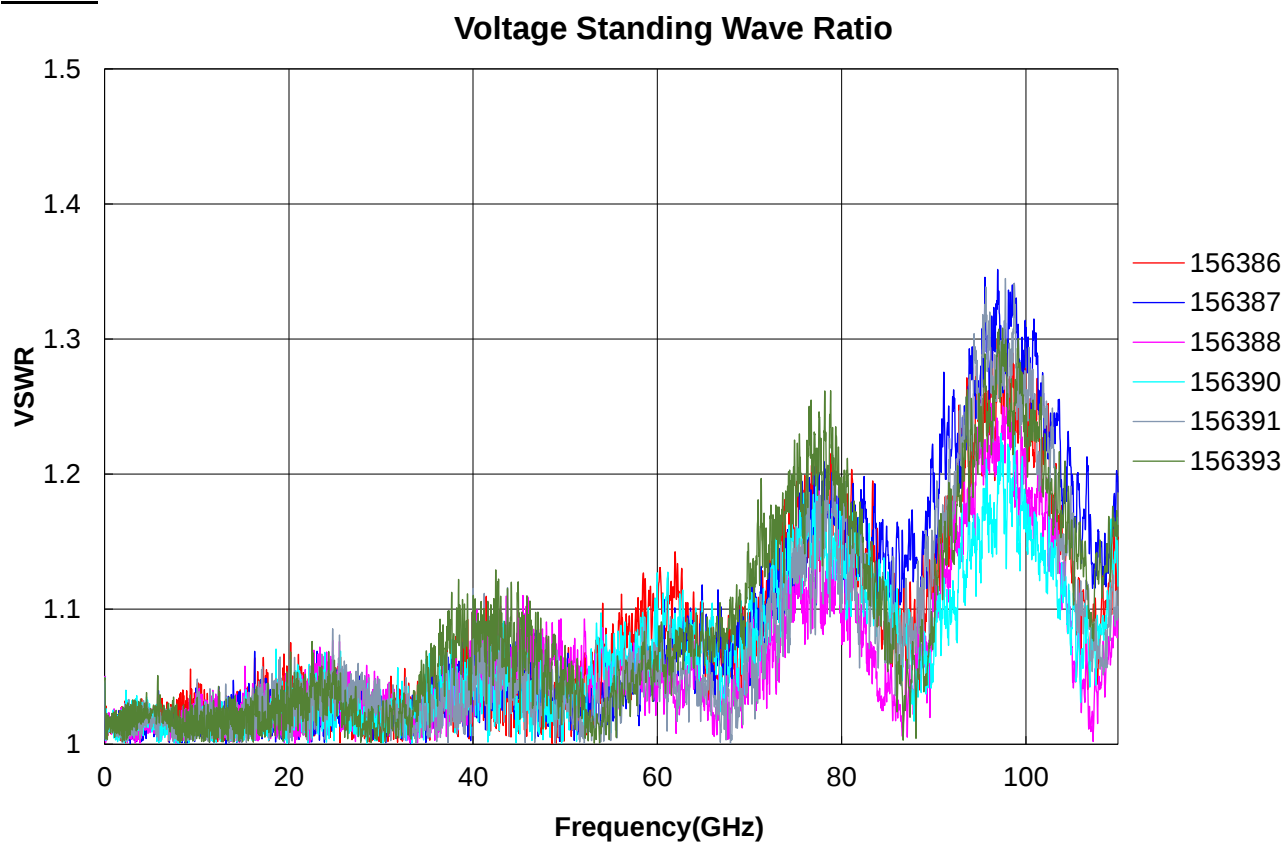
Series: RF047-A

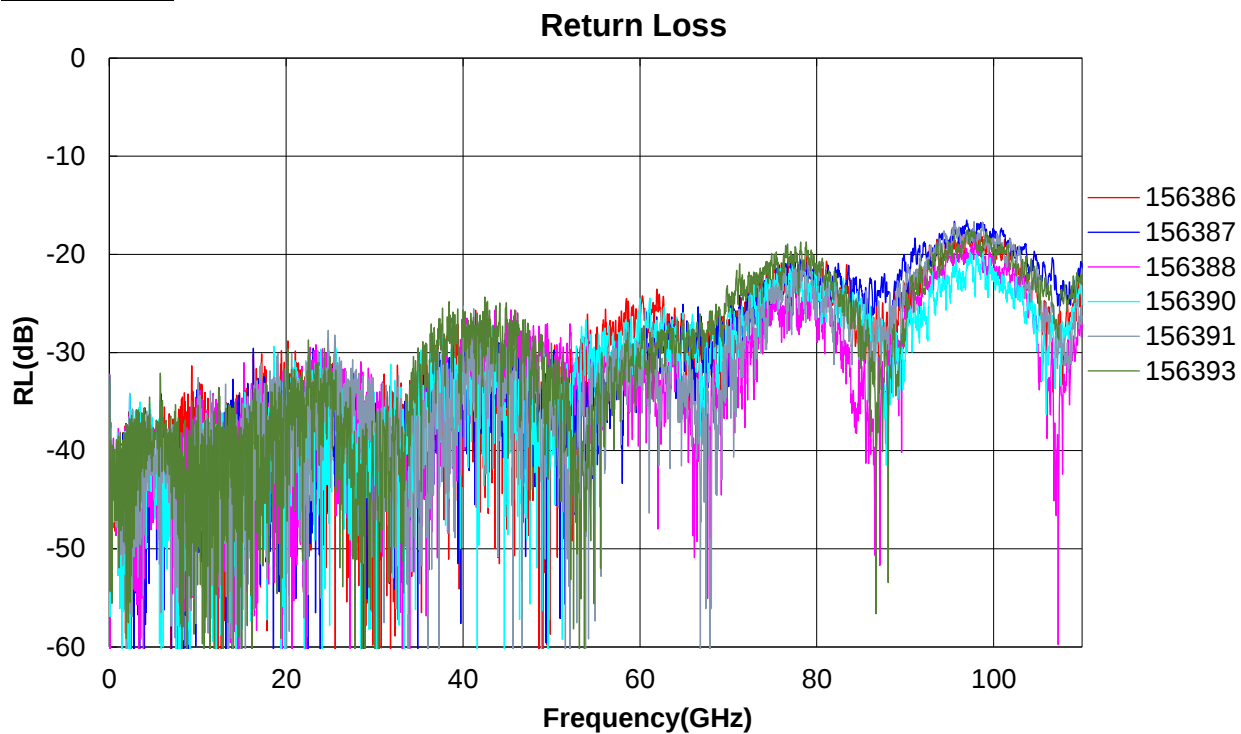
Description: 50 Ohm, .047" RF Millimeter Wave Cable Assembly, 1.0mm End Options

Results: RF047-A-10SP-10SP-1000

Description: RF047-A High Frequency RF Cable Assembly			
Sample	VSWR(max)	RL (dB, max)	IL(dB, min)
156386	1.31@97.73GHz	-17.54@97.73GHz	-17.44@109.99GHz
156387	1.35@96.95GHz	-16.51@96.95GHz	-17.88@110.00GHz
156388	1.27@97.90GHz	-18.63@97.90GHz	-17.64@110.00GHz
156390	1.23@98.78GHz	-19.68@98.78GHz	-17.64@109.90GHz
156391	1.34@97.78GHz	-16.65@97.78GHz	-17.28@110.00GHz
156393	1.31@97.48GHz	-17.49@97.48GHz	-17.86@109.86GHz

VSWR



Series: RF047-A**Description:** 50 Ohm, .047" RF Millimeter Wave Cable Assembly, 1.0mm End OptionsReturn LossInsertion Loss