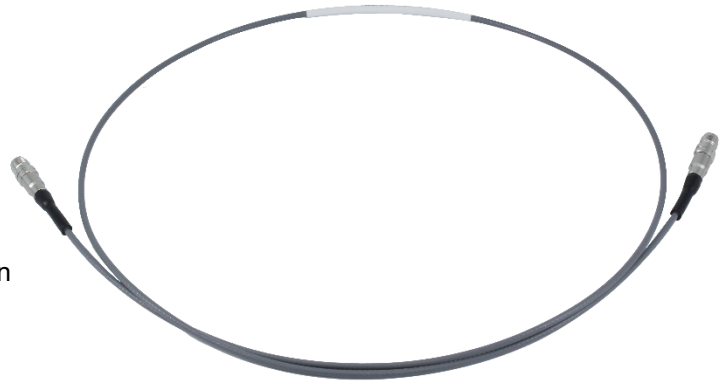


W1 Series are complete line of high performance flexible microwave cable assemblies.

The W103 Series have **Low density PTFE dielectric** structure and achieve fast velocity propagation of **81 %**. W103 Series have excellent RF performance up to 40,50 & 67 GHz with 2.92 mm, 2.4 mm & 1.85 mm connectors, respectively.

■ **Features**

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



■ **Specification**

Scope	Specification	W103 (40,50 & 67 GHz)
Physical	Center Conductor	0.51
	Dielectric	1.38
	Outer Conductor	1.58
	Inner Tape	1.86
	Outer Shield	2.18
	Jacket	2.48
Electrical	Impedance(Ohm)	50
	Operation Freq.(GHz)	40,50 & 67 GHz
	Velocity of Propagation(%)	81
	Shielding Effectiveness(dB)	<-90
	VSWR	<1.3
	Amplitude Stability (dB) *	<± 0.05 (up to 67 GHz)
Mechanical & Environmental	Phase Stability (dB) *	<± 5.0 (up to 67 GHz)
	Weight (g/M)	17
	Bending Radius (mm)	10 (Installation) 25 (Repeated)
	Temperature (Storage)	-40 ~+85 °C **

* Cable(length : 1 meter) was wrapped 360 degree around Φ 40 mm mandrel

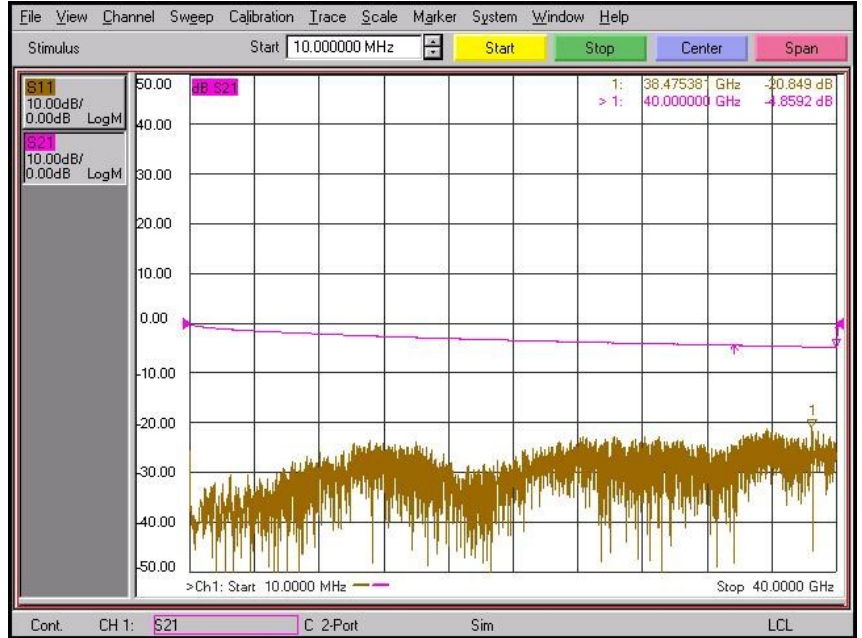
** Adhesive type shrinkable tube: - -40 ~+85 °C / Non-adhesive type shrinkable tube: - -40 ~ + 125 °C

■ **Test Result**

W103 cable Assembly

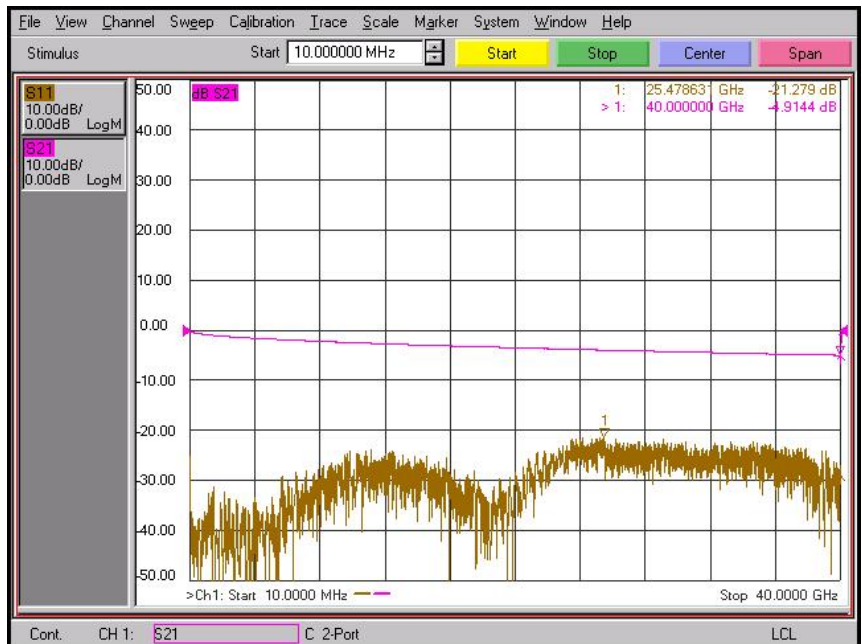
Part No: W103-KM1KM1-1M

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



Part No: W103-KF1KF1-1M

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

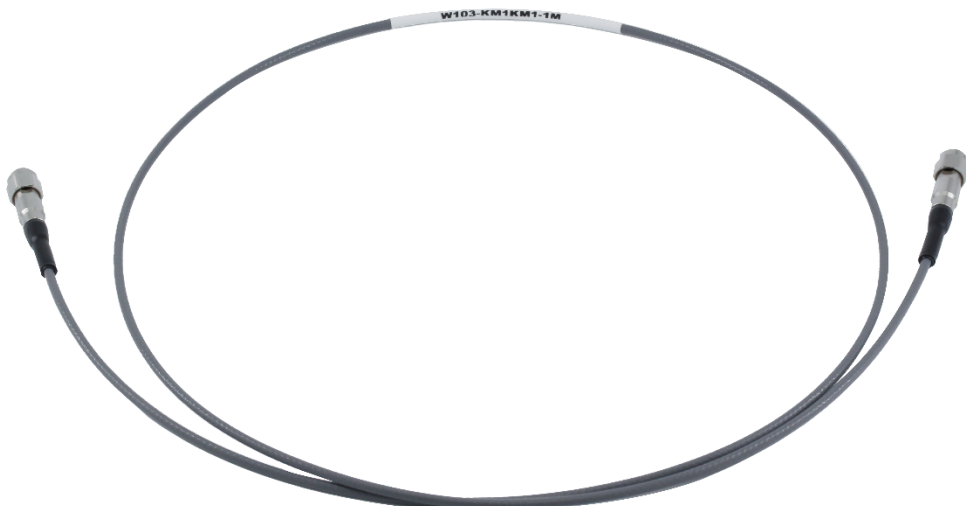
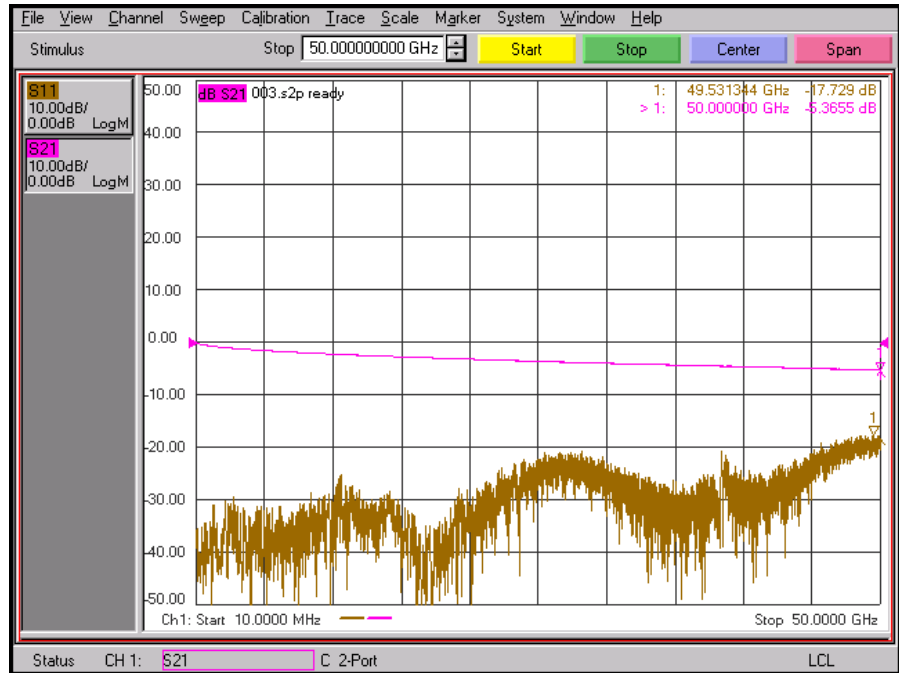


■ **Test Result**

W103 cable Assembly

Part No: W103-2M12M1-1M

- Frequency : DC to 50 GHz
- Connector : 2.4 mm (Male)
- Cable Length : 1 meter

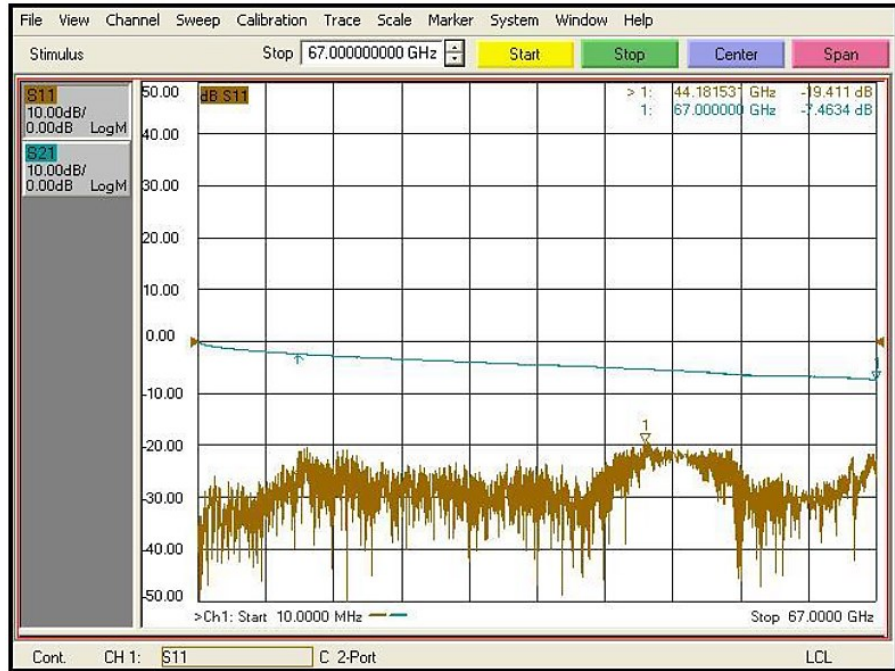


Test Result

W103 cable Assembly

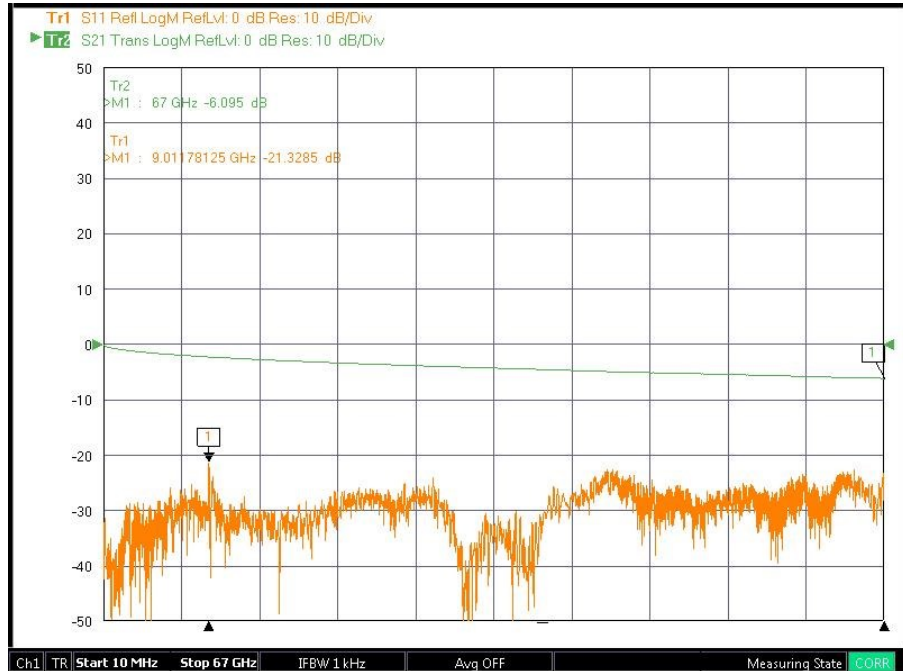
Part No: W103-VM1VM1-1M

- Frequency : DC to 67 GHz
- Connector : 1.85 mm (Male)
- Cable Length : 1 meter



Part No: W103-VF1VF1-1M

- Frequency : DC to 67 GHz
- Connector : 1.85 mm (FeMale)
- Cable Length : 1 meter



■ **Selection Guide**

W103 - VM1VM1 - 1M - T

**Non-Adhesive
Shrinkable Tube**

T: -40 ~ + 125 °C

Cable Type

W103

Connector Type

KM1: 2.92 mm Male
KF1: 2.92 mm Female
2M1: 2.4 mm Male
2F1: 2.4 mm Female
VM1: 1.85 mm Male
VF1: 1.85 mm Female

Cable Length

Unit : Meter



2.92 mm(Male)



2.92 mm(Female)



1.85 mm(Male)



1.85 mm(FeMale)

■ **Revision History**

Revision	Date	Changes
Ver 1.0	2019-08-01	Released W103 Series Cable Assembly
Ver 1.1	2019-11-01	Updated Spec,
Ver 1.2	2020-03-01	Updated Spec.
Ver 1.3	2020-06-04	Add test result for 2.92 mm type
Ver 1.4	2020-07-10	Updated Spec.
Ver 1.5	2022-04-22	Updated Temperature spec. according to tube
Ver 1.6	2022-07-15	Add test result for 2.4mm type