

# FMCA2072-48 DATA SHEET

# Outdoor Rated Low PIM 7/16 DIN Male to 7/16 DIN Male Cable SPO-500 Coax in 48 Inch Using Times Microwave Parts

The 7/16 DIN male to 7/16 DIN male 48 inch cable using SPO-500 coax, part number FMCA2072-48, from Fairview Microwave is in-stock and ships same day. This Fairview 7/16 DIN to 7/16 DIN 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 FMCA2072-48 7/16 DIN male to 7/16 DIN 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             | Min | Тур       | Max   | Units        |  |  |
|-------------------------|-----|-----------|-------|--------------|--|--|
| Frequency Range         | DC  | 6         |       | GHz          |  |  |
| VSWR                    |     |           | 1.4:1 |              |  |  |
| Velocity of Propagation |     | 83        |       | %            |  |  |
| Passive Intermodulation |     |           | -158  | dBc          |  |  |
| Capacitance             |     | 24 [78.74 | 1]    | pF/ft [pF/m] |  |  |

### **Performance by Frequency**

| Description         | F1      | F2   | F3   | F4   | F5 | Units |
|---------------------|---------|------|------|------|----|-------|
| Frequency           | 0.5     | 1    | 2    | 6    |    | GHz   |
| Insertion Loss (Max | .) 0.24 | 0.34 | 0.49 | 0.87 |    | dB    |

**Electrical Specification Notes:** 

PIM test results vary between cables

The Insertion Loss data above is based on the performance specifications of the coax used in this assembly. The Insertion Loss includes an estimated insertion loss of 0.1\*SQRT(FGHz) dB per connector.

#### **Mechanical Specifications**

### **Cable Assembly**

Length\* 48 in [121.92 cm]

Cable

Cable Type SPO-500 Impedance 50 Ohms Inner Conductor Type Solid



## **Configuration:**

- 7/16 DIN Male
- TC-SPP500-716M-LP
- 7/16 DIN Male
- TC-SPP500-716M-LP
- SPO-500

## **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

## Cable Diagram:

Fairview Microwave 301 Leora Ln., Suite 100 Lewisville, TX 75056 Tel: 1-800-715-4396 / (972) 649-6678 Fax: (972) 649-6689 www.fairviewmicrowave.com sales@fairviewmicrowave.com





Inner Conductor Material and Plating Co

Dielectric Type Number of Shields

Shield Layer 1

Outer Conductor Material and Plating

Jacket Material Jacket Diameter

Copper Clad Aluminum

Foam PE

1

Helically Corrugated Copper Tube

Copper PE, Black

0.53 in [13.46 mm]

One Time Minimum Bend Radius 2.25 in [57.15 mm]

#### **Connectors**

| Description                 | Connector 1                    | Connector 2      |  |
|-----------------------------|--------------------------------|------------------|--|
| Туре                        | 7/16 DIN Male                  | 7/16 DIN Male    |  |
| Impedance                   | 50 Ohms                        | 50 Ohms          |  |
| Contact Material & Plating  | Brass, Silver                  | Brass, Silver    |  |
| Contact Plating Spec.       | 200 μin                        | 200 μin          |  |
| Dielectric Type             | PTFE                           | PTFE             |  |
| Body Material & Plating     | Brass, Tri-Metal Brass, Tri-Me |                  |  |
| Body Plating Spec.          | 80 µin                         | 80 µin           |  |
| Coupling Nut Material & Pla | ting Brass, Tri-Metal          | Brass, Tri-Metal |  |
| Coupling Nut Plating Spec.  | 80 μin                         | 80 μin           |  |
|                             |                                |                  |  |

# **Environmental Specifications**

**Temperature** 

Operating Range

-40 to +85 deg C

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

#### **Plotted and Other Data**

Notes:

Values at 25°C, sea level.

## **How to Order**

Part Number Configuration:

FMCA2072 - xx uu | cm = Centimeters | chlank> = Inches | Length

Example: FMCA2072-12 = 12 inches long cable

FMCA2072-100cm = 100 cm long cable

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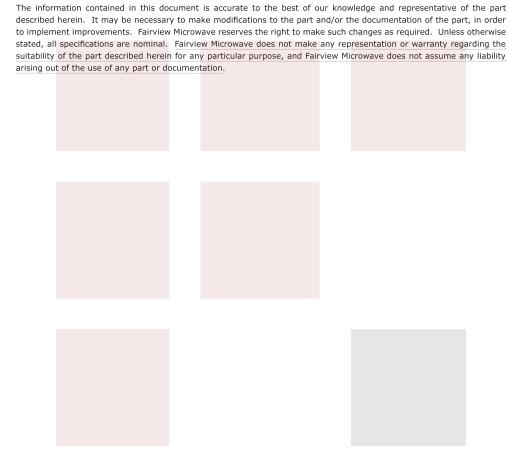




Outdoor Rated Low PIM 7/16 DIN Male to 7/16 DIN Male Cable SPO-500 Coax in 48 Inch Using Times Microwave Parts from Fairview Microwave has same day shipment for domestic and International orders. Our RF, microwave and millimeter wave products maintain a 99% availability and are part of the broadest selection in the industry.

Click the following link to obtain additional part information: Outdoor Rated Low PIM 7/16 DIN Male to 7/16 DIN Male Cable SPO-500 Coax in 48 Inch Using Times Microwave Parts FMCA2072-48

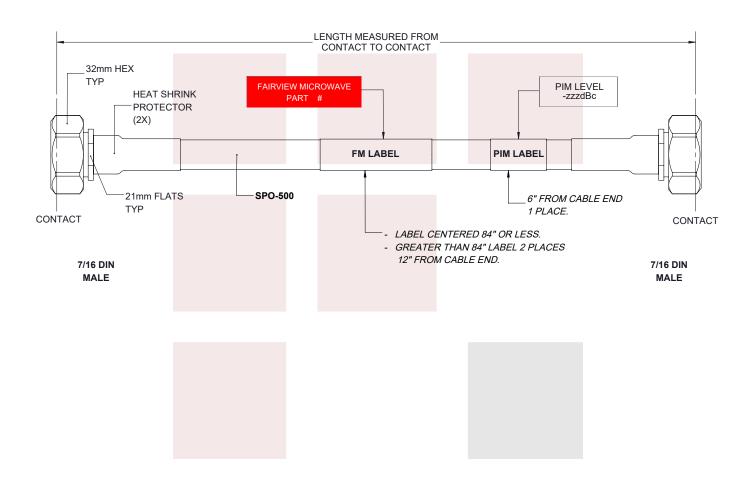
URL: https://www.fairviewmicrowave.com/low-pim-7-16-din-male-7-16-din-male-cable-spo500-coax-fmca2072-48-p.aspx



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STANDARD TOLERANCES

.X ±0.2 .XX ±0.01 .XXX ±0.005

\*STANDARD TOLERANCES APPLY ONLY TO DIMENSIONS IN INCHES

| Fairview Microwave   | NOTES:  1. UNLESS OTHERWISE SPECIFIED ALL DIMENSIONS ARE NOMINAL.  2. ALL SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE AT ANY TIME.  3. DIMENSIONS ARE IN INCHES [mm]. |              |      |                 |        |      |
|--|---|--------------|------|-----------------|--------|------|
| TITLE  | DWG NO FMCA2072   |              |      | CAGE CODE 3FKR5 |        |      |
| Outdoor Rated Low PIM 7/16 DIN Male to 7/16 DIN Male Cable SPO-500 Coax in 48 Inch Using Times Microwave Parts | CAD FILE 07/22/19   | SHEET 1 OF 1 | SCAL | E N/A           | SIZE A | 7361 |