Fairview Microwave
an INFINITE brand

# FMCA2050
# DATA SHEET

## Plenum Low PIM 4.3-10 Male to 4.3-10 Male Cable SPP-375-LLPL Coax Using Times Microwave Parts

The 4.3-10 male to 4.3-10 male cable using SPP-375-LLPL coax, part number FMCA2050, 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 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 FMCA2050 4.3-10 male to 4.3-10 male cable assembly operates to 3 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 | Typ | Max | Units |
|---|---|---|---|---|
| Frequency Range | DC | | 3 | GHz |
| VSWR | | | 1.21:1 | |
| Velocity of Propagation | | 76 | | % |
| RF Shielding | 100 | | | dB |
| Passive Intermodulation | | -165 | -160 | dBc |
| 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] | | Ω/1000ft [Ω/Km] |

### Performance by Frequency

| Description | F1 | F2 | F3 | F4 | F5 | Units |
|---|---|---|---|---|---|---|
| Frequency | 0.45 | 0.7 | 1 | 2 | 3 | GHz |
| Insertion Loss (Max.) | 0.028 | 0.033 | 0.039 | 0.057 | 0.071 | dB/ft |
| | 0.09 | 0.11 | 0.13 | 0.19 | 0.23 | 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*SQRT(FGHz) dB per connector.

### Mechanical Specifications

**Cable Assembly**

| | |
|---|---|
| Length* | 0 in [0 mm] |
| Weight | 0.3 lbs [136.08 g] |

### Configuration:

- 4.3-10 Male
- TC-375-4310M-LP
- 4.3-10 Male
- TC-375-4310M-LP
- SPP-375-LLPL

### Features:

- Max Frequency 3 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
- Distributed Antenna Systems (DAS)
- Plenum Installations
- Multi-Carrier Communication Systems
- PIM Testing

### Cable Diagram:

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**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 |
| Shield Layer 1 | Helically Corrugated Copper Tube |
| Outer Conductor 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] |

**Connectors**

| Description | Connector 1 | Connector 2 |
|---|---|---|
| Type | 4.3-10 Male | 4.3-10 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-Metal |
| Body Plating Spec. | 80 µin | 80 µin |
| Coupling Nut Material & Plating | Brass, Nickel | Brass, Nickel |
| Coupling Nut Plating Spec. | 200 µin | 200 µin |
| Torque | 44.25 in-lbs 5 Nm | 44.25 in-lbs 5 Nm |

## Environmental Specifications

**Temperature**

| | |
|---|---|
| Operating Range | -55 to +200 deg C |
| Storage Range | -55 to +200 deg C |
| Plenum Rating | UL910 |

## 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: **FMCA2050 - xx uu**

- uu: cm = Centimeters; <blank> = Inches
- xx: Length

Example: FMCA2050-12 = 12 inches long cable
FMCA2050-100cm = 100 cm long cable



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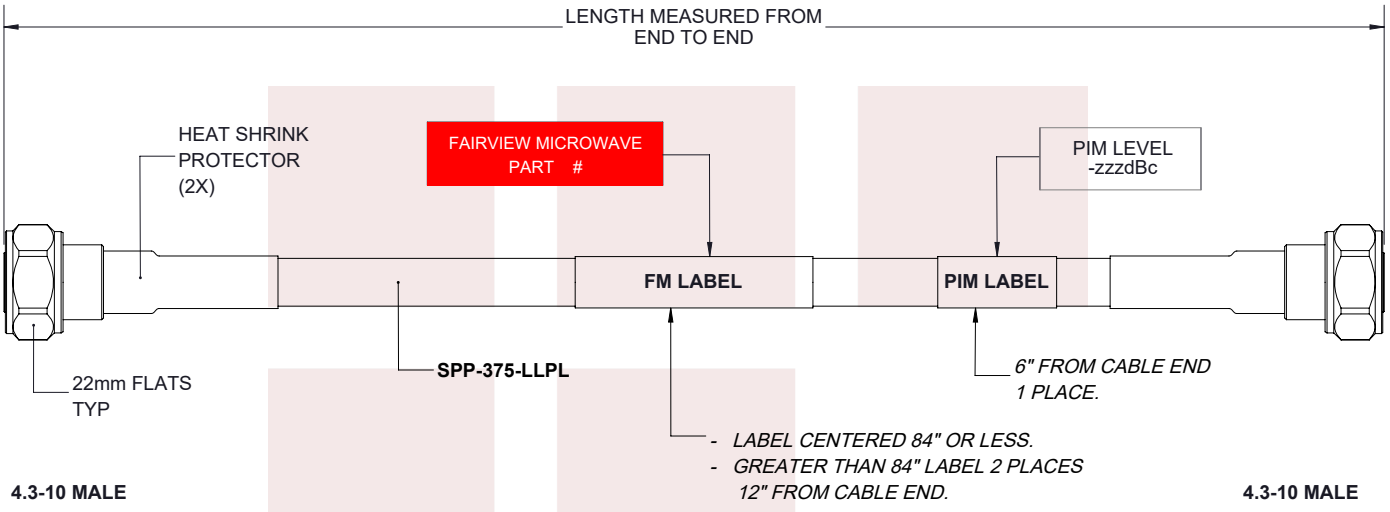
Plenum Low PIM 4.3-10 Male to 4.3-10 Male Cable SPP-375-LLPL Coax Using Times Microwave Parts from Fairview Microwave has same day shipment for domestic and International orders. Our RF, microwave and millimeter wave products maintain a 99% availability and are part of the broadest selection in the industry.

Click the following link to obtain additional part information: Plenum Low PIM 4.3-10 Male to 4.3-10 Male Cable SPP-375-LLPL Coax Using Times Microwave Parts FMCA2050

URL: https://www.fairviewmicrowave.com/low-pim-4.3-10-male-4.3-10-male-cable-spp375llpl-coax-fmca2050-p.aspx

The information contained in this document is accurate to the best of our knowledge and representative of the part described herein. It may be necessary to make modifications to the part and/or the documentation of the part, in order to implement improvements. Fairview Microwave reserves the right to make such changes as required. Unless otherwise stated, all specifications are nominal. Fairview Microwave does not make any representation or warranty regarding the suitability of the part described herein for any particular purpose, and Fairview Microwave does not assume any liability arising out of the use of any part or documentation.




| STANDARD TOLERANCES | |
|---|---|
| .X | ±0.2 |
| .XX | ±0.01 |
| .XXX | ±0.005 |

*STANDARD TOLERANCES APPLY ONLY TO DIMENSIONS IN INCHES

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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
Plenum Low PIM 4.3-10 Male to 4.3-10 Male Cable
SPP-375-LLPL Coax Using Times Microwave Parts

| DWG NO | CAGE CODE |
|---|---|
| FMCA2050 | 3FKR5 |

| CAD FILE | SHEET | SCALE | SIZE | |
|---|---|---|---|---|
| 06/05/19 | 1 OF 1 | N/A | A | 7361 |

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