

67 GHz Test Port Extension Cables

Spanawave’s test port extension cables are the perfect alternative to over-priced models from other manufacturers. These test cables provide the utmost precision in vector measurements in the lab and during calibrations. Besides the electrical performance, these VNA cables are rugged and feature a lightweight armor to insure consistent performance over time. A wide variety of connectors are available including the precision “NMD” or “port ruggedized” connectors, which mate directly to the VNA port. Custom lengths and configurations are available. Please contact us for application help and pricing.



ELECTRICAL DATA	
Max Frequency:	67 GHz
Impedance:	50 Ω Nominal
Propagation Velocity:	78.7% Nominal
Time Delay:	1.291 ns/ft (4.236 ns/m)
Shielding Effectiveness:	-100 dB minimum (cable only)
Dielectric Withstanding Voltage:	400 VRMS
Capacitance:	25.82pF/ft (84.71 pF/m)

MECHANICAL DATA	
Finished Outer Diameter:	0.625 in (1.588 cm)
Static Bend Radius:	4.0 in (10.16 cm)
Weight with Standard Jacket/Armor:	0.18 lbs/ft (0.26 kg/m)
Max Assembly Length:	5 ft (1.52 m)
Crush Resistance:	250 lbs/linear in (44.6 kg/linear cm)
Operating Temperature Range:	-76 to 248° F (-60 to 120° C)

CABLE CONSTRUCTION	
Inner Conductor:	Solid Ag-plated Cu
Dielectric:	Foamed FEP
Standard Finish:	Metal Braid/ Metal Conduit

PART NO.	MAX. FREQ. (GHz)	LENGTH in. (cm)	TEST PORT CONNECTOR	DUT CONNECTOR
C4697E	67	38 (96.5)	1.85mm (f) NMD	1.85mm (f)
C4697F (Set of 2)	67	24 (62)	1.85mm (f) NMD	1.85mm (f)
	67	24 (62)	1.85mm (f) NMD	1.85mm (m)

FREQUENCY		ATTENUATION		CONN LOSS dB	VSWR	
BAND	GHz	dB/ft	dB/m			
UHF	0.3	0.182	0.596	0.006	1.10	
	0.5	0.235	0.772	0.009		
	0.8	0.299	0.980	0.012		
L	1.0	0.335	1.098	0.014	1.15	
S	2.0	0.477	1.566	0.024		
	2.4	0.524	1.720	0.027		
	3.0	0.588	1.930	0.032		
C	4.0	0.683	2.241	0.040		1.20
	6.0	0.844	2.769	0.055		
X	8.0	0.982	3.220	0.070	1.25	
	10.0	1.105	3.624	0.084	1.30	
	12.4	1.238	4.063	0.101		
Ku	15.0	1.371	4.499	0.118	1.35	
	18.0	1.513	4.962	0.139		
K	20.0	1.601	5.253	0.152		1.40
	22.0	1.686	5.532	0.165		
	24.0	1.768	5.801	0.178		
Ka	26.5	1.866	6.123	0.194	1.45	
	28.0	1.924	6.311	0.204		
	30.0	1.998	6.555	0.217		
	32.0	2.070	6.792	0.230		
	34.0	2.141	7.023	0.243		
V	36.0	2.210	7.249	0.256	1.50	
	40.0	2.343	7.686	0.281		
	45.0	2.502	8.209	0.313	1.55	
	50.0	2.655	8.709	0.344		
	60.0	2.943	9.655	0.406		
	67.0	3.134	10.282	0.450	1.60	

