

## Outdoor Rated Low PIM 4.3-10 Male to 4.3-10 Male Cable SPO-500 Coax Using Times Microwave Parts and RoHS

**FMCA2074**

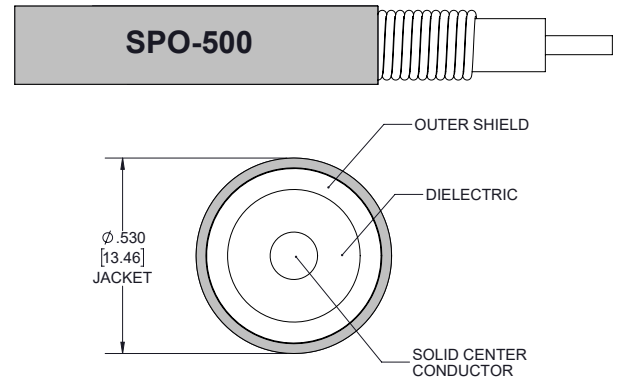


### Configuration

- Connector 1: 4.3-10 Male TC-SPP500-4310M-LP
- Connector 2: 4.3-10 Male TC-SPP500-4310M-LP
- Cable Type: SPO-500
- Coax Flex Type: Corrugated

### Features

- Max Frequency 6 GHz
- Low PIM: -158 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

The 4.3-10 male to 4.3-10 male cable using SPO-500 coax, part number FMCA2074, from Fairview Microwave is in-stock and ships same day. This Fairview 4.3-10 to 4.3-10 cable assembly has a male to male gender configuration with 50 ohm corrugated SPO-500 coax. Fairview Microwave's corrugated RF cable assemblies are ideal for applications where durability and high power are needed. Our low PIM design offers excellent passive intermodulation performance with PIM levels better than -158 dBc. The FMCA2074 4.3-10 male to 4.3-10 male cable assembly operates to 6 GHz. 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 RF cable assembly value added services including connector orientation or clocking, heat shrink booting and labeling are also available. RF testing can also be performed to document the electrical performance of your cable assembly.

### Electrical Specifications

| Description                                | Minimum | Typical | Maximum | Units |
|--------------------------------------------|---------|---------|---------|-------|
| Frequency Range                            | DC      |         | 6       | GHz   |
| VSWR                                       |         |         | 1.4:1   |       |
| Velocity of Propagation                    |         | 83      |         | %     |
| Passive Intermodulation                    |         |         | -158    | dBc   |
| IM3 (2x43dBm Tones) at 850 MHz or 1900 MHz |         |         |         |       |

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### Electrical Specifications

| Description | Minimum | Typical    | Maximum | Units        |
|-------------|---------|------------|---------|--------------|
| Capacitance |         | 24 [78.74] |         | pF/ft [pF/m] |

### Specifications by Frequency

| Description           | F1    | F2    | F3    | F4    | F5 | Units |
|-----------------------|-------|-------|-------|-------|----|-------|
| Frequency             | 0.5   | 1     | 2     | 6     |    | GHz   |
| Insertion Loss (Max.) | 0.024 | 0.035 | 0.051 | 0.096 |    | dB/ft |
|                       | 0.08  | 0.11  | 0.17  | 0.31  |    | dB/m  |

Electrical Specification Notes:

PIM test results vary between cables

Insertion Loss does not include the loss of the connectors. Insertion Loss is estimated as  $0.1 \cdot \sqrt{\text{FGHz}}$  dB per connector.

### Mechanical Specifications

#### Cable Assembly

Width/Diameter 1.14 in [28.96 mm]

#### Cable

Cable Type SPO-500  
 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 1 Material and Plating Copper  
 Jacket Material PE, Black  
 Jacket Diameter 0.53 in [13.46 mm]  
 One Time Minimum Bend Radius 2.25 in [57.15 mm]

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### Connectors

| Description                        | Connector 1      | Connector 2      |
|------------------------------------|------------------|------------------|
| Type                               | 4.3-10 Male      | 4.3-10 Male      |
| Impedance                          | 50 Ohms          | 50 Ohms          |
| Configuration                      | Straight         | Straight         |
| Contact Material and Plating       | Brass, Silver    | Brass, Silver    |
| Contact Plating Specification      | 200 µin          | 200 µin          |
| Dielectric Type                    | PTFE             | PTFE             |
| Body Material and Plating          | Brass, Tri-Metal | Brass, Tri-Metal |
| Body Plating Specification         | 80 µin           | 80 µin           |
| Coupling Nut Material and Plating  | Brass, Tri-Metal | Brass, Tri-Metal |
| Coupling Nut Plating Specification | 80 µin           | 80 µin           |

### Environmental Specifications

Operating Range Temperature -40 to +85 deg C

**Compliance Certifications** (see [product page](#) for current document)

### Plotted and Other Data

Notes:  
Values at 25°C, sea level.

Outdoor Rated Low PIM 4.3-10 Male to 4.3-10 Male Cable  
SPO-500 Coax Using Times Microwave Parts and RoHS

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#### Typical Performance Data



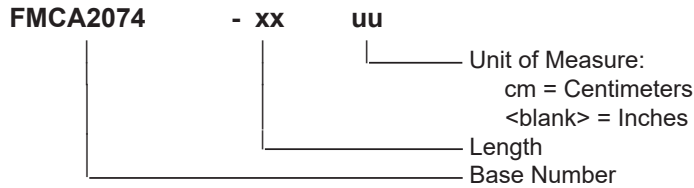
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### FMCA2074

#### How to Order

Part Number Configuration:



Example: FMCA2074-12 = 12 inches long cable  
FMCA2074-100cm = 100 cm long cable

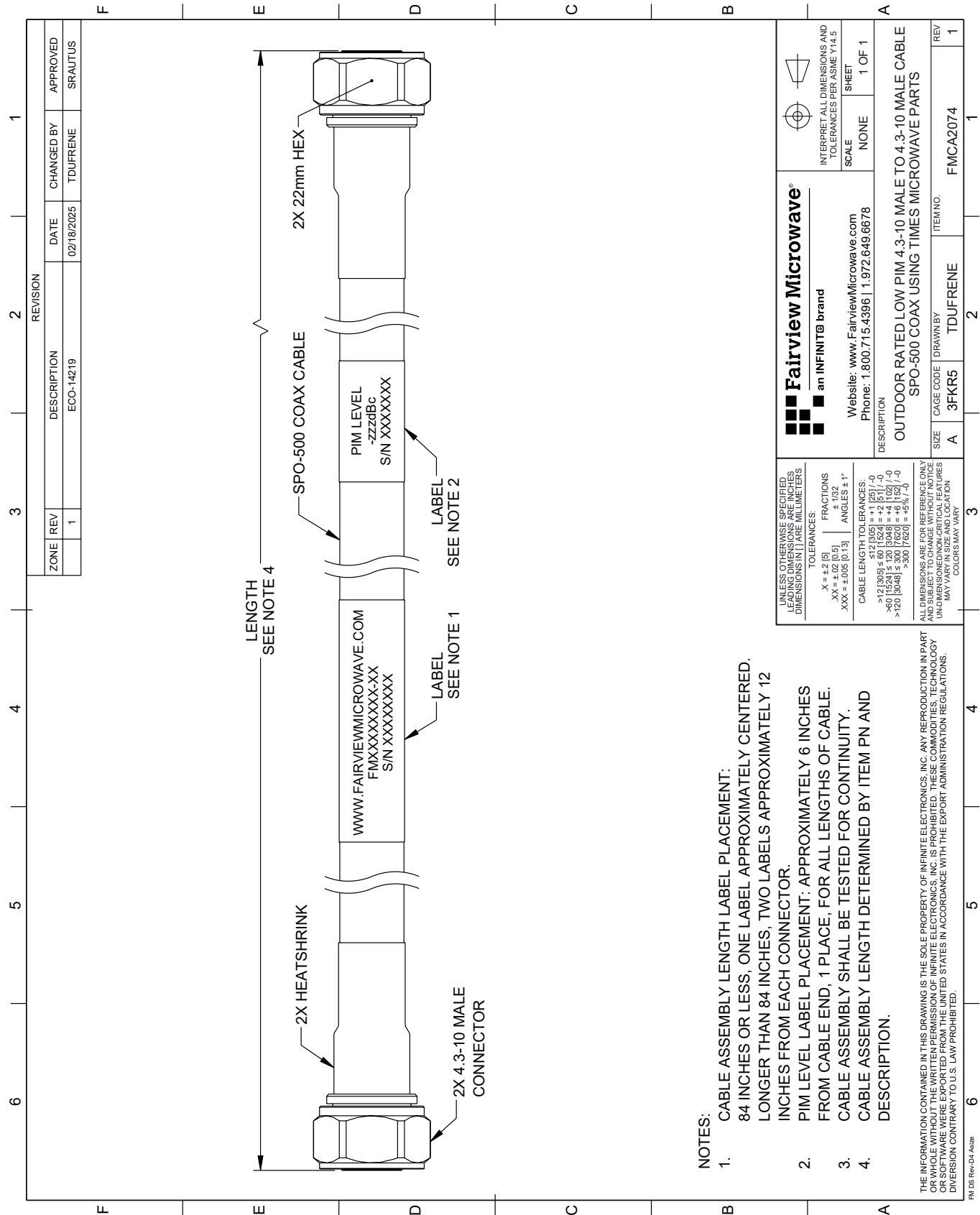
Outdoor Rated Low PIM 4.3-10 Male to 4.3-10 Male Cable SPO-500 Coax Using Times Microwave Parts and RoHS from Fairview Microwave is in-stock and available to ship same-day. All of our RF/microwave products are available off-the-shelf from our ISO 9001:2008 certified facilities in Lewisville, Texas. Fairview Microwave is RF on-demand.

For additional information on this product, please click the following link: [Outdoor Rated Low PIM 4.3-10 Male to 4.3-10 Male Cable SPO-500 Coax Using Times Microwave Parts and RoHS FMCA2074](https://www.fairviewmicrowave.com/low-pim-4.3-10-male-4.3-10-male-cable-spo500-coax-fmca2074-p.aspx)

URL: <https://www.fairviewmicrowave.com/low-pim-4.3-10-male-4.3-10-male-cable-spo500-coax-fmca2074-p.aspx>

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FMCA2074 CAD Drawing
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- NOTES:
- 1. CABLE ASSEMBLY LENGTH LABEL PLACEMENT: 84 INCHES OR LESS, ONE LABEL APPROXIMATELY CENTERED. LONGER THAN 84 INCHES, TWO LABELS APPROXIMATELY 12 INCHES FROM EACH CONNECTOR.
  - 2. PIM LEVEL LABEL PLACEMENT: APPROXIMATELY 6 INCHES FROM CABLE END, 1 PLACE, FOR ALL LENGTHS OF CABLE.
  - 3. CABLE ASSEMBLY SHALL BE TESTED FOR CONTINUITY.
  - 4. CABLE ASSEMBLY LENGTH DETERMINED BY ITEM PN AND DESCRIPTION.

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