PhaseTrack® 047
MICRO COAXIAL CABLE

PT-047 is a compact, phase stable, highly flexible, micro coaxial cable. Originally designed for space flight applications, this high-performance cable easily accommodates densely packed in-the-box applications.

Environmental and Mechanical Properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diameter</td>
<td>0.060” max</td>
</tr>
<tr>
<td>Minimum Bend Radius</td>
<td>0.25” nominal (centerline)</td>
</tr>
<tr>
<td>Operating Temperature</td>
<td>-65ºC to +150ºC</td>
</tr>
<tr>
<td>Impedance</td>
<td>50 ohm nominal</td>
</tr>
<tr>
<td>Capacitance</td>
<td>24.6 pf/ft nominal</td>
</tr>
<tr>
<td>Velocity of Propagation</td>
<td>81% nominal</td>
</tr>
<tr>
<td>Delay</td>
<td>1.25 nsec/ft nominal</td>
</tr>
<tr>
<td>Shielding</td>
<td>90 dB minimum</td>
</tr>
<tr>
<td>Insertion Loss</td>
<td>1.72 dB/ft @ 18 GHz</td>
</tr>
</tbody>
</table>

Frequency (Typical) | Attenuation dB/ft (+25ºC) | Attenuation dB/m (+25ºC)
---|------------------------|------------------------|
18 GHz               | 1.72                   | 5.64                   |
28.5 GHz              | 2.22                   | 7.28                   |
31 GHz                | 2.32                   | 7.61                   |
40 GHz                | 2.68                   | 8.79                   |

FEATURES

- High performance in a compact size
- Phase stable over temperature utilizing TF4® technology
- Highly flexible and small bend radius
- Broad frequency range up to 70 GHz
- Flexible alternative to 047 Semi-Rigid
- Perfect for multi-pin connectors

APPLICATIONS

- Aerospace and Defense
- Test and Measurement
- 5G and Telecom
- Medical Equipment
PT-047 Assemblies

Connectors

- SMA
- SMP
- SMPM
- 2.92 mm
- 2.4 mm
- TLMP
- Semi-rigid

Sold as fully tested assemblies

Used in current Space Flight applications. Suited for conditions where "failure is not an option".

1. Center Conductor: Silver Plated CopperClad Steel
2. Dielectric: TF4® Dielectric
3. Shield: Silver Plated Copper Flat Braid
4. Outer Braid: Silver Plated Copper
5. Jacket: Blue FEP

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