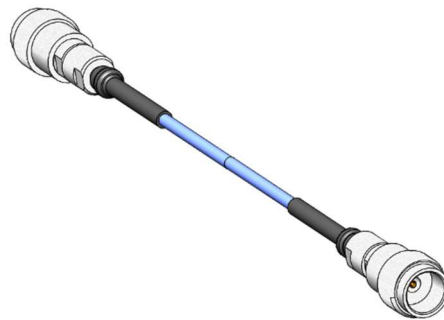




## RF Characterization Report

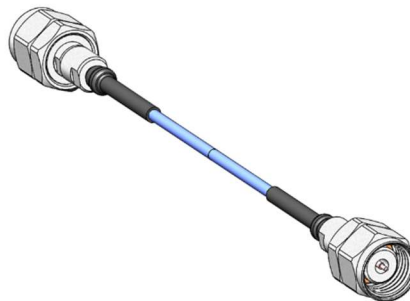
**RF047-A-18SJ-18SJ-XXXX**

Test Date: 13 March 2020



**RF047-A-18SP-18SP-XXXX**

Test Date: 13 March 2020



### Description

**High Performance Microwave Cable Assembly, 1.85mm Connector  
End, CCA-047-PFA, 50 Ohm, RF cable**

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**Series: RF047-A**

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**Series:** RF047-A

**Description:** High Performance Microwave Cable Assembly, 1.85 mm Connector End

## 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 N5227B (10 MHz - 67 GHz)
Averaging Factor	0
Smoothing	Off
IF Bandwidth	1 kHz
Sweep Start	10 MHz
Sweep End	67 GHz
Points	6700
Test Cables	Gore 0F0CACB036.0-LF (DC to 67 GHz)

### Calibration Type:

A Keysight ECAL calibration is performed using the Keysight ECAL 4694A kit.

Calibration Kit	Keysight ECAL 4694A
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### Adapter Use:

The 1.85 mm Female to 1.85 mm Male adapters and 1.85 mm Female /Female adapters were used for the measurements of RF047-A-18SP-18SP and RF047-A-18SJ-18SJ. The adapter effects were removed from the measurement using the PNA's Fixture Removal method.

**Series: RF047-A**
**Description:** High Performance Microwave Cable Assembly, 1.85 mm Connector End

**RF047-A-18SJ-18SJ-0152 Test Definition**

Part Number	Length	End 1	End 2
RF047-A-18SJ-18SJ-0152	152 mm	SMA, 1.85 Straight Jack	SMA, 1.85 Straight Jack

**Assembly Under Test:**

**Rating Opportunity:**

Not Available.

**Conclusion:**

The maximum VSWR is specified as 1.4:1 from DC to 67 GHz in the RF047-A datasheet. The samples meet the specification for VSWR.

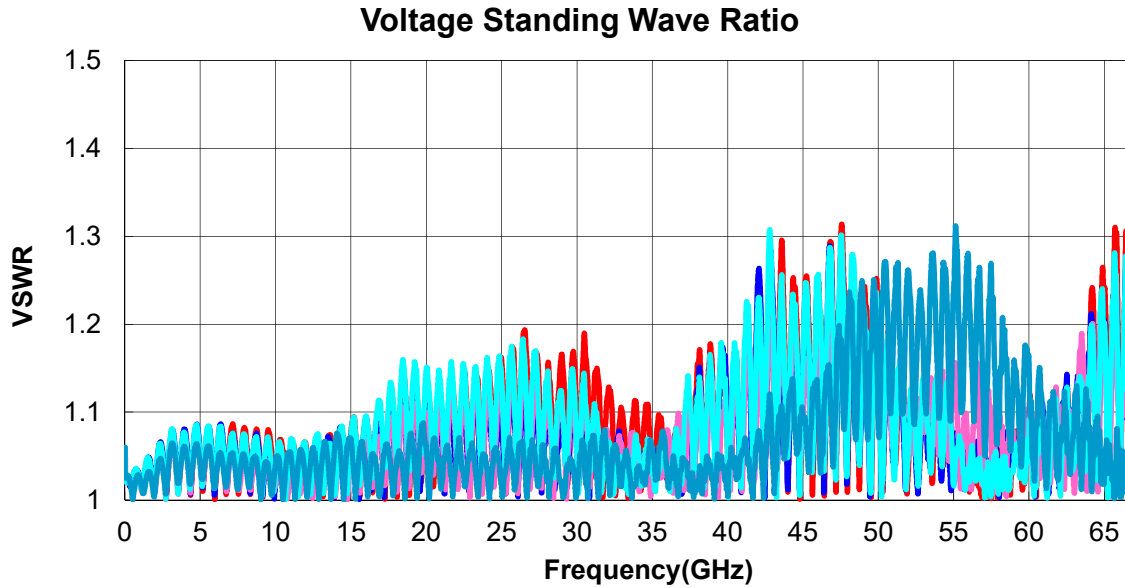
**Results: RF047-A-18SJ-18SJ-0152**

Sample	VSWR (max)	IL (max)
1	1.31 @ 47.56 GHz	2.14 dB @ 66.45 GHz
2	1.29 @ 46.77 GHz	2.11 dB @ 66.45 GHz
3	1.25 @ 66.42 GHz	2.13 dB @ 66.45 GHz
4	1.31 @ 42.79 GHz	2.15 dB @ 66.45 GHz
5	1.31 @ 55.12 GHz	2.13 dB @ 66.89 GHz

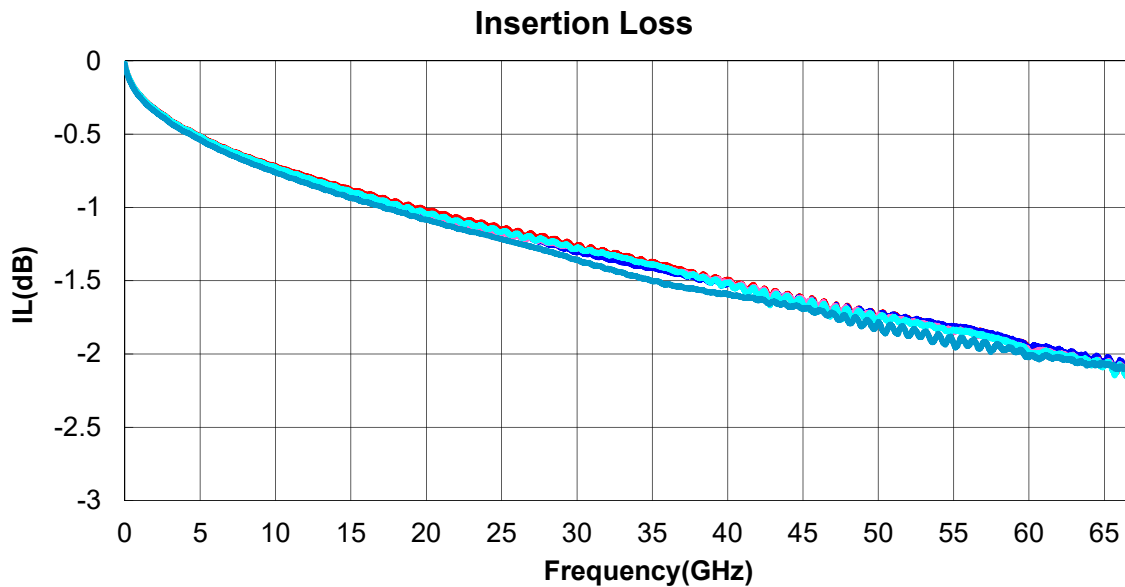
Series: RF047-A

Description: High Performance Microwave Cable Assembly, 1.85 mm Connector End

### VSWR



### Insertion Loss



**Series: RF047-A**
**Description:** High Performance Microwave Cable Assembly, 1.85 mm Connector End

**RF047-A-18SP-18SP-0152 Test Definition**

Part Number	Length	End 1	End 2
RF047-A-18SP-18SP-0152	152 mm	SMA, 1.85 Straight Plug	SMA, 1.85 Straight Plug

**Assembly Under Test:**

**Rating Opportunity:**

Not Available.

**Conclusion:**

The maximum VSWR is specified as 1.4:1 from DC to 67 GHz in the RF047-A datasheet. The samples meet the specification for VSWR.

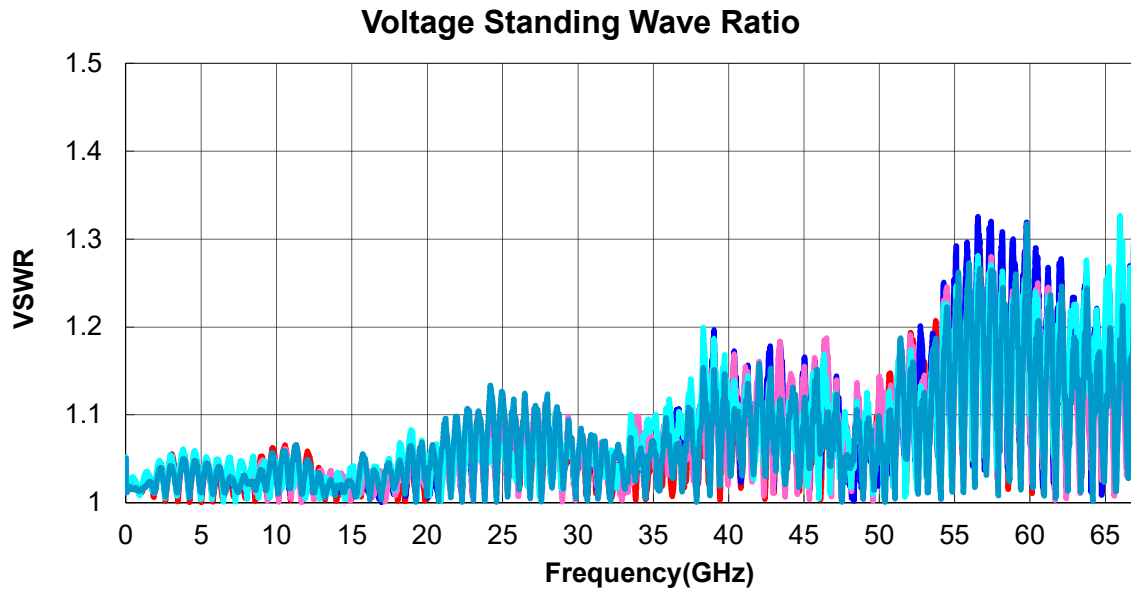
**Results: RF047-A-18SP-18SP-0152**

Sample	VSWR (max)	IL (max)
1	1.31 @ 59.77 GHz	2.24 dB @ 66.85 GHz
2	1.33 @ 56.55 GHz	2.25 dB @ 66.84 GHz
3	1.29 @ 59.75 GHz	2.17 dB @ 66.85 GHz
4	1.33 @ 66.91 GHz	2.23 dB @ 66.84 GHz
5	1.32 @ 59.79 GHz	2.20 dB @ 66.89 GHz

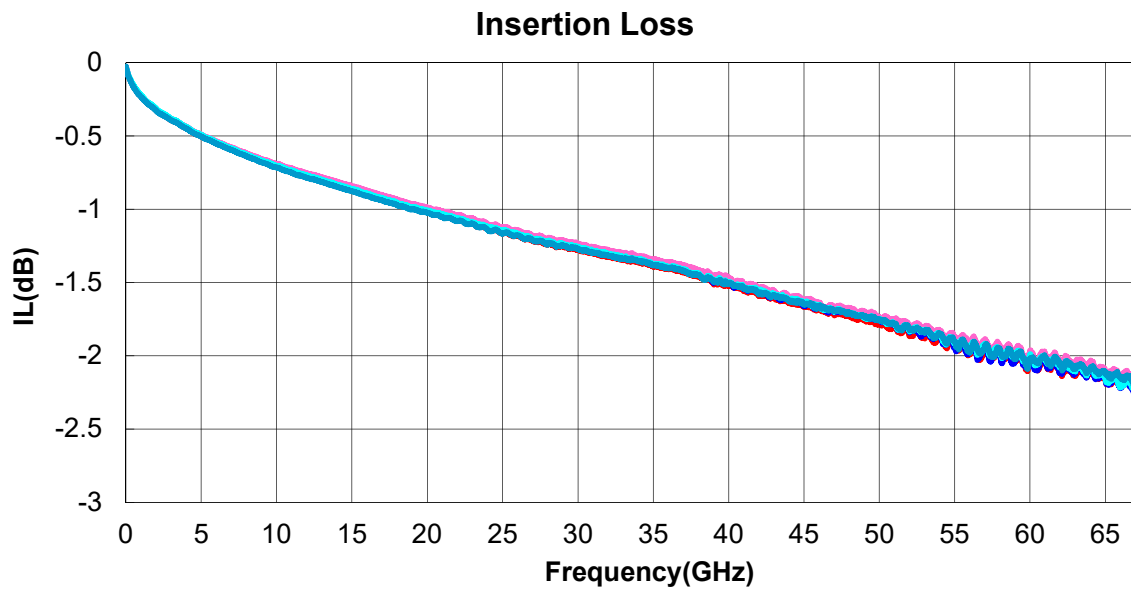
Series: RF047-A

Description: High Performance Microwave Cable Assembly, 1.85 mm Connector End

### VSWR



### Insertion Loss



**Series:** RF047-A

**Description:** High Performance Microwave Cable Assembly, 1.85 mm Connector End

**RF047-A-18SJ-18SJ-1000 Test Definition**

Part Number	Length	End 1	End 2
RF047-A-18SJ-18SJ-1000	1000 mm	SMA, 1.85 Straight Jack	SMA, 1.85 Straight Jack

**Assembly Under Test:**



**Rating Opportunity:**

Not Available.

**Conclusion:**

The maximum VSWR is specified as 1.4:1 from DC to 67 GHz in the RF047-A datasheet. The samples meet the specification for VSWR.

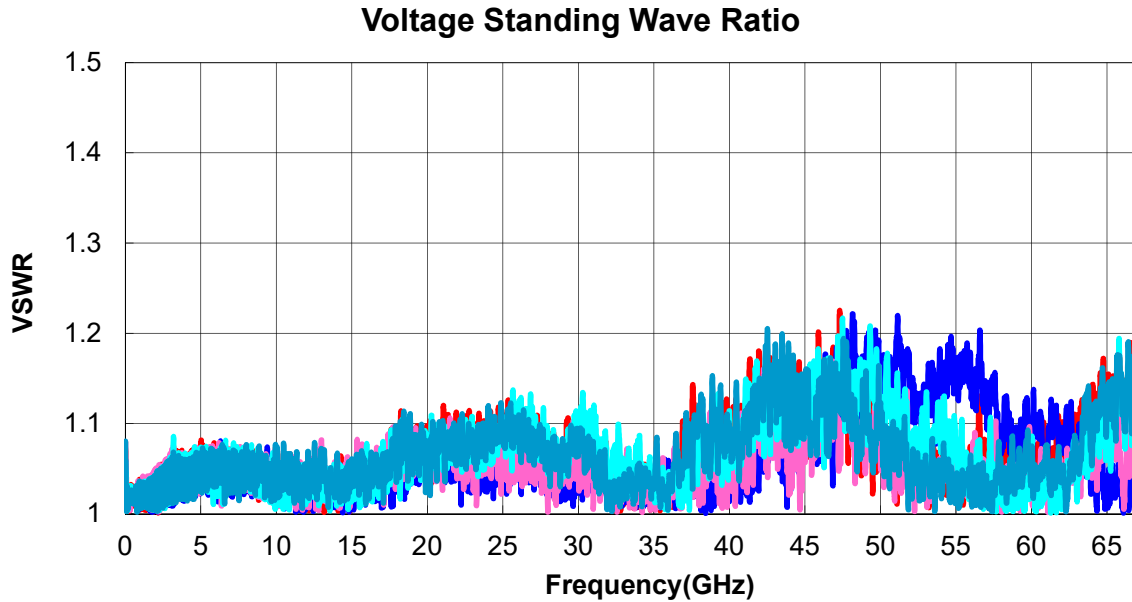
**Results: RF047-A-18SJ-18SJ-1000**

Sample	VSWR (max)	IL (max)
1	1.23 @ 47.30 GHz	11.94 dB @ 66.91 GHz
2	1.22 @ 48.16 GHz	11.97 dB @ 66.88 GHz
3	1.17 @ 46.89 GHz	11.93 dB @ 66.91 GHz
4	1.22 @ 47.49 GHz	12.01 dB @ 66.91 GHz
5	1.21 @ 42.52 GHz	11.96 dB @ 66.88 GHz

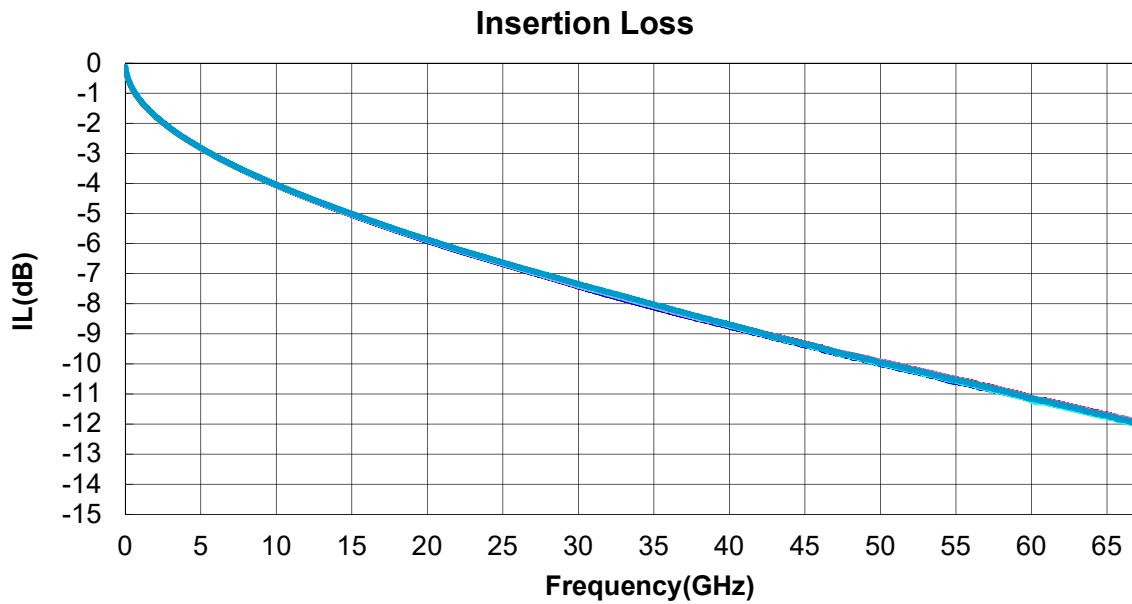
Series: RF047-A

Description: High Performance Microwave Cable Assembly, 1.85 mm Connector End

### VSWR



### Insertion Loss



**Series: RF047-A**
**Description:** High Performance Microwave Cable Assembly, 1.85 mm Connector End

**RF047-A-18SP-18SP-1000 Test Definition**

Part Number	Length	End 1	End 2
RF047-A-18SP-18SP-1000	1000 mm	SMA, 1.85 Straight Plug	SMA, 1.85 Straight Plug

**Assembly Under Test:**

**Rating Opportunity:**

Not Available.

**Conclusion:**

The maximum VSWR is specified as 1.4:1 from DC to 67 GHz in the RF047-A datasheet. The samples meet the specification for VSWR.

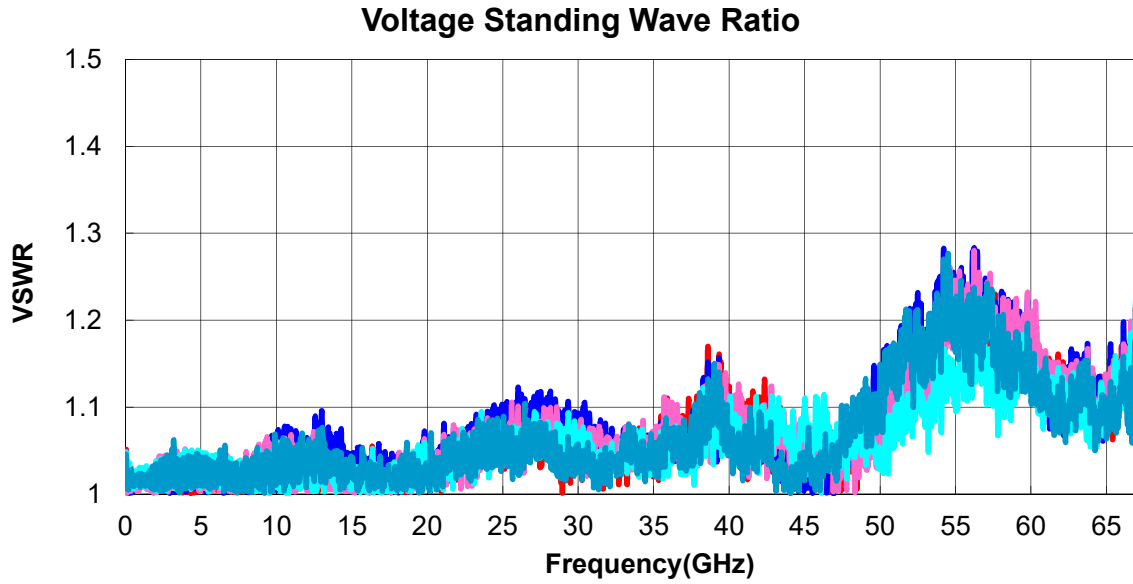
**Results: RF047-A-18SP-18SP-1000**

Sample	SWR (max)	IL (max)
1	1.25 @ 56.54 GHz	12.31 dB @ 66.84 GHz
2	1.28 @ 56.23 GHz	12.65 dB @ 66.84 GHz
3	1.28 @ 56.22 GHz	12.35 dB @ 67.00 GHz
4	1.22 @ 66.93 GHz	12.54 dB @ 67.00 GHz
5	1.28 @ 54.52 GHz	12.33 dB @ 66.98 GHz

Series: RF047-A

Description: High Performance Microwave Cable Assembly, 1.85 mm Connector End

### VSWR



### Insertion Loss

