P1CA-24M24M-130F-24-PM-1PS

Phase matched cable assemblies, 2.4mm male to 2.4mm male, 130F flexible coax, 24 inch. Phase matched +/- 1 ps. Frequency DC to 50 GHz. Supplied as phase matched pairs. Price is per cable. Each set includes S-Parameter data.



Product Features

P1dB's matched cable P1CA-24M24M-130F-24-PM-1PS is a flexible low loss cable assembly with 2.4mm male to 2.4mm male connectors. The assemblies are supplied as matched pairs to within 1 ps over the frequency range DC to 50 GHz. The assembly length is 24 inches and typical insertion loss at 50 GHz is 2.4 dB. Typical VSWR from DC 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.

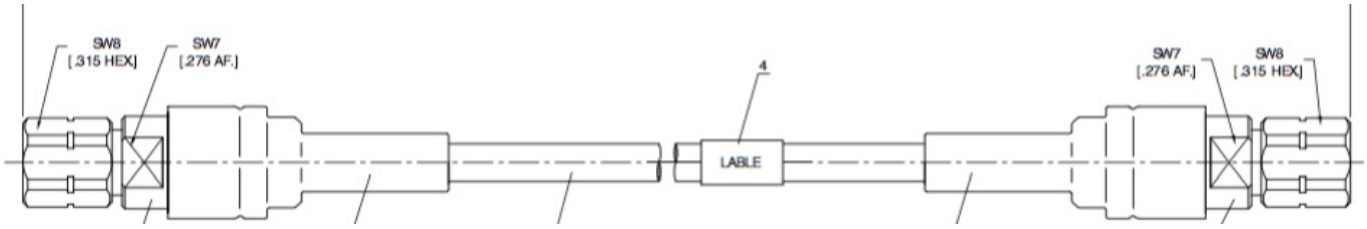
Electrical Specification: $T_{Ambient}$ = 25° C

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	24.0	
Operating Temprature	-55.0 to 125.0 °C	
RoHS Compliance	Yes	

Drawing



Graph

P1dB, Inc. 188 Martinvale Lane, San Jose, CA 95119 +1(408)613-4857

sales@p1dB.com

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	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	Sprial 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 Effectivene	>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

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

Product Notes

Mating cylecs > 500.

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Temp range -55 to +125 deg C.

Bend radius is 0.7 inch (18mm).

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