

C29F Series (2.4 Male-ST to 2.4 Male-ST)

Low Loss .086 Cable Assembly, 50ohms, DC-50GHz



C29F-391-391-"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	2.54mm	
Velocity of Propagation	80%	
Shielding Effectiveness	>100dB	
Power Handling at 20°C	6 GHz	59W
	12 GHz	42W
	18 GHz	34W
	26.5 GHz	27W
40 GHz	21W	
Min. Bending Radius	5mm	

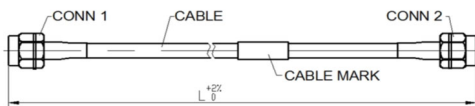
Features

- Super flexible with minimum bending radius of 5 mm
- Extremely low loss with 5.57dB/m @ 50GHz
- Excellent shielding effectiveness >100 dB
- Excellent phase stability vs temperature 500ppm@-40~+70°C
- Very stable performance during bending and shaking
 - Amplitude Stability: $\pm 0.08\text{dB}$@50GHz
 - Phase Stability vs. Flexure: $\pm 3^\circ$@50GHz
 - (When wrapped 360° around a 25.4mm radius mandrel)

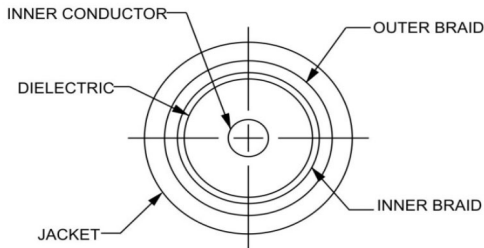
Applications

- 5G Massive MIMO and antenna OTA test
- 5G switch and attenuator matrices systems
- In-box and board to board connection
- High-density integrated connection
- Lab and production line test
- Product temperature cycle test
- Military and commercial systems

Outline Drawing Unit[mm]



Cable Cross Section



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

Connectors	
● Nut, Stainless steel, Passivated	
● Body, Brass, Gold plated	
● Center contacts, Brass, 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-.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	0.2	0.8	1.0	1.1	1.3	1.2	1.5	1.5	1.8	1.17	1.25	1.23	1.30	1.28	1.35	1.31	1.35
	0.3	1.1	1.3	1.3	1.6	1.7	2.0	2.1	2.4								
	0.5	1.7	1.9	2.1	2.4	2.7	3.0	3.2	3.5								
	0.8	2.6	2.8	3.3	3.6	4.2	4.5	4.9	5.2								
	1	3.2	3.4	4.0	4.3	5.2	5.5	6.0	6.4								

Typical Performance Data (C29F-391-391-0.3M)

Frequency(MHz)	VSWR	Insertion Loss (dB)
50	1.02	0.08
1000	1.06	0.28
2000	1.06	0.36
2500	1.07	0.42
4000	1.09	0.48
5000	1.09	0.53
6000	1.10	0.57
7000	1.10	0.62
8000	1.12	0.66
9000	1.12	0.71
10000	1.15	0.75
12000	1.13	0.83
18000	1.17	1.06
26500	1.23	1.24
40000	1.28	1.68
50000	1.31	2.11

