

VNA40 Series (SMD2.92 Female-ST to NMD2.92 Male-ST)

Test Cable for Vector Network Analyzer, 50ohms, DC-40GHz



VNA40-46-0U-"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
	12 GHz	115W
	18 GHz	93W
	26.5 GHz	76W
40 GHz	61W	
Min. Bending Radius	1.97" (50mm)	

Features

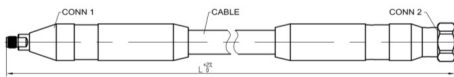
- Ultra-wideband operation, DC to 40 GHz
- 2.4mm Rugged Female connector for direct interface with 40 GHz VNA ports
- Low insertion loss and excellent return loss
- Extra rugged construction includes protective shield and strain relief for longer life
- Stainless steel connector for long mating-cycle life
- Excellent amplitude and phase stability vs flexure and shaking

Applications

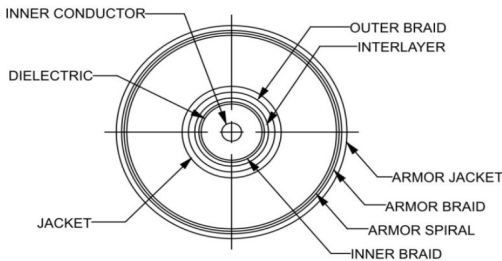
- Vector network analyzer (VNA) test cables

Outline Drawing

Unit [mm]



Cable Cross Section



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

Electrical Specifications at 25°C

Freq. (GHz)	Length	Insertion Loss (dB@GHz)								VSWR (@GHz)							
		DC - 6		6-18		18-26.5		26.5-40		DC - 6		6-18		18-26.5		26.5-40	
		Typ.	Max.	Typ.	Max.	Typ.	Max.	Typ.	Max.	Typ.	Max.	Typ.	Max.	Typ.	Max.	Typ.	Max.
DC-40	2FT	0.7	0.9	1.4	1.7	1.7	2.0	2.0	2.4	1.06	1.15	1.17	1.25	1.20	1.25	1.25	1.30
	3FT	1.1	1.3	2.0	2.3	2.5	2.8	3.0	3.4								
	1M	1.2	1.4	2.1	2.4	2.7	3.0	3.2	3.6								

Typical Performance Data (VNA40-46-0U-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	1.05	0.75
6000	1.06	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
38000	1.23	2.15
40000	1.25	2.23

