Outdoor Rated 4.3-10 Male to 4.3-10 Male Low PIM Cable Using SPO-250 Coax Using Times Microwave Parts

RF Cable Assemblies Technical Data Sheet PE3C6437

Configuration
• Connector 1: 4.3-10 Male
• Connector 2: 4.3-10 Male
• Cable Type: SPO-250

Features
• Max Frequency 5.8 GHz
• Low PIM: -160 dBc Max
• 83% Phase Velocity
• PE Jacket
• 100% Tested with PIM Test Results Marked on Cable
• Lightweight and Extremely Flexible
• Low Loss with Excellent VSWR
• IP67 (when mated)
• Using Times Microwave Components

Applications
• General Purpose
• Laboratory Use
• Low PIM Applications
• Distributed Antenna Systems (DAS)
• Multi-Carrier Communication Systems
• PIM Testing

Description
Pasternack's PE3C6437 4.3-10 male to 4.3-10 male cable using SPO-250 coax is part of our full line of RF components available for same-day shipping. Pasternack's corrugated RF cable assemblies are ideal for applications where durability and high power are needed. This Pasternack 4.3-10 to 4.3-10 cable assembly has a male to male gender configuration with 50 ohm corrugated SPO-250 coax. The PE3C6437 4.3-10 male to 4.3-10 male cable assembly operates to 5.8 GHz. Our low PIM design also offers excellent passive intermodulation performance with PIM levels better than -160 dBc. Times Microwave cable is used in each assembly and TMS components are used to form connections with the super flexible low PIM cable. These cable assemblies are expertly built to satisfy your specific need with high quality Times Microwave Systems manufactured parts.

Custom versions of most RF cable assemblies can be built and shipped same day. Custom cable assembly lengths can be obtained by specifying the desired length on the web site at time of order or by contacting a sales representative. Other available RF cable assembly value added services include connector orientation or clocking, heat shrink booting and custom labeling. RF testing can also be performed to document the electrical performance of your cable assembly.

Click the following link (or enter part number in “SEARCH” on website) to obtain additional part information including price, inventory and certifications: Outdoor Rated 4.3-10 Male to 4.3-10 Male Low PIM Cable Using SPO-250 Coax Using Times Microwave Parts PE3C6437

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Outdoor Rated 4.3-10 Male to 4.3-10 Male Low PIM Cable Using SPO-250 Coax Using Times Microwave Parts

### Electrical Specifications

<table>
<thead>
<tr>
<th>Description</th>
<th>Minimum</th>
<th>Typical</th>
<th>Maximum</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frequency Range</td>
<td>DC</td>
<td>5.8</td>
<td>GHz</td>
<td></td>
</tr>
<tr>
<td>VSWR</td>
<td></td>
<td>1.4:1</td>
<td></td>
<td></td>
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<tr>
<td>Velocity of Propagation</td>
<td></td>
<td>83</td>
<td>%</td>
<td></td>
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<tr>
<td>Passive Intermodulation</td>
<td></td>
<td>-165</td>
<td>-160</td>
<td>dBc</td>
</tr>
<tr>
<td>Capacitance</td>
<td></td>
<td>24 [78.74]</td>
<td></td>
<td>pF/ft [pF/m]</td>
</tr>
<tr>
<td>Inductance</td>
<td></td>
<td>0.054 [0.18]</td>
<td></td>
<td>uH/ft [uH/m]</td>
</tr>
</tbody>
</table>

### Specifications by Frequency

<table>
<thead>
<tr>
<th>Description</th>
<th>F1</th>
<th>F2</th>
<th>F3</th>
<th>F4</th>
<th>F5</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frequency</td>
<td>0.45</td>
<td>0.7</td>
<td>1</td>
<td>2.5</td>
<td>5.8</td>
<td>GHz</td>
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<tr>
<td>Insertion Loss (Max.)</td>
<td>0.041</td>
<td>0.051</td>
<td>0.062</td>
<td>0.103</td>
<td>0.167</td>
<td>dB/ft</td>
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<tr>
<td></td>
<td>0.13</td>
<td>0.17</td>
<td>0.2</td>
<td>0.34</td>
<td>0.55</td>
<td>dB/m</td>
</tr>
</tbody>
</table>

**Electrical Specification Notes:**
- PIM test results vary between cables
- Insertion Loss does not include the loss of the connectors. Insertion Loss is estimated as $0.1 \times \sqrt{\text{GHz}}$ dB per connector.

### Mechanical Specifications

**Cable Assembly**
- Diameter: 0.87 in [22.1 mm]

**Cable**
- Cable Type: SPO-250
- Impedance: 50 Ohms
- Inner Conductor Type: Solid
- Inner Conductor Material and Plating: Copper Clad Aluminum
- Dielectric Type: Foam PE
- Number of Shields: 1
- Shield Layer 1: Helically Corrugated Copper Tube
- Outer Conductor Material and Plating: Copper
- Jacket Material: PE, Black
- Jacket Diameter: 0.303 in [7.7 mm]
- One Time Minimum Bend Radius: 1.25 in [31.75 mm]

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Bending Moment 0.5 lbs-ft [0.68 N-m]

Connectors

<table>
<thead>
<tr>
<th>Description</th>
<th>Connector 1</th>
<th>Connector 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type</td>
<td>4.3-10 Male</td>
<td>4.3-10 Male</td>
</tr>
<tr>
<td>Impedance</td>
<td>50 Ohms</td>
<td>50 Ohms</td>
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<tr>
<td>Contact Material and Plating</td>
<td>Phosphor Bronze, Silver</td>
<td>Phosphor Bronze, Silver</td>
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<tr>
<td>Contact Plating Specification</td>
<td>200 µin</td>
<td>200 µin</td>
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<td>Dielectric Type</td>
<td>PTFE</td>
<td>PTFE</td>
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<tr>
<td>Body Material and Plating</td>
<td>Brass, Tri-Metal</td>
<td>Brass, Tri-Metal</td>
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<tr>
<td>Body Plating Specification</td>
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<td>80 µin</td>
</tr>
<tr>
<td>Coupling Nut Material and Plating</td>
<td>Brass, Tri-Metal</td>
<td>Brass, Tri-Metal</td>
</tr>
<tr>
<td>Coupling Nut Plating Specification</td>
<td>80 µin</td>
<td>80 µin</td>
</tr>
<tr>
<td>Torque</td>
<td>44.25 in-lbs [5 Nm]</td>
<td>44.25 in-lbs [5 Nm]</td>
</tr>
</tbody>
</table>

Mechanical Specification Notes:
*All cable assemblies have a length tolerance of 1.5% or ± 3/8", whichever is greater.

Environmental Specifications

Temperature
- Operating Range: -55 to +200 deg C
- Storage Range: -55 to +200 deg C

Compliance Certifications (see product page for current document)

Plotted and Other Data

Notes:
- Values at 25°C, sea level.

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How to Order

Part Number Configuration: PE3C6437 - xx uu

Unit of Measure:
- cm = Centimeters
- <blank> = Inches

Length
Base Number

Example: PE3C6437-12 = 12 inches long cable
PE3C6437-100cm = 100 cm long cable

Outdoor Rated 4.3-10 Male to 4.3-10 Male Low PIM Cable Using SPO-250 Coax Using Times Microwave Parts from Pasternack Enterprises has same day shipment for domestic and International orders. Our RF, microwave and millimeter wave products maintain a 99.4% availability and are part of the broadest selection in the industry.

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URL: https://www.pasternack.com/4.3-10-male-4.3-10-male-spo250-cable-assembly-pe3c6437-p.aspx

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