

C25F Series (SMP Female-ST to SMP Female-ST)

Low Loss .047 Cable Assembly, 50ohms, DC-40GHz



C25F-37-37-"L" (L: Length)

Maximum Ratings

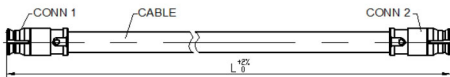
Operating Temperature -55°C to +125°C

Storage Temperature -55°C to +125°C

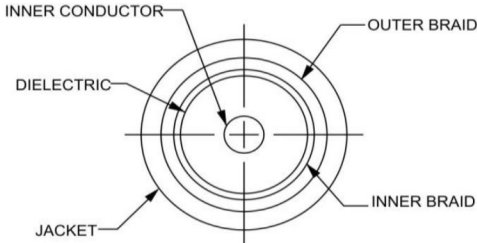
Permanent damage may occur if any of these limits are exceeded

Cable Diameter	1.42mm	
Velocity of Propagation	70%	
Shielding Effectiveness	>100dB	
Power Handling at 20°C	1 GHz	49W
	6 GHz	19W
	12 GHz	13W
	18 GHz	11W
	26.5 GHz	8W
40 GHz	7W	
Min. Bending Radius	3mm	

Outline Drawing Unit[mm]



Cable Cross Section



Features

- Super flexible with minimum bend radius of 3 mm
- Very low loss with 7.69dB/m @ 40GHz
- Low return loss with 15.5dB @ 40GHz
- Excellent shielding effectiveness >100 dB
- Excellent phase stability vs temperature 400ppm@-40~+70°C
- Ideal for application of compact installation space
- Very stable performance during bending and shaking
 - Amplitude Stability: $\pm 0.1\text{dB}$@40GHz
 - Phase Stability vs. Flexure: $\pm 4^\circ$ @40GHz
 (When wrapped 360° around a 14.2mm radius mandrel)

Applications

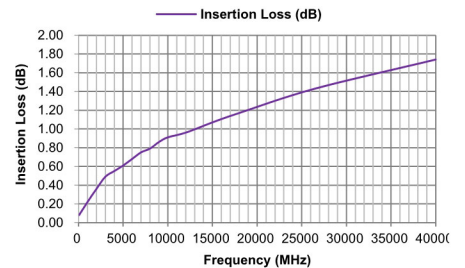
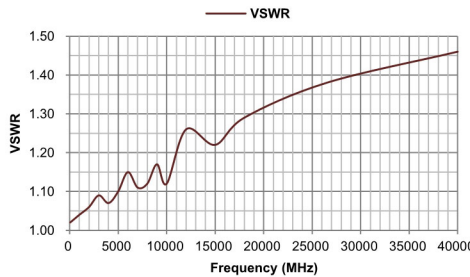
- In-box and board to board connection
- High-density integrated connection
- High accuracy miniature delay line
- 5G Massive MIMO and antenna OTA test
- Military and commercial miniature systems

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	
		Typ.	Max.	Typ.	Max.	Typ.	Max.	Typ.	Max.
DC- 40	0.2	0.7	0.8	1.2	1.4	1.5	1.7	1.8	2.1
	0.3	1.0	1.1	1.7	1.9	2.1	2.3	2.5	2.8
	0.5	1.6	1.7	2.7	2.9	3.4	3.6	4.1	4.4

Typical Performance Data (C25F-37-37-0.2M)

Frequency(MHz)	VSWR	Insertion Loss (dB)
50	1.02	0.08
1000	1.04	0.22
2000	1.06	0.36
3000	1.09	0.49
4000	1.07	0.55
5000	1.10	0.61
6000	1.15	0.68
7000	1.11	0.75
8000	1.12	0.79
9000	1.17	0.86
10000	1.12	0.91
12000	1.26	0.96
15000	1.22	1.07
18000	1.29	1.17
26500	1.38	1.43
40000	1.46	1.74



Cable Construction	
Inner Conductor	SPC, Solid
Dielectric	Foamed PTFE
Inner Braid	Silver-Plated Copper Strip
Outer Braid	Silver-Plated Copper Braid
Jacket	FEP

Connectors	
• Body, Berillium Copper, Gold plated	
• Center contacts, Berillium Copper, 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