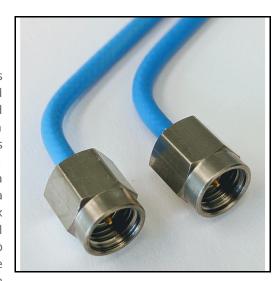




2.92mm Male to 2.92mm male cable assembly using ST085 Tight-Flex, triple shielded coax, 36 inch

### **Product Features**

P1CA-29M29M-ST085-36 is an RF Cable that is part of P1dB's Tight-Flex™ cable assembly series. With a minimum bend radius of 0.2 inch, the cable allows bends at the connector end eliminating the need for a right angle connector. It is a 36 inch 2.92mm Male to 2.92mm Male cable assembly that utilizes ST085 triple shielded coax, which is 0.104 inches in diameter. The Tight-Flex™ cable assembly operates to 40 GHz with a maximum 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.



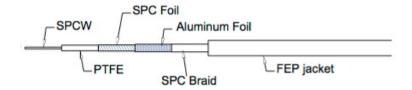
## **Electrical Specification: T**<sub>Ambient</sub> = 25° C

| Parameter       | Frequency Range | Units | Min | Typical | Max  | Notes |
|-----------------|-----------------|-------|-----|---------|------|-------|
| Frequency Range |                 | GHz   | DC  |         | 40.0 |       |

### **Mechanical And Environmental Specifications:**

| Parameter       | Description                 | Notes |  |
|-----------------|-----------------------------|-------|--|
| Connector 1     | 2.92mm Male                 |       |  |
| Connector 2     | 2.92mm Male                 |       |  |
| Coax Cable      | Tight-Flex, Triple Shielded |       |  |
| Cable Type      | ST085                       |       |  |
| Coax Diameter   | 0.104                       |       |  |
| Length          | 36.0                        |       |  |
| RoHS Compliance | Yes                         |       |  |

## **Drawing**



#### Graph

P1dB, Inc.

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# P1CA-29M29M-ST085-36

2.92mm Male to 2.92mm male cable assembly using ST085 Tight-Flex, triple shielded coax, 36 inch

| DIMENSIONS                      |                            |                |          |  |  |
|---------------------------------|----------------------------|----------------|----------|--|--|
| Center Conductor Diameter       |                            |                |          |  |  |
| (inch)                          |                            | 0.0201         |          |  |  |
| (mm)                            |                            | 0.51           |          |  |  |
| Dielectric Diameter             |                            |                |          |  |  |
| (inch)                          |                            | 0.0641         |          |  |  |
| (mm)                            | 1.63                       |                |          |  |  |
| , , ,                           |                            | 1.03           |          |  |  |
| Diameter Over Inner Foil (inch) | 0.0708                     |                |          |  |  |
| (mm)                            |                            |                |          |  |  |
|                                 | 1.80                       |                |          |  |  |
| Diameter Over Outer Foil        |                            | 0.0748         |          |  |  |
| (inch)                          |                            |                |          |  |  |
| (mm)                            | 1.90                       |                |          |  |  |
| Diameter over Braid             |                            |                |          |  |  |
| (inch)                          | 0.0885                     |                |          |  |  |
| (mm)                            | 2.25                       |                |          |  |  |
| Jacket Diameter                 |                            | 0.104          |          |  |  |
| (inch)                          |                            |                |          |  |  |
| (mm)                            | 2.64                       |                |          |  |  |
| MATERIAL SPECIFICATIONS         |                            |                |          |  |  |
| Jacket                          | FEP(BLUE)                  |                |          |  |  |
| Braid                           | Round Silver Plated Copper |                |          |  |  |
| Outer Foil                      | Aliminium Tape             |                |          |  |  |
| Inner Foil                      | Silver Plated Copper Tape  |                |          |  |  |
| Dielectic                       | Solid PTFE                 |                |          |  |  |
| Center Conductor                |                            | Solid SPCW     |          |  |  |
| ELECTRICAL CHARACTERISTICS      |                            |                |          |  |  |
| Impedance                       |                            | 50±2           |          |  |  |
| Capacitance (Nominal)           |                            |                |          |  |  |
| (pF/ft)                         | 29.4                       |                |          |  |  |
| (pF/m)                          | 96.4                       |                |          |  |  |
| Velocity of Propagation (%)     | 70                         |                |          |  |  |
| Cutt Off Frequency (GHz)        | 63                         |                |          |  |  |
| Shielding Effectiveness         | > -110dB                   |                |          |  |  |
| Max. Attenuation                | Attenuation                |                |          |  |  |
| Max Power (Watts)               | dB/100Ft                   | : dB/100M      |          |  |  |
| 400MHz                          | 14                         | 45.9           | 240      |  |  |
| 1GHz                            | 23                         | 75.4           | 160      |  |  |
| 3GHz                            | 39                         | 128            | 80       |  |  |
| 5GHz<br>10GHz                   | 52<br>80                   | 170.6<br>262.4 | 57<br>44 |  |  |
| 18GHz                           | 110                        | 361            | 33       |  |  |
| 25GHz                           | 131                        | 430            | 29       |  |  |
| 30GHz                           | 146                        | 479            | 26       |  |  |
| 35GHz                           | 160                        | 525            | 23       |  |  |
| 40GHz                           | 173                        | 567            | 22       |  |  |
| 45GHz                           | 183                        | 600            | 20       |  |  |
| 50GHz                           | 195                        | 640            | 18       |  |  |

## **Product Notes**