

## Product Features

P1-SMAP/NP-RG316-12 is a cable that is part of P1dB's RG series flex cable assemblies. It is a 12 inch SMA Male to N Male cable assembly that utilizes RG-316 RG Type Flex coax, which is 0.098 inches in diameter. This RG Type Flex cable operates to 6 GHz with a max VSWR of 1.35:1. P1dB's RG Type Flex cable assemblies are general purpose commercial grade cables that meet dimensional and electrical specifications of QPL cables. 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    |      |       |

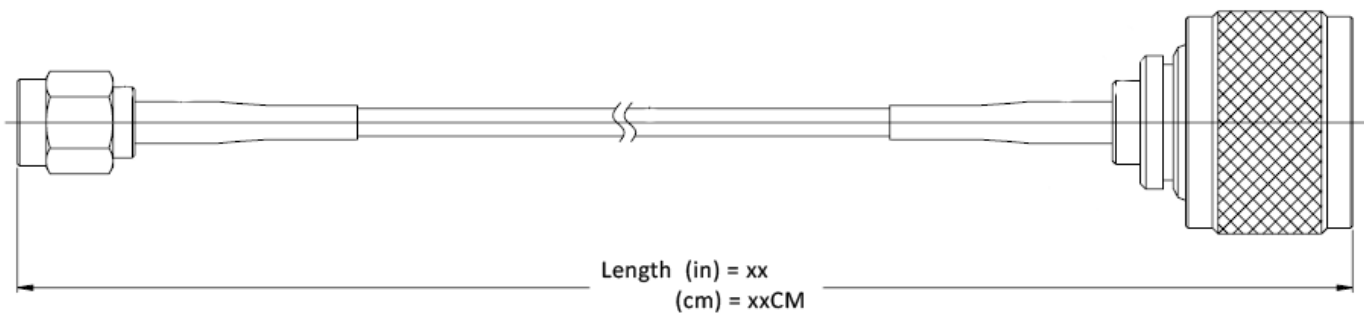
## Mechanical And Environmental Specifications:

| Parameter                | Description                        | Notes |
|--------------------------|------------------------------------|-------|
| Connector 1              | SMA Male                           |       |
| Connector 1 Coupling Nut | Gold Plated Brass                  |       |
| Connector 1 Body         | Gold Plated Brass                  |       |
| Connector 1 Contact      | Gold Plated Brass                  |       |
| Connector 2              | N Male                             |       |
| Connector 2 Coupling Nut | Tin-Zinc-Copper-Alloy Plated Brass |       |
| Connector 2 Body         | Tin-Zinc-Copper-Alloy Plated Brass |       |
| Connector 2 Contact      | Gold Plated Brass                  |       |
| Coax Cable               | RG Type Flex                       |       |
| Cable Type               | RG-316                             |       |
| Cable Inner Conductor    | 7/.0067 SPCW                       |       |
| Dielectric               | PTFE                               |       |
| Shield                   | 1. SPC Braid                       |       |
| Jacket                   | FEP                                |       |
| Coax Diameter            | 0.098                              |       |

SMA Male to N Male cable using RG-316 RG Type Flex Coax, 12 inches long, and  
Operating to 6 GHz.

| Parameter             | Description       | Notes |
|-----------------------|-------------------|-------|
| Minimum Bend Radius   | 0.5               |       |
| Length                | 12.0              |       |
| Operating Temperature | -55.0 to 200.0 °C |       |
| RoHS Compliance       | Yes               |       |

**Drawing**



**Product Notes**