

# A02 Series (N Male-ST to N Male-ST)

## LL142 Cable Assembly, 50ohms, DC-18GHz



### A02-07-07-"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	4.95mm	
Velocity of Propagation	80%	
Shielding Effectiveness	>95dB	
Power Handling at 20°C	1 GHz	834W
	2 GHz	606W
	6 GHz	334W
	12GHz	218W
	16 GHz	182W
18 GHz	169W	
Min. Bending Radius	1.0" (25.4mm)	

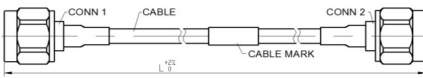
#### Features

- Frequency up to 18 GHz
- Stainless steel connectors for long mating-cycle life
- Triple shielded cable for excellent shielding effectiveness, >95dB
- Excellent phase stability over temperature, 220ppm@+22°C~+85°C
- Low loss, low VSWR
- High power handling

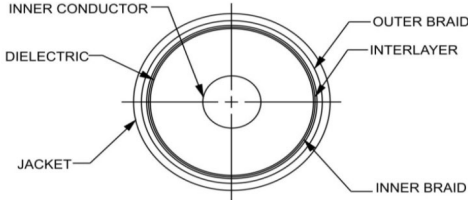
#### Applications

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

Outline Drawing Unit [mm]



Cable Cross Section



Cable Construction	
Inner Conductor	Solid Silver Plated Copper
Dielectric	Expanded PTFE Tape
Inner Braid	Silver-Plated Copper Strip
Interlayer	Aluminum Polyester
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 - 3		3-6		6-12		12-18		DC - 3		3-6		6-12		12-18	
		Typ.	Max.	Typ.	Max.	Typ.	Max.	Typ.	Max.	Typ.	Max.	Typ.	Max.	Typ.	Max.	Typ.	Max.
DC-18	0.5	0.4	0.5	0.6	0.7	0.6	0.8	0.7	1.0	1.09	1.15	1.12	1.20	1.18	1.25	1.30	1.35
	1	0.5	0.7	0.8	1.0	1.2	1.4	1.3	1.6								
	1.5	0.8	1.0	1.2	1.4	1.7	1.9	2.0	2.3								
	2	1.0	1.2	1.6	1.8	2.2	2.4	2.6	2.9								

#### Typical Performance Data (A02-07-07-1M)

Frequency(MHz)	VSWR	Insertion Loss (dB)
50	1.02	0.03
1000	1.05	0.28
2000	1.07	0.39
3000	1.09	0.47
4000	1.10	0.56
5000	1.11	0.65
6000	1.12	0.76
7000	1.13	0.81
8000	1.14	0.87
9000	1.15	0.95
10000	1.16	1.02
12000	1.19	1.16
13000	1.20	1.21
15000	1.23	1.27
18000	1.30	1.33

