

**Withwave** provides **Microwave Semi-rigid & flexible cable assemblies** with 0.047", 0.085" diameter for various kinds of microwave interconnection applications **up to 40 & 50 GHz**. These cable assemblies are suitable for Telecommunication Systems, Module to Module interconnections.

### ■ Features

- DC to 40 & 50 GHz
- Cable : Semi-Rigid & Flexible (0.047" , 0.085")
- Connector: 2.92 mm & 2.4 mm (Male, Female type)
- VSWR(Max): 1.30 : 1 (up 40 GHz)  
1.40 : 1 (up 50 GHz)



### ■ Application

- Telecommunication Systems
- RF & Microwave Interconnection
- Module to Module Systems

### ■ Specification

Scope	Specification	SR047	SF047	SR085	SF085
Physical (Cable)	Center Conductor	0.29	0.29	0.51	0.54
	Dielectric	0.92	0.92	1.68	1.68
	Jacket	1.19	1.19	2.20	2.18
Electrical	Impedance (Ohm)	50			
	Operation Freq.(GHz)	40, 50 GHz			
	Velocity of propagation( %)	69.5			
	VSWR (Max)	1.30 : 1 (to up 40 GHz) 1.40 : 1 (up to 50 GHz)			
	Shielding Effectiveness (dB)	100			
Mechanical & Environmental	Weight (g/M)	5.7	5.7	20.2	16.0
	Operation Temperature	-40~ +125℃			

\* ROHS Compliant

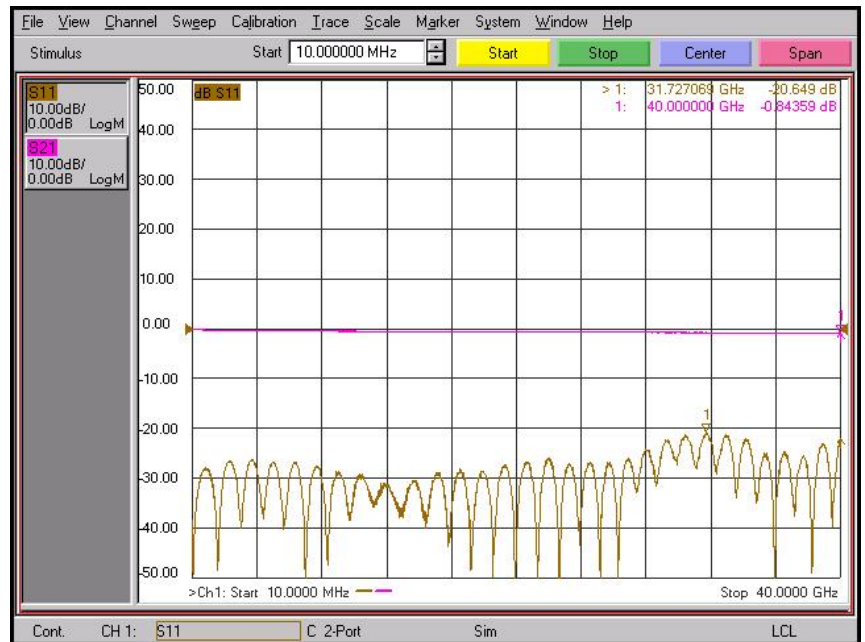
### ■ Test Results (Semi-Rigid Type)

## DC to 40 GHz

### Semi-Rigid 047

**Part No: SR047-KF1KF1-95mm**

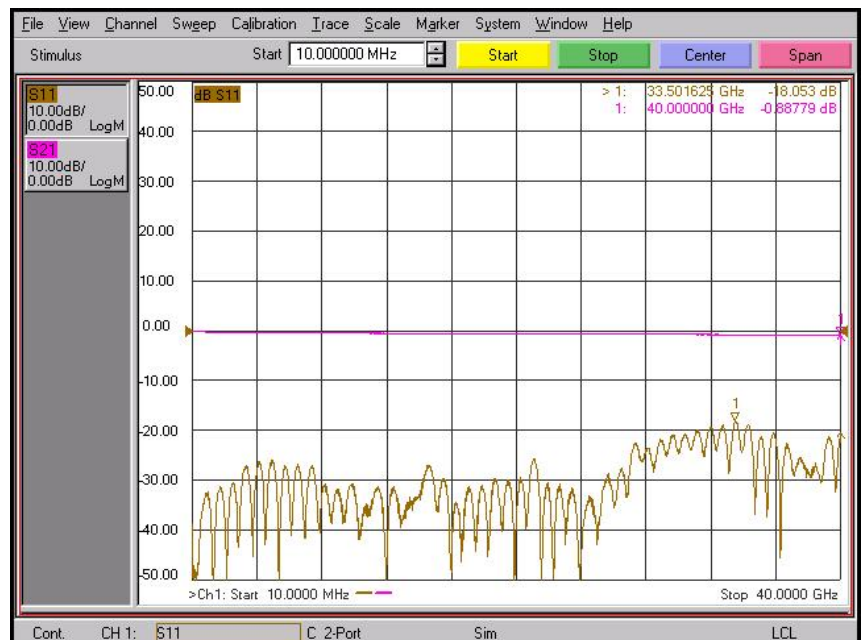
- Frequency : DC to 40 GHz
- Connector : 2.92 mm(Female)
- Cable Length : 95 mm



### Semi-Rigid 085

**Part No: SR085-KF1KF1-0.15M**

- Frequency : DC to 40 GHz
- Connector : 2.92 mm(Female)
- Cable Length : 0.15 meter



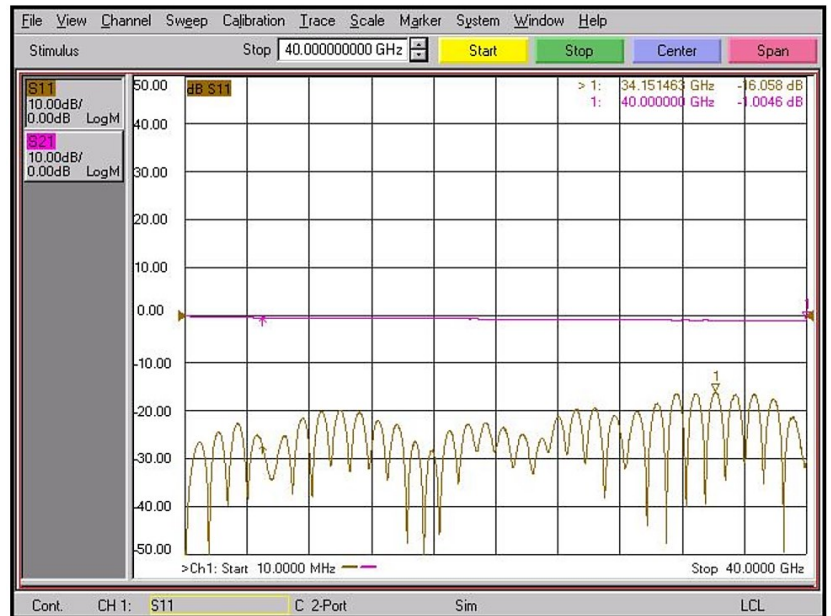
### ■ Test Results (Semi-Rigid Type)

## DC to 40 GHz

### Semi-Rigid 047

**Part No: SR047-KM1KM1-0.1M**

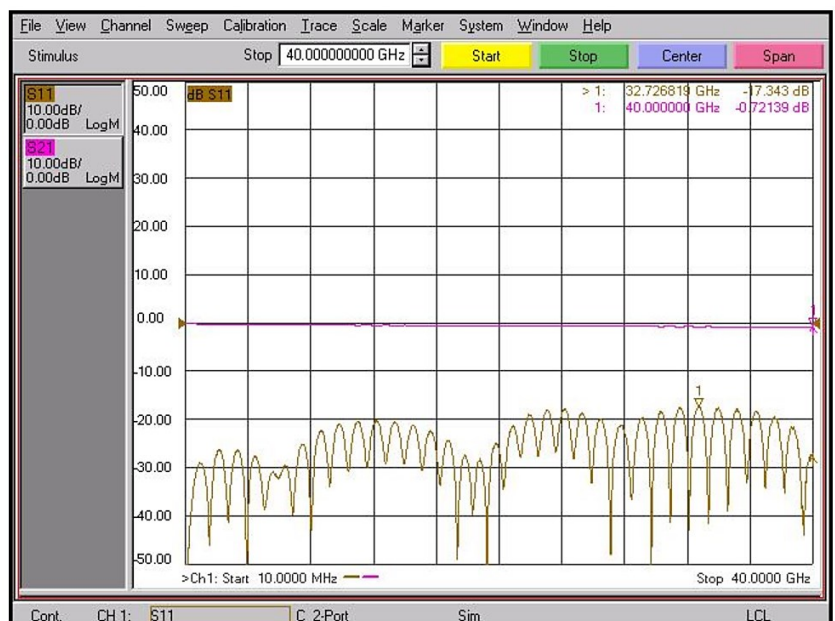
- Frequency : DC to 40 GHz
- Connector : 2.92 mm(Male)
- Cable Length : 0.1 meter



### Semi-Rigid 085

**Part No: SR085-KM1KM1-0.1M**

- Frequency : DC to 40 GHz
- Connector : 2.92 mm(Male)
- Cable Length : 0.1 meter



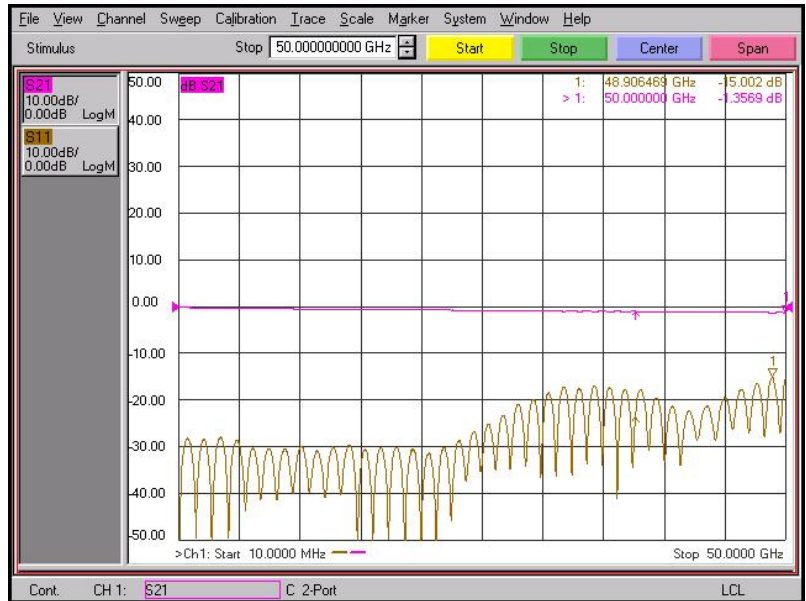
### ■ Test Results (Semi-Rigid Type)

## DC to 40 GHz

### Semi-Rigid 047

**Part No: SR047-2F12F1-0.1M**

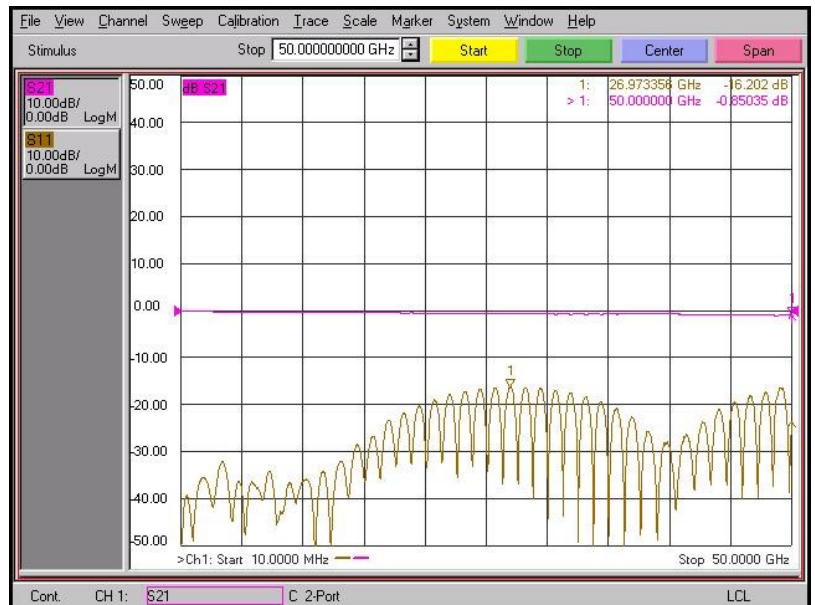
- Frequency : DC to 50 GHz
- Connector : 2.4 mm(Female)
- Cable Length : 0.1 meter



### Semi-Rigid 085

**Part No: SR085-2F12F1-0.1M**

- Frequency : DC to 50 GHz
- Connector : 2.4 mm(Female)
- Cable Length : 0.1 meter



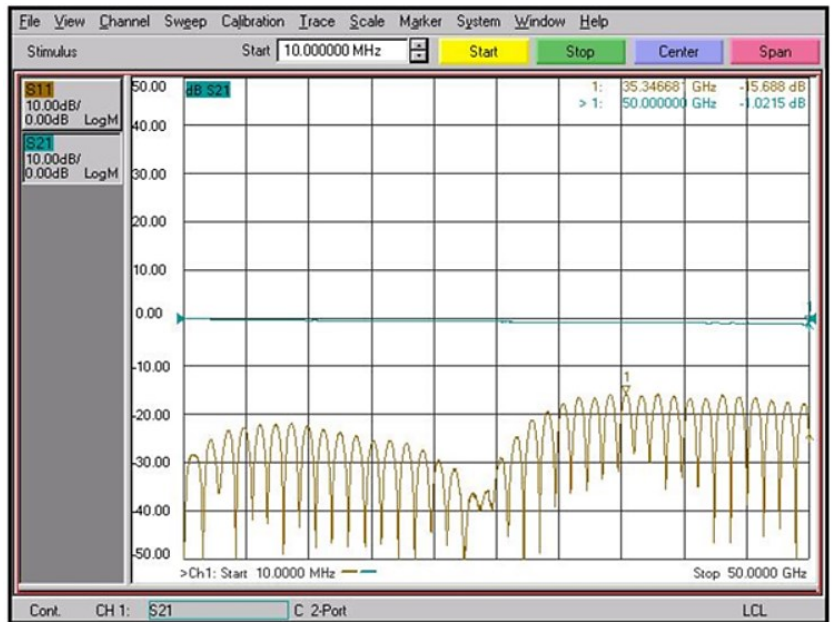
### ■ Test Results (Semi-Rigid Type)

## DC to 50 GHz

### Semi-Rigid 047

**Part No: SR047-2M12M1-0.1M**

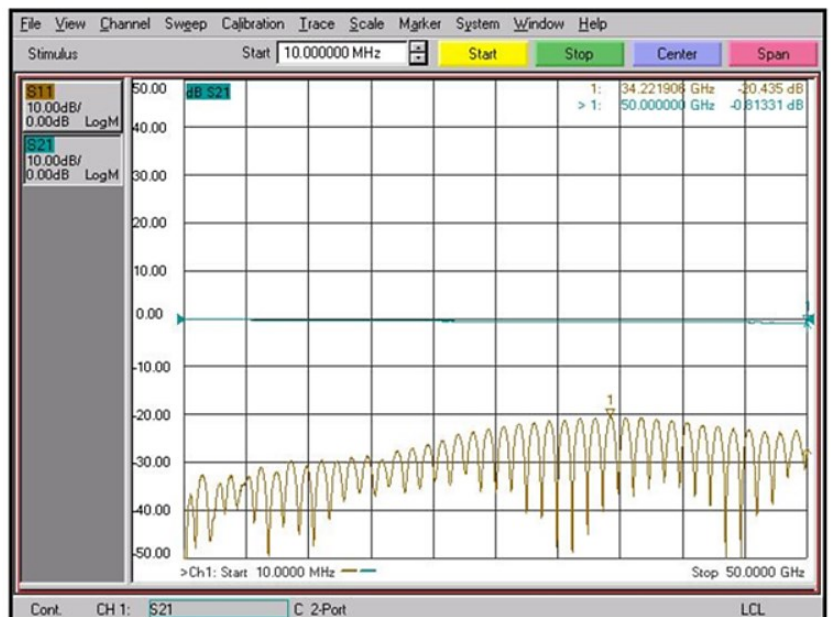
- Frequency : DC to 50 GHz
- Connector : 2.4 mm(male)
- Cable Length : 0.1 meter



### Semi-Rigid 085

**Part No: SR085-2M12M1-0.1M**

- Frequency : DC to 50 GHz
- Connector : 2.4 mm(male)
- Cable Length : 0.1 meter



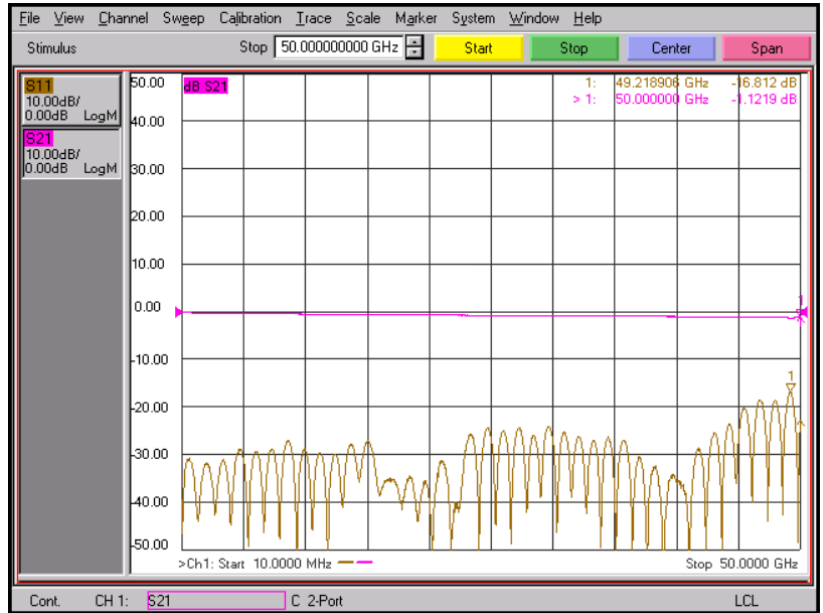
### ■ Test Results (Semi-Flexible Type)

## DC to 40 GHz

### Semi-Flex 047

**Part No: SF047-KF1KF1-0.1M**

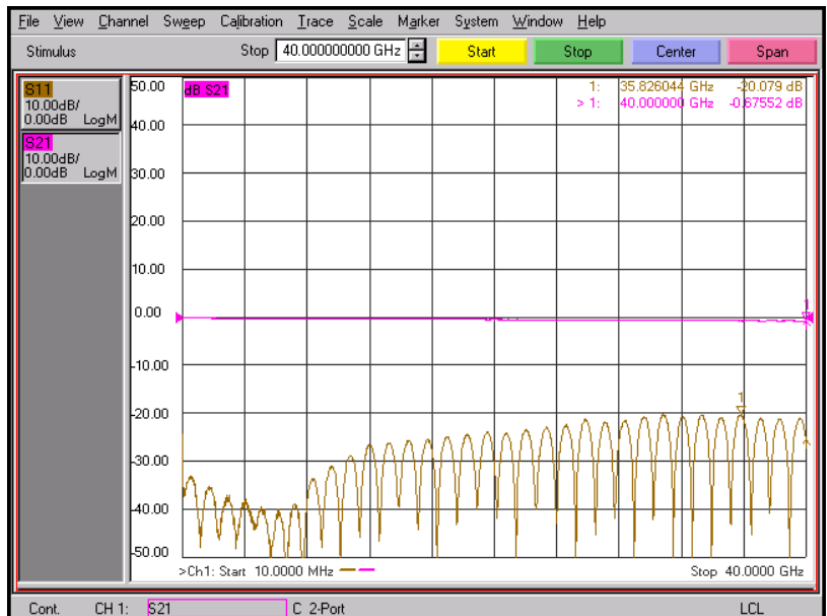
- Frequency : DC to 40 GHz
- Connector : 2.92 mm(Female)
- Cable Length : 0.1 meter



### Semi-Flex 085

**Part No: SF085-KF1KF1-0.1M**

- Frequency : DC to 40 GHz
- Connector : 2.92 mm(Female)
- Cable Length : 0.1 meter



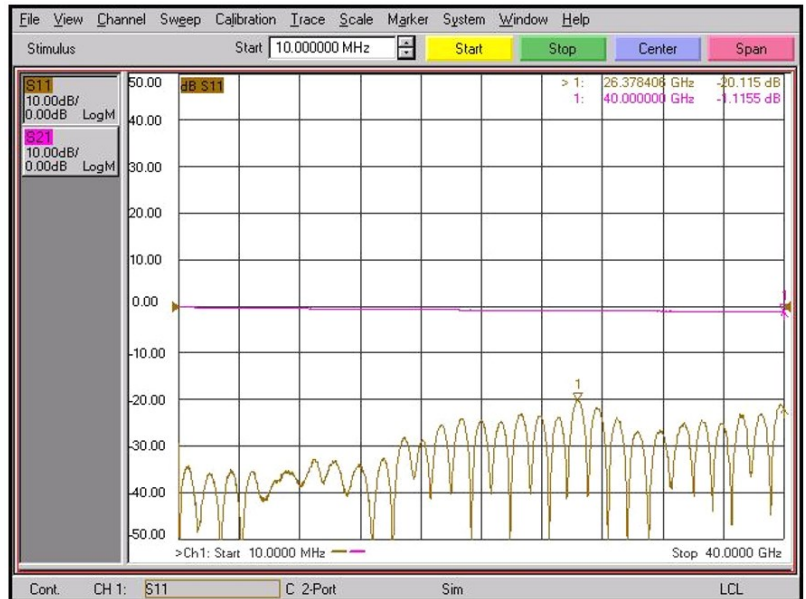
### ■ Test Results (Semi-Flexible Type)

## DC to 40 GHz

### Semi-Flex 047

**Part No: SF047-KM1KM1-0.1M**

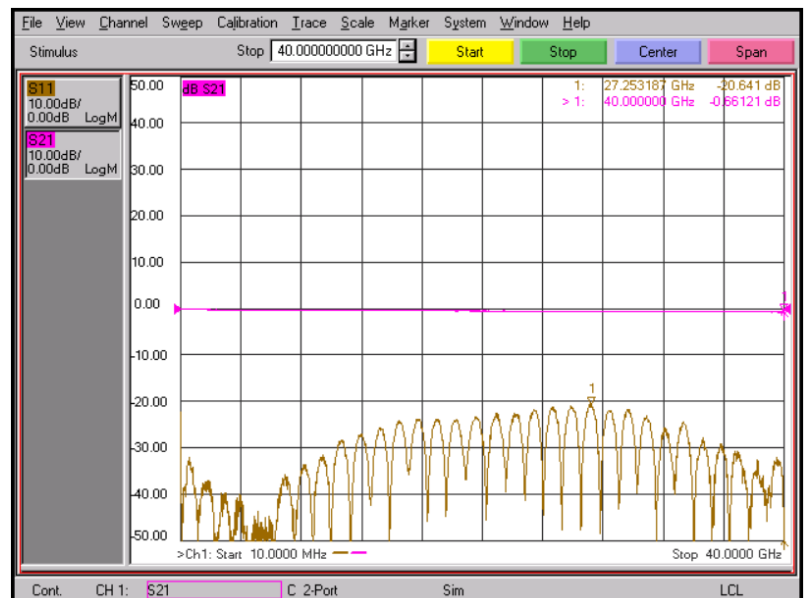
- Frequency : DC to 40 GHz
- Connector : 2.92 mm(Male)
- Cable Length : 0.1 meter



### Semi-Flex 085

**Part No: SF085-KM1KM1-0.1M**

- Frequency : DC to 40 GHz
- Connector : 2.92 mm(Male)
- Cable Length : 0.1 meter



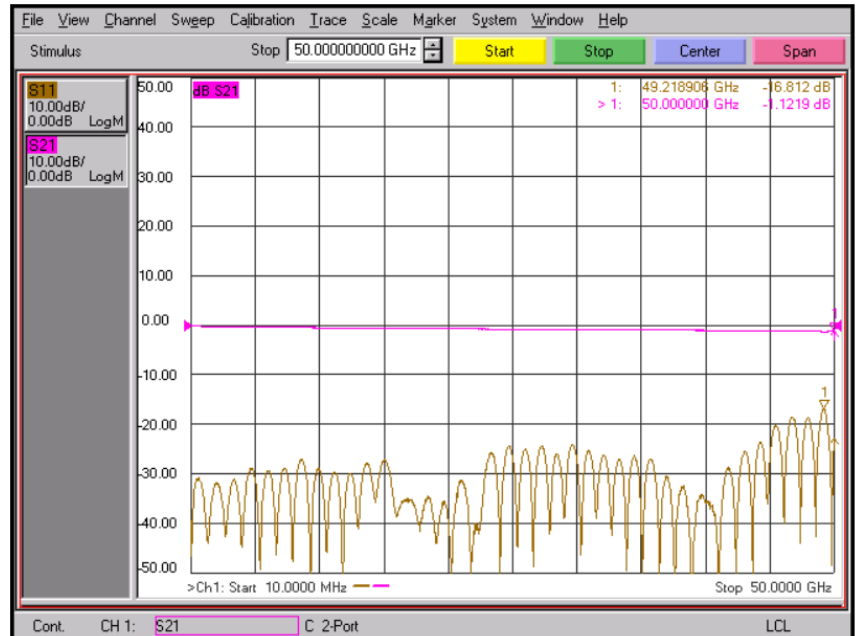
### ■ Test Results (Semi-Flexible Type)

## DC to 50 GHz

### Semi-Flex 047

**Part No: SF047-2F12F1-0.1M**

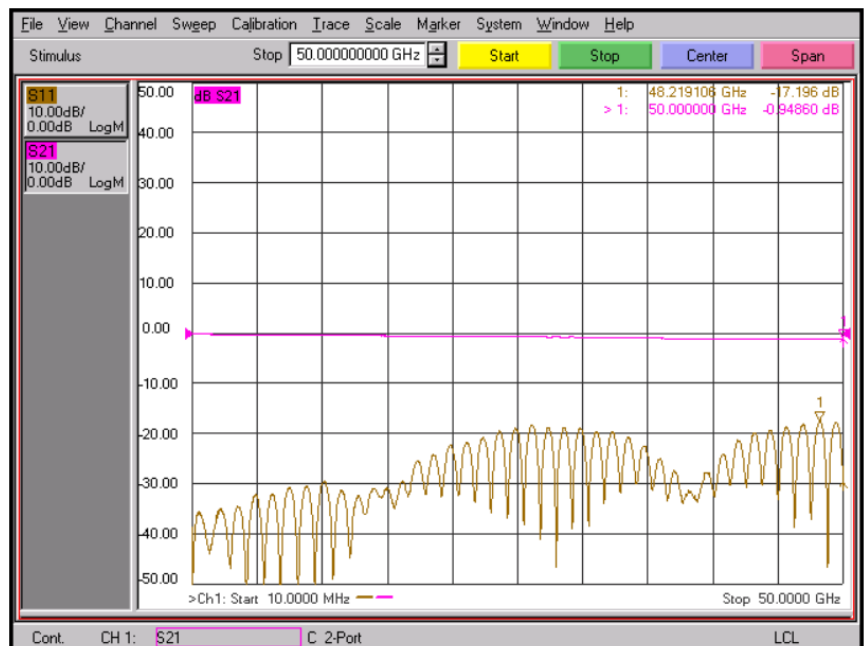
- Frequency : DC to 50 GHz
- Connector : 2.4 mm(Female)
- Cable Length : 0.1 meter



### Semi-Flex 085

**Part No: SF085-2F12F1-0.1M**

- Frequency : DC to 50 GHz
- Connector : 2.4 mm(Female)
- Cable Length : 0.1 meter





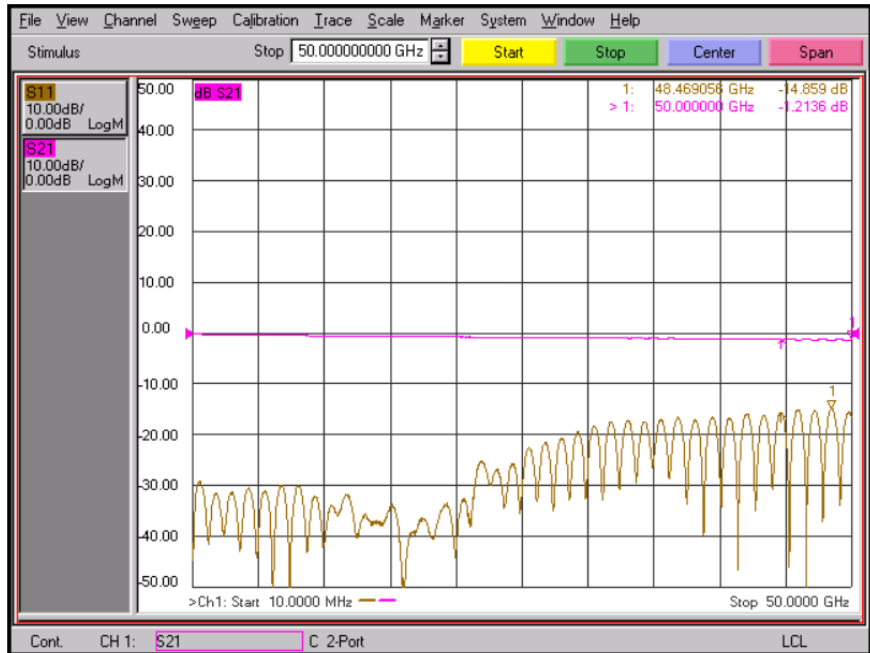
### ■ Test Results (Semi-Flexible Type)

## DC to 50 GHz

### Semi-Flex 047

**Part No: SF047-2M12M1-0.1M**

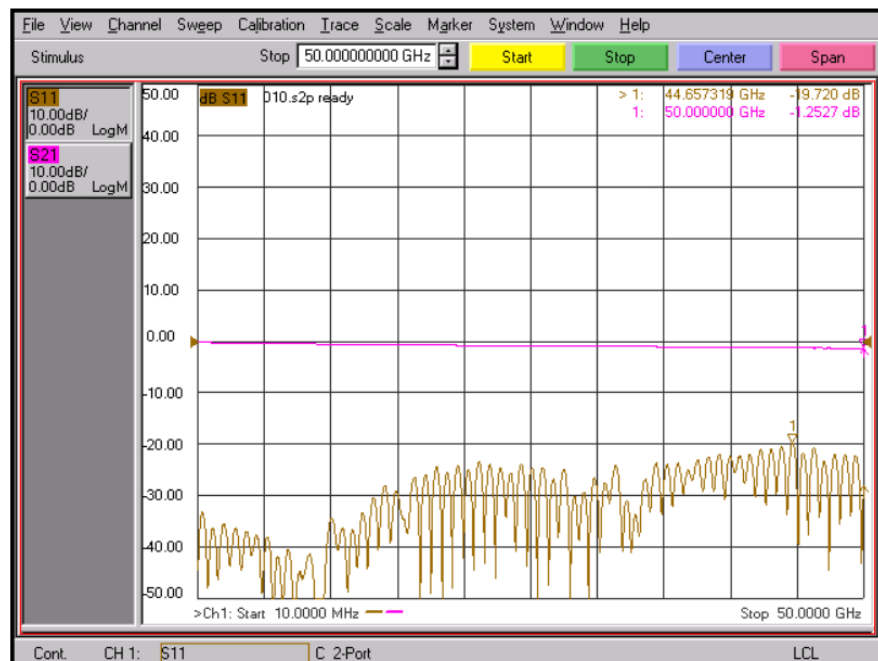
- Frequency : DC to 50 GHz
- Connector : 2.4 mm(Male)
- Cable Length : 0.1 meter



### Semi-Flex 085

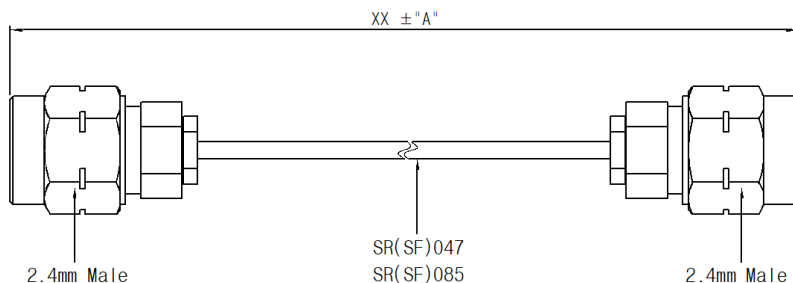
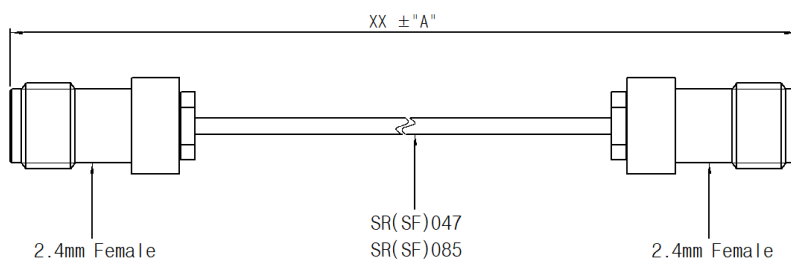
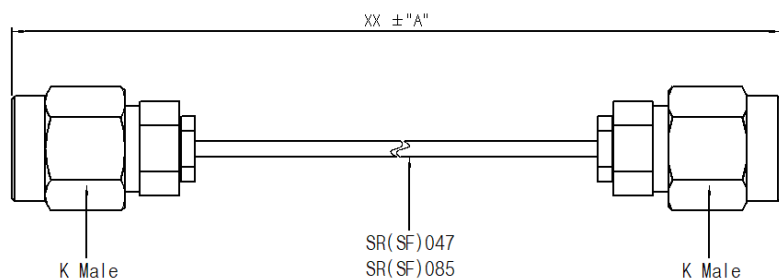
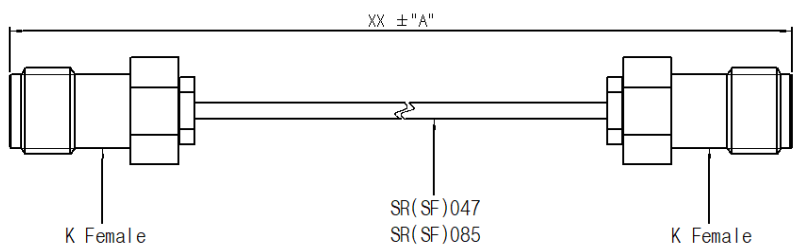
**Part No: SF085-2M12M1-0.1M**

- Frequency : DC to 50 GHz
- Connector : 2.4 mm(Male)
- Cable Length : 0.1 meter



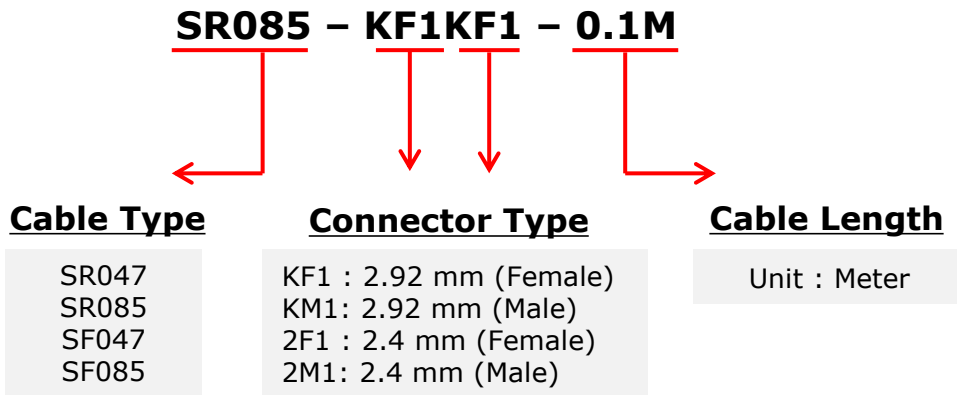
### ■ Drawing

Unit : mm



XX (Cable length)	"A" (Tolerance)
0.1M ~ 0.29M	+5.0mm / -0.0
0.3M ~ 0.99M	+15.0mm / -0.0
1.0M ~ 2.99M	+30.0mm / -0.0
3.0M ~ 9.99M	+50.0mm / -0.0
10.0M ~ 100.0M	+100.0mm / -0.0

### ■ Selection Guide



### ■ Revision History

Revision	Date	Changes
Ver 1.0	2015-11-10	Release Semi-Rigid & Flexible Cable Assemblies
Ver 1.1	2019-12-01	Add 2.4 mm types
Ver 2.0	2021-02-04	Add test results for 2.92 mm & 2.4 mm types