

VNA50 Series (SMD2.4 Female-ST to NMD2.4 Female-ST)

Test Cable for Vector Network Analyzer, 50ohms, DC-50GHz



VNA50-48-76-"L" (L: Length)

Maximum Ratings

Operating Temperature	23°C± 5°C
Storage Temperature	-55°C to +105°C
<i>Permanent damage may occur if any of these limits are exceeded</i>	

Cable Diameter	15.3mm	
Velocity of Propagation	74%	
Shielding Effectiveness	>90dB	
Power Handling at 40°C	1 GHz	409W
	2 GHz	288W
	6GHz	165W
	18 GHz	93W
	26.5 GHz	76W
	40 GHz	61W
50 GHz	50W	
Min. Bending Radius	1.97" (50mm)	

Features

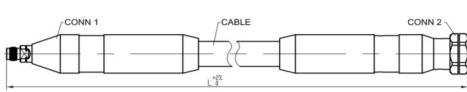
- Ultra-wideband operation, DC to 50 GHz
- 2.4mm Rugged Female connector for direct interface with 50 GHz VNA ports
- Low insertion loss and excellent return loss
- Extra rugged construction includes protective shield and strain relief for longer life
- Stainless steel connector for long mating-cycle life
- Excellent amplitude and phase stability vs flexure and shaking

Applications

- Vector network analyzer (VNA) test cables

Outline Drawing

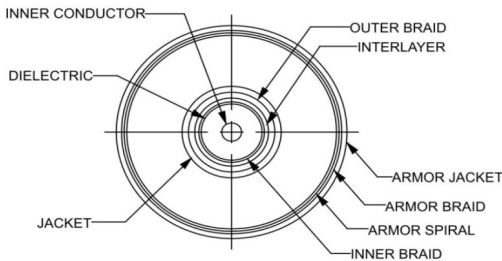
Unit [mm]



Electrical Specifications at 25°C

Freq. (GHz)	Length	Insertion Loss (dB@GHz)								VSWR (@GHz)							
		DC - 18		18-26.5		26.5-40		40-50		DC - 18		18-26.5		26.5-40		40-50	
		Typ.	Max.	Typ.	Max.	Typ.	Max.	Typ.	Max.	Typ.	Max.	Typ.	Max.	Typ.	Max.	Typ.	Max.
DC-50	2FT	1.4	1.7	1.7	2.0	2.0	2.4	2.6	3.0	1.17	1.25	1.20	1.30	1.26	1.35	1.31	1.40
	3FT	2.0	2.3	2.5	2.8	3.0	3.4	3.4	3.9								
	1M	2.1	2.4	2.7	3.0	3.2	3.6	3.6	4.2								

Cable Cross Section



Typical Performance Data (VNA50-48-76-2FT)

Frequency(MHz)	VSWR	Insertion Loss (dB)
50	1.02	0.10
1000	1.04	0.38
2000	1.05	0.49
4000	1.06	0.63
5000	1.07	0.75
6000	1.08	0.81
7000	1.09	0.86
8000	1.10	0.91
9000	1.11	0.95
10000	1.11	1.02
12000	1.12	1.09
15000	1.15	1.22
16000	1.16	1.31
18000	1.17	1.42
20000	1.19	1.57
26500	1.20	1.83
31000	1.21	1.94
34000	1.22	2.01
40000	1.26	2.23
50000	1.31	3.07

Cable Construction

Inner Conductor	-
Dielectric	-
Inner Braid	-
Interlayer	-
Outer Braid	-
Jacket	-

Connectors

- Nut, Stainless steel, Passivated
- Body, Stainless steel, Passivated
- Center contacts, Berillium Copper, Gold plated
- Dielectric, PEI, Natural

Product Guarantee*

Micable will repair or replace your cable assembly if it fails within six months after shipment. This guarantee excludes product damage from misuse or abuse

