

**Product Features**

P1CA-TPFTPF-ST085-12 is an RF Cable that is part of P1dB's Tight-Flex™ cable assembly series. It is a 12 inch SMP Female to SMP Female cable assembly that utilizes ST085 Tight-Flex, Triple Shielded coax, which is 0.104 inches in diameter. This Tight-Flex™ cable assembly operates to 18 GHz with a max VSWR of 1.35.

Tight-Flex™ cable assemblies are a flexible version of RG405 semi-rigid and 085 conformable coax cables that meet RG405 dimensional and electrical specifications. Tight-Flex™ cable assemblies can operate up to 40 GHz, depending on the installed connectors. The advantage of Tight-Flex™ cables over other 085 flex cables are their triple shielding that add additional RF stability even during tight bends.



**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:     |     |         | 1.15 |       |
|                         | 1.0 to 5.0      |        |     |         | 1.2  |       |
|                         | 5.0 to 10.0     |        |     |         | 1.25 |       |
|                         | 10.0 to 18.0    |        |     |         | 1.35 |       |
| Insertion Loss          | DC to 1.0       | dB/ft. |     |         | 0.21 |       |
|                         | 1.0 to 5.0      |        |     |         | 0.51 |       |
|                         | 5.0 to 10.0     |        |     |         | 0.75 |       |
|                         | 10.0 to 18.0    |        |     |         | 1.04 |       |
| 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         | Passivated Stainless Steel            |       |
| Connector 1 Contact      | Gold Plated Brass                     |       |
| Connector 2              | SMP Female                            |       |
| Connector 2 Coupling Nut | None                                  |       |
| Connector 2 Body         | Gold Plated Beryllium Copper          |       |
| Connector 2 Contact      | Gold Plated Beryllium Copper          |       |
| Coax Cable               | Tight-Flex, Triple Shielded           |       |
| Cable Type               | ST085                                 |       |
| Cable Inner Conductor    | SPCW                                  |       |
| Dielectric               | PTFE                                  |       |
| Shield                   | 1. SPC Tape, Aluminum Tape, SPC Braid |       |
| Jacket                   | FEP                                   |       |
| Coax Diameter            | 0.104                                 |       |

SMP Female to SMP Female cable assembly using ST085 Tight-Flex, Triple Shielded Coax, 12 inches long, Operating to 18 GHz.

| Parameter             | Description       | Notes |
|-----------------------|-------------------|-------|
| Minimum Bend Radius   | 0.2               |       |
| Length                | 12.0              |       |
| Operating Temperature | -55.0 to 200.0 °C |       |
| RoHS Compliance       | Yes               |       |

## Product Notes