

# B16Y Series (2.4 Female-ST to 2.4 Female-ST)

## High Performance Cable Assembly, 50ohms, DC-40GHz



### B16Y-48-48-"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	3.60mm	
Velocity of Propagation	85%	
Shielding Effectiveness	>90dB	
Power Handling at 40°C	1 GHz	110W
	2 GHz	79W
	6GHz	43W
	12 GHz	31W
	18 GHz	25W
	26.5 GHz	20W
40 GHz	16W	
Min. Bending Radius	25.4mm	

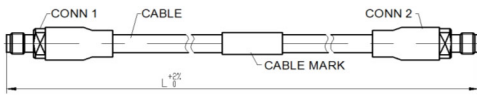
#### Features

- 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

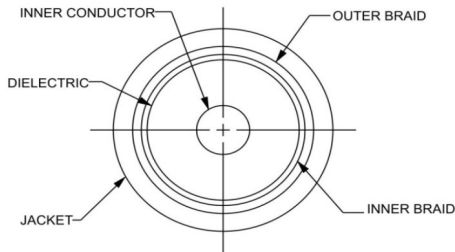
#### Applications

- 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	PFA
Connectors	
• Body, Stainless steel, Passivated	
• Center contacts, Beryllium, 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 (m)	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	0.6	0.8	1.0	1.2	1.2	1.5	1.6	1.9	1.14	1.20	1.20	1.25	1.27	1.35	1.33	1.40
	1	1.0	1.2	1.8	2.1	2.4	2.7	2.9	3.2								
	1.5	1.4	1.6	2.7	3.0	3.3	3.6	4.2	4.5								

#### Typical Performance Data (B16Y-48-48-1M)

Frequency(MHz)	VSWR	Insertion Loss (dB)
50	1.05	0.05
1000	1.09	0.44
2000	1.11	0.62
4000	1.12	0.89
5000	1.13	0.99
6000	1.14	1.10
7000	1.15	1.18
8000	1.16	1.27
9000	1.17	1.35
10000	1.18	1.42
12000	1.20	1.57
15000	1.22	1.76
16000	1.23	1.82
18000	1.24	1.94
20000	1.25	2.06
26500	1.27	2.38
31000	1.29	2.55
34000	1.31	2.68
38000	1.32	2.84
40000	1.33	2.91

