

MICROWAVE TEST CABLE ASSEMBLY

RTF2-50 -NM-SMAM-18 GHz-L, N Male to N Male 18GHz

SKU:00-0902



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 N type 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	N type 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	

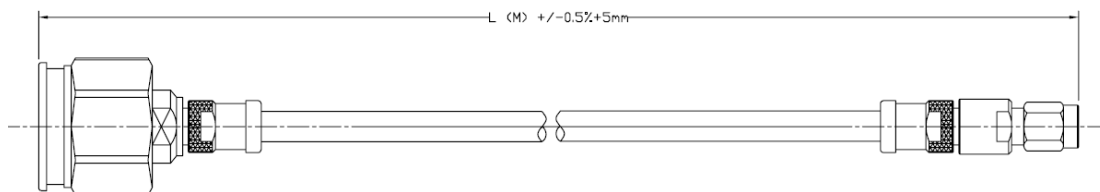
RoHS Compliance

ELECTRICAL CHARACTERISTICS	
characteristic impedance	50Ω
operating frequency range	DC – 18GHz
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)



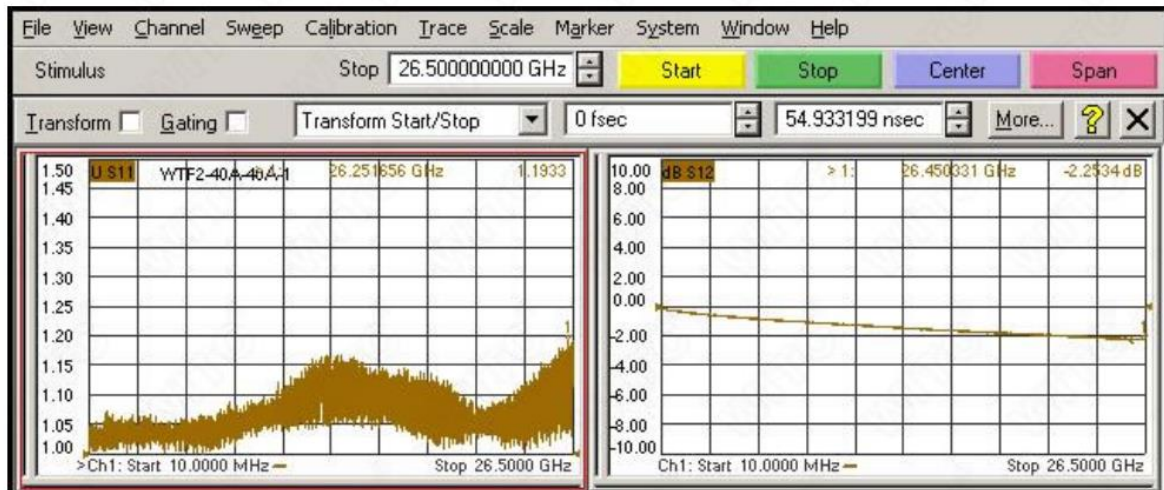
Standard length tolerance: ±0.5%. Custom lengths and other connector types available. · Length is measured from one connector end to the other connector end as shown above. For RA connectors, use the pin center-line.

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Typical Test Data



Typical Test results with 1 M length