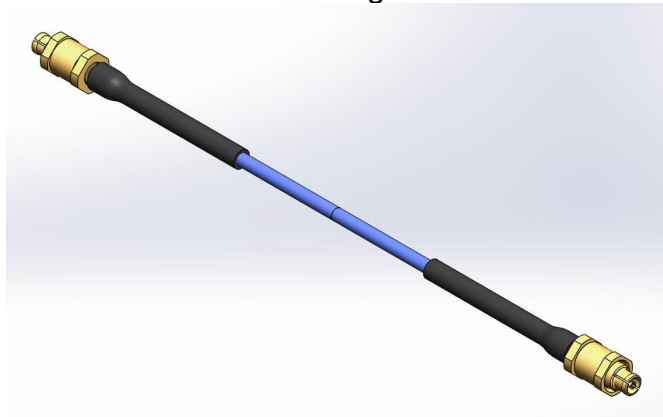




RF Characterization Report

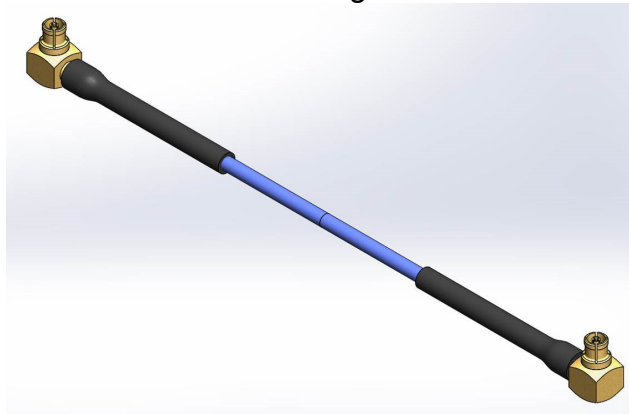
RF047-A-M0BJ-M0BJ-XXXX

Test Date: August 2020



RF047-A-M0RJ-M0RJ-XXXX

Test Date: August 2020



Description

50 Ohm, RF Microwave cable assembly

Series: RF047-A**Description:** 50 Ohm, RF Microwave cable assembly**Table of Contents**

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Series: RF047-A**Description:** 50 Ohm, RF Microwave cable assembly

Test Setup Information

Scope:

Provide insertion loss and standing wave ratio performance parameters for RF connector types terminated to RF047-A series coaxial cable.

Instrument Setup & Test Accessories:

Network Analyzer	Keysight PNA N5227A (10 MHz - 67 GHz)
Averaging Factor	0
Smoothing	Off
IF Bandwidth	1 KHz
Sweep Start	10 MHz
Sweep End	40 GHz
Points	4000
Test Cables	Gore 0F0CACB036.0-LF (DC to 67 GHz)

Calibration Type:

A Keysight ECAL calibration is performed using the Keysight ECAL N4694A kit.

Calibration Kit	Keysight ECAL N4694A
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Adapter Use:

Inmet SMPM to 1.85mm adapters were used for the measurements of RF047-A-M0BJ-M0BJ-0152, RF047-A-M0BJ-M0BJ-0250, RF047-A-M0BJ-M0BJ-1000, RF047-A-M0RJ-M0RJ-0152, RF047-A-M0RJ-M0RJ-0250 and RF047-A-M0RJ-M0RJ-1000. The adapter effects were removed from the measurement using the PNA's Fixture Removal method.

Series: RF047-A

Description: 50 Ohm, RF Microwave cable assembly

RF047-A-M0BJ-M0BJ-0152 Test Definition

Part Number	Length	End 1	End 2
RF047-A-M0BJ-M0BJ-0152	152 mm	SMPM Straight Jack	SMPM Straight Jack

Assembly Under Test:



Conclusion:

The maximum VSWR is specified as 1.4:1 from DC to 40 GHz in the RF047-A datasheet and the maximum insertion loss is specified by an equation on the RF047-A Cable Assembly Drawing. The samples meet the specifications for VSWR and insertion loss.

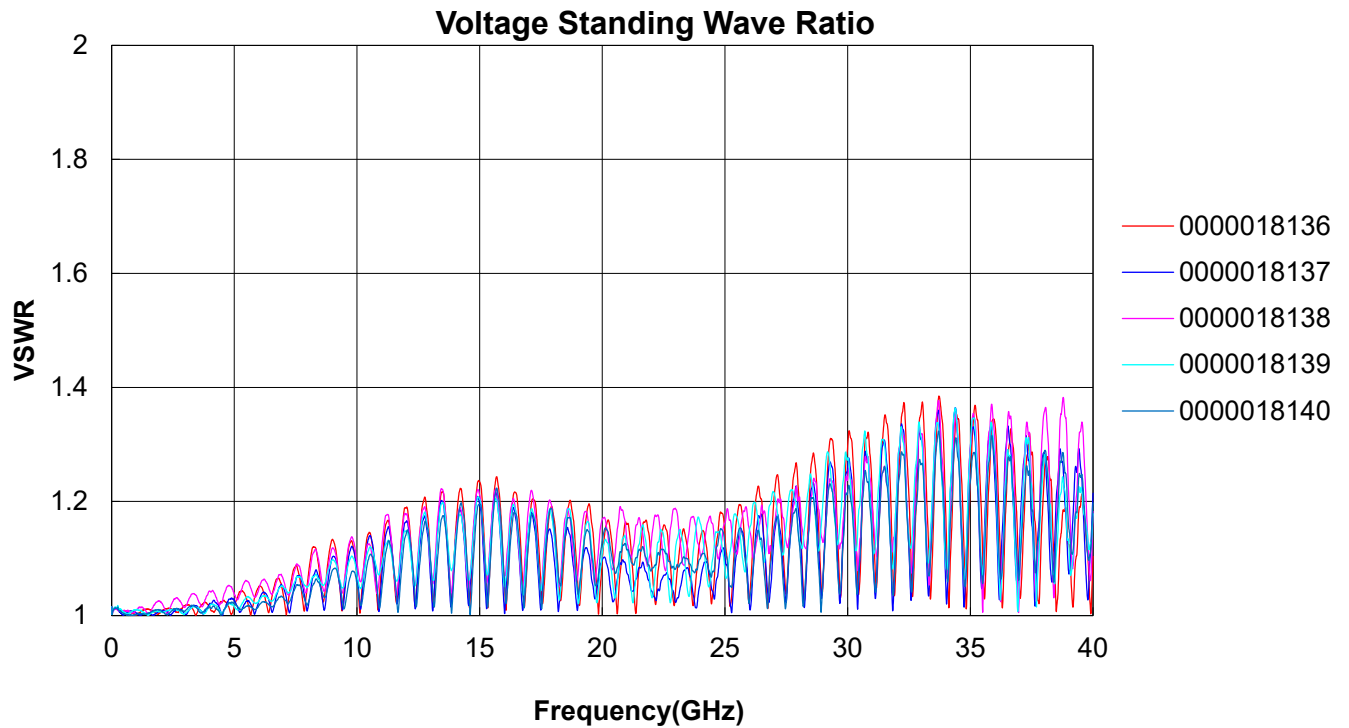
Results: RF047-A-M0BJ-M0BJ-0152

Sample	VSWR (max)	IL (max)
0000018136	1.38 @ 33.71 GHz	1.61 dB @ 38.12 GHz
0000018137	1.36 @ 34.38 GHz	1.62 dB @ 39.40 GHz
0000018138	1.38 @ 38.78 GHz	1.70 dB @ 38.81GHz
0000018139	1.36 @ 34.38 GHz	1.62 dB @ 39.53 GHz
0000018140	1.32 @ 33.71 GHz	1.62 dB @ 38.76 GHz

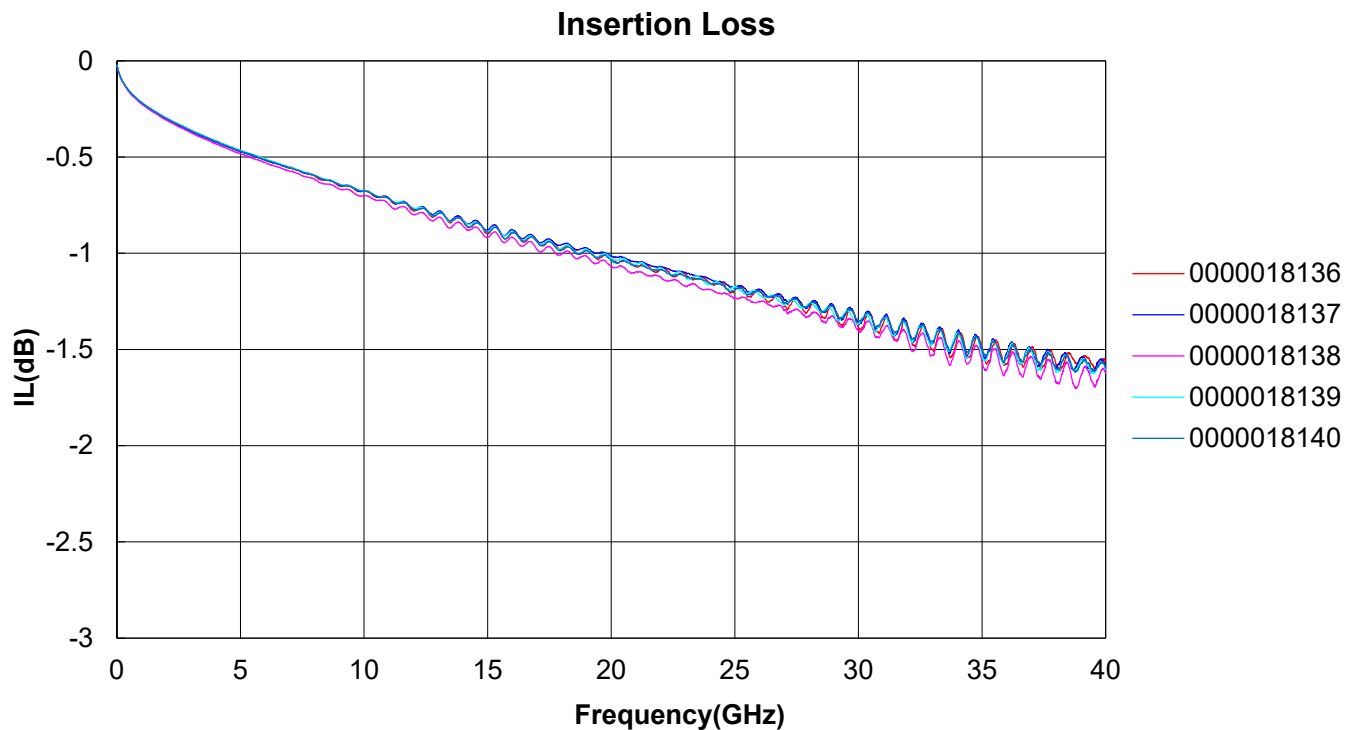
Series: RF047-A

Description: 50 Ohm, RF Microwave cable assembly

VSWR



Insertion Loss



Series: RF047-A

Description: 50 Ohm, RF Microwave cable assembly

RF047-A-M0BJ-M0BJ-0250 Test Definition

Part Number	Length	End 1	End 2
RF047-A-M0BJ-M0BJ-0250	250 mm	SMPM Straight Jack	SMPM Straight Jack

Assembly Under Test:



Conclusion:

The maximum VSWR is specified as 1.4:1 from DC to 40 GHz in the RF047-A datasheet and the maximum insertion loss is specified by an equation on the RF047-A Cable Assembly Drawing. The samples meet the specifications for VSWR and insertion loss.

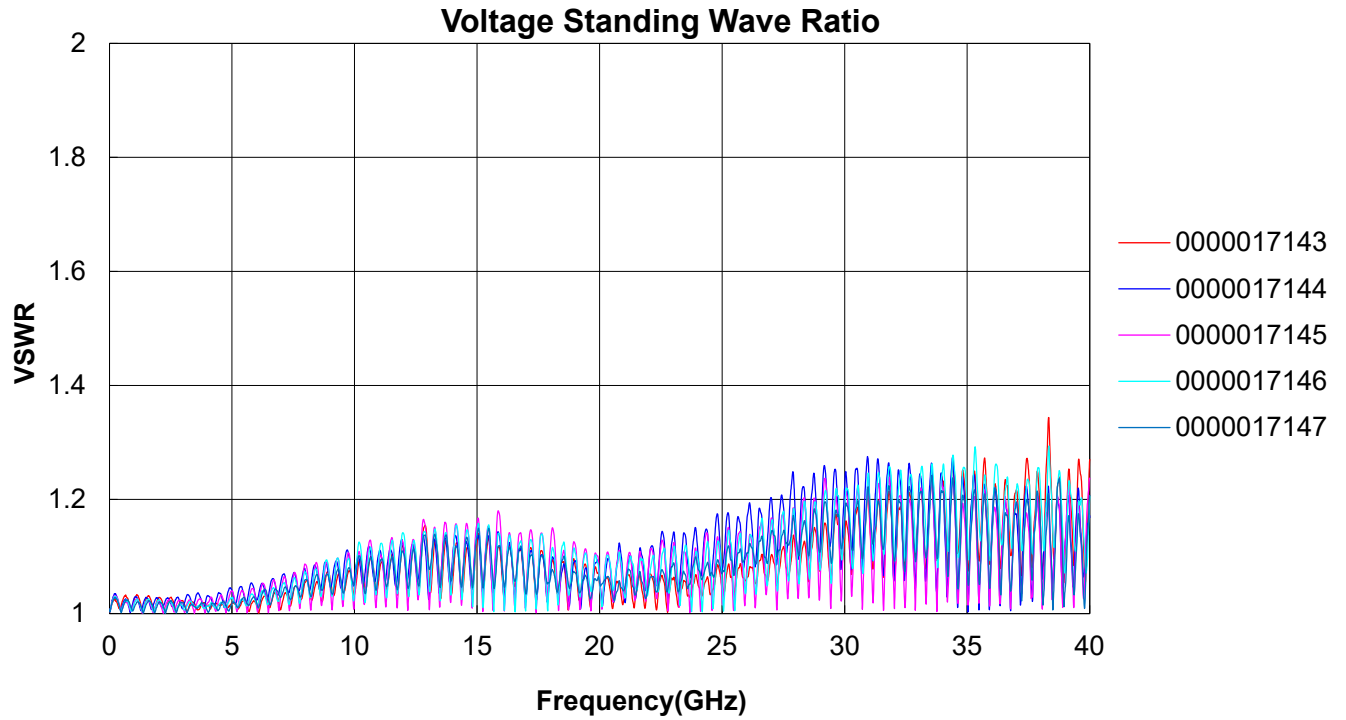
Results: RF047-A-M0BJ-M0BJ-0250

Sample	VSWR (max)	IL (max)
0000017143	1.34 @ 38.32GHz	2.44 dB @ 40.00 GHz
0000017144	1.28 @ 30.93 GHz	2.46 dB @ 39.54 GHz
0000017145	1.24 @ 31.80 GHz	2.46 dB @ 40.00 GHz
0000017146	1.29 @ 38.33 GHz	2.42 dB @ 40.00 GHz
0000017147	1.24 @ 33.55 GHz	2.42 dB @ 40.00 GHz

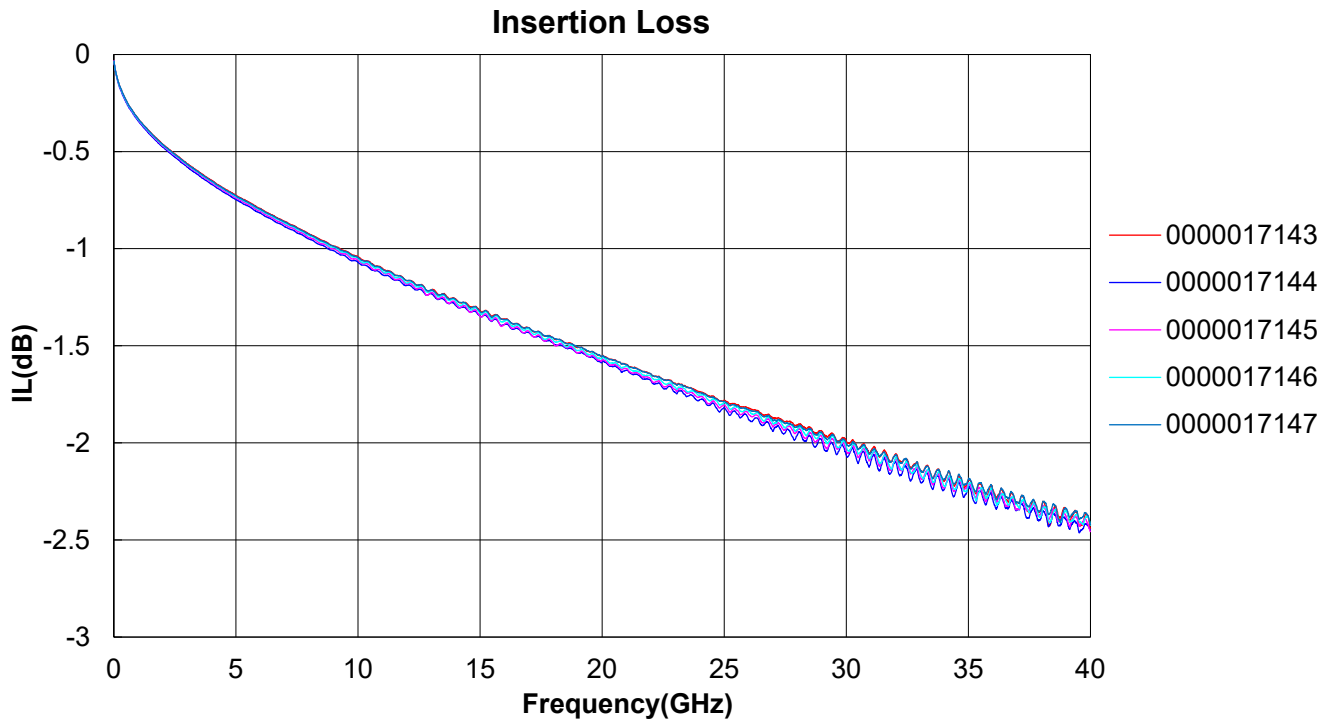
Series: RF047-A

Description: 50 Ohm, RF Microwave cable assembly

VSWR



Insertion Loss



Series: RF047-A

Description: 50 Ohm, RF Microwave cable assembly

RF047-A-M0BJ-M0BJ-1000 Test Definition

Part Number	Length	End 1	End 2
RF047-A-M0BJ-M0BJ-1000	1000 mm	SMPM Straight Jack	SMPM Straight Jack

Assembly Under Test:



Conclusion:

The maximum VSWR is specified as 1.4:1 from DC to 40 GHz in the RF047-A datasheet and the maximum insertion loss is specified by an equation on the RF047-A Cable Assembly Drawing. The samples meet the specifications for VSWR and insertion loss.

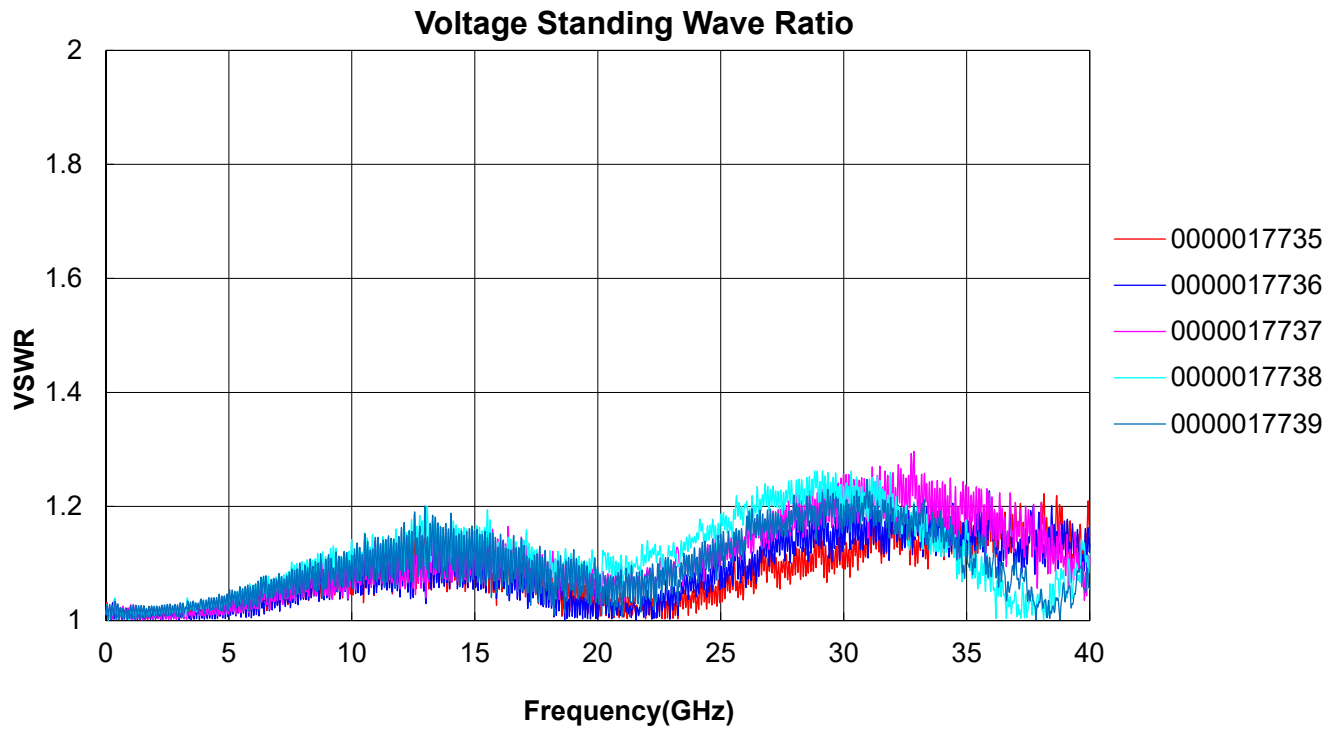
Results: RF047-A-M0BJ-M0BJ-1000

Sample	VSWR (max)	IL (max)
0000017735	1.22 @ 38.14 GHz	8.89 dB @ 39.95 GHz
0000017736	1.23 @ 35.92 GHz	8.91 dB @ 39.84 GHz
0000017737	1.30 @ 32.85 GHz	8.99 dB @ 40.00 GHz
0000017738	1.26 @ 29.13 GHz	9.15 dB @ 39.98 GHz
0000017739	1.25 @ 30.94 GHz	9.04 dB @ 40.00 GHz

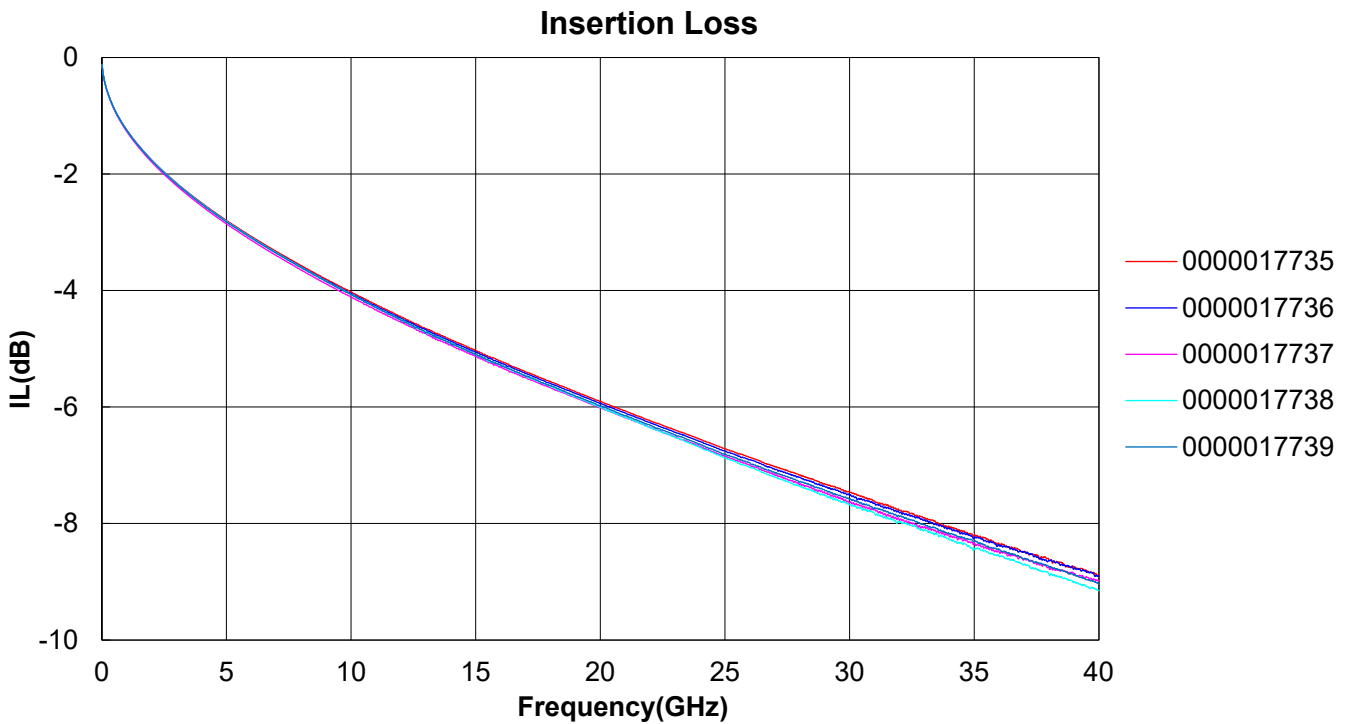
Series: RF047-A

Description: 50 Ohm, RF Microwave cable assembly

VSWR



Insertion Loss



Series: RF047-A

Description: 50 Ohm, RF Microwave cable assembly

RF047-A-M0RJ-M0RJ-0152 Test Definition

Part Number	Length	End 1	End 2
RF047-A-M0RJ-M0RJ-0152	152 mm	SMPM Right Angle Jack	SMPM Right Angle Jack

Assembly Under Test:



Conclusion:

The maximum VSWR is specified as 1.4:1 from DC to 20 GHz in the RF047-A datasheet and the maximum insertion loss is specified by an equation on the RF047-A Cable Assembly Drawing. The samples meet the specifications for VSWR and insertion loss.

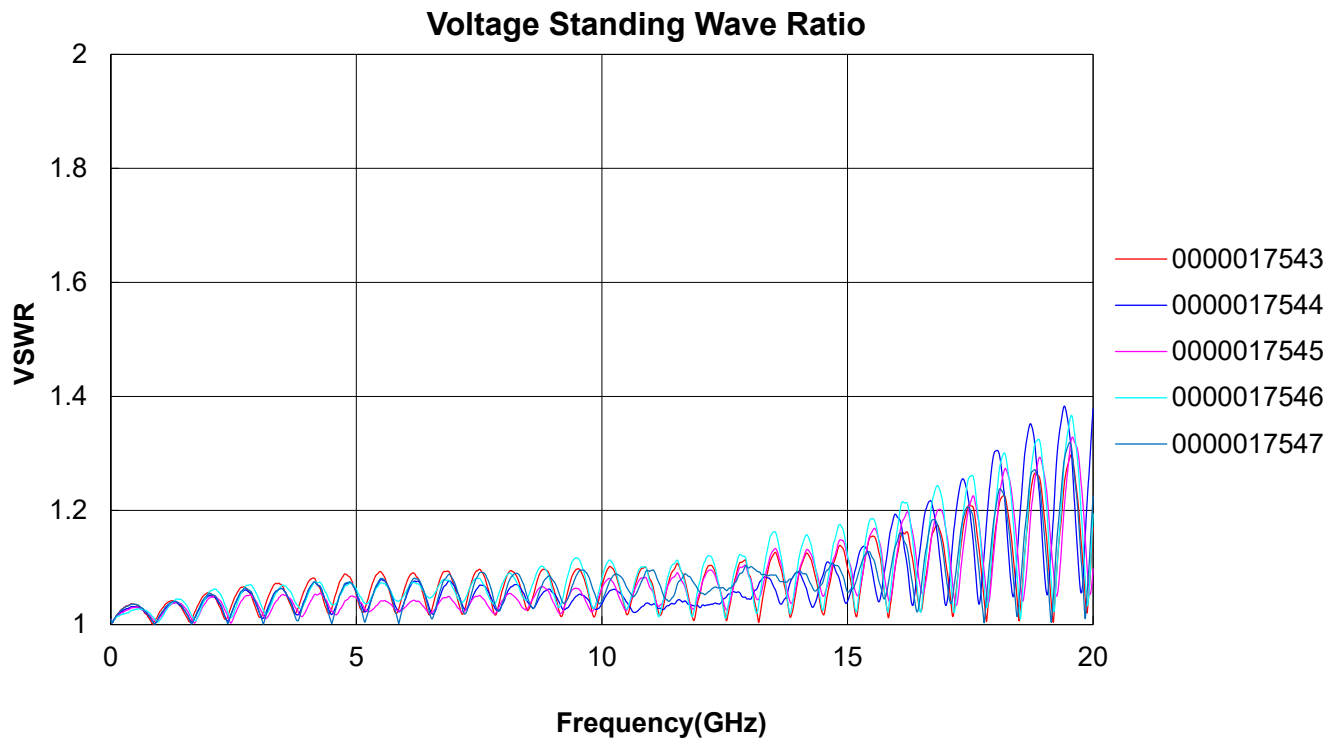
Results: RF047-A-M0RJ-M0RJ-0152

Sample	VSWR (max)	IL (max)
0000017543	1.30 @ 19.55 GHz	1.06 dB @ 19.55 GHz
0000017544	1.38 @ 19.41 GHz	1.12 dB @ 20.00 GHz
0000017545	1.33 @ 19.58 GHz	1.07 dB @ 19.57 GHz
0000017546	1.37 @ 19.56 GHz	1.09 dB @ 19.56 GHz
0000017547	1.32 @ 19.52 GHz	1.06 dB @ 19.53 GHz

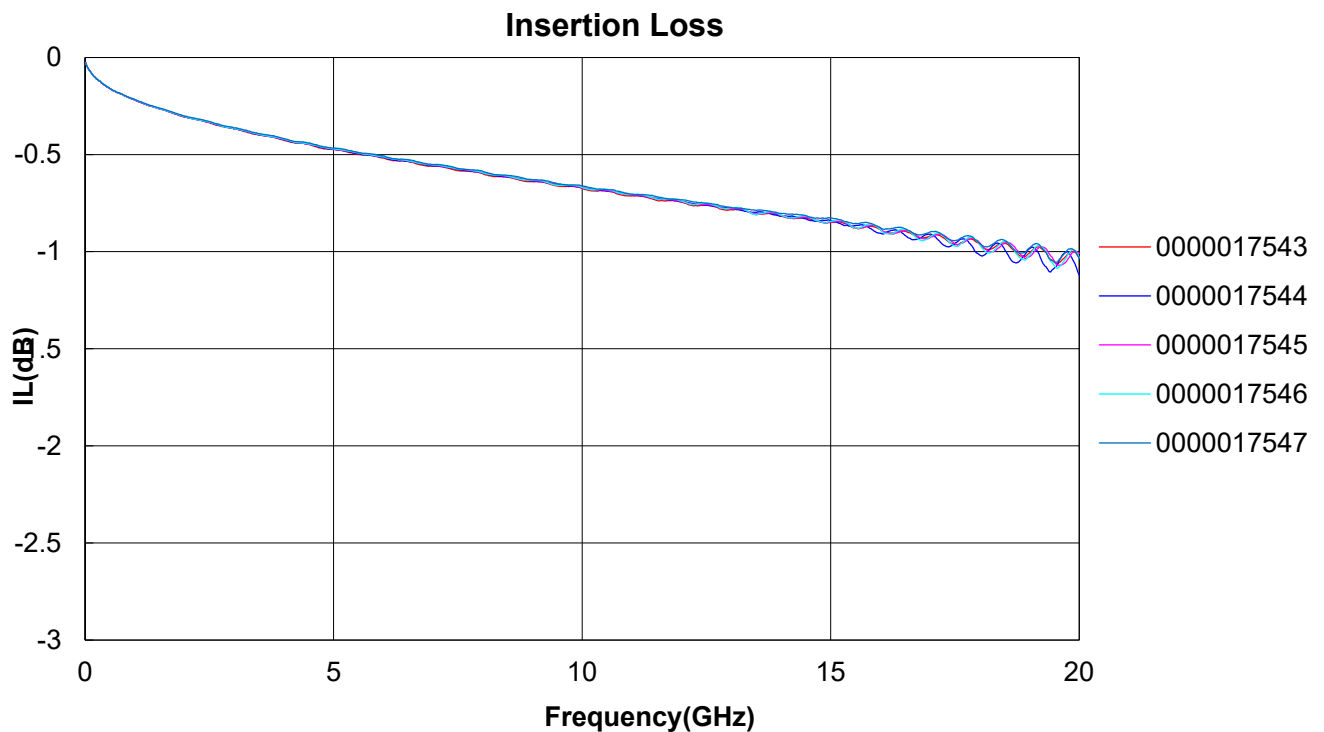
Series: RF047-A

Description: 50 Ohm, RF Microwave cable assembly

VSWR



Insertion Loss



Series: RF047-A

Description: 50 Ohm, RF Microwave cable assembly

RF047-A-M0RJ-M0RJ-0250 Test Definition

Part Number	Length	End 1	End 2
RF047-A-M0RJ-M0RJ-0152	250 mm	SMPM Right Angle Jack	SMPM Right Angle Jack

Assembly Under Test:



Conclusion:

The maximum VSWR is specified as 1.4:1 from DC to 20 GHz in the RF047-A datasheet and the maximum insertion loss is specified by an equation on the RF047-A Cable Assembly Drawing. The samples meet the specifications for VSWR and insertion loss.

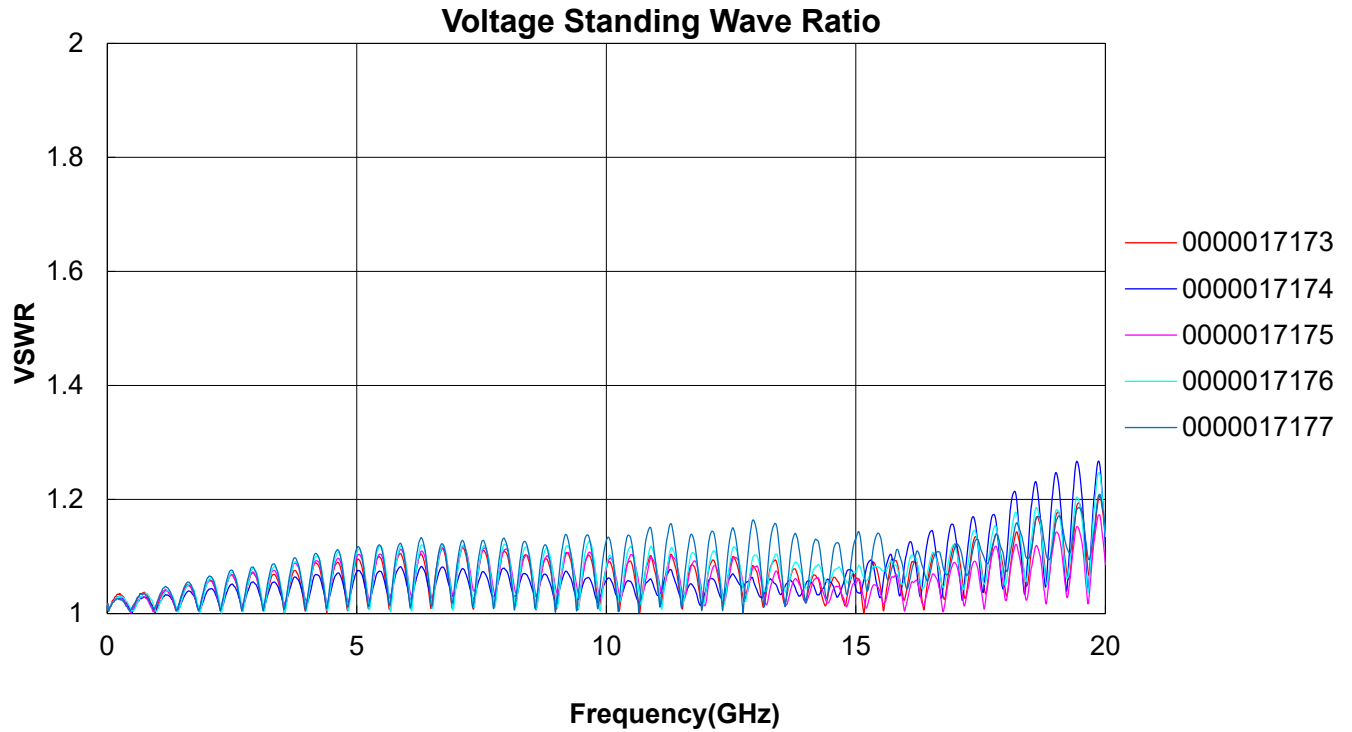
Results: RF047-A-M0RJ-M0RJ-0250

Sample	VSWR (max)	IL (max)
0000017173	1.21 @ 19.89 GHz	1.60 dB @ 19.88 GHz
0000017174	1.27 @ 19.86 GHz	1.59 dB @ 19.88 GHz
0000017175	1.17 @ 19.87 GHz	1.56 dB @ 19.88 GHz
0000017176	1.25 @ 19.87 GHz	1.59 dB @ 19.88 GHz
0000017177	1.21 @ 19.88 GHz	1.57 dB @ 19.88 GHz

Series: RF047-A

Description: 50 Ohm, RF Microwave cable assembly

VSWR



Insertion Loss



Series: RF047-A

Description: 50 Ohm, RF Microwave cable assembly

RF047-A-M0RJ-M0RJ-1000 Test Definition

Part Number	Length	End 1	End 2
RF047-A-M0RJ-M0RJ-1000	1000 mm	SMPM Right Angle Jack	SMPM Right Angle Jack

Assembly Under Test:



Conclusion:

The maximum VSWR is specified as 1.4:1 from DC to 20 GHz in the RF047-A datasheet and the maximum insertion loss is specified by an equation on the RF047-A Cable Assembly Drawing. The samples meet the specifications for VSWR and insertion loss.

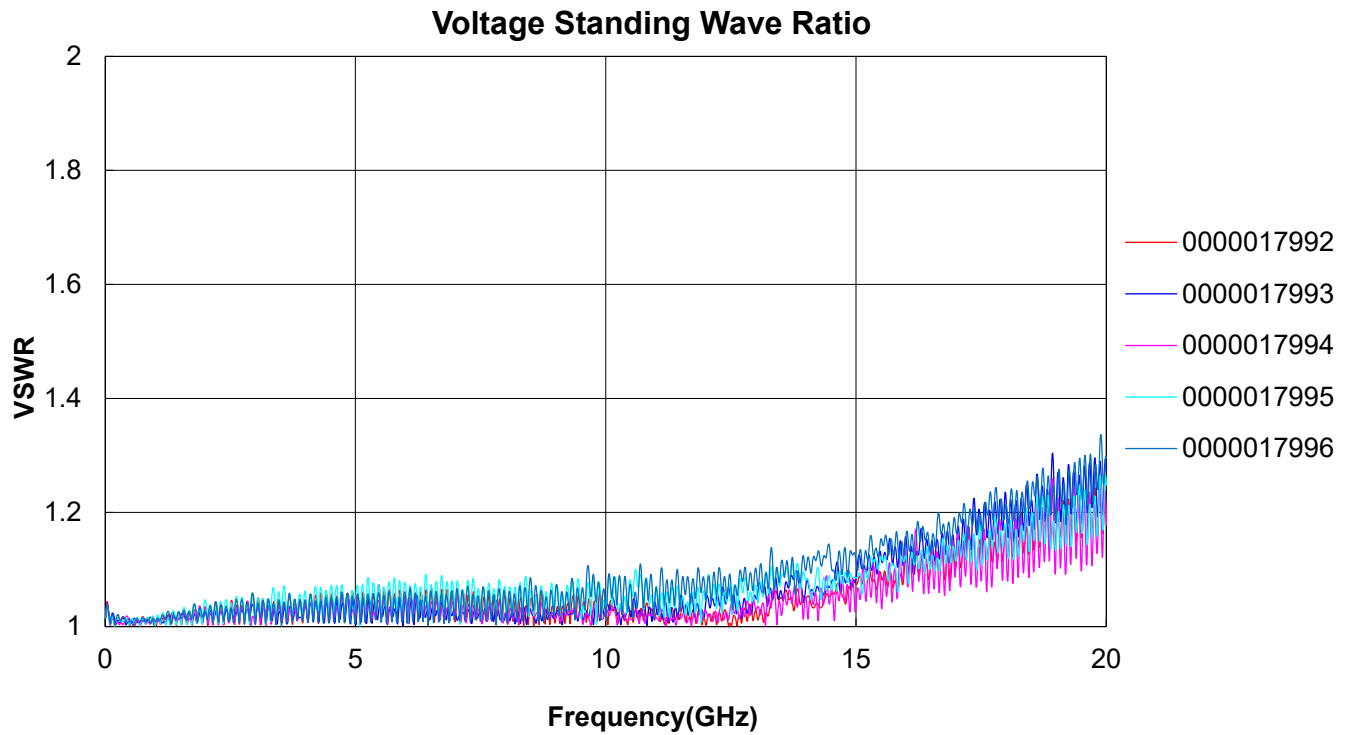
Results: RF047-A-M0RJ-M0RJ-1000

Sample	VSWR (max)	IL (max)
0000017992	1.24 @ 19.87 GHz	6.03 dB @ 19.98 GHz
0000017993	1.30 @ 18.92 GHz	6.09 dB @ 19.98 GHz
0000017994	1.26 @ 18.92 GHz	6.07 dB @ 19.97 GHz
0000017995	1.26 @ 19.88 GHz	6.02 dB @ 19.99 GHz
0000017996	1.34 @ 19.89 GHz	6.11 dB @ 19.90 GHz

Series: RF047-A

Description: 50 Ohm, RF Microwave cable assembly

VSWR



Insertion Loss

