

## MICROWAVE TEST CABLE ASSEMBLY

**RTF2-60 -SMAM-SMAM-20 GHz-L, N Male to N Male 20GHz**

**SKU:00-0903**



### Application:

RTF2 is the flexible microwave coax cable with the copper tape and silver-plated wire braid to ensure the phase stable signal transmission. This cable will be used in the microwave telecommunications test equipment and VNA and Spectrum analyser test cable.

The SMA and SMA cable assemblies feature robust strain relief construction to ensure stability of centre contact relative to the connector body. This rigidity allows for the optimal electrical test performance and consistent phase stability.

### Phase Stable Test Cable

#### CONSTRUCTION / DIMENSIONS

	Description	Materials	Finish
Connector 1	SMA Male	Stainless Steel	Passivated
Connector 2	SMA Male	Stainless Steel	Passivated
Cable Jacket	Outer cover	FEP	Blue
Markers	Label	PVC	White / black
Contacts	Centre pin	Brass or BeCu	Gold plated

#### MECHANICAL CHARACTERISTICS

recommended minimum bending radius	20 mm	0.79 inch
Cable Diameter	4.0mm	0.15

#### ENVIRONMENTAL CHARACTERISTICS

operating temperature range	-55 / +200 °C	-67 / +392 °F
fire resistance	yes (CSA FT6 / IEC 332-2)	
halogen free	NO	

RoHS Compliance

#### ELECTRICAL CHARACTERISTICS

characteristic impedance	50Ω
operating frequency range	DC – 20GHz
VSWR	1.2:1 (Typical 1.15:1)
voltage withstanding	800 V rms
Mechanical Phase Stability*	<±8°
Amplitude Stability vs Shaking	0.1dB
velocity of propagation	70 %

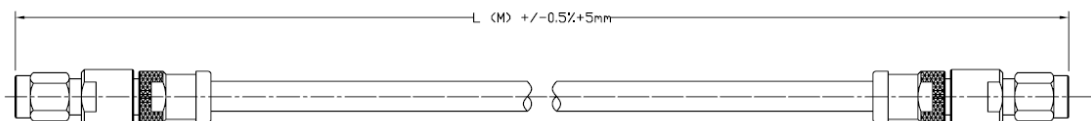
\* Wrapped 360° around a 35mm diameter mandrel.

#### FREQUENCY / ATTENUATION

##### MAX POWER (sea level / 25 °C)

GHz	dB / m	dB / ft	Watts
1.0	0.38	0.09	290
3.0	0.71	0.22	156
6.0	1.07	0.31	103
8.0	1.29	0.38	86
12	1.67	0.51	67
18	2.17	0.62	51
26	2.81	0.73	39
attenuation calculation (dB/m)	(0.342022 x √f GHz) + (0.039 443x f GHz)		
power calculation (W)	290 / √f GHz		

Note: typical attenuation for a couple of connectors (dB) = 0.045 x √f (GHz)



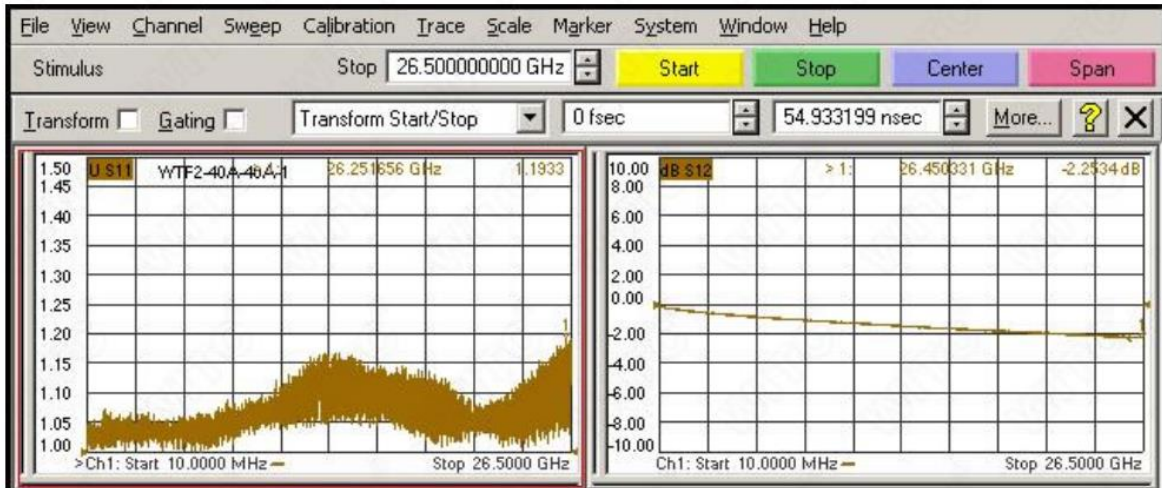
Standard length tolerance: ±0.5%. Custom lengths and other connector types available. Length is measured from one connector end to the other connector end as shown above. For RA connectors, use the pin center-line.

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### Typical Test Data



Typical Test rest results with 1 M length