



RF Characterization Report

RF180-01SP-01SP-XXXX



RF180-01SJ-01SJ-XXXX



RF180-01RP-01RP-XXXX



RF180-01BJ-01BJ-XXXX



Test Date: May and Nov 2021

Description:
50 Ohm, .178 low-loss flexible RF Microwave Cable Assembly

Series: RF180**Description:** 50 Ohm, .178 low-loss flexible RF Microwave Cable Assembly

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Series: RF180

Description: 50 Ohm, .178 low-loss flexible RF Microwave Cable Assembly

Test Setup Information

Scope:

Provide standing wave ratio, return loss and insertion loss performance parameters for RF180 RF cable assembly.

Instrument Setup & Test Accessories:

Network Analyzer	Keysight PNA N5227B
Averaging Factor	1
Smoothing	Off
IF Bandwidth	1 KHz
Sweep Start	10 MHz
Sweep End	18 GHz
Points	1800
Test Cables	Gore 0F0CACB036.0-LF(DC to 67 GHz)

Calibration Type:

A Keysight mechanical calibration is performed for N5227B using the Keysight ECAL N4694A kit.

Calibration Kit	Keysight ECAL N4694A
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Adapter Use:

1.85 mm Female to 2.92 mm Male/Female adapters were used for the measurements of RF180-01SP-01SP-XXXX, RF180-01SJ-01SJ-XXXX, RF180-01RP-01RP-XXXX and RF180-01BJ-01BJ-XXXX. The adapter effects were removed from the measurement using the PNA's Fixture Removal method.

Series: RF180**Description:** 50 Ohm, .178 low-loss flexible RF Microwave Cable Assembly**RF180-01XX-01XX-XXXX Test Definition**

Part Number	End 1	End 2
RF180-01SP-01SP-0152	SMA Straight Plug	SMA Straight Plug
RF180-01SP-01SP-1000	SMA Straight Plug	SMA Straight Plug
RF180-01SJ-01SJ-0152	SMA Jack	SMA Jack
RF180-01SJ-01SJ-1000	SMA Jack	SMA Jack
RF180-01RP-01RP-0152	SMA Right-Angle Plug	SMA Right-Angle Plug
RF180-01RP-01RP-1000	SMA Right-Angle Plug	SMA Right-Angle Plug
RF180-01BJ-01BJ-0152	SMA Jack	SMA Jack
RF180-01BJ-01BJ-1000	SMA Jack	SMA Jack

Cable Under Test:

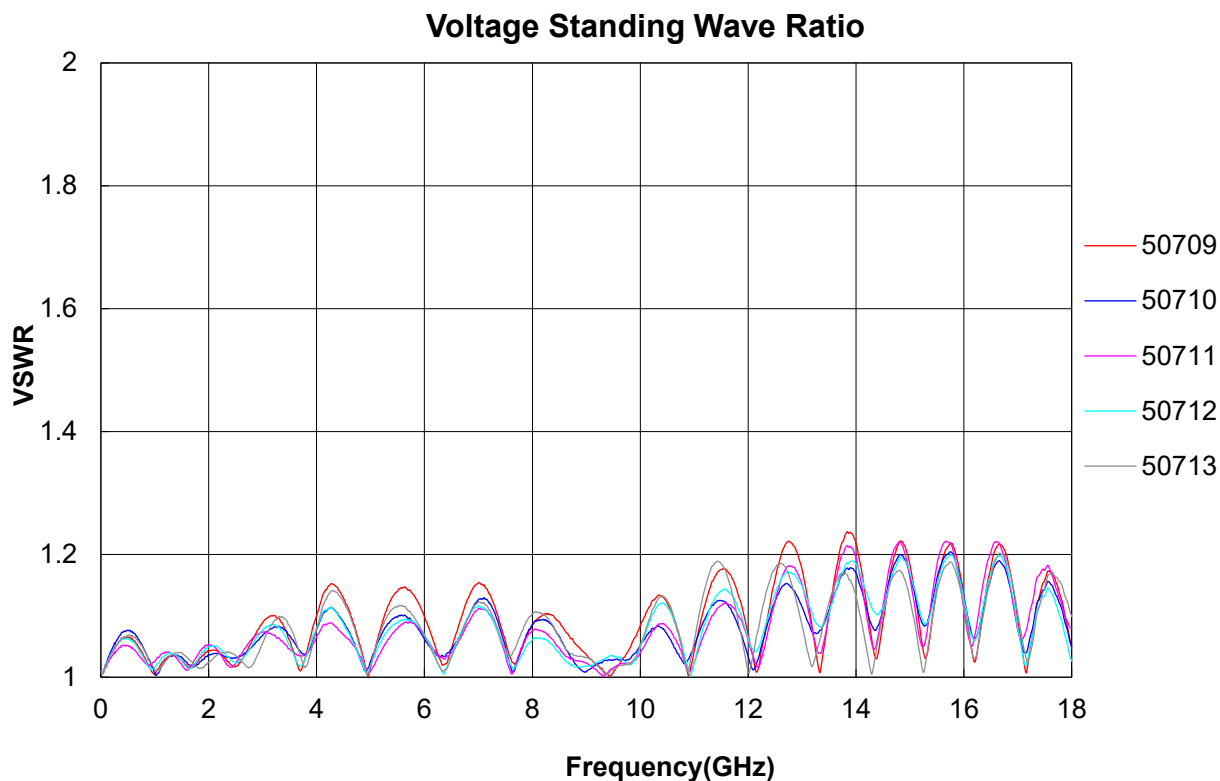
Series: RF180

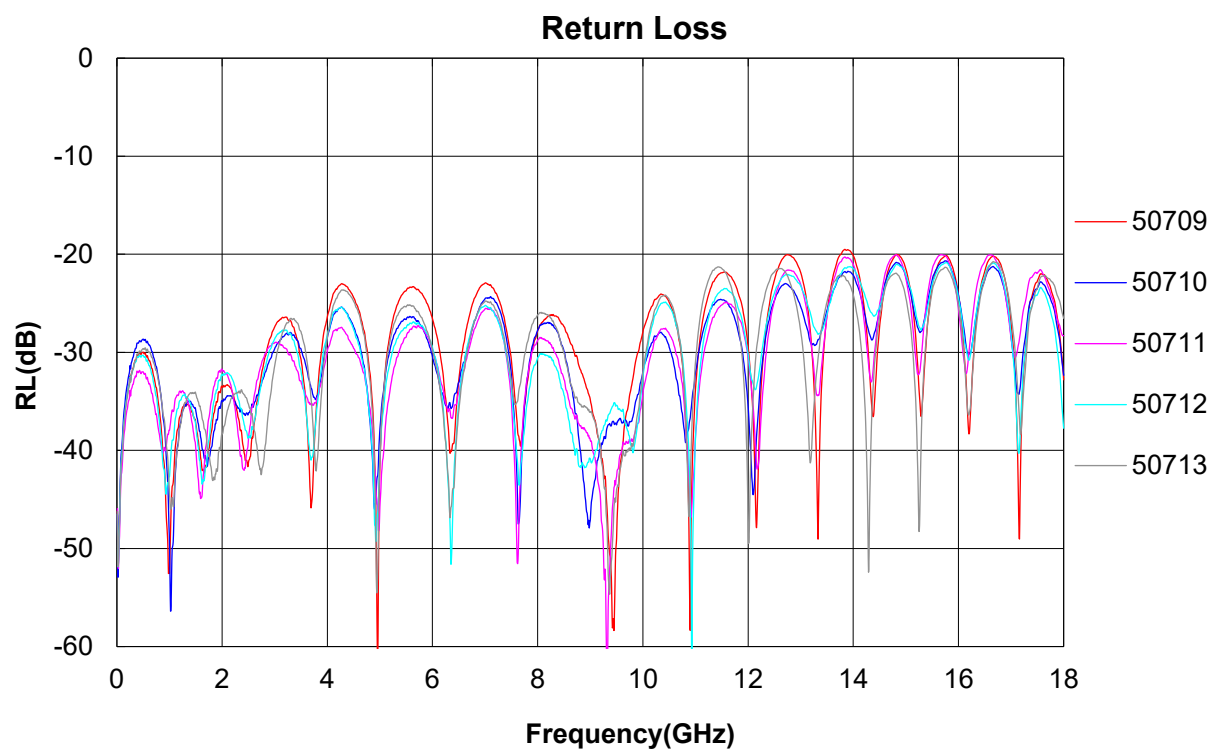
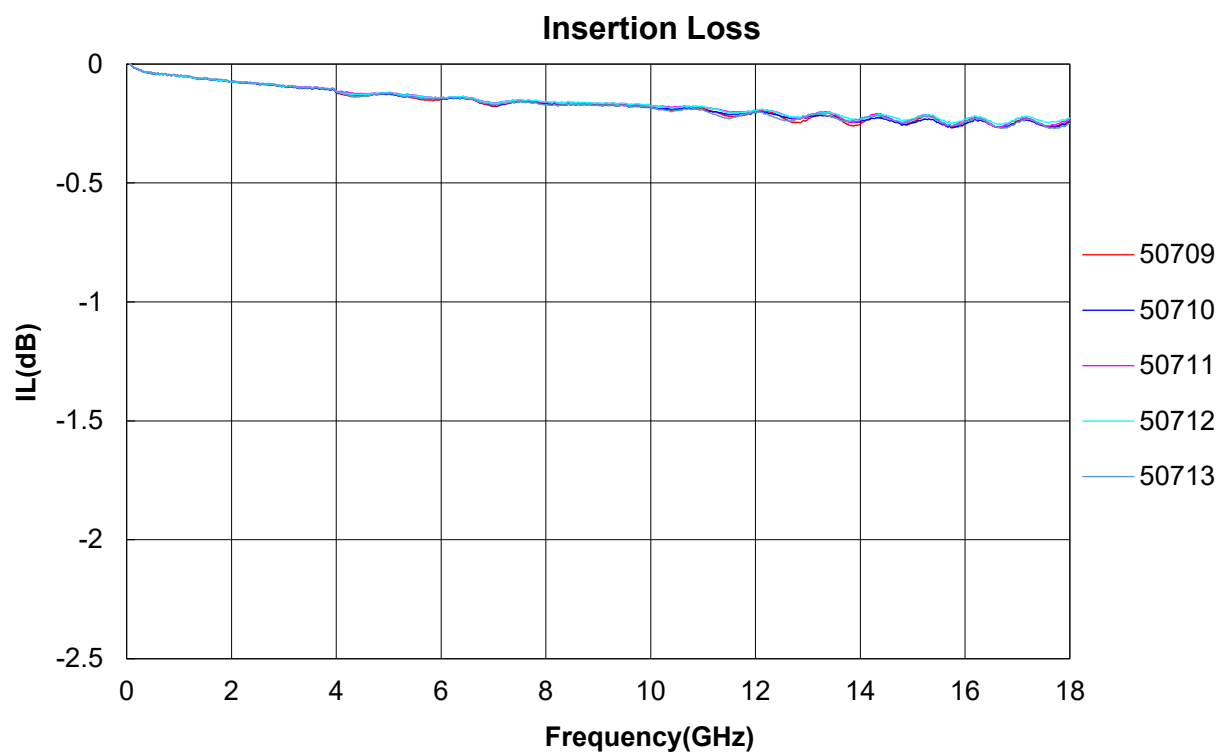
Description: 50 Ohm, .178 low-loss flexible RF Microwave Cable Assembly

Results: RF180-01SP-01SP-0152

Description: RF180 High Frequency RF Cable Assembly			
Sample	VSWR(max)	RL(max)	IL(min)
50709	1.24 @ 13.84 GHz	-19.50 @ 13.84 GHz	-0.27 dB @ 16.68 GHz
50710	1.20 @ 15.75 GHz	-21.55 @ 15.75 GHz	-0.27 dB @ 15.75 GHz
50711	1.22 @ 15.67 GHz	-20.03 @ 15.67 GHz	-0.27 dB @ 16.59 GHz
50712	1.20 @ 15.77 GHz	-20.85 @ 15.77 GHz	-0.25 dB @ 16.68 GHz
50713	1.20 @ 16.66 GHz	-20.75 @ 16.66 GHz	-0.27 dB @ 17.61 GHz

VSWR



Series: RF180**Description:** 50 Ohm, .178 low-loss flexible RF Microwave Cable Assembly**Return Loss****Insertion Loss**

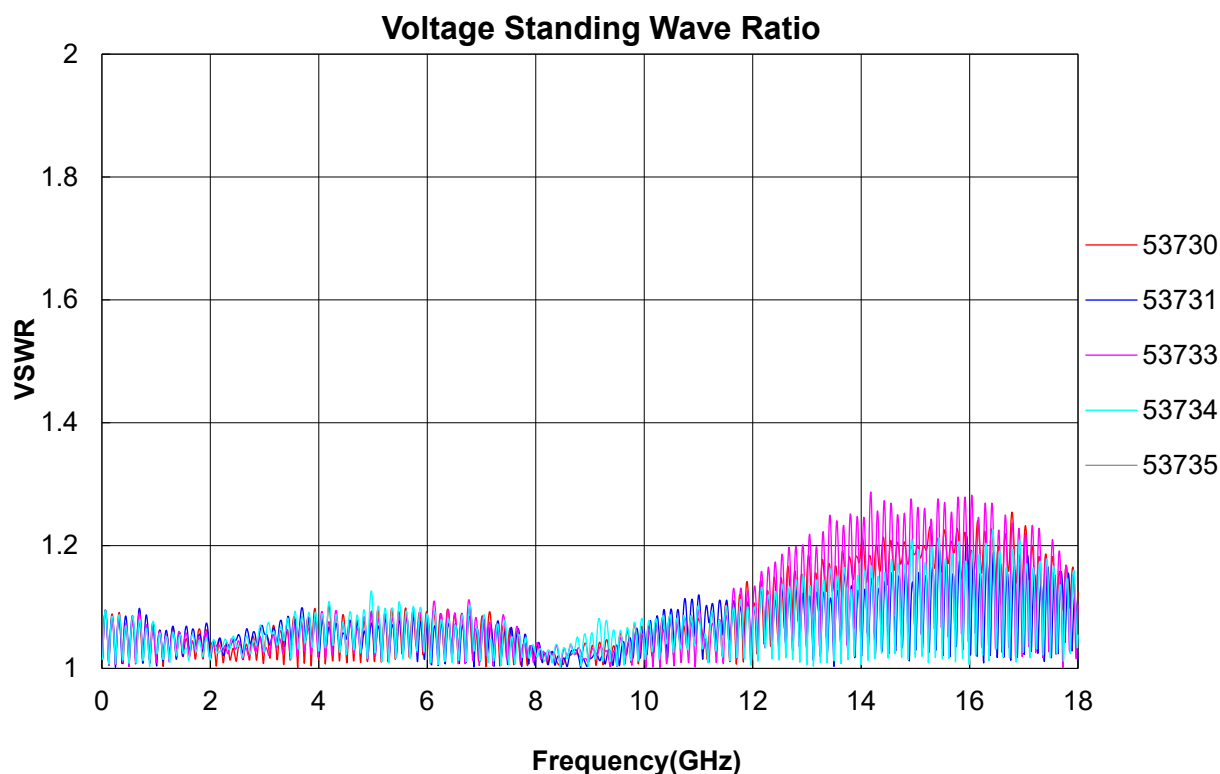
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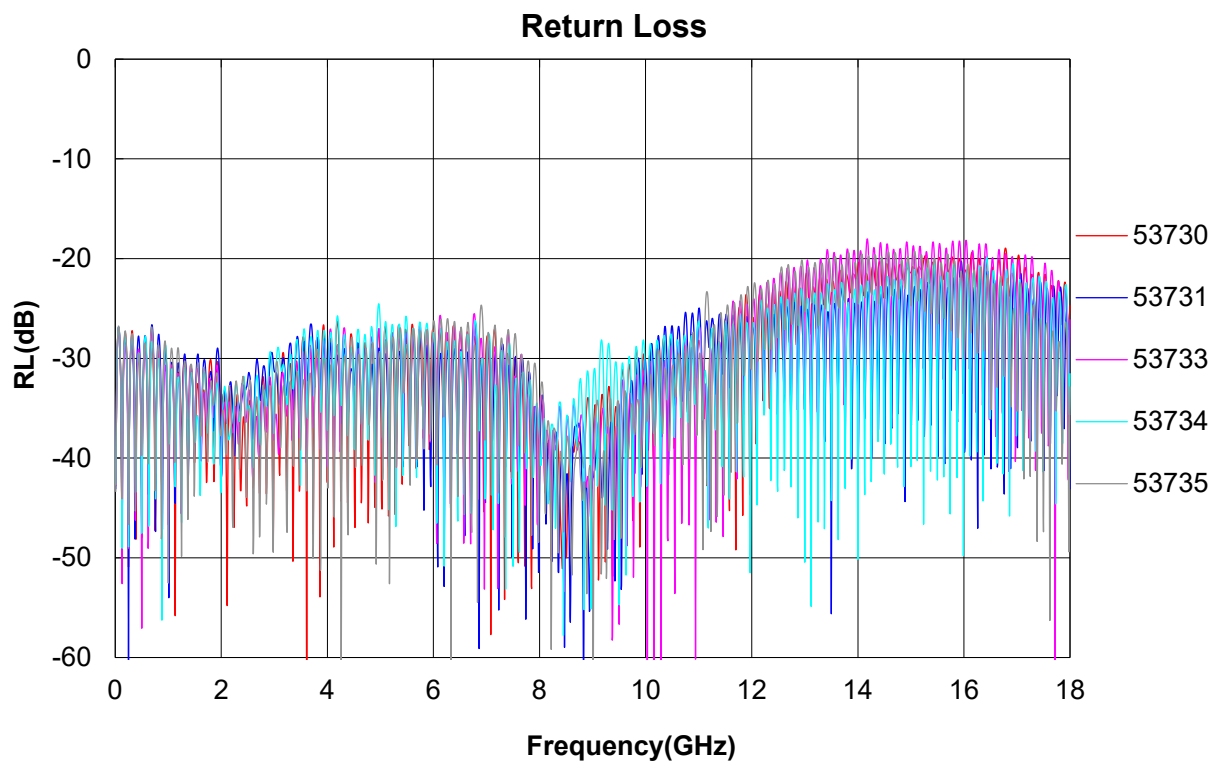
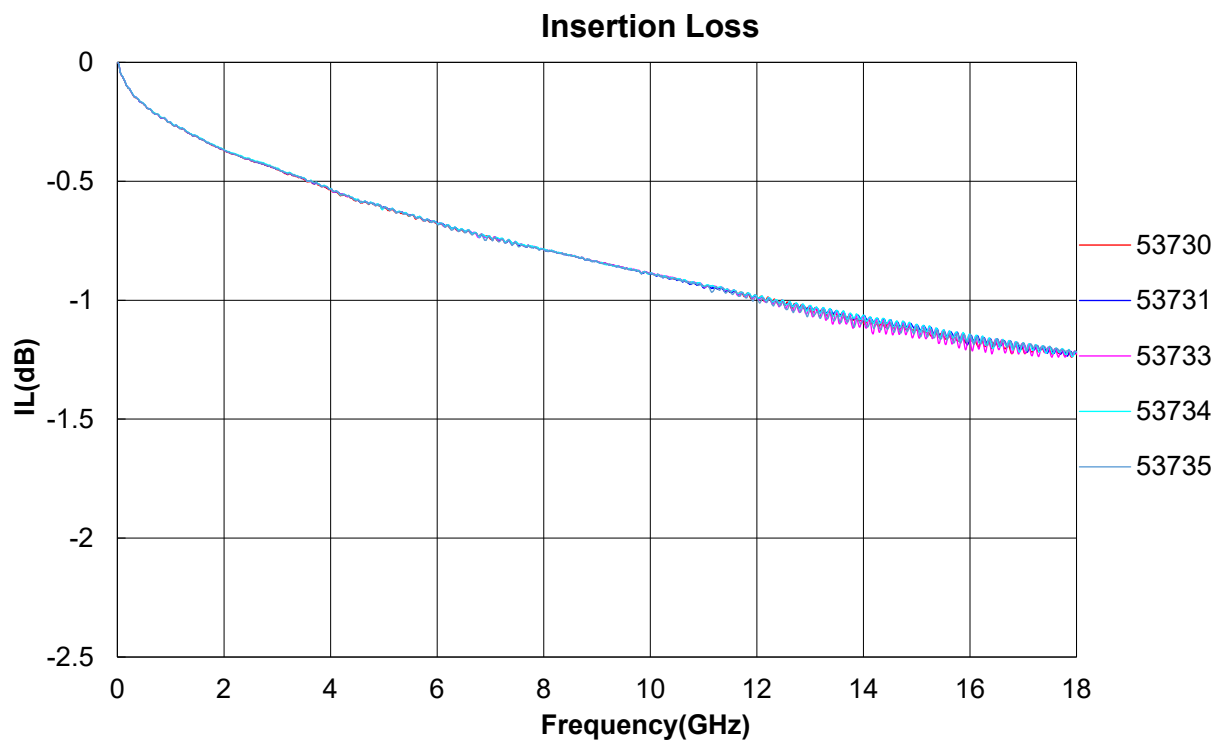
Description: 50 Ohm, .178 low-loss flexible RF Microwave Cable Assembly

Results: RF180-01SP-01SP-1000

Description: RF180 High Frequency RF Cable Assembly			
Sample	VSWR(max)	RL(max)	IL(min)
53730	1.25 @ 16.78 GHz	-18.95 @ 16.78 GHz	-1.24 dB @ 17.91 GHz
53731	1.22 @ 15.95 GHz	-20.25 @ 15.95 GHz	-1.24 dB @ 17.83 GHz
53733	1.29 @ 14.18 GHz	-18.02 @ 14.18 GHz	-1.24 dB @ 17.54 GHz
53734	1.23 @ 16.43 GHz	-19.85 @ 16.43 GHz	-1.24 dB @ 17.92 GHz
53735	1.24 @ 15.07 GHz	-19.26 @ 15.07 GHz	-1.22 dB @ 17.91 GHz

VSWR



Series: RF180**Description:** 50 Ohm, .178 low-loss flexible RF Microwave Cable AssemblyReturn LossInsertion Loss

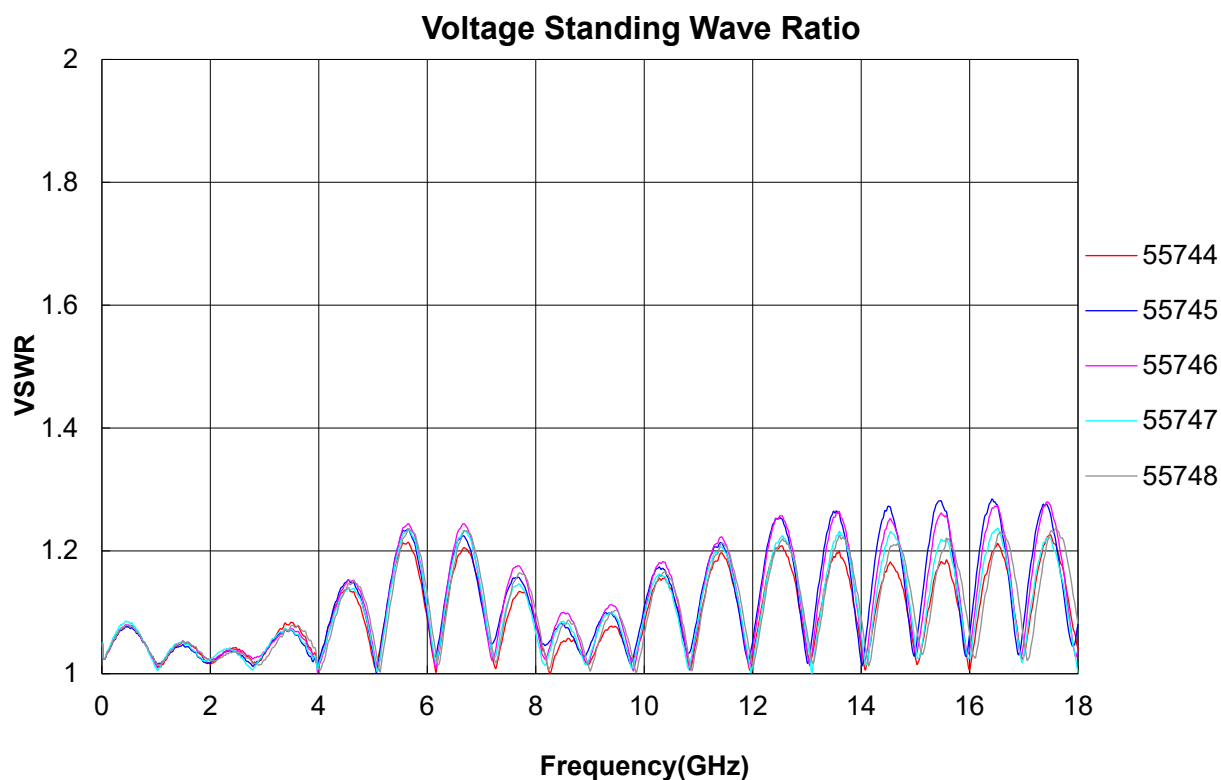
Series: RF180

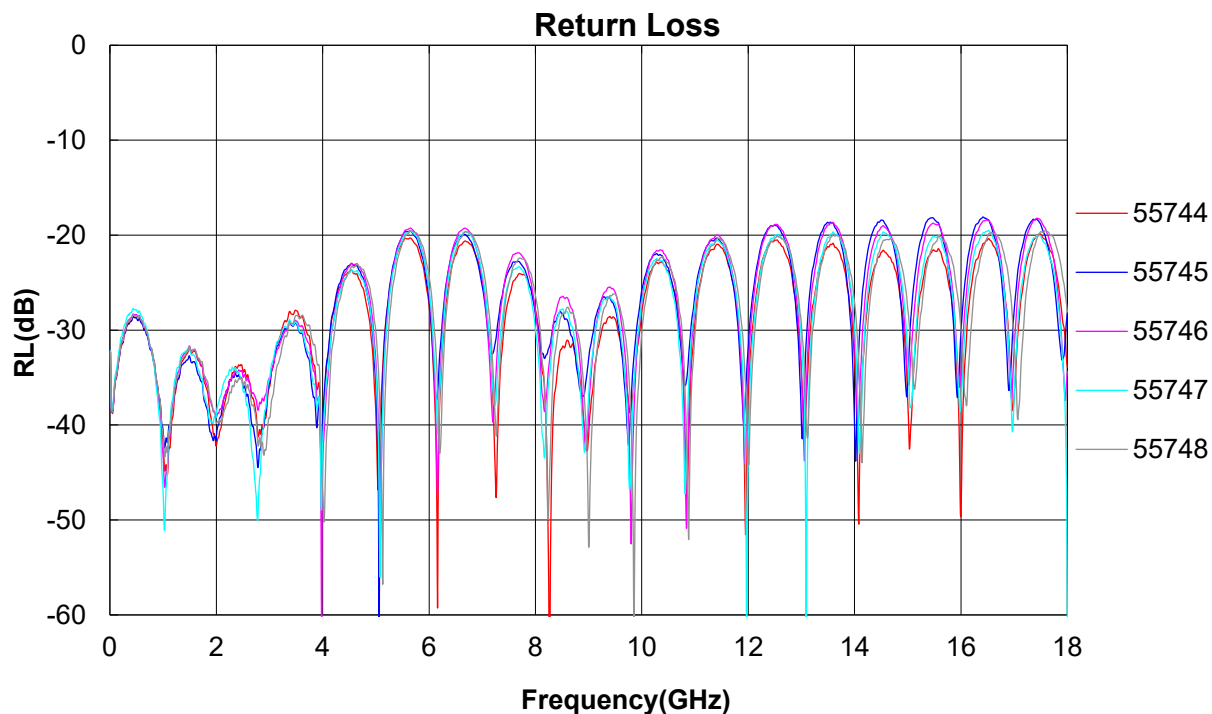
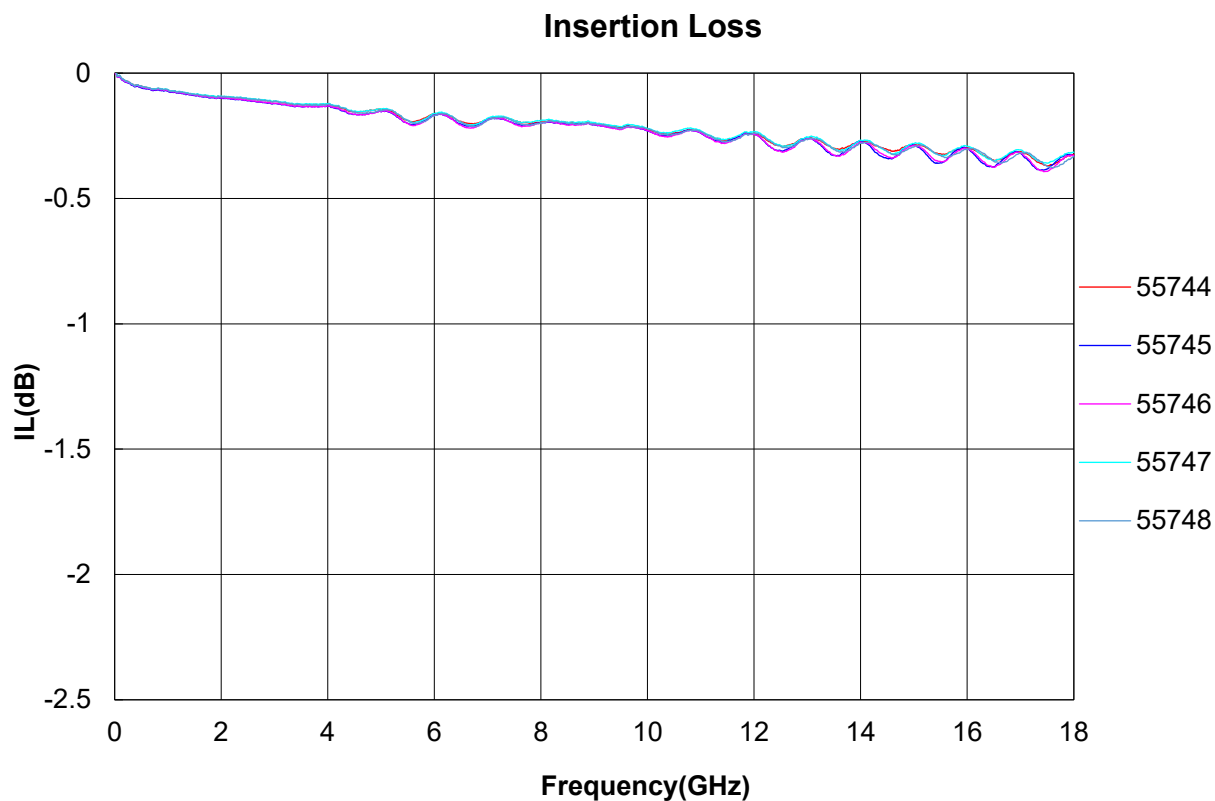
Description: 50 Ohm, .178 low-loss flexible RF Microwave Cable Assembly

Results: RF180-01SJ-01SJ-0152

Description: RF180 High Frequency RF Cable Assembly			
Sample	VSWR(max)	RL(max)	IL(min)
55744	1.23 @ 17.49 GHz	-19.86 @ 17.49 GHz	-0.37 dB @ 17.51 GHz
55745	1.28 @ 16.42 GHz	-18.10 @ 16.42 GHz	-0.39 dB @ 17.37 GHz
55746	1.28 @ 17.43 GHz	-18.22 @ 17.43 GHz	-0.39 dB @ 17.44 GHz
55747	1.24 @ 16.52 GHz	-19.50 @ 16.52 GHz	-0.36 dB @ 17.50 GHz
55748	1.24 @ 17.59 GHz	-19.50 @ 17.59 GHz	-0.38 dB @ 17.62 GHz

VSWR



Series: RF180**Description:** 50 Ohm, .178 low-loss flexible RF Microwave Cable Assembly**Return Loss****Insertion Loss**

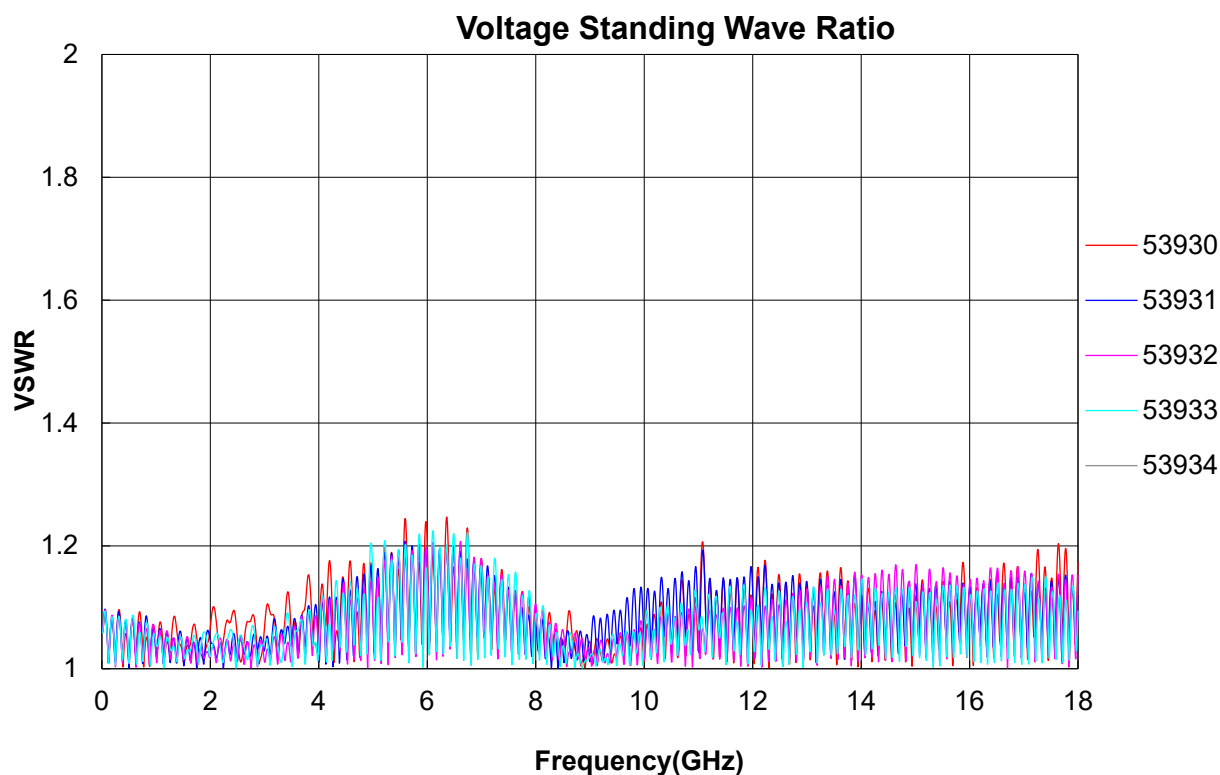
Series: RF180

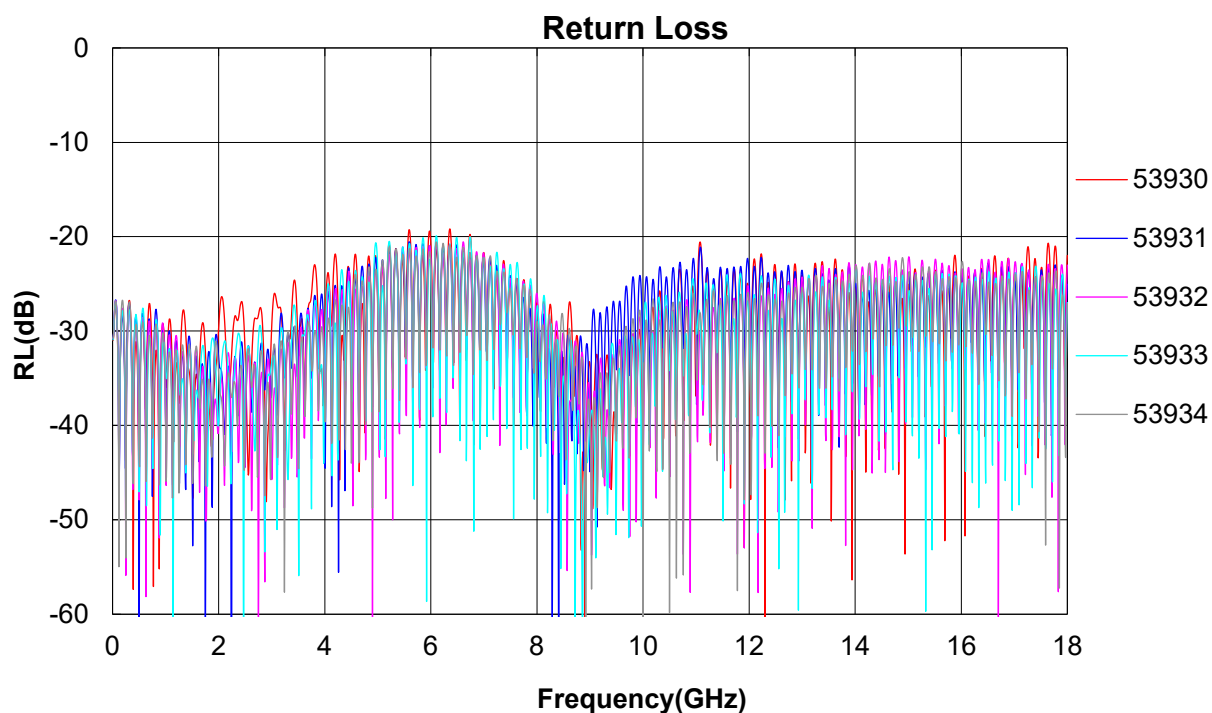
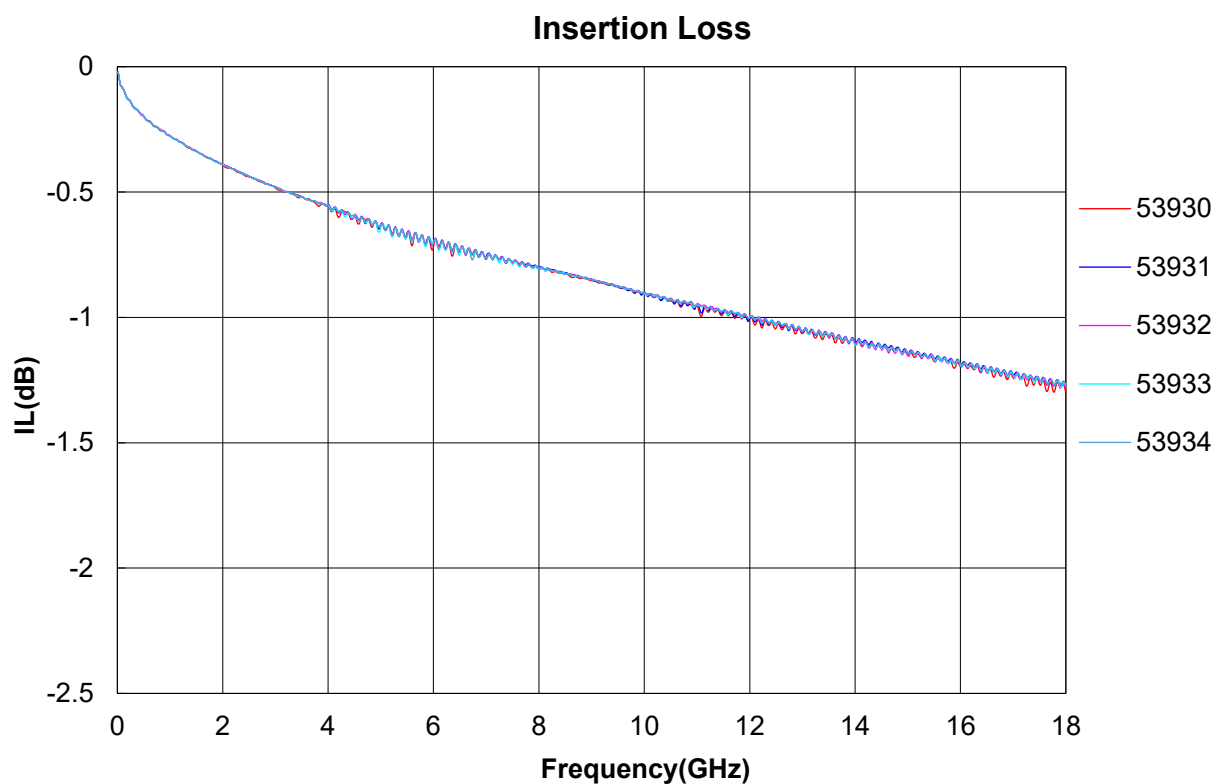
Description: 50 Ohm, .178 low-loss flexible RF Microwave Cable Assembly

Results: RF180-01SJ-01SJ-1000

Description: RF180 High Frequency RF Cable Assembly			
Sample	VSWR(max)	RL(max)	IL(min)
53930	1.25 @ 6.36 GHz	-19.18 @ 6.36 GHz	-1.30 dB @ 18.00 GHz
53931	1.21 @ 5.59 GHz	-20.54 @ 5.59 GHz	-1.27 dB @ 17.77 GHz
53932	1.21 @ 6.61 GHz	-20.54 @ 6.61 GHz	-1.29 dB @ 18.00 GHz
53933	1.22 @ 6.10 GHz	-19.91 @ 6.10 GHz	-1.28 dB @ 17.91 GHz
53934	1.21 @ 6.10 GHz	-20.56 @ 6.10 GHz	-1.27 dB @ 17.78 GHz

VSWR



Series: RF180**Description:** 50 Ohm, .178 low-loss flexible RF Microwave Cable Assembly**Return Loss****Insertion Loss**

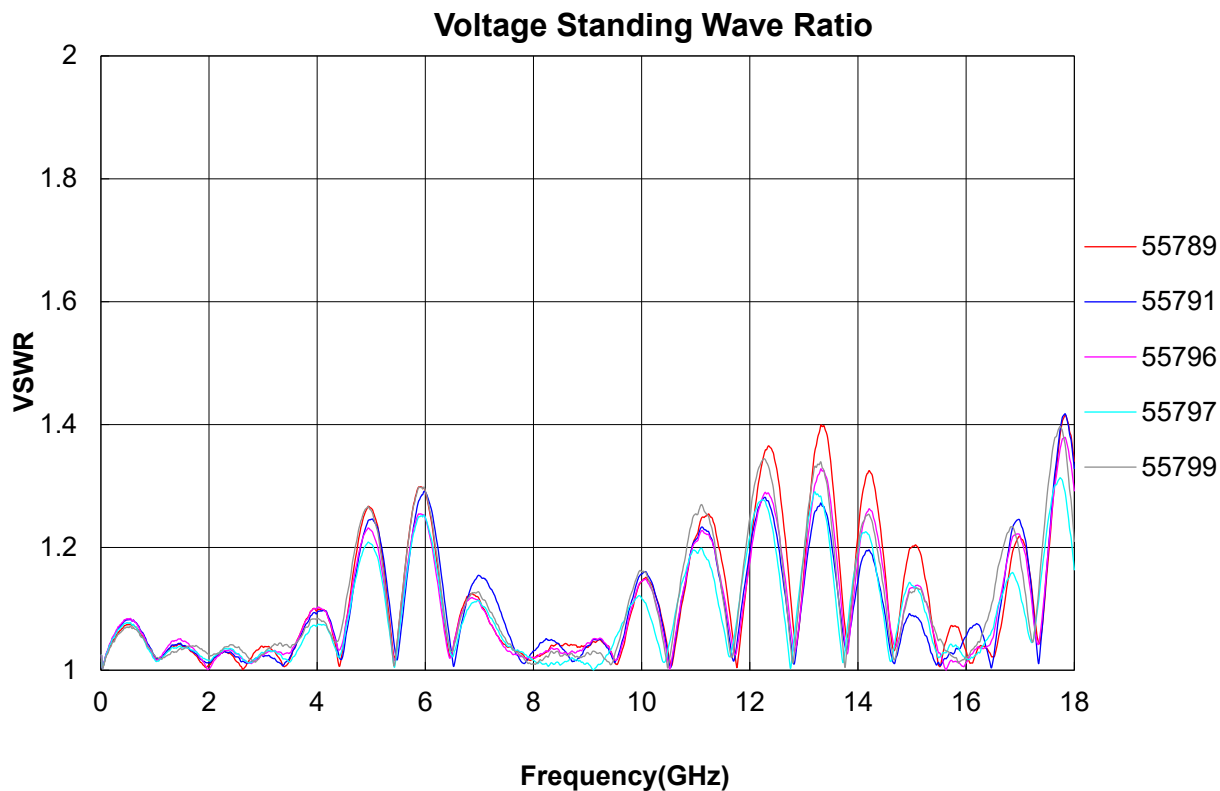
Series: RF180

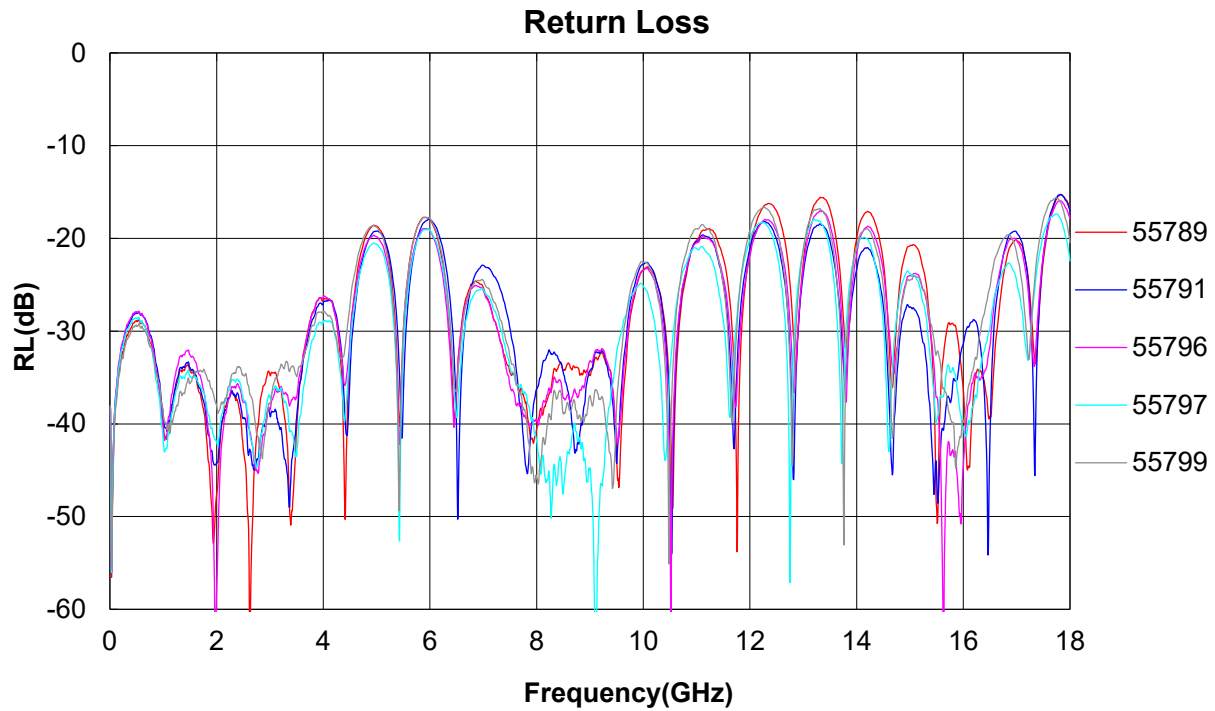
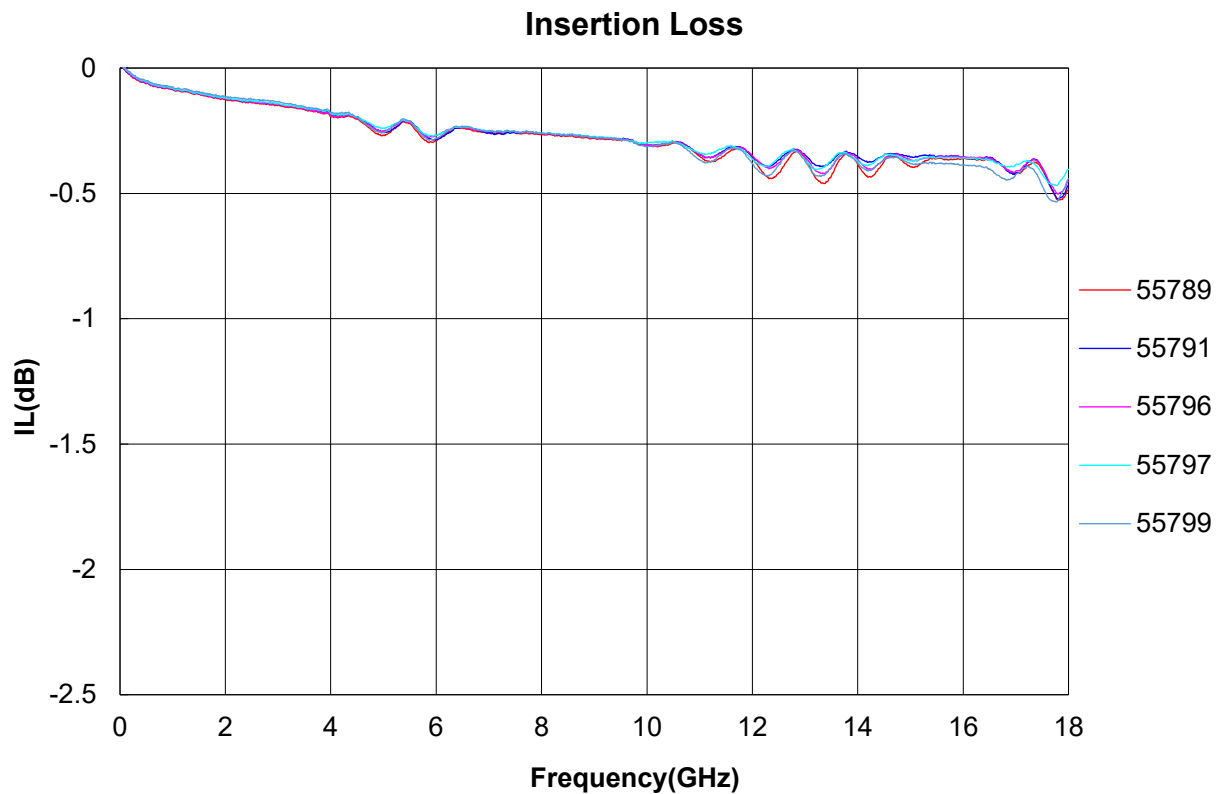
Description: 50 Ohm, .178 low-loss flexible RF Microwave Cable Assembly

Results: RF180-01RP-01RP-0152

Description: RF180 High Frequency RF Cable Assembly			
Sample	VSWR(max)	RL(max)	IL(min)
55789	1.42 @ 17.83 GHz	-15.29 @ 17.83 GHz	-0.53 dB @ 17.81 GHz
55791	1.42 @ 17.83 GHz	-15.25 @ 17.83 GHz	-0.52 dB @ 17.81 GHz
55796	1.38 @ 17.83 GHz	-15.95 @ 17.83 GHz	-0.50 dB @ 17.81 GHz
55797	1.31 @ 17.74 GHz	-17.36 @ 17.74 GHz	-0.47 dB @ 17.78 GHz
55799	1.40 @ 17.74 GHz	-15.62 @ 17.74 GHz	-0.53 dB @ 17.77 GHz

VSWR



Series: RF180**Description:** 50 Ohm, .178 low-loss flexible RF Microwave Cable Assembly**Return Loss****Insertion Loss**

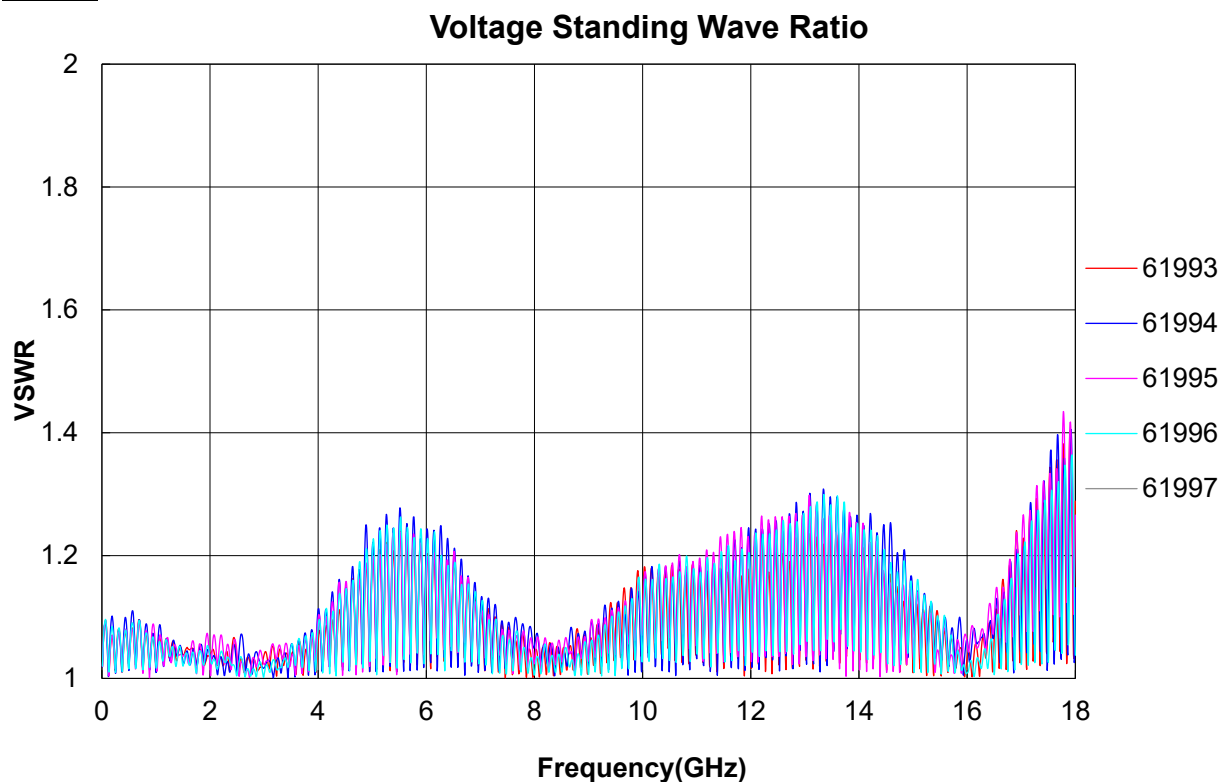
Series: RF180

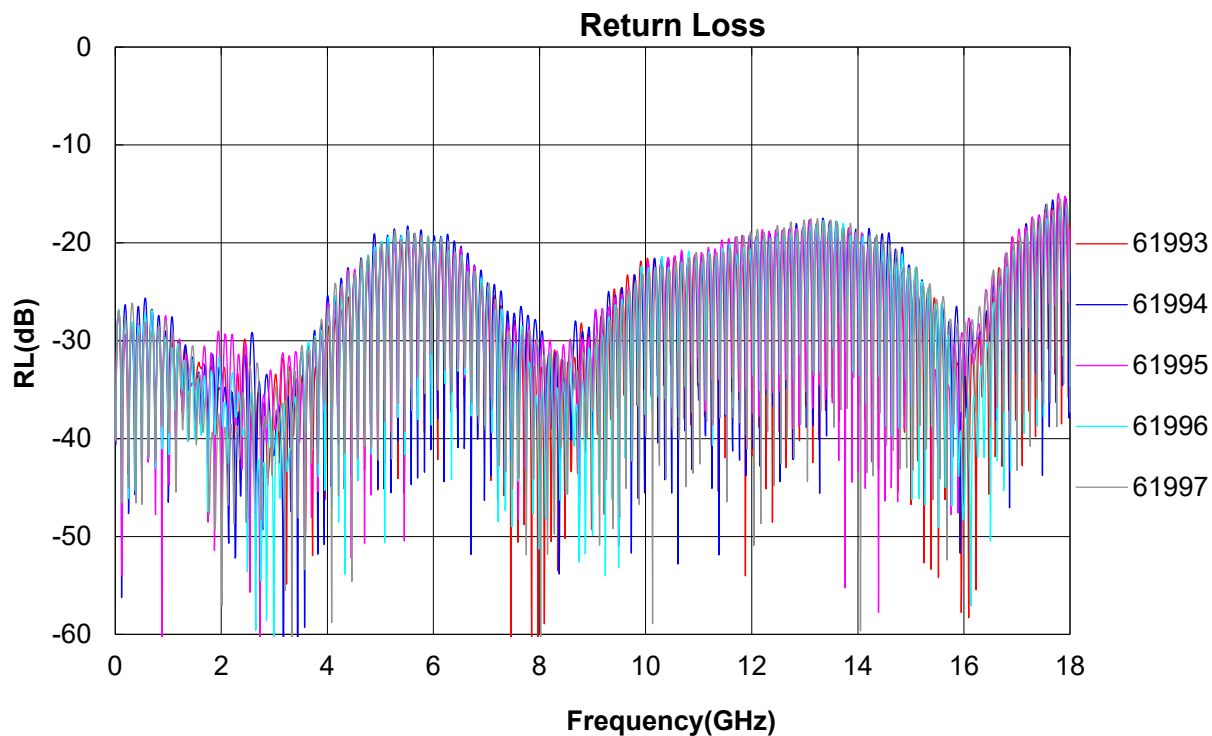
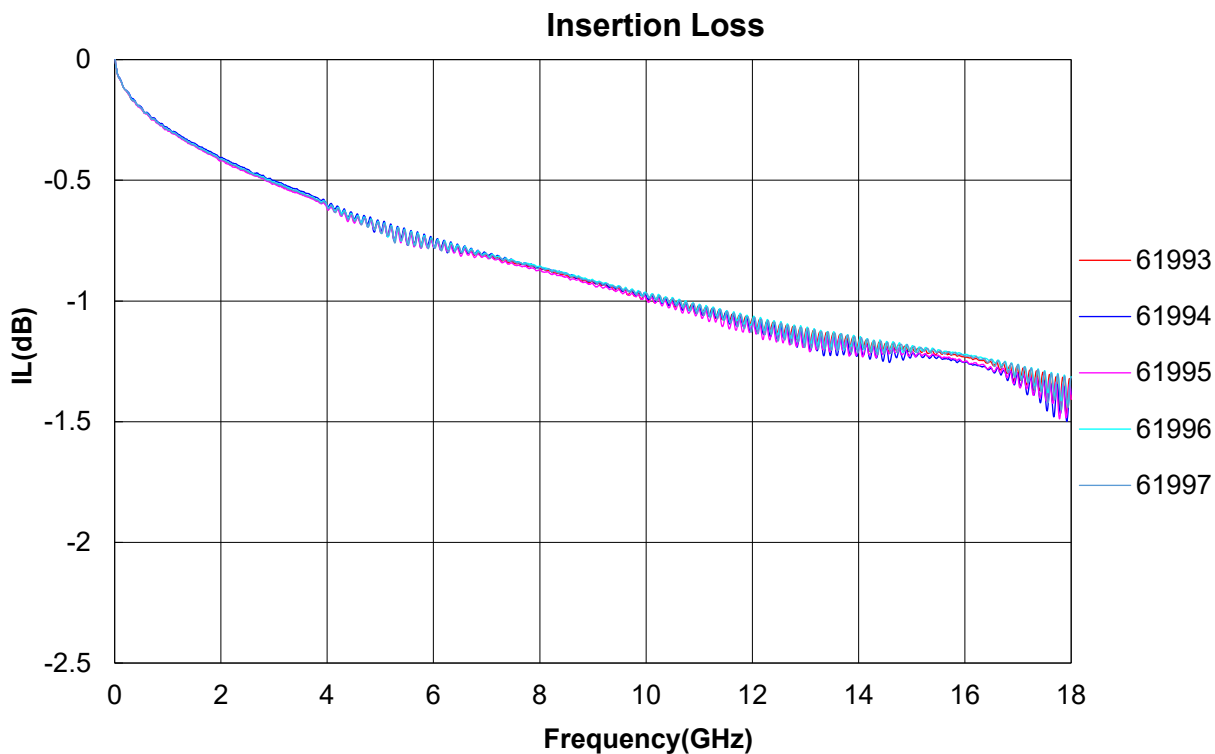
Description: 50 Ohm, .178 low-loss flexible RF Microwave Cable Assembly

Results: RF180-01RP-01RP-1000

Description: RF180 High Frequency RF Cable Assembly			
Sample	VSWR(max)	RL(max)	IL(min)
61993	1.40 @ 17.90 GHz	-15.51 @ 17.90 GHz	-1.47 dB @ 17.91 GHz
61994	1.41 @ 17.92 GHz	-15.47 @ 17.92 GHz	-1.50 dB @ 17.92 GHz
61995	1.43 @ 17.78 GHz	-14.97 @ 17.78 GHz	-1.49 dB @ 17.78 GHz
61996	1.36 @ 17.94 GHz	-16.25 @ 17.94 GHz	-1.43 dB @ 17.94 GHz
61997	1.40 @ 17.81 GHz	-15.51 @ 17.81 GHz	-1.45 dB @ 17.81 GHz

VSWR



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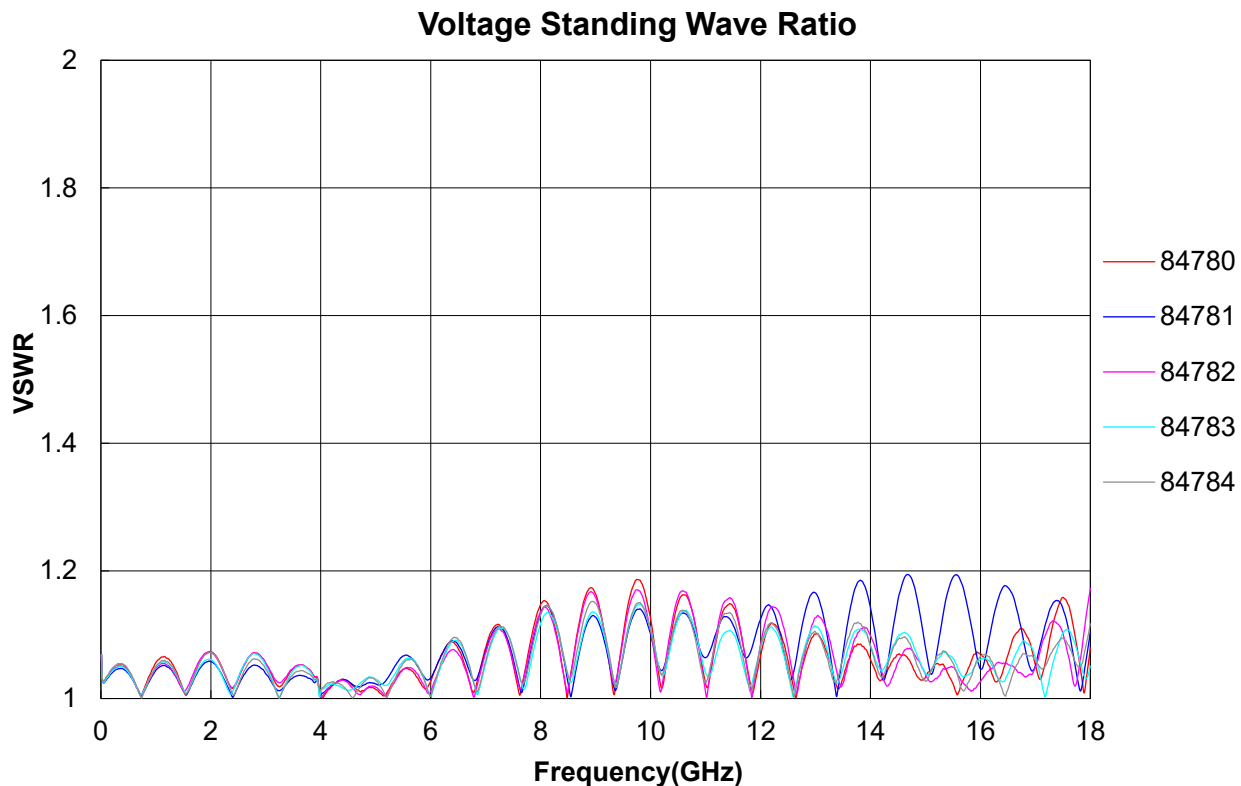
Series: RF180

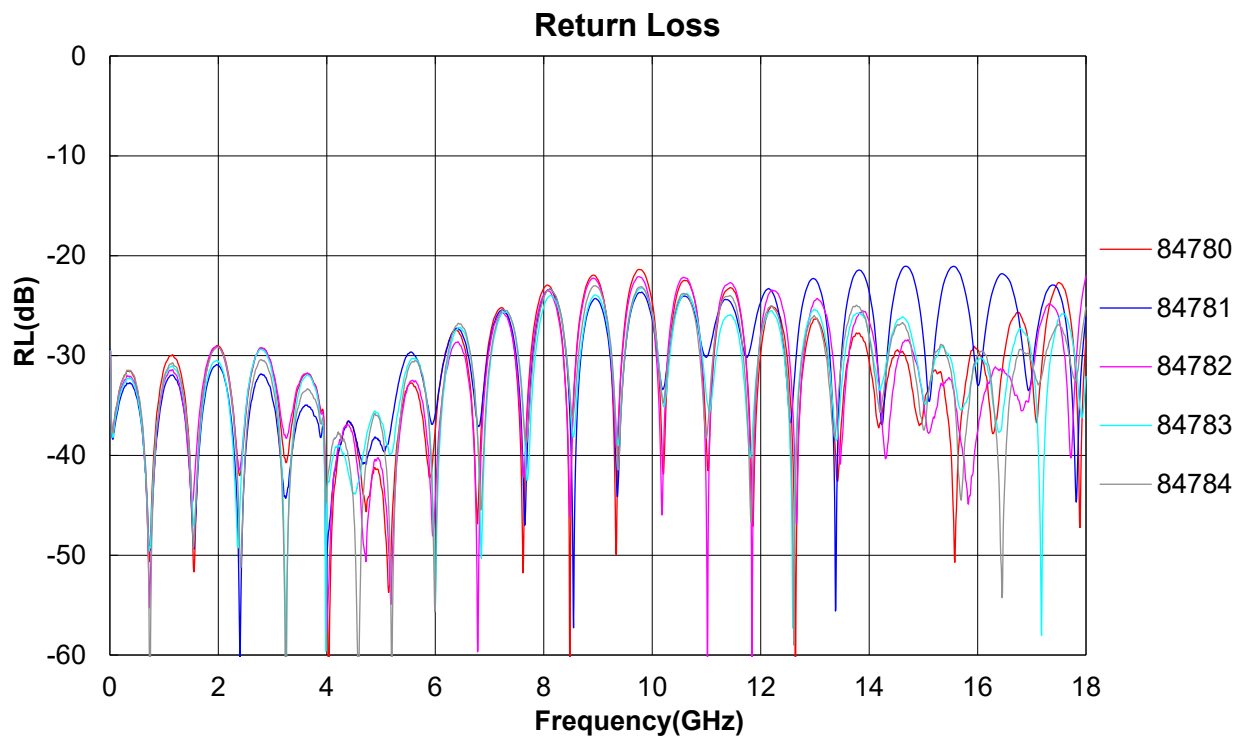
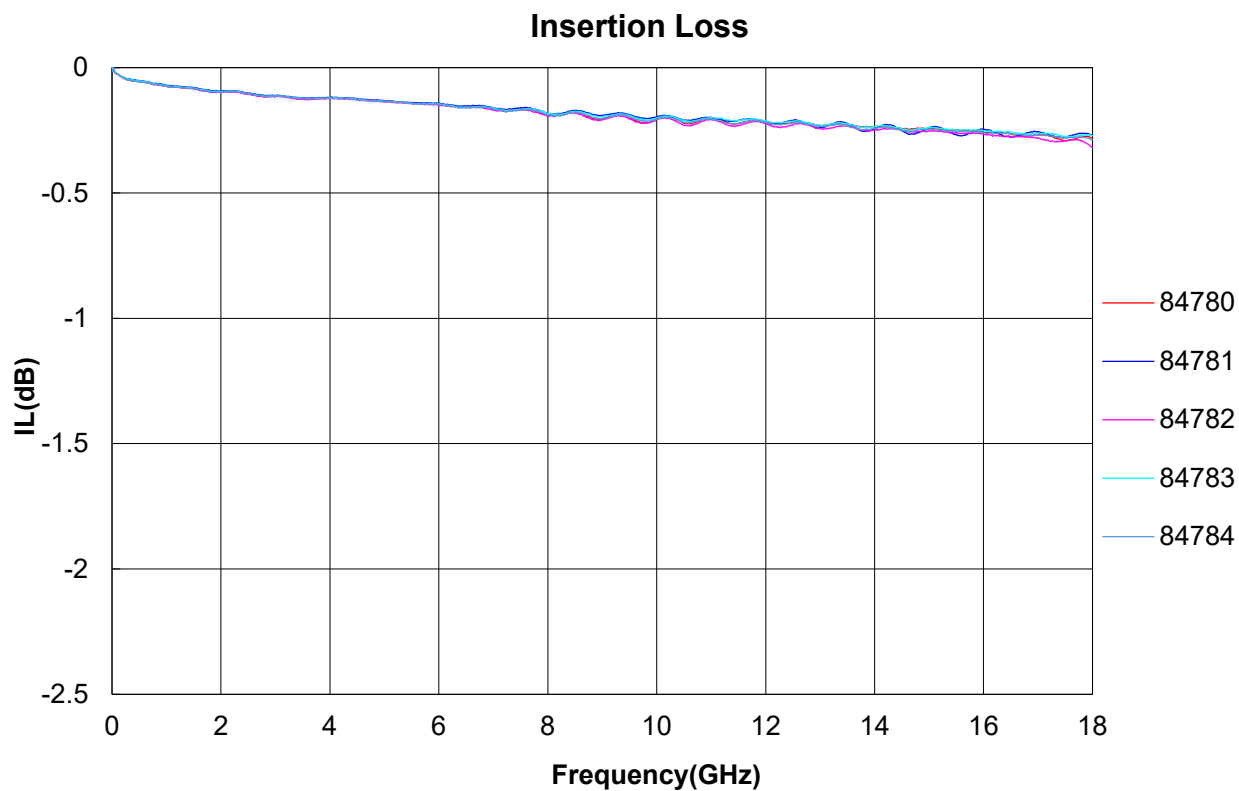
Description: 50 Ohm, .178 low-loss flexible RF Microwave Cable Assembly

Results: RF180-01BJ-01BJ-0152

Description: RF180 High Frequency RF Cable Assembly			
Sample	VSWR(max)	RL(max)	IL(min)
84780	1.19 @ 9.76 GHz	-21.38 @ 9.76 GHz	-0.29 dB @ 17.52 GHz
84781	1.19 @ 14.68 GHz	-21.06 @ 14.68 GHz	-0.28 dB @ 17.44 GHz
84782	1.17 @ 18.00 GHz	-22.01 @ 18.00 GHz	-0.32 dB @ 18.00 GHz
84783	1.15 @ 9.81 GHz	-23.22 @ 9.81 GHz	-0.28 dB @ 17.64 GHz
84784	1.15 @ 8.95 GHz	-23.01 @ 8.95 GHz	-0.29 dB @ 18.00 GHz

VSWR



Series: RF180**Description:** 50 Ohm, .178 low-loss flexible RF Microwave Cable Assembly**Return Loss****Insertion Loss**

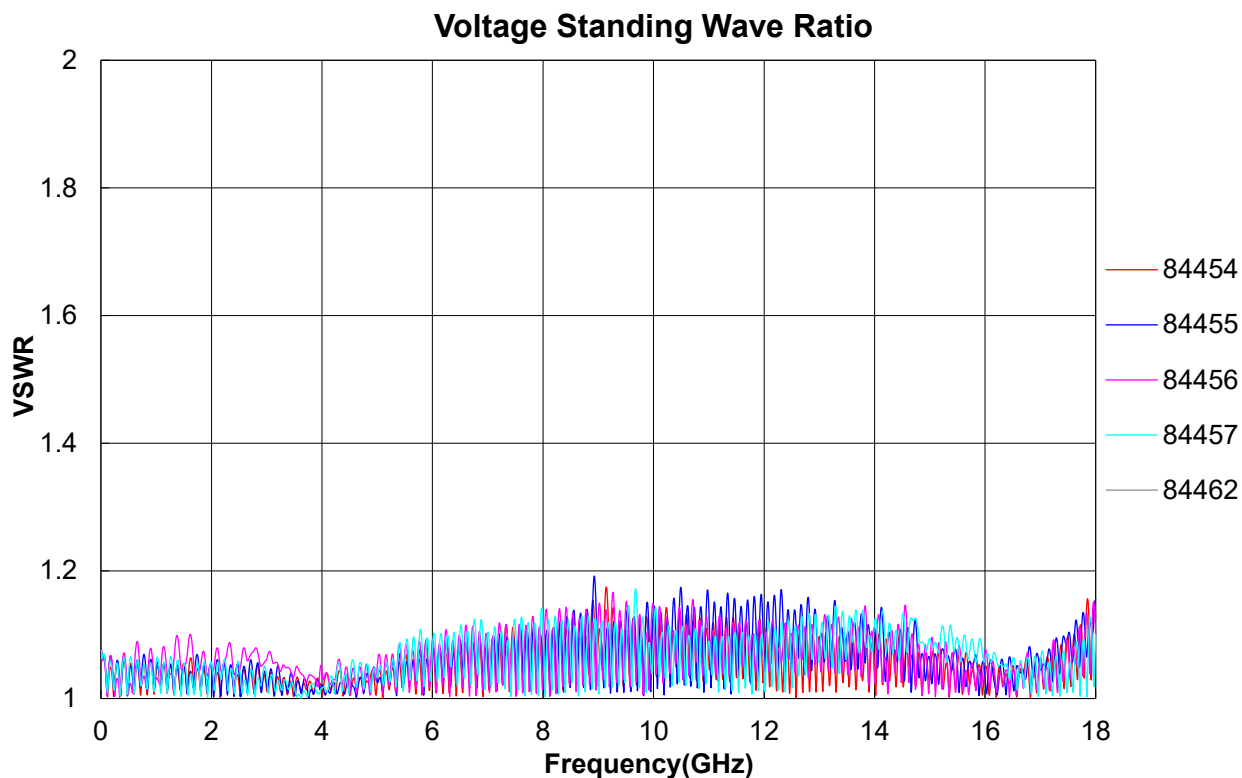
Series: RF180

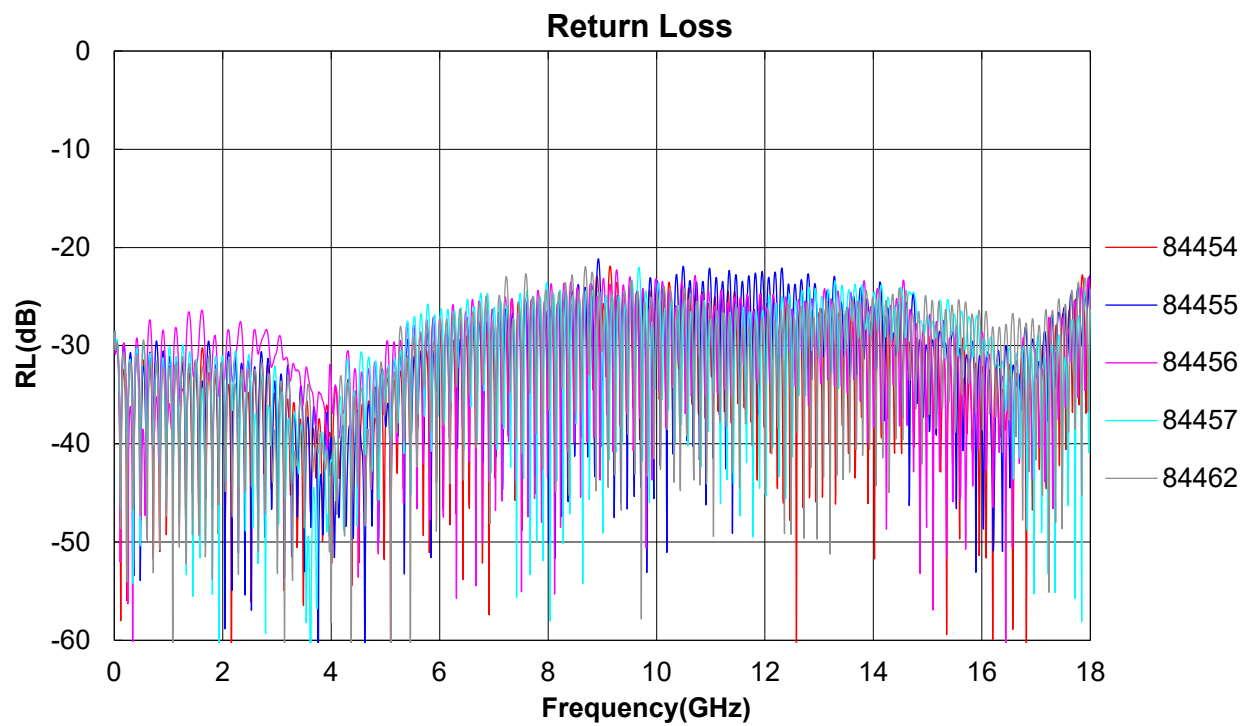
Description: 50 Ohm, .178 low-loss flexible RF Microwave Cable Assembly

Results: RF180-01BJ-01BJ-1000

Description: RF180 High Frequency RF Cable Assembly			
Sample	VSWR(max)	RL(max)	IL(min)
84454	1.17 @ 9.14 GHz	-21.92 @ 9.14 GHz	-1.28 dB @ 17.98 GHz
84455	1.19 @ 8.93 GHz	-21.15 @ 8.93 GHz	-1.27 dB @ 18.00 GHz
84456	1.17 @ 9.27 GHz	-22.30 @ 9.27 GHz	-1.28 dB @ 17.96 GHz
84457	1.17 @ 9.68 GHz	-22.03 @ 9.68 GHz	-1.28 dB @ 17.91 GHz
84462	1.17 @ 8.69 GHz	-21.95 @ 8.69 GHz	-1.28 dB @ 18.00 GHz

VSWR



Series: RF180**Description:** 50 Ohm, .178 low-loss flexible RF Microwave Cable Assembly**Return Loss****Insertion Loss**