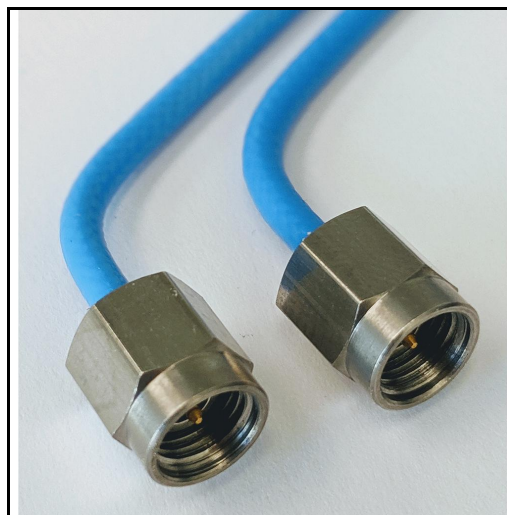


**Product Features**

P1CA-29M29M-ST085-20 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 20 inch 2.92mm Male to 2.92mm Male cable assembly that utilizes ST085 Tight-Flex, Triple Shielded coax, which is 0.104 inches in diameter. The Tight-Flex™ cable assembly operates to 40 GHz with a max VSWR of 1.35:1.

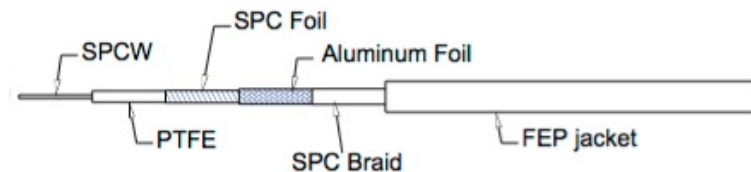
Tight-Flex™ cable assemblies are a flexible version of RG405 semi-rigid and 085 conformable coax cables that meet RG405 dimensional and electrical specifications. Tight-Flex™ cable assemblies can operate up to 40 GHz, depending on the installed connectors. The advantage of Tight-Flex™ cables over other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



**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          | 20                          |       |
| RoHS Compliance | Yes                         |       |

**Drawing**



**Graph**

| DIMENSIONS                            |                            |         |       |
|---------------------------------------|----------------------------|---------|-------|
| Center Conductor Diameter<br>(inch)   | 0.0201                     |         |       |
| (mm)                                  | 0.51                       |         |       |
| Dielectric Diameter<br>(inch)         | 0.0641                     |         |       |
| (mm)                                  | 1.63                       |         |       |
| Diameter Over Inner Foil<br>(inch)    | 0.0708                     |         |       |
| (mm)                                  | 1.80                       |         |       |
| Diameter Over Outer Foil<br>(inch)    | 0.0748                     |         |       |
| (mm)                                  | 1.90                       |         |       |
| Diameter over Braid<br>(inch)         | 0.0885                     |         |       |
| (mm)                                  | 2.25                       |         |       |
| Jacket Diameter<br>(inch)             | 0.104                      |         |       |
| (mm)                                  | 2.64                       |         |       |
| MATERIAL SPECIFICATIONS               |                            |         |       |
| Jacket                                | FEP(BLUE)                  |         |       |
| Braid                                 | Round Silver Plated Copper |         |       |
| Outer Foil                            | Aluminium Tape             |         |       |
| Inner Foil                            | Silver Plated Copper Tape  |         |       |
| Dielectric                            | Solid PTFE                 |         |       |
| Center Conductor                      | Solid SPCW                 |         |       |
| ELECTRICAL CHARACTERISTICS            |                            |         |       |
| Impedance                             | 50±2                       |         |       |
| Capacitance (Nominal)<br>(pF/ft)      | 29.4                       |         |       |
| (pF/m)                                | 96.4                       |         |       |
| Velocity of Propagation (%)           | 70                         |         |       |
| Cutt Off Frequency (GHz)              | 63                         |         |       |
| Shielding Effectiveness               | > -110dB                   |         |       |
| Max. Attenuation<br>Max Power (Watts) | Attenuation                |         | Power |
|                                       | dB/100Ft                   | dB/100M |       |
| 400MHz                                | 14                         | 45.9    | 240   |
| 1GHz                                  | 23                         | 75.4    | 160   |
| 3GHz                                  | 39                         | 128     | 80    |
| 5GHz                                  | 52                         | 170.6   | 57    |
| 10GHz                                 | 80                         | 262.4   | 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**