

Microwave Farm's MFW1 Series are complete line of high performance flexible microwave cable assemblies. The W1 have extruded **Low density PTFE dielectric** structure to allow low dielectric constant as close as air up to 1.3 and achieve fast velocity propagation of **83 %**.

MFW1 Series have the lowest insertion loss available to **18, 26.5, 35, 40 GHz**

These low loss cable assemblies are extremely versatile, moderately priced and fit a variety of applications.



■ Features

- Center Conductor : Silver Plated Copper
- Dielectric core : LD PTFE
- Outer Conductor : Silver Plated Copper Ribbon
- Outer Shield : Silver Plated Copper

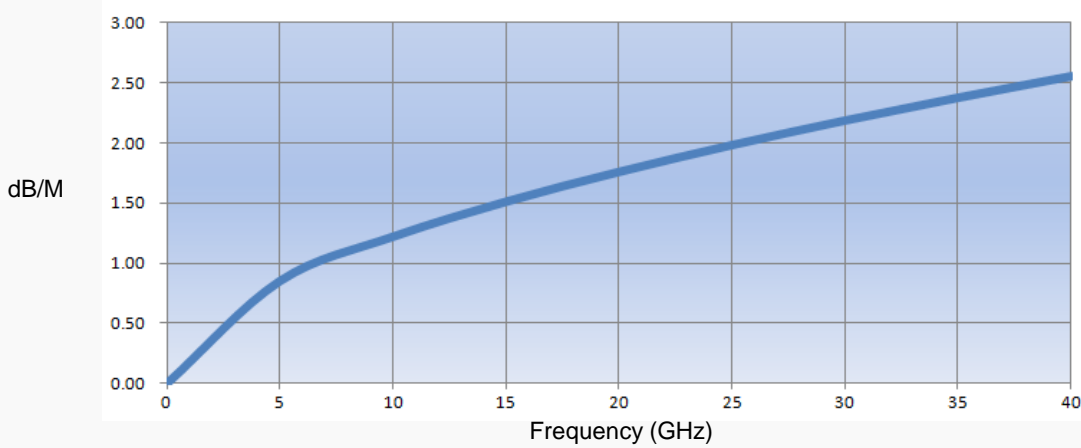


■ Specification

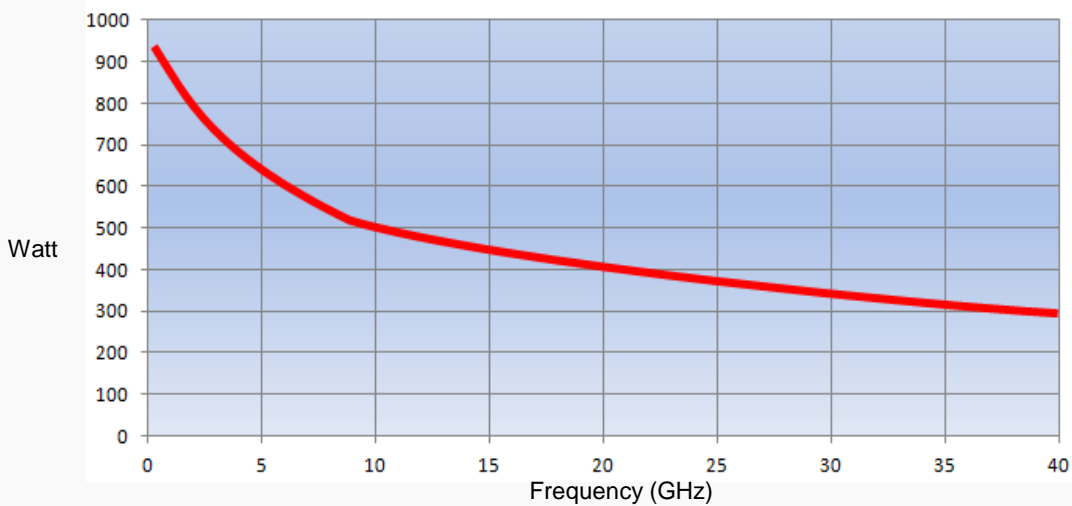
Scope	Specification	MFW100	MFW101	MFW102
Physical	Center Conductor	0.91	1.45	2.30
	Dielectric	2.50	4.00	6.30
	Outer Conductor	2.66	4.20	6.60
	Outer Shield	3.15	4.70	7.11
	Jacket	3.60	5.10	7.80
Electrical	Impedance(Ohm)		50	
	Operation Freq.(GHz)	40	26.5	18
	Velocity of Propagation(%)		83	
	VSWR (Max)		<1.3	
	Shielding Effectiveness(dB)		<-90	
Mechanical & Environmental	Voltage Withstand(V,DC)	1,000	1,500	2,000
	Weight (g/M)	33	50	146
	Bending Radius : Installation (mm)	18	25.5	39
	Repeated (mm)	33	65	78
	Temperature (Operating)		-55 ~+165°C	

■ **MFW100 (40 GHz)**

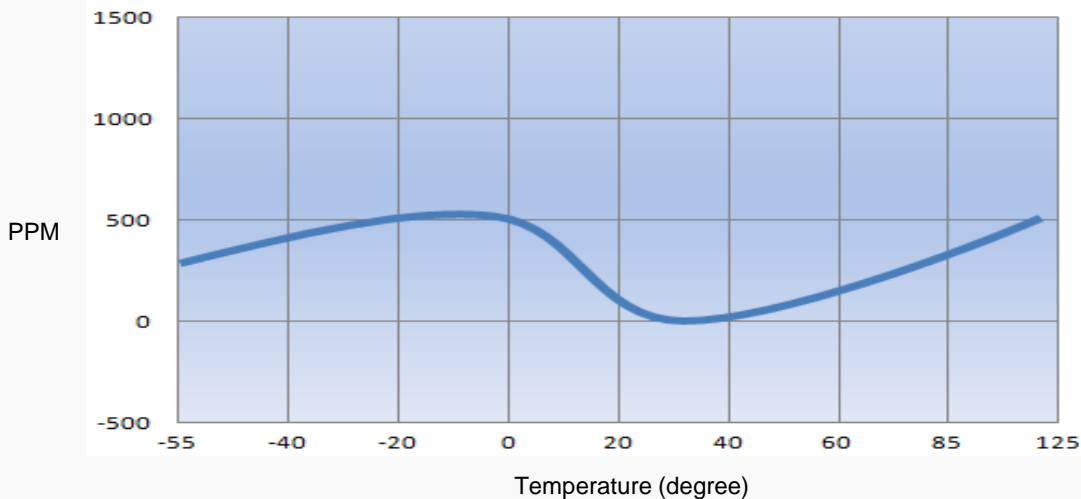
Cable Attenuation (Nominal Values @ +25 °C Ambient temperature)



Power Handling (Maximum Values @ +40 °C Ambient temperature & Sea level)

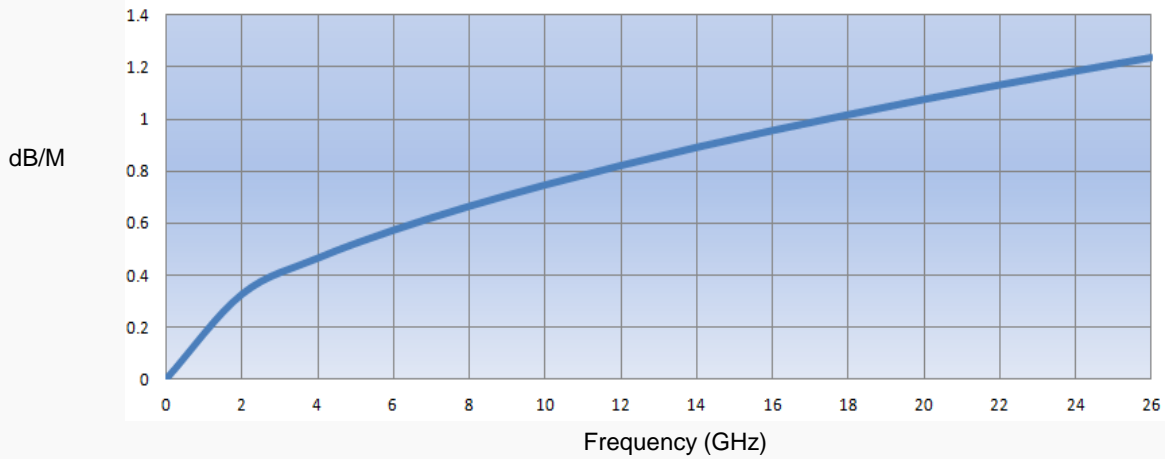


Typical Phase change

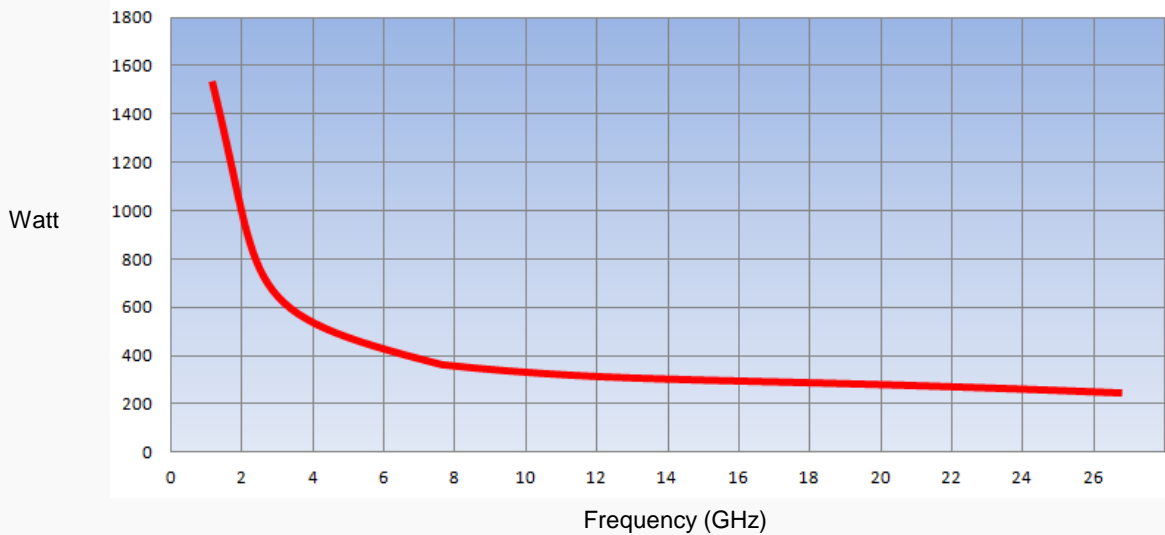


■ **MFW101 (26.5 GHz)**

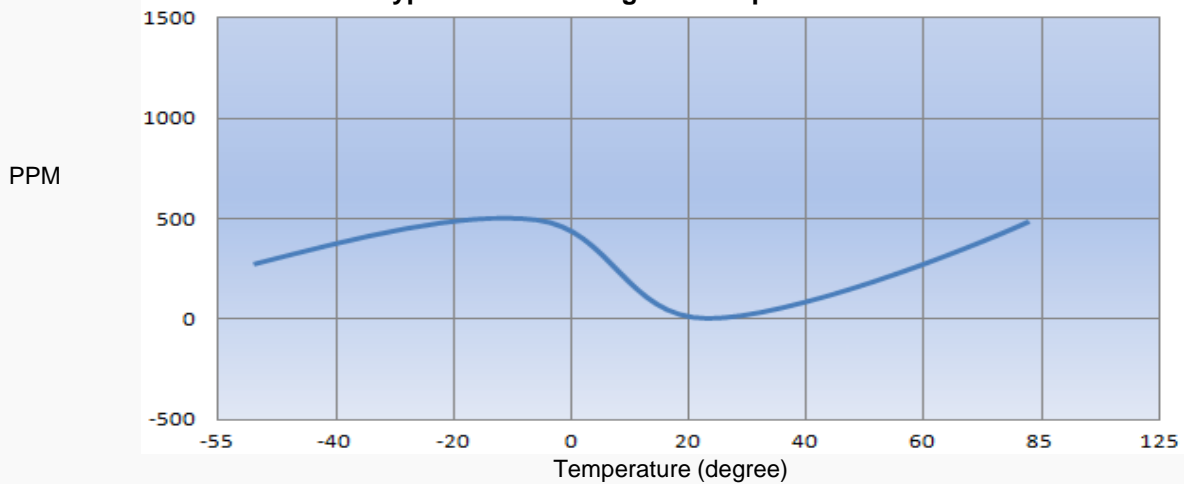
Cable Attenuation (Nominal Values @ +25 °C Ambient temperature)



Power Handling (Maximum Values @ +40 °C Ambient temperature & Sea level)

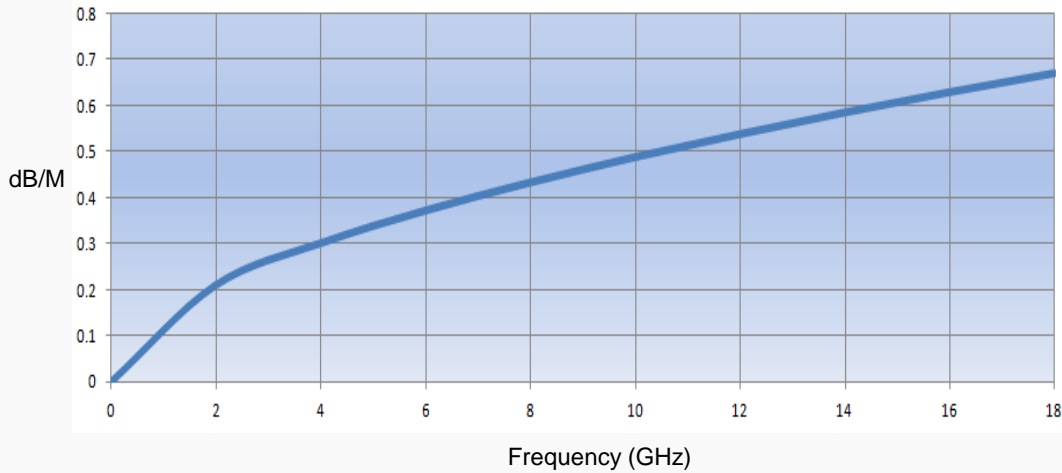


Typical Phase change vs Temperature

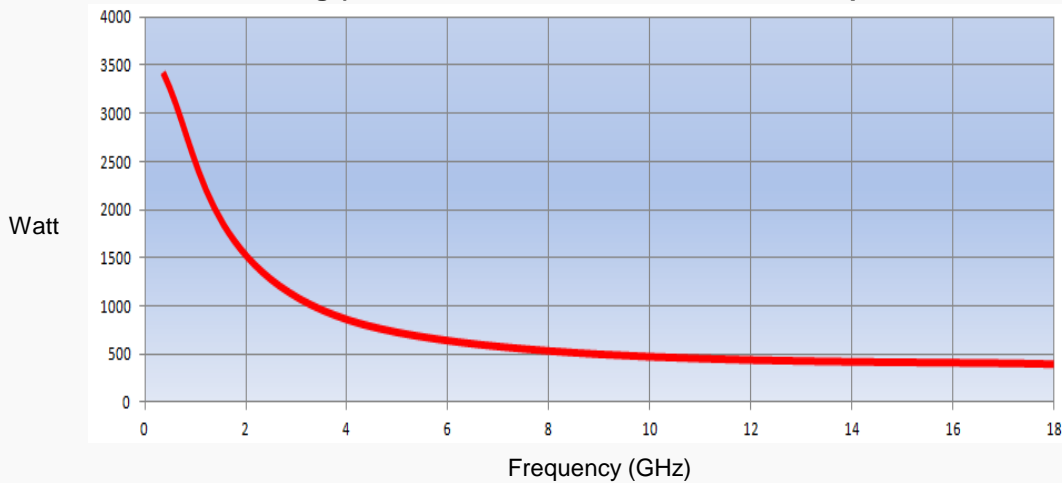


■ **MFW102 (18 GHz)**

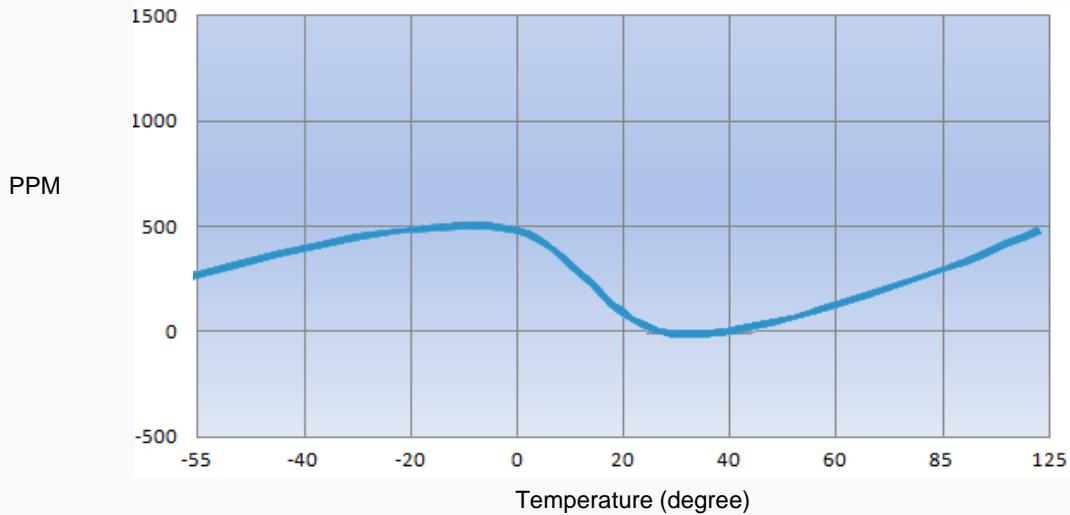
Cable Attenuation (Nominal Values @ +25 °C Ambient temperature)



Power Handling (Maximum Values @ +40 °C Ambient temperature & Sea level)



Typical Phase change

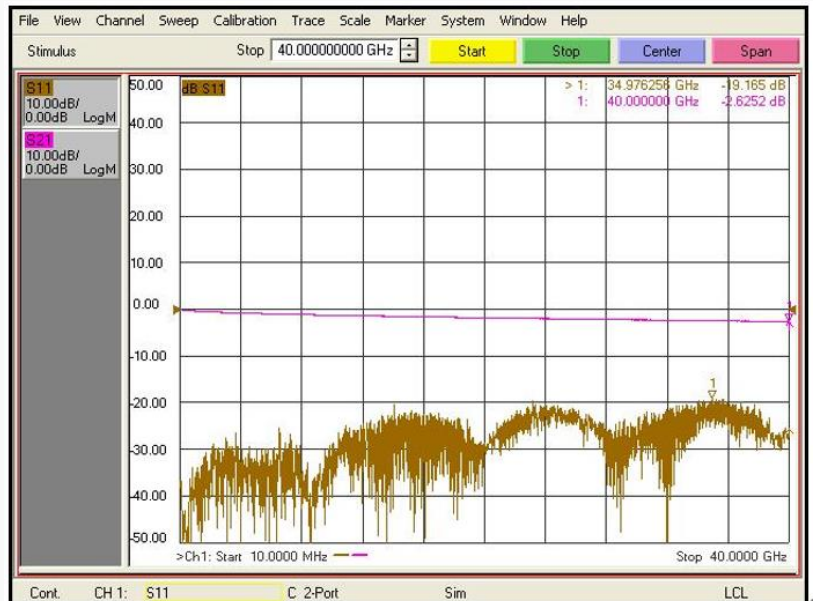


Test Result

MFW100 cable Assembly

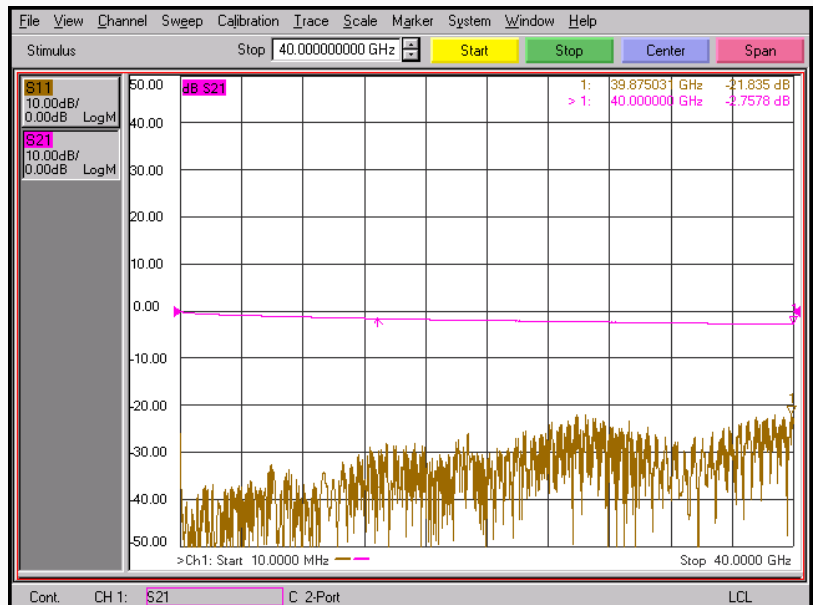
Part No: MFW100-KM1KM1-1M

- Frequency : DC to 40 GHz
- Connector : 2.92 mm(Male)
- Cable Length : 1 meter



Part No: MFW100-KF1KF1-1M

- Frequency : DC to 40 GHz
- Connector : 2.92 mm(Female)
- Cable Length : 1 meter

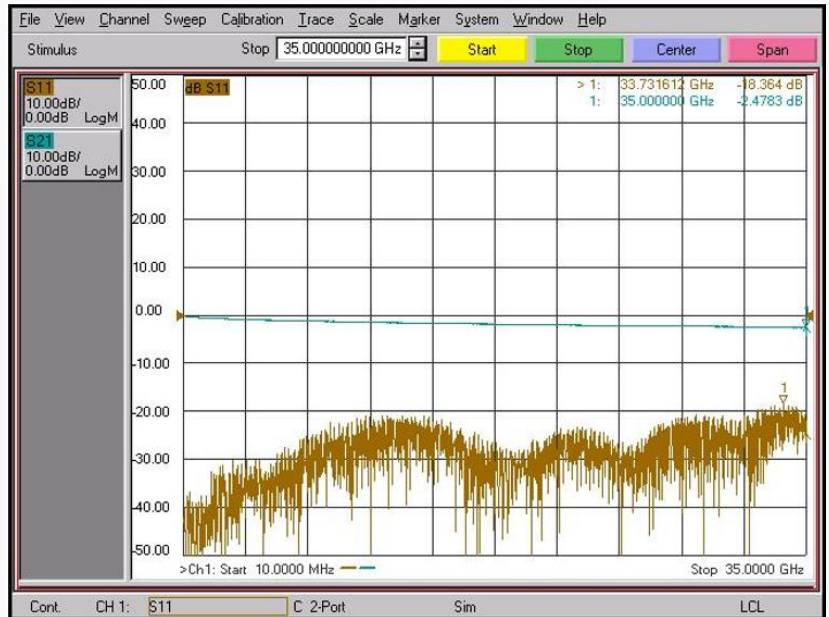


Test Result

MFW100 cable Assembly

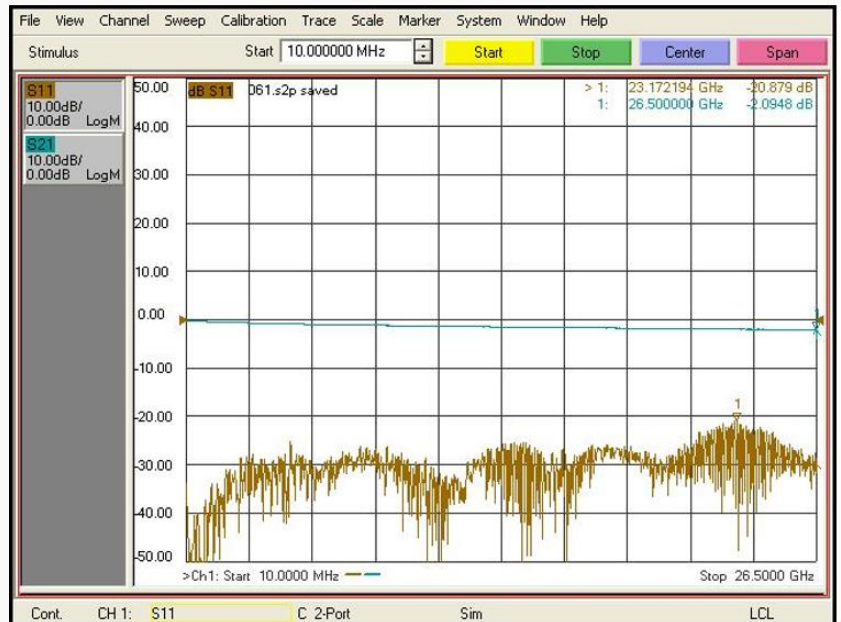
Part No: MFW100-3M13M1-1M

- Frequency : DC to 35 GHz
- Connector : 3.5 mm(Male)
- Cable Length : 1 meter



Part No: MFW100-SM1SM1-1M

- Frequency : DC to 26.5 GHz
- Connector : SMA (Male)
- Cable Length : 1 meter

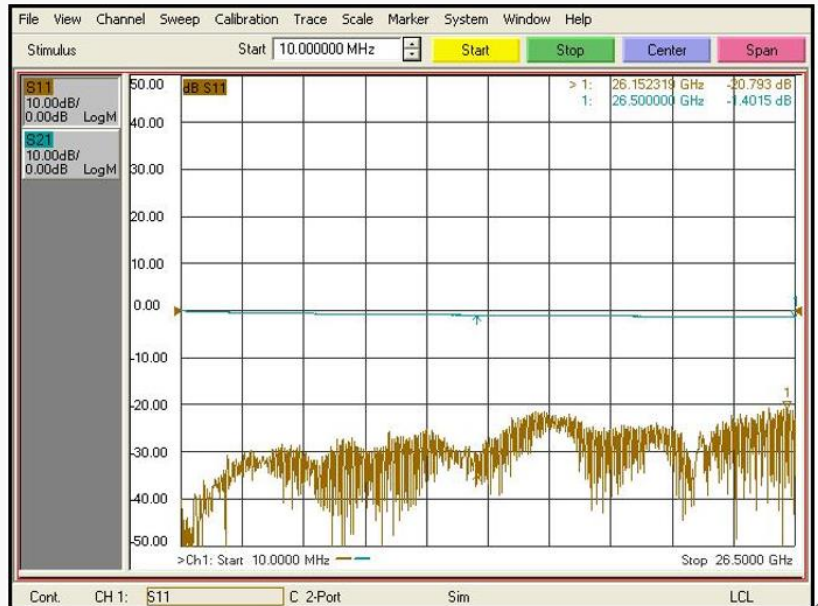


■ **Test Result**

MFW101 cable Assembly

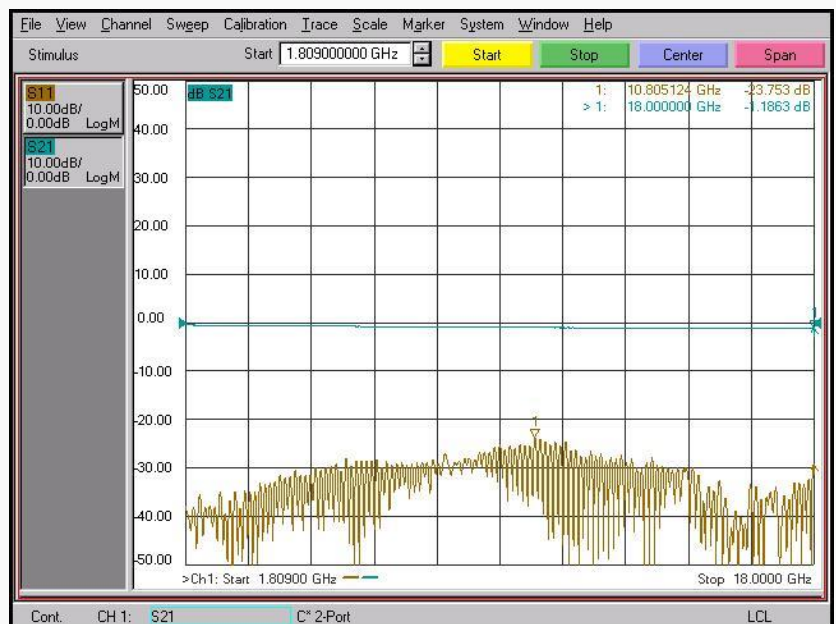
Part No: MFW101-SM1SM1-1M

- Frequency : DC to 26.5 GHz
- Connector : SMA (Male)
- Cable Length : 1 meter



Part No: MFW101-NM1NM1-1M

- Frequency : DC to 18 GHz
- Connector : N-type (Male)
- Cable Length : 1 meter

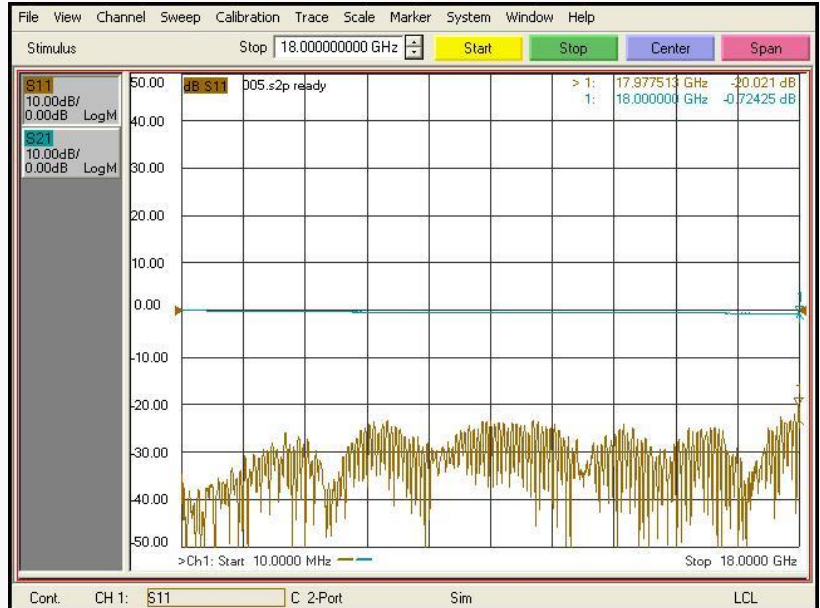


■ **Test Result**

MFW102 cable Assembly

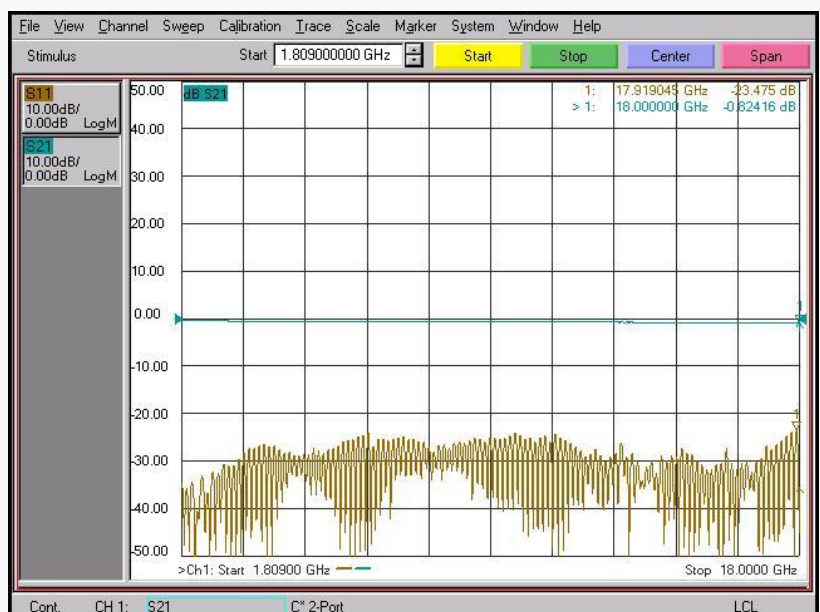
Part No: MFW102-SM1SM1-1M

- Frequency : DC to 18 GHz
- Connector : SMA (Male)
- Cable Length : 1 meter



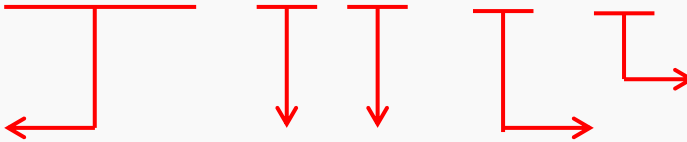
Part No: MFW102-NM1NM1-1M

- Frequency : DC to 18 GHz
- Connector : N-type (Male)
- Cable Length : 1 meter



■ **Selection Guide**

MFW100 – KM1KM1 – 1M – 2PS



Phase Matching

2PS: ± 2 pico-second
5PS: ± 5 pico-second
10PS: ± 10 pico-second

Cable Type

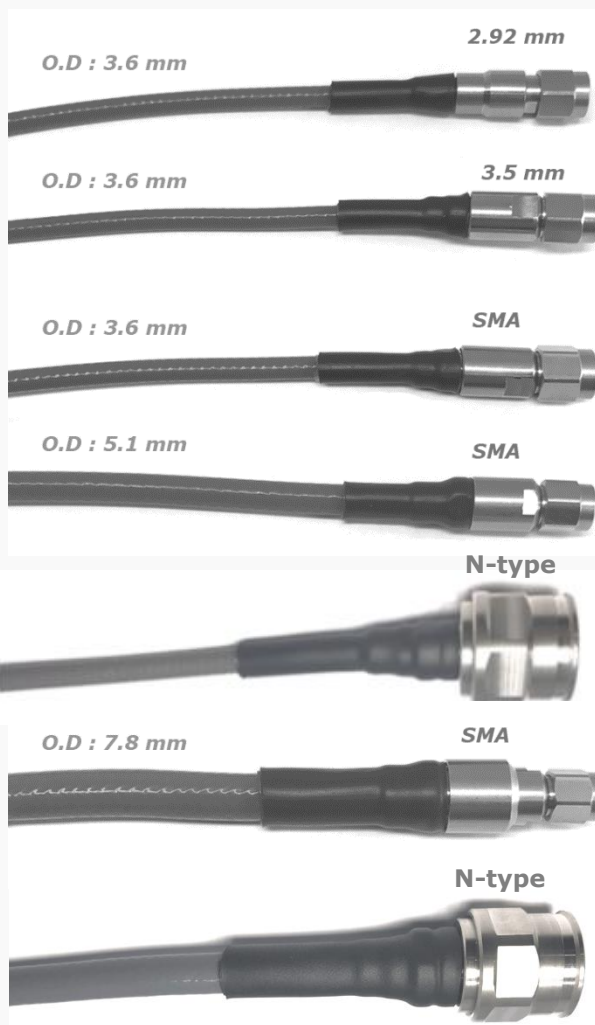
Connector Type

Cable Length

MFW100
MFW101
MFW102

SM1 : SMA Male
3M1 : 3.5 mm Male
KM1 : 2.92 mm Male
KF1 : 2.92 mm Female
NM1 : N-type Male

Unit : Meter



MFW100(40G)

MFW100(35G)

MFW100(26.5G)

MFW101(26.5G)

MFW102(18G)