

**W2 Series** are complete line of high performance flexible microwave cable assemblies. Specially, **W205 Series** have low density PTFE structure to achieve velocity propagation of 74 % and **excellent phase and amplitude stability performance**. **W205 series** have excellent RF performance up to 50 & 67 GHz with 2.4 mm & 1.85 mm connectors, respectively.

### ■ Features

- Center Conductor : Silver Plated Copper
- Insulator : Low Density PTFE
- Outer Conductor 1 : Silver Plated Copper Foil
- Outer Conductor 2 : Silver Plated Copper
- Jacket : FEP (Blue)



### ■ Specification

Scope	Specification	W205 (50 & 67 GHz)
Physical	Center Conductor (mm)	0.51
	Insulator (mm)	1.52
	Outer Conductor 1 (mm)	1.72
	Outer Conductor 2 (mm)	2.04
	Jacket (mm)	2.40 ± 0.15
Electrical	Characteristic Impedance (Ohm)	50 ± 2 Ohm
	Velocity of Propagation (%)	Typical 74
	Shielding Effectiveness(dB)	-90
	VSWR (Max)	< 1.3
	Amplitude Stability (dB) *	<± 0.03 (up to 50 GHz) <± 0.05 (up to 67 GHz)
	Phase Stability (degree) *	<±3 (up to 50 GHz) <± 5 (up to 67 GHz)
	Attenuation (at 25 °C)	4.4 dB/m @ 40.0 GHz 5.0 dB/m @ 50.0 GHz 6.0 dB/m @ 67.0 GHz
Mechanical & Environmental	Weight (g/M)	16
	Min. bending radius (mm)	12 (Installation) 24 (Repeated)
	Operating Temperature	-40 ~+85 °C **

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

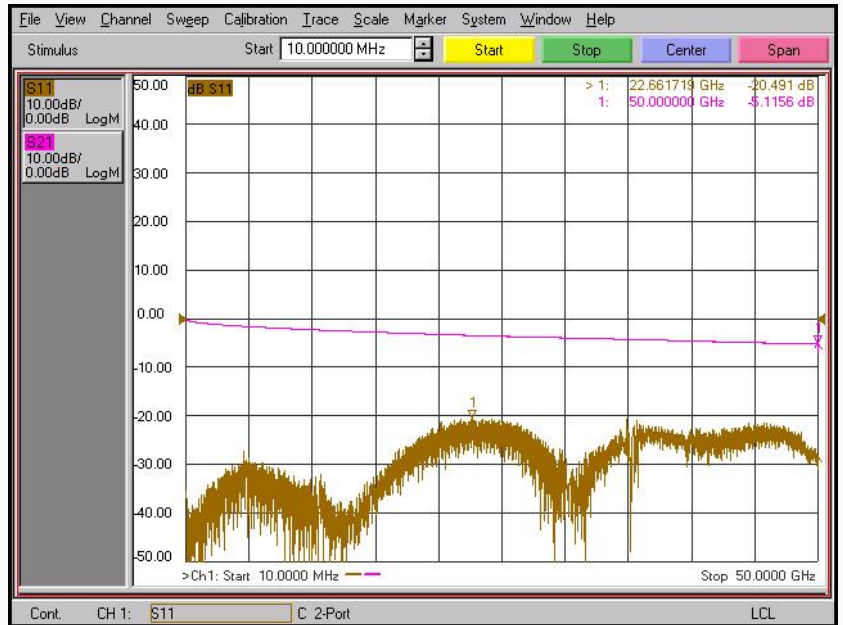
\*\* Adhesive type shrinkable tube: -40 ~+85 °C / Non-adhesive type shrinkable tube: -40 ~ + 125 °C

■ **Test Result**

**W205 cable assembly**

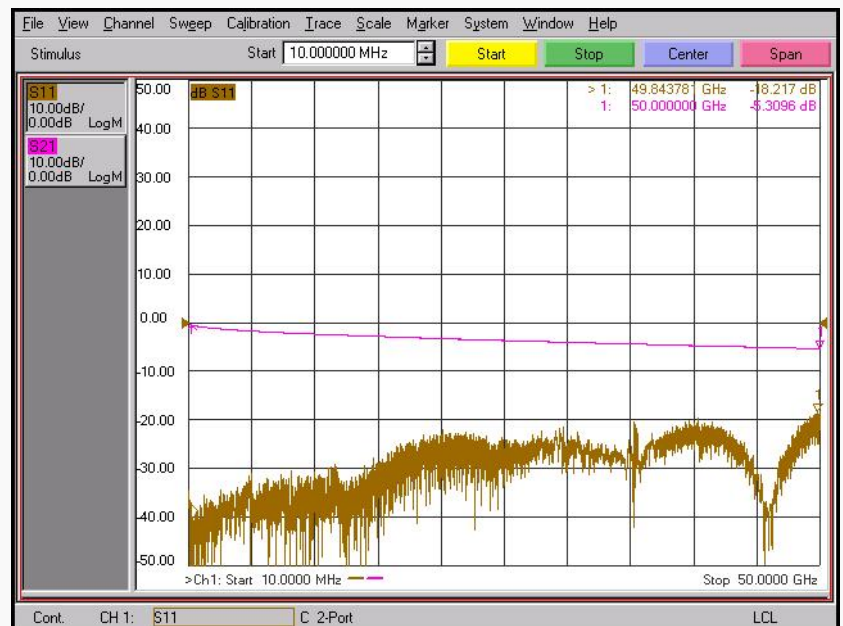
**Part No. : W205-2M12M1-1M**

- Frequency : 10 MHz to 50 GHz
- Connector : 2.4 mm (Male)
- Cable Length : 1 meter



**Part No. : W205-2F12F1-1M**

- Frequency : 10 MHz to 50 GHz
- Connector : 2.4 mm (Female)
- Cable Length : 1 meter

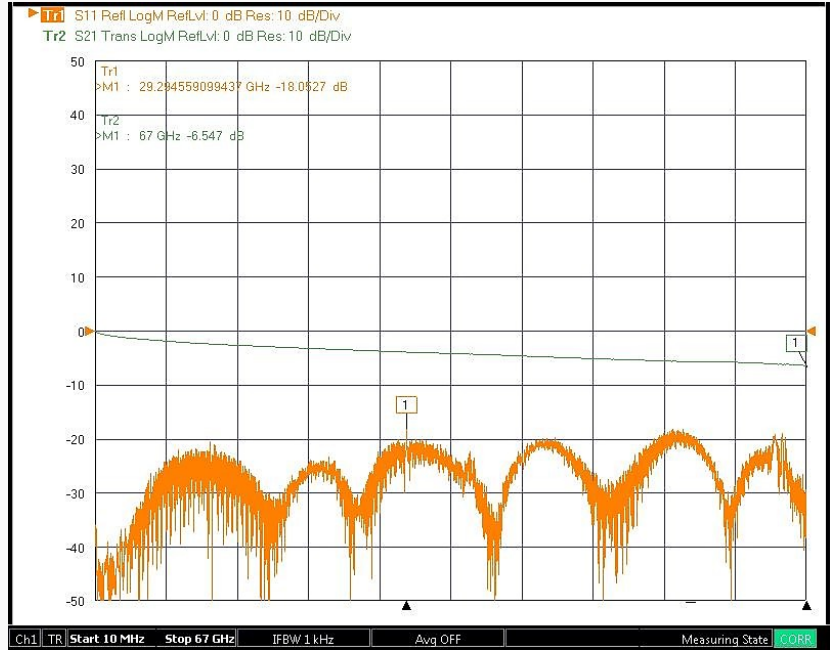


■ **Test Result**

**W205 cable assembly**

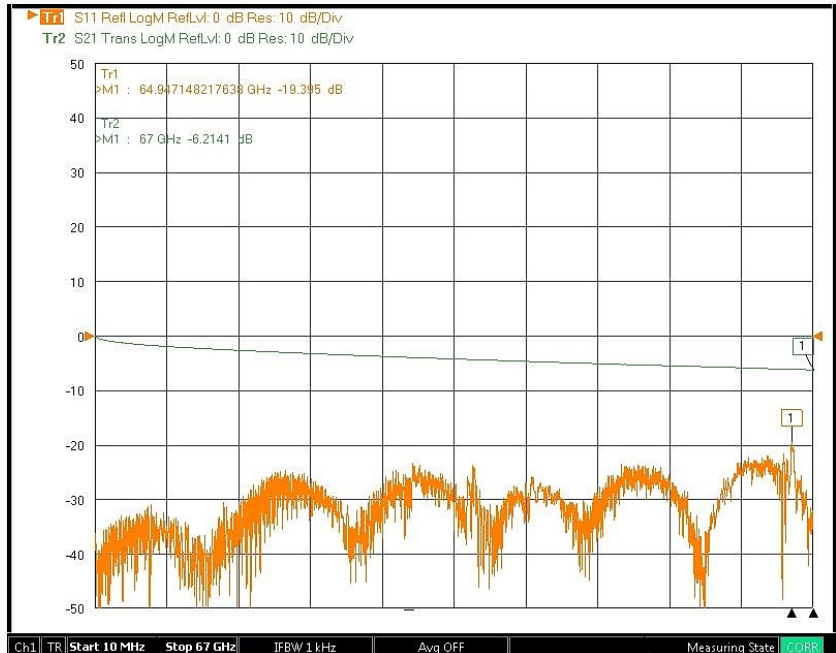
**Part No. : W205-VM1VM1-1M**

- Frequency : 10 MHz to 67 GHz
- Connector : 1.85 mm (Male)
- Cable Length : 1 meter



**Part No. : W205-VF1VF1-1M**

- Frequency : 10 MHz to 67 GHz
- Connector : 1.85 mm (Female)
- Cable Length : 1 meter



■ **Selection Guide**

**W205- VM1VM1 - 1M- 2PS - T**

**Non-Adhesive Shrinkable Tube**

T: -40 ~ + 125 °C

**Phase Matching**

1PS: ± 1 pico-second  
2PS: ± 2 pico-seconds  
5PS: ± 5 pico-seconds

Cable Type

Connector Type

Cable Length

W205

2M1 : 2.4 mm Male  
2F1 : 2.4 mm Female  
VM1 : 1.85 mm Male  
VF1 : 1.85 mm Female

Unit : Meter

**W205(50 GHz): 2.4 mm Connectors**



**W205(67 GHz): 1.85 mm Connectors**



■ **Revision History**

<b>Revision</b>	<b>Date</b>	<b>Changes</b>
Ver 1.0 Ver 1.1	2020-07-08 2022-04-20	Released W205 Series Cable Assembly Updated Temperature Spec. according to tube