

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

Cable Assembly, 50ohms, DC-50GHz



B50-39-39-"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		3.6mm
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

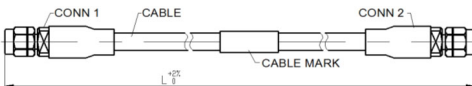
- Wide frequency range: DC - 50GHz
- Stainless steel connectors for long mating-cycle life
- High shielding effectiveness, >90dB
- Excellent phase stability over flexure, <±4°@50GHz
- Low loss, low VSWR

Applications

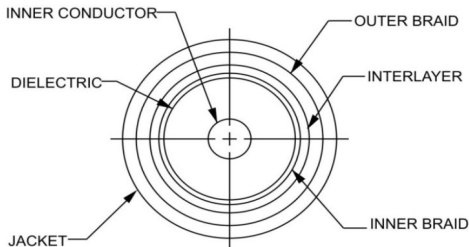
- Interconnect
- Rack to rack connection
- RF/Microwave test systems

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 (B50-39-39-1M)

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

