

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.



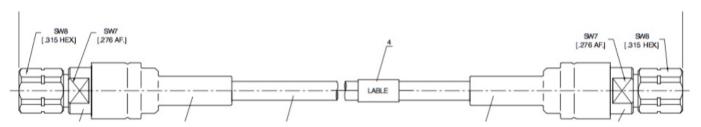
Electrical Specification: T Ambient = 25° C

| 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



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.

| | *** | Diar | Diameter | | |
|--------------------|--|------|----------|--|--|
| | M aterial | 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 |

| Fragues (CH-) | Atte | Da(Masta (2011) | |
|----------------|----------|-----------------|-----------------|
| Frequency(GHz) | dB/100 m | dB/100 Ft | Power(Watts CW) |
| 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.



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.

Temp range -55 to +125 deg C.

Bend radius is 0.7 inch (18mm).