

B50 Series (2.4 Male-ST to 2.4 Female-ST)

Cable Assembly, 50ohms, DC-50GHz



B50-39-48-"L" (L: Length)

Maximum Ratings

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

Cable Diameter	3.6mm	
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	14.4mm	

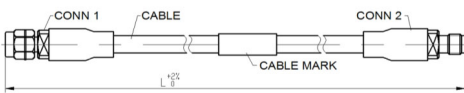
Features

- Wide frequency range: DC - 50GHz
- Stainless steel connectors for long mating-cycle life
- High shielding effectiveness, >90dB
- Excellent phase stability over flexure, <±4°@50GHz
- Low loss, low VSWR

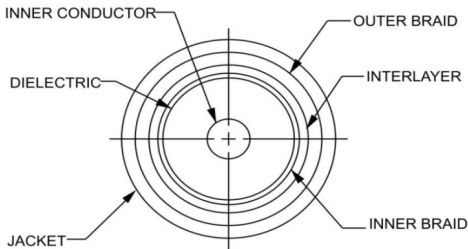
Applications

- Interconnect
- Rack to rack connection
- RF/Microwave test systems

Outline Drawing Unit [mm]



Cable Cross Section



Cable Construction	
Inner Conductor	Silver Plated Copper, Solid
Dielectric	Solid PTFE
Inner Braid	Silver-Plated Copper Braid
Interlayer	PTFE
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 - 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 (B50-39-48-1M)

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

