

# AT50 Series (2.4 Male-ST to 2.4 Male-ST)

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



### AT50-39-39-"L" (L: Length)

#### Maximum Ratings

Operating Temperature	23°C± 5°C
Storage Temperature	-55°C to +85°C
<i>Permanent damage may occur if any of these limits are exceeded</i>	

Cable Diameter	6.0mm
Velocity of Propagation	74%
Shielding Effectiveness	>90dB

Power Handling at 40°C	1 GHz	125W
	12 GHz	37W
	18 GHz	29W
	26.5 GHz	22W
	40 GHz	18W
50 GHz	15W	

Min. Bending Radius	50mm
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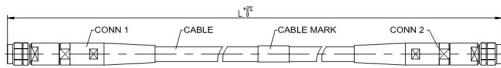
#### Features

- Ultra-wideband operation, DC to 50 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

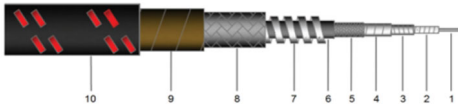
#### Applications

- 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



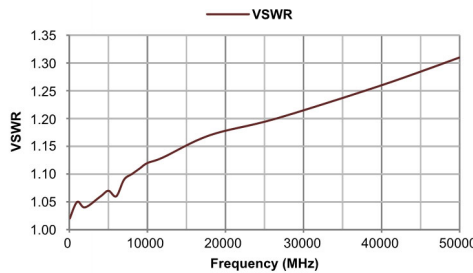
1. Center Conductor: Solid SPC
2. Dielectric: ND-PTFE
3. Inner Shield: SPC Strip
4. Inter layer: PTFE Tape
5. Outer Shield: SPC Braid
6. Inner Jacket: FEP
7. Crush Member: Stainless Steel Spiral Spring
8. Braided Strength Member: Stainless Steel Braid
9. Outer Binder: PTFE Film Tape with Silicone Adhesive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

#### Electrical Specifications at 25°C

Freq. (GHz)	Length	Insertion Loss (dB@GHz)								VSWR (@GHz)							
		DC - 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								

#### Typical Performance Data (AT50-39-39-1M)

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
18000	1.17	2.09
26500	1.20	2.68
40000	1.26	3.22
50000	1.31	3.63



#### 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