

## Product Features

P1-SMAP/SMAPRA-141CJ-12 is an RF Cable that is part of P1dB's YouForm™ conformable cable assembly series. It is a 12 inch SMA Male to SMA Male Right Angle Jacketed Conformable cable assembly that utilizes 141CJ conformable coax with a diameter of 0.168 inches. The RF cable assembly operates to 18 GHz with a max VSWR of 1.35:1. YouForm™ cables are conformable and jacketed conformable versions 085 and 141 semi-rigid coax cables and meet RG402 and RG405 dimensional and electrical specifications. YouForm™ cable assemblies can operate up to 18 GHz, depending on the configuration. The advantage of YouForm™ conformable cables over semi-rigid are their ability to be formed by hand multiple times, while semi-rigid cables can be formed only once with special bending tools.



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

| Parameter               | Frequency Range | Units  | Min | Typical | Max  | Notes |
|-------------------------|-----------------|--------|-----|---------|------|-------|
| Frequency Range         |                 | GHz    | DC  |         | 18.0 |       |
| VSWR                    | DC to 1.0       | 1:     |     |         | 1.2  |       |
|                         | 1.0 to 5.0      |        |     |         | 1.25 |       |
|                         | 5.0 to 10.0     |        |     |         | 1.26 |       |
|                         | 10.0 to 18.0    |        |     |         | 1.35 |       |
| Insertion Loss          | DC to 1.0       | dB/ft. |     |         | 0.12 |       |
|                         | 1.0 to 5.0      |        |     |         | 0.3  |       |
|                         | 5.0 to 10.0     |        |     |         | 0.45 |       |
|                         | 10.0 to 18.0    |        |     |         | 0.65 |       |
| Velocity Of Propagation |                 | %      |     | 70.0    |      |       |

## Mechanical And Environmental Specifications:

| Parameter                | Description                | Notes |
|--------------------------|----------------------------|-------|
| Connector 1              | SMA Male                   |       |
| Connector 1 Coupling Nut | Passivated Stainless Steel |       |
| Connector 1 Body         | Gold Plated Brass          |       |
| Connector 1 Contact      | Gold Plated Brass          |       |
| Connector 2              | SMA Male Right Angle       |       |
| Connector 2 Coupling Nut | Passivated Stainless Steel |       |
| Connector 2 Body         | Gold Plated Brass          |       |
| Connector 2 Contact      | Gold Plated Brass          |       |
| Coax Cable               | Jacketed Conformable       |       |
| Cable Type               | 141CJ                      |       |
| Cable Inner Conductor    | SPCW                       |       |
| Dielectric               | PTFE                       |       |
| Shield                   | 1. Tinned Cu/Sn Braid      |       |
| Jacket                   | FEP                        |       |
| Coax Diameter            | 0.168                      |       |

| Parameter             | Description       | Notes |
|-----------------------|-------------------|-------|
| Minimum Bend Radius   | 0.38              |       |
| Length                | 12.0              |       |
| Operating Temperature | -85.0 to 200.0 °C |       |
| RoHS Compliance       | Yes               |       |

## Drawing



## Product Notes