

W6 Series are complete line of high performance flexible microwave cable assemblies. Specially, **W601 Series** have low density PTFE structure to achieve velocity propagation of **80 %**.

These series have excellent RF performance up to **110 GHz with 1.0 mm Connectors**.

Features

- W601 Cable
- Center Conductor : Silver Plated Copper
 - Insulator : Low Density PTFE
 - Outer Conductor 1 : Silver Plated Copper Ribbon
 - Outer Conductor 2 : Silver Plated Copper
 - Jacket : FEP

- 1.0mm Connector
- Body : Stainless steel (Passivated)
 - Coupling nut : Stainless steel (Passivated)
 - Pin : Beryllium copper (Gold plated)
 - Insulator : Ultem 1000



Specification

Scope	Specification	W601 (110 GHz)
Physical	Center Conductor (mm)	0.29
	Insulator (mm)	0.84
	Outer Conductor 1 (mm)	1.00
	Inner Tape	1.28
	Outer Conductor 2 (mm)	1.51
	Jacket	1.81

■ Specification

Scope	Specification	W601 (110 GHz)
Electrical	Freq. (GHz)	110 GHz
	Characteristic Impedance	50 ± 1 Ohm
	Velocity of Propagation (%)	Typical 80
	Voltage Withstand (V, DC)	600
	Shielding Effectiveness (dB)	<-90
	VSWR (based on connector selection)	< 1.4 to 110 GHz
	Amplitude Stability (Max) *	<± 0.2 dB @ 110 GHz
Mechanical & Environmental	Phase Stability (Max) *	<±9.8 degree @ 110 GHz
	Weight (g/M)	5.6
	Min. bending radius :	
	Installation (mm)	7.0
	Repeated (mm)	15.0
	Operating Temperature	-40 ~+85 °C **

	Freq MHz	W	dB / 100M
Average Power & Attenuation values	1000	33.0	128.9
	2000	24.0	182.7
	6000	14.0	317.9
	8000	12.0	367.7
	10000	10.0	411.7
	12000	10.0	451.6
	16000	8.0	522.7
	26500	6.0	676.1
	40000	5.0	834.9
	50000	5.0	936.5
	110000	3.0	1267.2

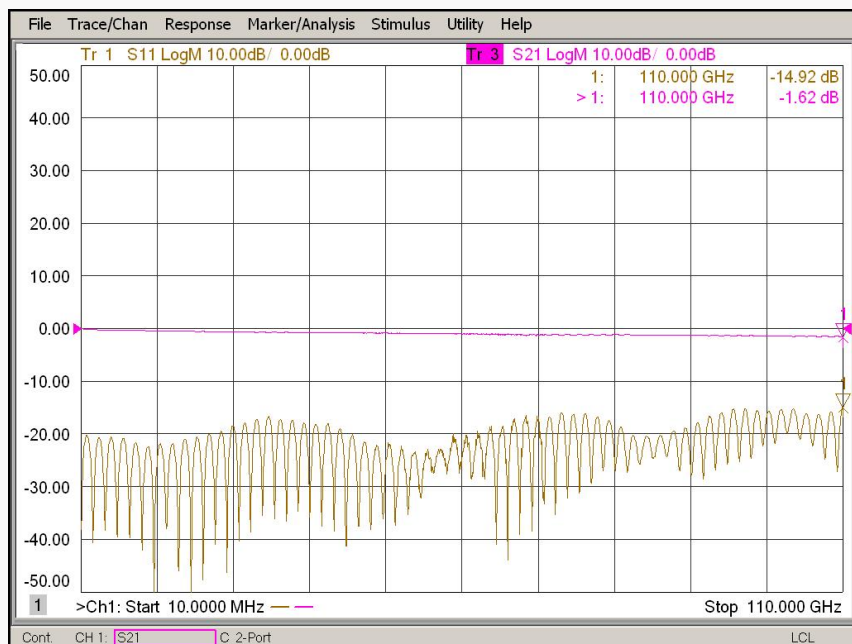
* Cable (length : 1 meter) was wrapped 360 degree around Φ 30 mm mandrel
** Adhesive type shrinkable tube: - -40 ~+85 °C / Non-adhesive type shrinkable tube: - -40 ~ + 125 °C

■ Test Result

W601 cable assembly

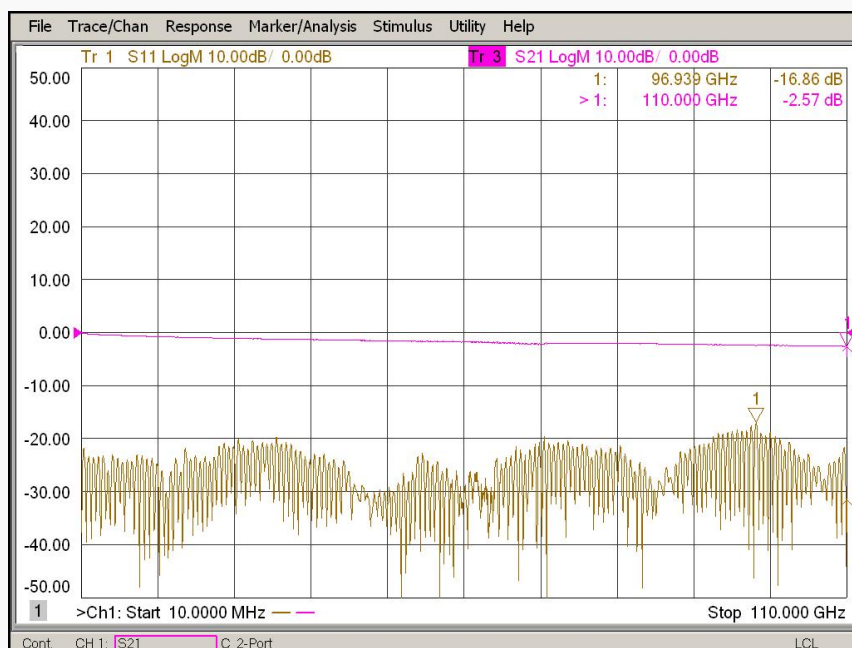
Part No. : W601-WM1WM1-3inch

- Frequency : 10 MHz to 110 GHz
- Connector : 1.0 mm (Male)
- Cable Length : 3 inch



Part No. : W601-WM1WM1-7inch

- Frequency : 10 MHz to 110 GHz
- Connector : 1.0 mm (Male)
- Cable Length : 7 inch

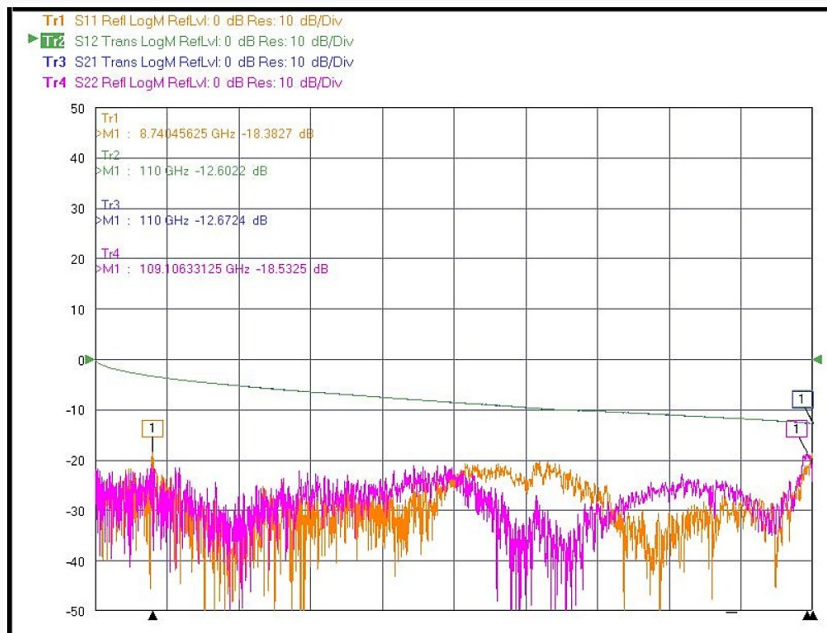


■ Test Result

W601 cable assembly

Part No. : W601-WM1WM1-1M

- Frequency : 10 MHz to 110 GHz
- Connector : 1.0 mm (Male)
- Cable Length : 1 Meter

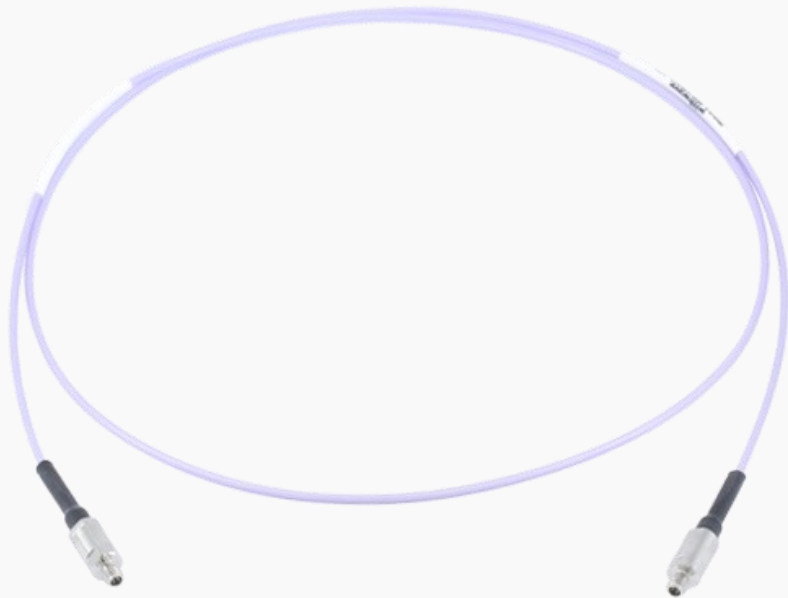
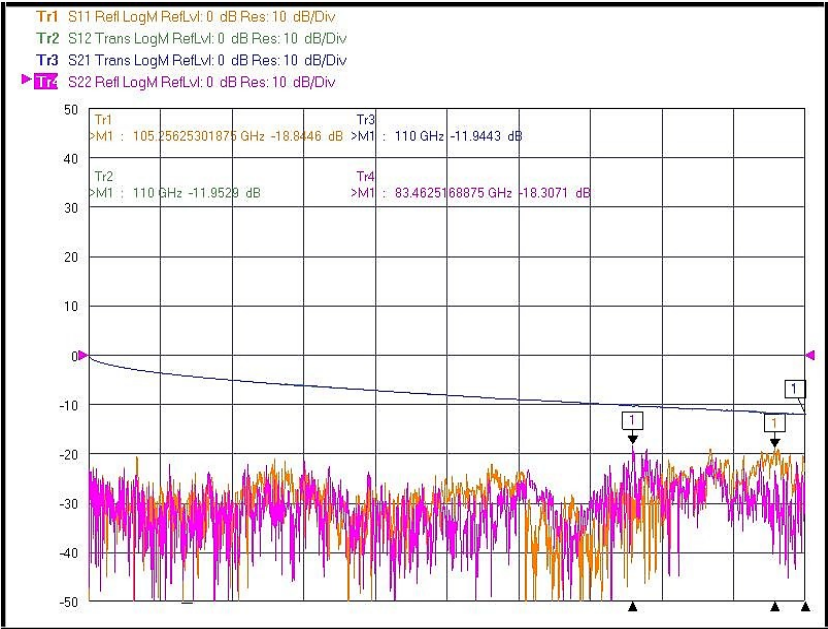


■ Test Result

W601 cable assembly

Part No. : W601-WF1WF1-1M

- Frequency : 10 MHz to 110 GHz
- Connector : 1.0 mm (Female)
- Cable Length : 1 Meter



■ Selection Guide

W601-WM1WM1 - 1M - T

Non-Adhesive Shrinkable Tube

T: -40 ~ + 125 °C

Cable Type

Connector Type

Cable Length

W601

WM1 : 1.0 mm(Male)
WF1 : 1.0 mm(Female)

Unit :
Meter

1.0 mm(Male) Connector



1.0 mm(Female) Connector



O.D: 1.81 mm

■ Revision History

Revision	Date	Changes
Ver 1.0	2019-11-01	Released W601 Series Cable Assembly
Ver.2.0	2020-02-10	Updated Test result
Ver 2.1	2020-05-20	Updated Cable Spec.
Ver 2.2	2020-11-24	Add Female type
Ver 2.3	2022-04-22	Updated Temperature Spec. according to tube
Ver 2.4	2025-03-19	Updated 1.0mm Connector Features, Average Power and Attenuation values