

## Product Features

P1-SMAPRA/SMAPRA-RD316-12 is a cable that is part of P1dB's RG series flex cable assemblies. It is a 12 inch SMA Male Right Angle to SMA Male Right Angle cable assembly that utilizes RD316 Double-Shielded RG Type Flex coax, which is 0.114 inches in diameter. This Double-Shielded RG Type Flex cable operates to 6 GHz with a max VSWR of 1.35:1. P1dB's Double-Shielded RG Type Flex cable assemblies are general purpose commercial grade cables that meet dimensional and electrical specifications of QPL cables. Double-Shielded RG Type Flex cables can operate up to 6 GHz, depending on the installed connectors. The advantage of RG type commercial cables over QPL cables is their lower cost, since they do not go through the stringent environmental, mechanical and certification testing required for military grade, QPL equivalents.



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

| Parameter               | Frequency Range | Units  | Min | Typical | Max  | Notes |
|-------------------------|-----------------|--------|-----|---------|------|-------|
| Frequency Range         |                 | GHz    | DC  |         | 6.0  |       |
| VSWR                    | DC to 0.4       | 1:     |     |         | 1.2  |       |
|                         | 0.4 to 1.0      |        |     |         | 1.25 |       |
|                         | 1.0 to 2.4      |        |     |         | 1.3  |       |
|                         | 2.4 to 5.0      |        |     |         | 1.35 |       |
| Insertion Loss          | DC to 0.4       | dB/ft. |     |         | 0.18 |       |
|                         | 0.4 to 1.0      |        |     |         | 0.31 |       |
|                         | 1.0 to 2.4      |        |     |         | 0.49 |       |
|                         | 2.4 to 5.0      |        |     |         | 0.67 |       |
| Velocity Of Propagation |                 | %      |     | 69.5    |      |       |

## Mechanical And Environmental Specifications:

| Parameter                | Description                  | Notes |
|--------------------------|------------------------------|-------|
| Connector 1              | SMA Male Right Angle         |       |
| Connector 1 Coupling Nut | Gold Plated Brass            |       |
| Connector 1 Body         | Gold Plated Brass            |       |
| Connector 1 Contact      | Gold Plated Brass            |       |
| Connector 2              | SMA Male Right Angle         |       |
| Connector 2 Coupling Nut | Gold Plated Brass            |       |
| Connector 2 Body         | Gold Plated Brass            |       |
| Connector 2 Contact      | Gold Plated Brass            |       |
| Coax Cable               | Double-Shielded RG Type Flex |       |
| Cable Type               | RD316                        |       |
| Cable Inner Conductor    | 7/.0067 SPCW                 |       |
| Dielectric               | PTFE                         |       |
| Shield                   | 1. SPC Braid                 |       |
|                          | 2. SPC Braid                 |       |

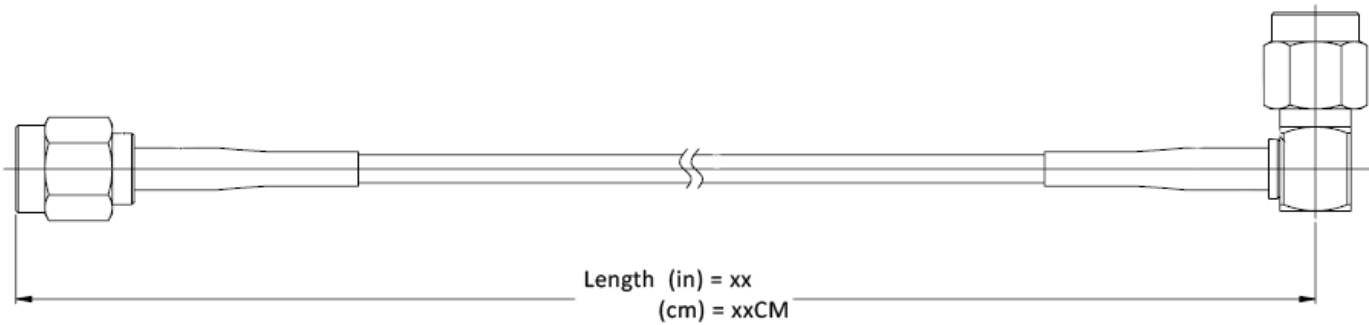
**P1-SMAPRA/SMAPRA-RD316-12**

SMA Male Right Angle to SMA Male Right Angle cable using RD316 Double-Shielded RG  
Type Flex Coax, 12 inches long, and Operating to 6 GHz.



| Parameter             | Description       | Notes |
|-----------------------|-------------------|-------|
| Jacket                | FEP               |       |
| Coax Diameter         | 0.114             |       |
| Minimum Bend Radius   | 0.6               |       |
| Length                | 12.0              |       |
| Operating Temperature | -55.0 to 200.0 °C |       |
| RoHS Compliance       | Yes               |       |

**Drawing**



**Product Notes**