

AT40 Series (2.92 Female-ST to 2.92 Female-ST)

Armored Precision Test Cable, 50ohms, DC-40GHz



AT40-46-46-"L" (L: Length)

Maximum Ratings

Operating Temperature 23°C± 5°C

Storage Temperature -55°C to +85°C

Permanent damage may occur if any of these limits are exceeded

Cable Diameter		6.0mm
Velocity of Propagation		74%
Shielding Effectiveness		>90dB
Power Handling at 40°C	1 GHz	125W
	6GHz	52W
	12 GHz	37W
	18 GHz	29W
	26.5 GHz	22W
	40 GHz	18W
Min. Bending Radius		50mm

Features

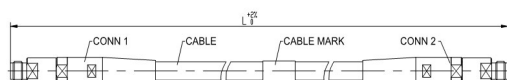
- Ultra-wideband operation, DC to 40 GHz
- Ideal VSWR and measurement accuracy
- Excellent amplitude and phase stability vs flexure and shaking
- Reinforced connector, multilayer armor structure to protect cable against compression, tension, torsion and abrasion

Applications

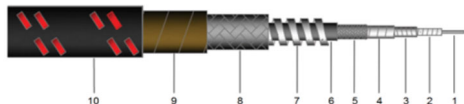
- Lab and production line test
- 5G Massive MIMO and antenna OTA test
- 5G switch and attenuator matrices systems
- Phase array test systems
- RF/Microwave test systems

Outline Drawing

Unit [mm]



Cable Cross Section



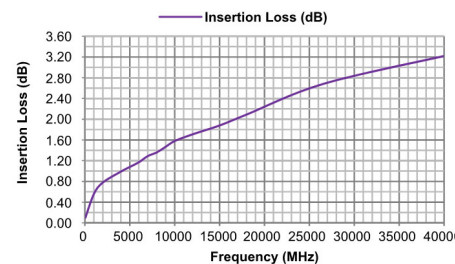
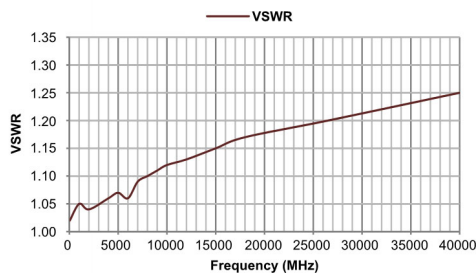
1. Center Conductor: Solid SPC
2. Dielectric: ND-PTFE
3. Inner Shield: SPC Strip
4. Inter layer: PTFE Tape
5. Outer Shield: SPC Braid
6. Inner Jacket: FEP
7. Crush Member: Stainless Steel Spiral Spring
8. Braided Strength Member: Stainless Steel Braid
9. Outer Binder: PTFE Film Tape with Silicone Adhesive
10. Outer Jacket: PTFE Braid

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 (AT40-46-46-1M)

Frequency(MHz)	VSWR	Insertion Loss (dB)
50	1.02	0.10
1000	1.05	0.56
2000	1.04	0.78
4000	1.06	0.99
5000	1.07	1.08
6000	1.06	1.17
7000	1.09	1.29
8000	1.10	1.36
9000	1.11	1.47
10000	1.12	1.58
12000	1.13	1.71
15000	1.15	1.88
18000	1.17	2.09
26500	1.20	2.68
40000	1.25	3.22



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