

## Plenum Low PIM 7/16 DIN Male to 7/16 DIN Female Cable SPP-375-LLPL Coax Using Times Microwave Parts



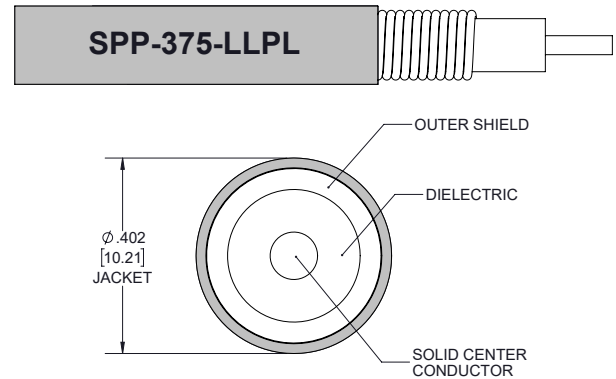
### FMCA2575-50CM

#### Configuration

- Connector 1: 7/16 DIN Male
- Connector 2: 7/16 DIN Female
- Cable Type: SPP-375-LLPL
- Coax Flex Type: Corrugated

#### Features

- Max Frequency 5.8 GHz
- Low PIM: -160 dBc Max
- Shielding Effectivity > 100 dB
- 76% Phase Velocity
- FEP Jacket
- 100% Tested with PIM Test Results Marked on Cable
- UL910 Plenum Rated 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
- CMP Plenum Rated Installations
- Distributed Antenna Systems (DAS)
- Multi-Carrier Communication Systems
- PIM Testing

#### Description

The 7/16 DIN male to 7/16 DIN female 50 cm cable using SPP-375-LLPL coax, part number FMCA2575-50CM, 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 female gender configuration with 50 ohm corrugated SPP-375-LLPL 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 -160 dBc. The FMCA2575-50CM 7/16 DIN male to 7/16 DIN female cable assembly operates to 5.8 GHz.

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      |         | 5.8     | GHz   |
| VSWR                    |         |         | 1.4:1   |       |
| Velocity of Propagation |         | 76      |         | %     |
| RF Shielding            | 100     |         |         | dB    |

Plenum Low PIM 7/16 DIN Male to 7/16 DIN Female Cable  
SPP-375-LLPL Coax Using Times Microwave Parts



**FMCA2575-50CM**

**Electrical Specifications**

| Description                                | Minimum | Typical      | Maximum | Units                 |
|--------------------------------------------|---------|--------------|---------|-----------------------|
| Passive Intermodulation                    |         |              | -160    | dBc                   |
| IM3 (2x43dBm Tones) at 850 MHz or 1900 MHz |         |              |         |                       |
| Capacitance                                |         | 26.2 [85.96] |         | pF/ft [pF/m]          |
| Inductance                                 |         | 0.067 [0.22] |         | uH/ft [uH/m]          |
| DC Resistance Inner Conductor              |         | 1.3 [4.27]   |         | Ohms/1000ft [Ohms/Km] |

**Specifications by Frequency**

| Description           | F1   | F2   | F3   | F4   | F5   | Units |
|-----------------------|------|------|------|------|------|-------|
| Frequency             | 0.25 | 0.5  | 1    | 2.5  | 5.8  | GHz   |
| Insertion Loss (Typ.) | 0.14 | 0.19 | 0.27 | 0.43 | 0.66 | dB    |

Electrical Specification Notes:

The Insertion Loss data above is based on the performance specifications of the coax and connectors used in this assembly. The Insertion Loss includes an estimated insertion loss of  $0.1 \cdot \sqrt{\text{FGHz}}$  dB per connector.

**Mechanical Specifications**

**Cable Assembly**

|                |                       |
|----------------|-----------------------|
| Length         | 19.68 in [499.87 mm]  |
| Width/Diameter | 0.5 in [12.7 mm]      |
| Weight         | 0.2975 lbs [134.94 g] |

**Cable**

|                                        |                       |
|----------------------------------------|-----------------------|
| Cable Type                             | SPP-375-LLPL          |
| Impedance                              | 50 Ohms               |
| Inner Conductor Type                   | Solid                 |
| Inner Conductor Material and Plating   | Copper Clad Aluminum  |
| Dielectric Type                        | Microporous PTFE      |
| Number of Shields                      | 1                     |
| Outer Conductor 1 Material and Plating | Copper                |
| Jacket Material                        | FEP, Blue             |
| Jacket Diameter                        | 0.402 in [10.21 mm]   |
| One Time Minimum Bend Radius           | 1.25 in [31.75 mm]    |
| Bending Moment                         | 1.7 lbs-ft [2.31 N-m] |

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Connectors

| Description                        | Connector 1      | Connector 2             |
|------------------------------------|------------------|-------------------------|
| Type                               | 7/16 DIN Male    | 7/16 DIN Female         |
| Impedance                          | 50 Ohms          | 50 Ohms                 |
| Configuration                      | Straight         | Straight                |
| Mating Cycles                      |                  | 500                     |
| Contact Material and Plating       | Brass, Silver    | Phosphor Bronze, 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         | 100 µin          | 100 µin                 |
| Coupling Nut Material and Plating  | Brass, Tri-Metal |                         |
| Coupling Nut Plating Specification | 100 µin          |                         |

Environmental Specifications

Operating Range Temperature-40 to +125 deg C

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

Plotted and Other Data

Notes:

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### FMCA2575-50CM

#### Typical Performance Data

#### How to Order

Part Number Configuration:

**FMCA2575**

**- xx**

**uu**

Unit of Measure:

cm = Centimeters

<blank> = Inches

Length

Base Number

Example: FMCA2575-12 = 12 inches long cable  
FMCA2575-100cm = 100 cm long cable

Plenum Low PIM 7/16 DIN Male to 7/16 DIN Female Cable SPP-375-LLPL Coax Using Times Microwave Parts 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.

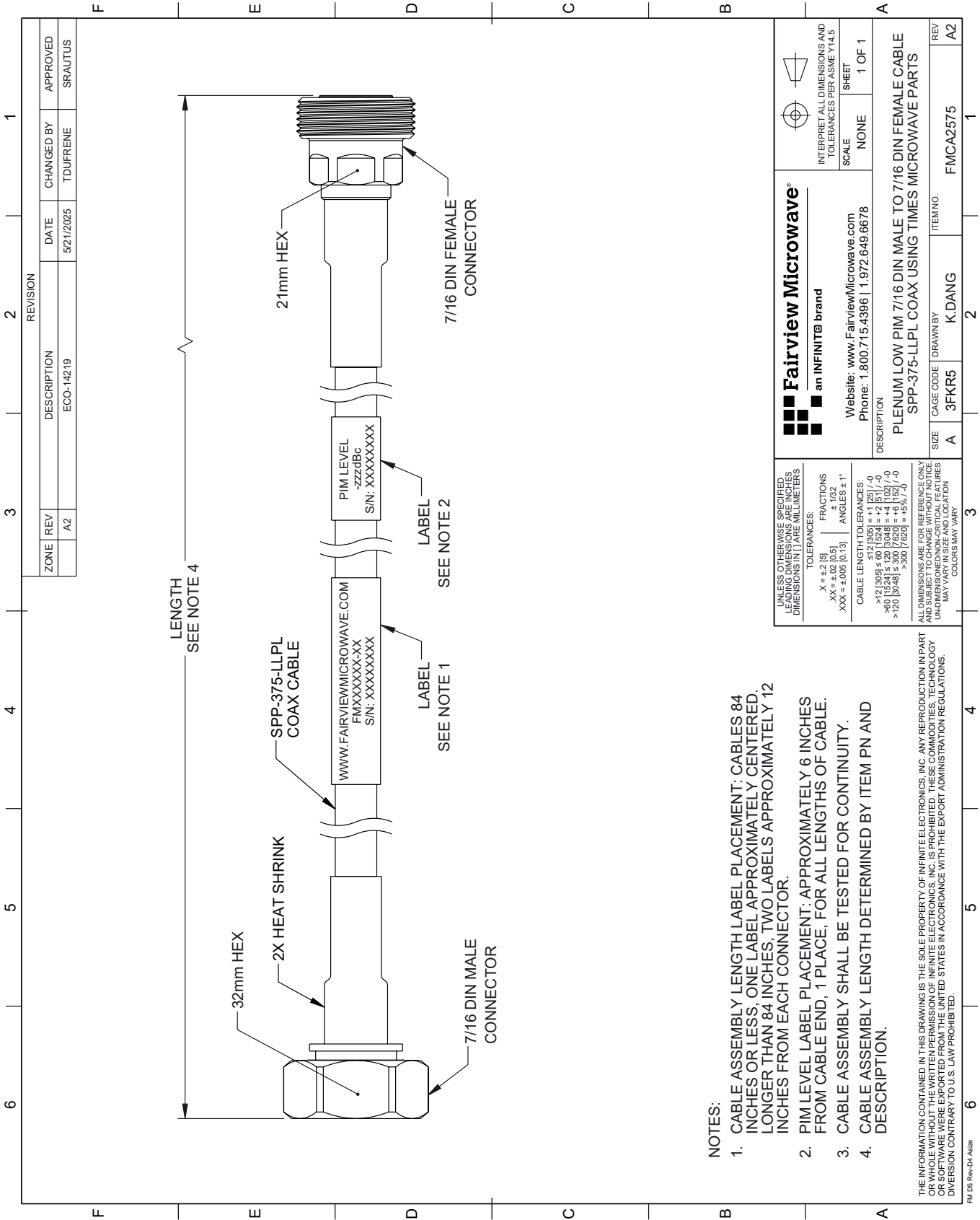
For additional information on this product, please click the following link: [Plenum Low PIM 7/16 DIN Male to 7/16 DIN Female Cable SPP-375-LLPL Coax Using Times Microwave Parts FMCA2575-50CM](https://www.fairviewmicrowave.com/plenum-low-pim-7-16-din-male-to-7-16-din-female-cable-spp-375-llpl-coax-using-times-microwave-parts-fmca2575-50cm-p.aspx)

URL: <https://www.fairviewmicrowave.com/plenum-low-pim-7-16-din-male-to-7-16-din-female-cable-spp-375-llpl-coax-using-times-microwave-parts-fmca2575-50cm-p.aspx>

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FMCA2575-50CM CAD Drawing

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

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