



P2RFC-1003-36

Description: Precision test grade cable jumpers are suitable for use in lab or field applications up to 18 GHz exhibiting outstanding electrical performance. Connectors for this model have passivated stainless steel SMA male connectors on flexible RG-402/U cable. Assemblies can be armored as an option¹.

Electrical:

Velocity of Propagation	70%
Shielding effectiveness	> -80 dB
Impedance.....	50 ± 1 ohm
Capacitance	29 pF/ft
Delay.....	1.45 ns/ft
Phase stability vs. flexure on a 2" mandrel.....	4° @ 18 GHz
VSWR.....	1.25:1 max @ 18 GHz
Insertion Loss -dB/100 ft	See chart below

Mechanical:

Min. bend radius	1"
Nominal diameter157"
Operating temp.	-65 C to +165 C
¹ Armor.	¼" square-lock stainless steel tube
Crush resistance.	1500 lbs per linear inch

Materials and finish:

Connectors Passivated stainless steel coupling nut
 PTFE insulator
 Gold plated brass pin
 Gold plated steel body

Cable Blue FEP jacket
 Signal conductor .036" solid silver plated copper
 FEP insulator per MIL-DTL-17
 2 braided shields per ASTM B-298, one helically wrapped flat silver plated copper braid, one 44AWG round silver plated copper braid

I.L. Chart:

Freq GHz	Atten.(dB/100 ft)	Avg Pwr (W)
.4	7.1	480
1	11.6	280
2	17	195
3	22	154
10	45	72
12	51	63
18	66	48

Attention at any frequency: $(K1 \times \sqrt{F \text{ MHz}}) + (K2 \times F \text{ MHz})$

K1= .330

K2= .0012