



P2RFC-1055A-48

Description: Precision test grade cables are suitable for use up to 26.5 GHz with outstanding performance to 18 GHz. Cables are in stock and ready for use. Some applications for precision grade cables are:

1. Test port cables for attachment to RF and microwave test equipment.
2. High frequency jumpers to connect test equipment components.
3. Anechoic chambers for near field testing.
4. Portable VNA or hand held analyzers.
5. Rugged or harsh Military environments such as Mobile Radar Deployment testing and compliance.¹

Product features:

Triple shield construction for ultimate EMC and EMI shielding.¹ High Temp FEP jacket. Solid PTFE dielectric for phase stability with multiple flexing. Exceptional VSWR and I.L. performance. (charts included with each cable) Rugged SMA Male connectors made from passivated stainless steel. Gold plated center conductors for high repeatability and wear resistance while maintaining voltage to current ratios.

Electrical: Velocity of Propagation 70%
 Shielding effectiveness..... >100dB
 Impedance ohms 50 ± 1 ohm
 Capacitance 29.4 pF/ft
 Delay 1.45 ns/ft
 Phase stability vs. flexure on a 3" mandrel +/-6° to 18 GHz
 VSWR..... 1.25:1 max to 26 GHz
 Insertion Loss dB See chart below

Mechanical: Min. bend radius..... 1"
 Nominal diameter..... .375"
 Operating temperature..... -55 C to +200 C
 Crush resistance ¼" square-lock..... 1500 lbs. per linear inch

I.L. Chart

Freq GHz	Atten (dB/100 ft)	Max Pwr (W)
1	12	539
6	34	180
12	52	117
18	68	88
26.5	88	65

Attenuation at any frequency: $(K1 \times \sqrt{F \text{ MHz}}) + (K2 \times F \text{ MHz})$
 K1 = .348
 K2 = .0012

Ex. 1 (1 GHz): $\sqrt{1000} \times .348 = 11.0047...$
 $1000 \times .0012 + 11.0047... = 12.2\text{dB}$
 Ex. 2 (500 MHz): $\sqrt{500} \times .348 = 7.718...$
 $500 \times .0012 + 7.718... = 8.3\text{dB}$

¹Electro-Magnetic Compatibility; Electro-Magnetic Interference