

## MICROWAVE TEST CABLE ASSEMBLY

### RG1R-60 -2.92M-2.92M-40 GHz-L, 2.92mm Male to 2.92mm Male 40GHz SKU:00-0913



#### Application:

RG1R 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 2.92mm and 2.92mm 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.

#### 2.92mm Male Phase Stable Test Cable

CONSTRUCTION / DIMENSIONS			
	Description	Materials	Finish
Connector 1	2.92mm Male	Stainless Steel	Passivated
Connector 2	2.92mm Male	Stainless Steel	Passivated
Cable Jacket	Outer cover	FEP	Gray
Markers	Label	PVC	White / black
Contacts	Centre pin	Brass or BeCu	Gold plated

ELECTRICAL CHARACTERISTICS	
characteristic impedance	50Ω
operating frequency range	DC – 40GHz
VSWR	1.3:1 (Typical 1.2:1)
voltage withstanding	800 V rms
Mechanical Phase Stability*	<±5°
Amplitude Stability vs Shaking	0.1dB
velocity of propagation	83 %

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

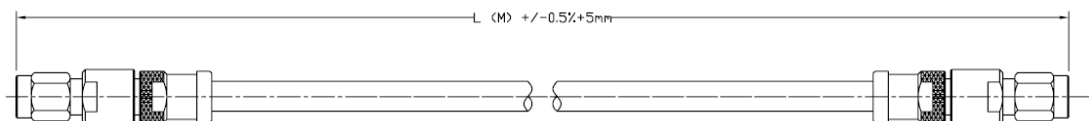
MECHANICAL CHARACTERISTICS		
recommended minimum bending radius	20 mm	0.79 inch
Cable Diameter	3.9mm	0.154

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

RoHS Compliance

FREQUENCY / ATTENUATION MAX POWER (sea level / 25 °C)			
GHz	dB / m	dB / ft	Watts
1.0	0.372	0.11	516
3.0	0.65	0.20	294
6.0	0.93	0.28	205
8.0	1.08	0.33	177
12	1.67	0.41	143
18	2.05	0.51	115
26	2.05	0.62	94
30	2.19	0.67	88
35	2.38	0.73	80
40	2.56	0.78	75
attenuation calculation (dB/m)	(0.365688 x √f GHz) + (0.00625917 f GHz)		
power calculation (W)	516 / √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