

B04 Series (2.92 Female-ST to 2.92 Female-ST)

Cable Assembly, 50ohms, DC-40GHz



B04-46-46-"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	3.9mm	
Velocity of Propagation	82%	
Shielding Effectiveness	>90dB	
Power Handling at 40°C	1 GHz	125W
	2 GHz	93W
	6GHz	52W
	12 GHz	37W
	18 GHz	29W
	26.5 GHz	22W
40 GHz	18W	
Min. Bend Radius	20mm	

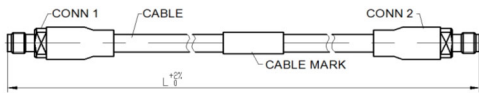
Features

- Extremely low loss, 2.0dB/m@40GHz typ.
- Low VSWR
- High shielding effectiveness, >90dB
- Excellent phase stability over temperature, 500ppm@-55°C~+85°C
- Excellent phase stability over flexure, <±3°@40GHz
- Stainless steel connectors for long mating-cycle life

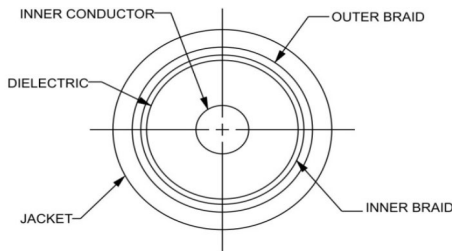
Applications

- Phase array radars
- 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 Coppe
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, 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	0.5	0.5	0.7	0.9	1.1	1.0	1.3	1.3	1.6	1.08	1.15	1.18	1.25	1.22	1.30	1.26	1.35
	0.8	0.7	0.9	1.3	1.5	1.5	1.8	1.9	2.2								
	1	0.9	1.1	1.5	1.8	1.8	2.2	2.2	2.6								
	1.5	1.3	1.5	2.2	2.5	2.6	3.0	3.3	3.7								
	2	1.6	1.8	2.8	3.1	3.5	3.9	4.3	4.7								

Typical Performance Data (B04-46-46-1M)

Frequency(MHz)	VSWR	Insertion Loss (dB)
50	1.02	0.10
1000	1.04	0.31
2000	1.05	0.44
4000	1.06	0.63
5000	1.07	0.70
6000	1.08	0.82
7000	1.09	0.94
8000	1.10	1.00
9000	1.11	1.05
10000	1.12	1.11
12000	1.13	1.25
15000	1.15	1.34
18000	1.18	1.47
26500	1.22	1.78
40000	1.26	2.20

