

# B10 Series (SMA Male-ST to N Male-ST)

High Performance Cable Assembly, 50ohms, DC-18GHz



## B10-01-07-"L" (L: Length)

### Maximum Ratings

Operating Temperature -55°C to +85°C

Storage Temperature -55°C to +85°C

Permanent damage may occur if any of these limits are exceeded

Cable Diameter	7.37mm	
Velocity of Propagation	84%	
Shielding Effectiveness	>90dB	
Power Handling at 40°C	1 GHz	590W
	2 GHz	414W
	6 GHz	221W
	12GHz	172W
	16 GHz	165W
18 GHz	153W	
Min. Bending Radius	1.5" (38.1mm)	

### Features

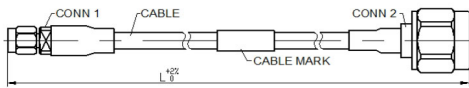
- Stainless steel connectors for long mating-cycle life
- High shielding effectiveness, >90dB
- Excellent phase stability over temperature, 500ppm@-55°C~+85°C
- Extremely low loss, low VSWR
- High power handling

### Applications

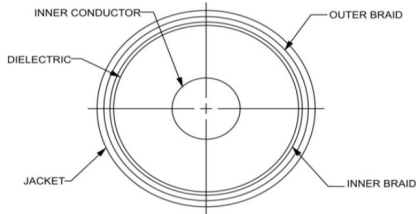
- Phase array radars
- High-power transmitter
- Rack to rack connection
- RF/Microwave test systems
- Airborne, shipborne and ground systems

Outline Drawing

Unit [mm]



Cable Cross Section



Cable Construction	
Inner Conductor	Solid Silver Plated Copper
Dielectric	LD-PTFE
Inner Braid	Silver-Plated Copper Strip
Outer Braid	Silver-Plated Copper Braid
Jacket	FEP

Connectors	
• Nut, Stainless steel, Passivated	
• Body, Stainless steel, Passivated	
• Center contacts, Brass, Gold plated	
• Dielectric, PTFE, 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 (m)	Insertion Loss (dB@GHz)								VSWR (@GHz)							
		DC - 2.5		2.5-6		6-12		12-18		DC - 2.5		2.5-6		6-12		12-18	
		Typ.	Max.	Typ.	Max.	Typ.	Max.	Typ.	Max.	Typ.	Max.	Typ.	Max.	Typ.	Max.	Typ.	Max.
DC-18	0.5	0.3	0.4	0.4	0.5	0.5	0.6	0.6	0.7	1.09	1.15	1.12	1.20	1.18	1.25	1.30	1.35
	1	0.4	0.5	0.6	0.7	0.8	0.9	1.0	1.1		1.15	1.12	1.20	1.18	1.25	1.30	1.35
	1.5	0.6	0.7	0.8	0.9	1.1	1.2	1.3	1.4		1.15	1.12	1.20	1.18	1.25	1.30	1.35
	2	0.7	0.8	1.0	1.1	1.4	1.5	1.5	1.7		1.15	1.12	1.20	1.18	1.25	1.30	1.35

### Typical Performance Data (B10-01-07-1M)

Frequency(MHz)	VSWR	Insertion Loss (dB)
50	1.02	0.04
1000	1.07	0.22
2000	1.08	0.33
2500	1.09	0.38
4000	1.10	0.46
5000	1.11	0.51
6000	1.12	0.57
7000	1.13	0.61
8000	1.14	0.66
9000	1.15	0.70
10000	1.16	0.73
12000	1.18	0.81
13000	1.19	0.86
15000	1.22	0.93
18000	1.30	1.00

