

# P1CA-24M24M-130F-12-PM-1PS

Phase matched pair of cable assemblies (2) , 2.4mm male to 2.4mm male, 130F flexible coax, 12 inch. Phase matched +/- 1 ps. Frequency DC to 50 GHz. Supplied as a skew (delay) matched pair (min order 2 pcs). Price is per cable. Each set includes S-Parameter data. Note: contact P1dB if you require a matched set of cables larger than 2 pcs.

## Product Features

P1dB's matched cable P1CA-24M24M-130F-12-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 12 inches and typical insertion loss at 50 GHz is 1.4 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<sub>Ambient</sub> = 25° C

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

## 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	12.0	
Operating Temperature	-55.0 to 125.0 °C	
RoHS Compliance	Yes	

## Drawing

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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

## Graph

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
16.0	180.4	55.02	99
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.

Temp range -55 to +125 deg C.

Bend radius is 0.7 inch (18mm).