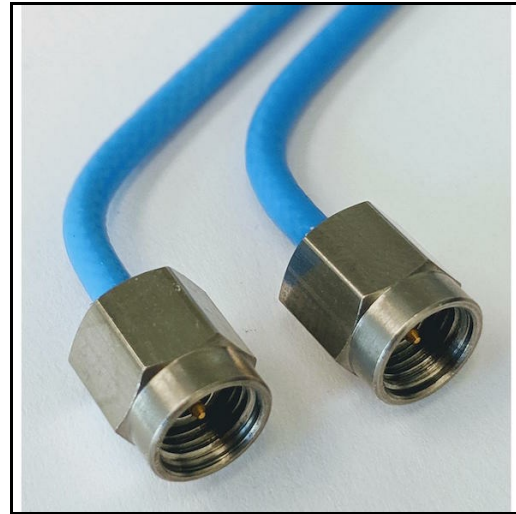


Product Features

P1CA-29M29M-ST085-12 is an RF cable assembly 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 12 inch 2.92mm Male to 2.92mm Male cable assembly that utilizes ST085 Tight-Flex, triple shield coax, which is 0.104 inch (2.6 mm) diameter. The Tight-Flex™ cable assembly operates to 40 GHz with a max VSWR of 1.35:1. Max Insertion Loss at 40 GHz for this 12 inch assembly is 1.75 dB. RF shielding > 110 dB. Velocity of Propagation is 70 %.

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 is triple shield construction for great RF shielding and RF stability during tight bends.



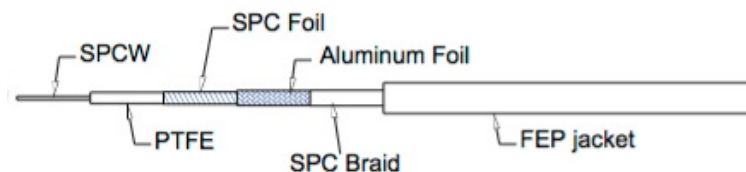
Electrical Specification: T Ambient = 25° C

| 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 | 12.0 | |
| RoHS Compliance | Yes | |

Drawing



| DIMENSIONS | | | |
|-----------------------------------|-------------|---------|----------------------------|
| Center Conductor Diameter | | | |
| (inch) | | | 0.0201 |
| (mm) | | | 0.51 |
| Dielectric Diameter | | | |
| (inch) | | | 0.0641 |
| (mm) | | | 1.63 |
| Diameter Over Inner Foil | | | |
| (inch) | | | 0.0708 |
| (mm) | | | 1.80 |
| Diameter Over Outer Foil | | | |
| (inch) | | | 0.0748 |
| (mm) | | | 1.90 |
| Diameter over Braid | | | |
| (inch) | | | 0.0885 |
| (mm) | | | 2.25 |
| Jacket Diameter | | | |
| (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) | | | |
| (pF/ft) | | | 29.4 |
| (pF/m) | | | 96.4 |
| Velocity of Propagation (%) | | | 70 |
| Cutt Off Frequency (GHz) | | | 63 |
| Shielding Effectiveness | | | > -110dB |
| Max. Attenuation | Attenuation | | Power |
| Max Power (Watts) | 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

Temp range: -55 to +125 deg C

Minimum bend radius: 0.2 inch (5.1 mm)