

## Product Features

P1dB's flexible low loss test cable P1CA-24M24M-130F-1M is a 2.4mm male to 2.4mm male, 1 meter assembly. Frequency is DC to 50 GHz with a typical Insertion Loss of 3.7 dB for the 1 meter assembly. Typical VSWR to 50 GHz is 1.30.

The flexible 130F cable has an outer diameter of 0.14 inch (3.6mm) and has a Velocity of Propagation of 74%. The cable features 2 shield layers for >90 dB shielding performance. Made with a Low Density PTFE dielectric, typical attenuation at 50 GHz is 1.0 dB/ft.



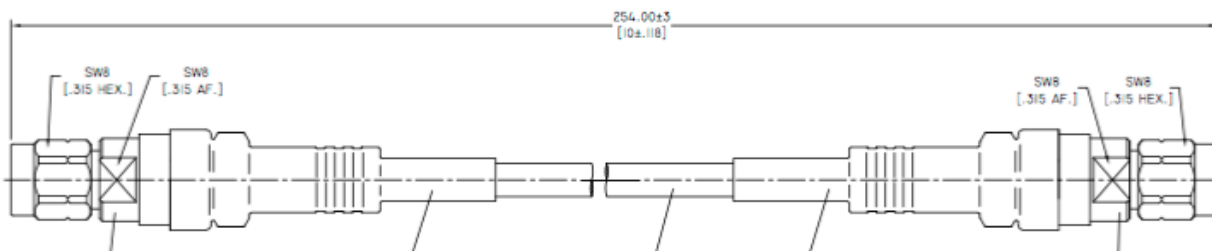
## Electrical Specification: T<sub>Ambient</sub> = 25° C

Parameter	Frequency Range	Units	Min	Typical	Max	Notes
Frequency Range		GHz	DC		50.0	

## Mechanical And Environmental Specifications:

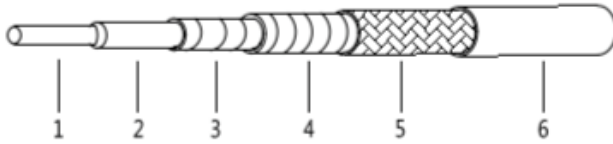
Parameter	Description	Notes
Connector 1	2.4mm Male	
Connector 2	2.4mm Male	
Coax Cable	Flexible, low loss	
Cable Type	130F	
Coax Diameter	0.14	
Minimum Bend Radius	0.7	
Length	10.0	
Operating Temperature	-55.0 to 125.0 °C	
RoHS Compliance	Yes	

## Drawing



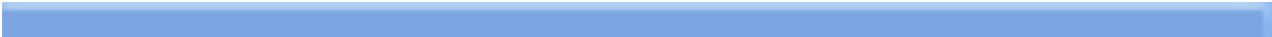
## Graph

Flexible 50 Ohm cable assembly, 2.4mm male to 2.4mm male, 130F flexible coax, 1 meter Frequency DC to 50 GHz.



	Material	Diameter	
		mm	inch
1. Inner Conductor	Silver Plated Copper	0.72	0.028
2. Dielectric	LD PTFE	2.15	0.085
3. Outer Conductor	Spiral Wrapped Silver Plated Copper Tape	2.30	0.091
4. Interlayer	Composite Materials	2.70	0.106
5. Outer shields	Silver Plated Copper Braid	3.15	0.124
6. Jacket	BLUE FEP	3.60	0.142

Frequency(GHz)	Attenuation		Power(Watts CW)
	dB/100 m	dB/100 Ft	
1.0	43.8	13.36	409
2.0	62.2	18.97	288
4.0	88.5	26.99	202
6.0	108.8	33.18	165
8.0	126.1	38.46	142
10.0	141.5	43.16	127
12.0	155.4	47.40	115
14.0	168.3	51.33	106
18.0	191.8	58.50	93
40.0	291.7	88.97	61
50.0	328.5	100.19	55



	Material	Diameter	
		mm	inch
1. Inner Conductor	Silver Plated Copper	0.72	0.028
2. Dielectric	LD PTFE	2.12	0.083
3. Outer Conductor	Spiral Wrapped Silver Plated Copper Tape	2.30	0.091
4. Interlayer	PTFE	2.58	0.102
5. Outer shields	Silver Plated Copper Braid	2.98	0.117
6. Jacket	FEP	3.60	0.142

Electrical Characteristics	
Impedance	50 Ohms
Velocity of Propagation	74%
Shielding Effectiveness	>90 dB
Operating Frequency (MAX.)	50 GHz
Dielectric withstanding voltage	1000 VRMS

Mechanical Characteristics	
Cable Minimum Static Bend Radius	18 mm .709 inch
Cable Minimum Dynamic Bend Radius	36 mm 1.42 inch
Weight	34 g/m 0.024 lbs/ft

## Product Notes

Mating cycles > 500.

Temp range -55 to +125 deg C.

Bend radius is 0.7 inch (18mm).