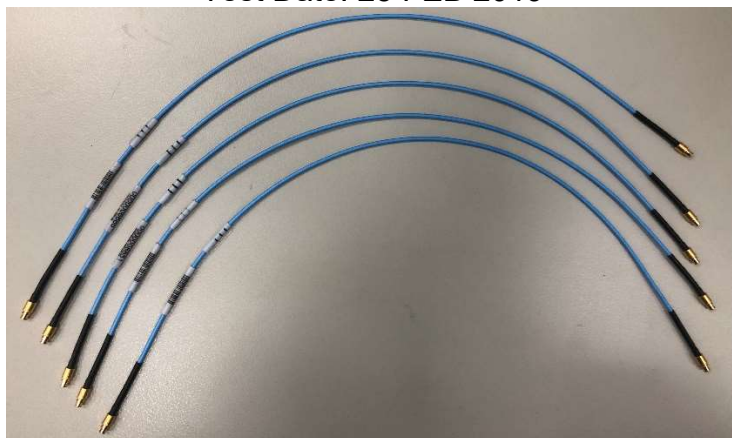




RF Characterization Report

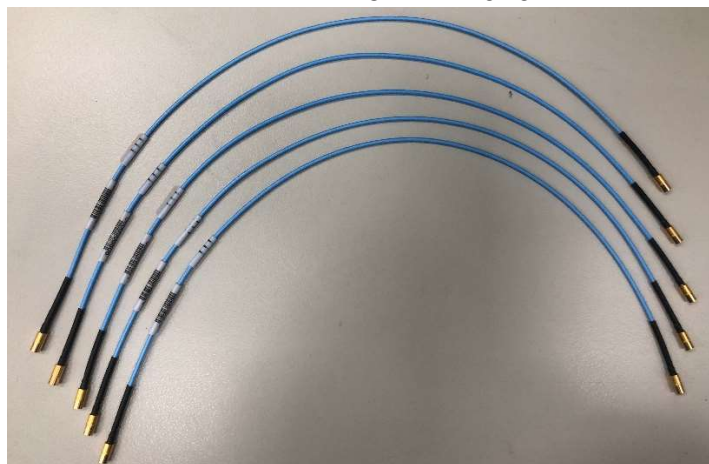
RF047-2-MOSJ-MOSJ-0305

Test Date: 25 FEB 2019



RF047-2-MFSP-MFSP-0305

Test Date: 25 FEB 2019



Description

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

Series: RF047-2**Description:** High Performance Microwave Cable Assembly, SMPM Connector End

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Series: RF047-2**Description:** High Performance Microwave Cable Assembly, SMPM Connector End**Test Setup Information****Scope:**

Provide insertion loss, return loss and standing wave ratio performance parameters for RF connector types terminated to RF047-2 series coaxial cable. Where requested, provide extended bandwidth and TDR information.

Instrument Setup & Test Accessories:

Network Analyzer	Keysight PNA N5227A (10 MHz - 67 GHz)
Averaging Factor	0
Smoothing	Off
IF Bandwidth	1 KHz
Sweep type:	Stepped sweep and Dwell time 10us
Sweep Start	10 MHz
Sweep End	67 GHz
Points	6700
Test Cables	Gore 0F0CACB036.0-LF (DC to 67 GHz)

Calibration Type:

A SOLT calibration is performed using a Ecal N4694A 1.85 mm kit.

Calibration Kit	Keysight Ecal N4694A 1.85 mm kit
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Adapter Use:

1.85 mm Female to SMPM Male/Female adapters, used for the measurements of RF047-2-MFSP-MFSP-0305 and RF047-2-MOSJ-MFSJ-0305. The test result has contained the SMPM adapters performance.

Adapter:

API/Inmet 5298 1.85 mm Female to SMPM Male Adapter
API/Inmet 5299 1.85 mm Female to SMPM Female Adapter

Series: RF047-2

Description: High Performance Microwave Cable Assembly, SMPM Connector End

RF047-2-MOSJ-MOSJ-0305 Test Definition

Part Number	Length	End 1	End 2
RF047-2-MOSJ-MOSJ-0305	305 mm	SMPM Jack	SMPM Jack

Assembly Under Test:

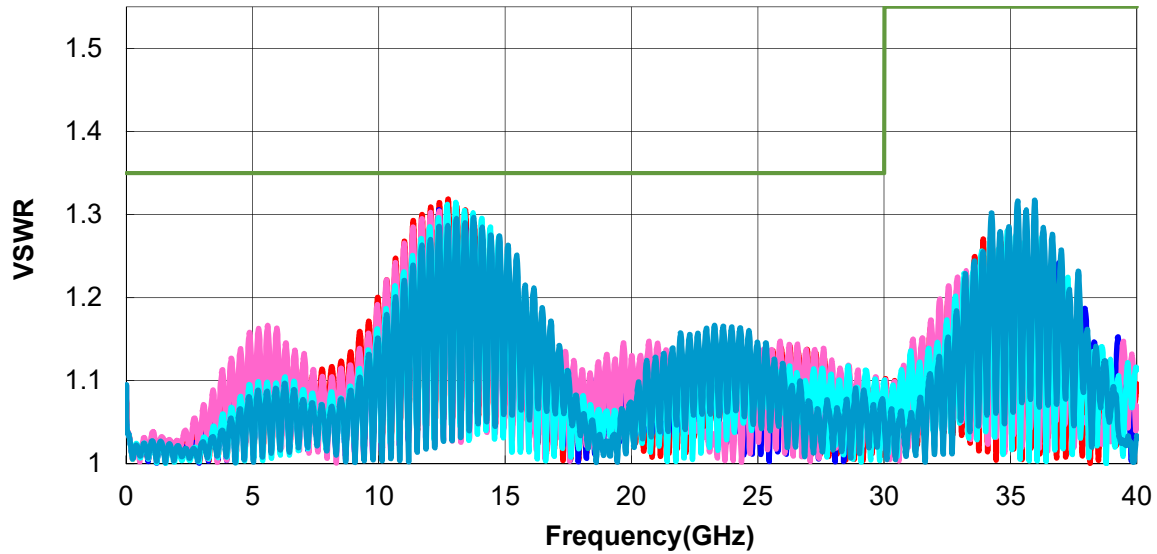
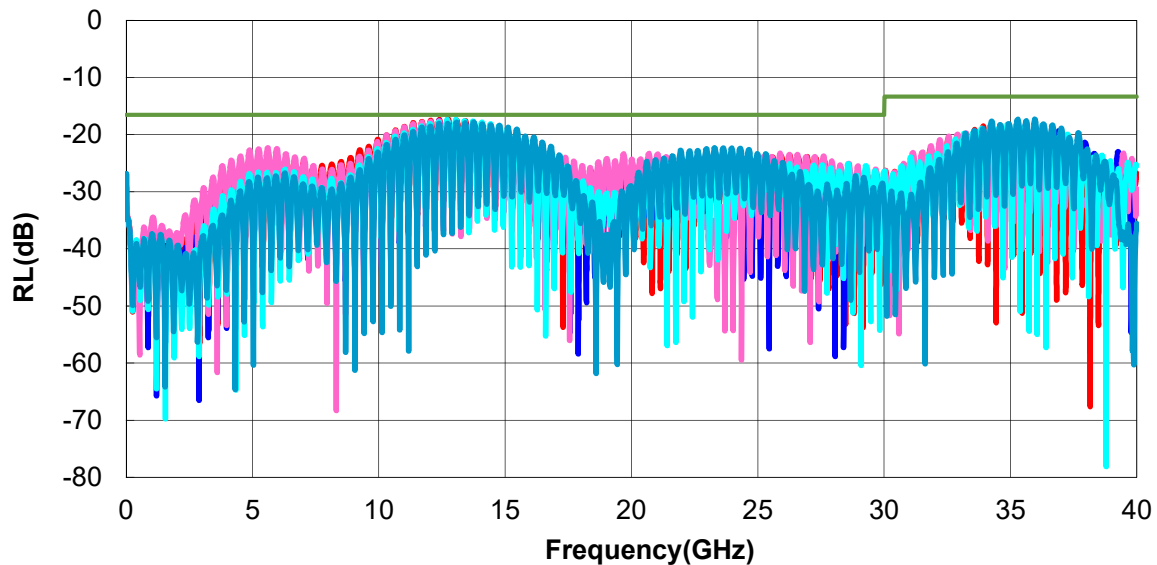


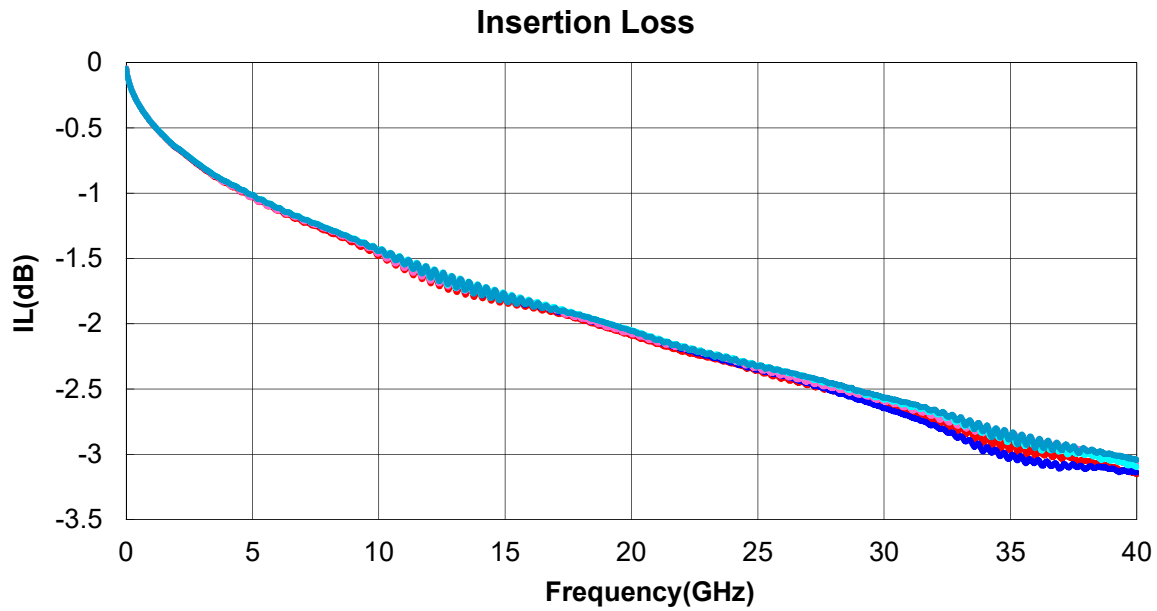
Conclusion:

The maximum return loss is specified as -16.54 dB from DC to 30 GHz, -13.32dB from 30 to 40 GHz in the SMPM datasheet. The responding maximum SWR is 1.35 from DC to 30 GHz, 1.55 from 30 to 40 GHz then. The samples meet the specification on the return loss and VSWR.

Results: RF047-2-MOSJ-MOSJ-0305

Description: SMPM Jack to RF047-2 Microwave Cable to SMPM Jack			
Sample	VSWR (max)	RL (max)	IL (min)
1	1.31 @ 13.05 GHz	-17.33 dB @ 13.05 GHz	-3.10 dB @ 39.95 GHz
2	1.32 @ 35.96 GHz	-17.26 dB @ 35.96 GHz	-3.04 dB @ 39.96 GHz
3	1.32 @ 12.74 GHz	-17.23 dB @ 12.74 GHz	-3.15 dB @ 40.00 GHz
4	1.31 @ 12.38 GHz	-17.55 dB @ 12.38 GHz	-3.07 dB @ 39.93 GHz
5	1.30 @ 12.39 GHz	-17.58 dB @ 12.39 GHz	-3.14 dB @ 39.95 GHz

Series: RF047-2**Description:** High Performance Microwave Cable Assembly, SMPM Connector EndVSWR**Voltage Standing Wave Ratio**Return Loss**Return Loss**

Series: RF047-2**Description:** High Performance Microwave Cable Assembly, SMPM Connector EndInsertion Loss

Series: RF047-2

Description: High Performance Microwave Cable Assembly, SMPM Connector End

RF047-2-MFSP-MFSP-0305 Test Definition

Part Number	Length	End 1	End 2
RF047-2-MFSP-MFSP-0305	305 mm	SMPM Plug	SMPM Plug

Assembly Under Test:

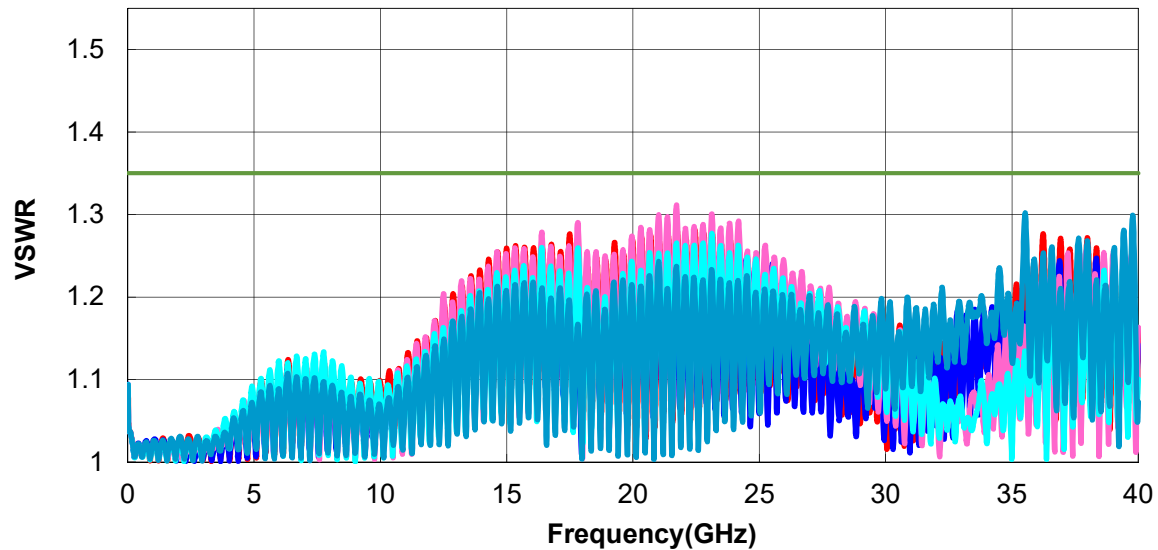
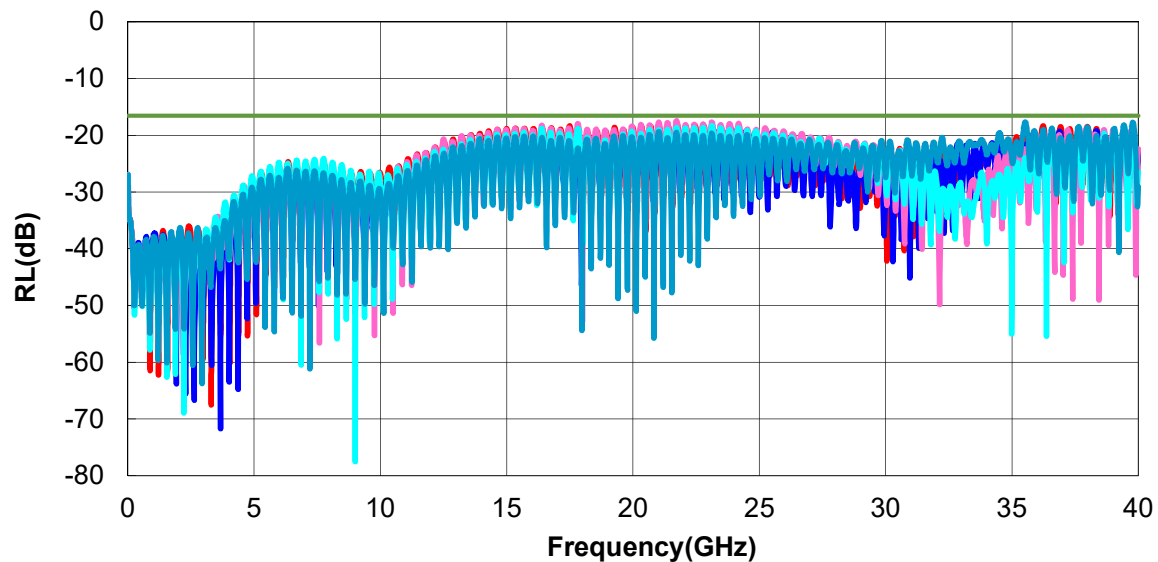


Conclusion:

The maximum return loss is specified as -16.54 dB from DC to 40 GHz in the SMPM datasheet. The responding maximum SWR. is 1.35 then. The samples meet the specification on the return loss and VSWR.

Results: RF047-2-MFSP-MFSP-0305

Description: SMPM Plug to RF047-2 Microwave Cable to SMPM Plug			
Sample	SWR (max)	RL (max)	IL (min)
1	1.28 @ 21.74 GHz	-18.51 dB @ 21.74 GHz	-3.03 dB @ 40.00 GHz
2	1.25 @ 23.42 GHz	-19.06 dB @ 23.42 GHz	-3.03 dB @ 40.00 GHz
3	1.31 @ 21.72 GHz	-17.40 dB @ 21.72 GHz	-3.05 dB @ 39.69 GHz
4	1.28 @ 23.12 GHz	-18.29 dB @ 23.12 GHz	-2.99 dB @ 39.41 GHz
5	1.30 @ 35.52 GHz	-17.64 dB @ 35.52 GHz	-3.09 dB @ 39.80 GHz

Series: RF047-2**Description:** High Performance Microwave Cable Assembly, SMPM Connector EndVSWR**Voltage Standing Wave Ratio**Return Loss**Return Loss**

Series: RF047-2**Description:** High Performance Microwave Cable Assembly, SMPM Connector EndInsertion Loss