

## Low PIM 4.1/9.5 Mini DIN Male to 4.1/9.5 Mini DIN Male Plenum Cable SPP-250-LLPL Coax in 36 Inch

Low PIM 4.1/9.5 mini DIN male to 4.1/9.5 mini DIN male part number FMCA1318 from Fairview Microwave is in-stock and ships same day. This low PIM 4.1/9.5 mini DIN male to 4.1/9.5 mini DIN male plenum coax cable assembly offers low PIM performance to support Distributed Antenna Systems (DAS), in-building wireless and other emerging mobile communication networks. The SPP-250-LLPL coax cable carries a UL910 rating for plenum installations. Each low PIM 4.1/9.5 mini DIN male to 4.1/9.5 mini DIN male cable assembly is marked with its actual Passive Intermodulation (PIM) test result.

Fairview's FMCA1318 datasheet specifications and outline drawing are shown below in this PDF. Our extensive offering of low PIM cable assemblies, low-PIM adapters and other RF products support multi-carrier system prototype, cable installations and PIM testing applications.

### Electrical Specifications

| Description             | Min | Typ         | Max    | Units        |
|-------------------------|-----|-------------|--------|--------------|
| Frequency Range         | DC  |             | 6      | GHz          |
| VSWR                    |     |             | 1.35:1 |              |
| Velocity of Propagation |     | 76          |        | %            |
| RF Shielding            | 100 |             |        | dB           |
| Passive Intermodulation |     | -165        | -160   | dBc          |
| Capacitance             |     | 26.7 [87.6] |        | pF/ft [pF/m] |
| Operating Voltage (AC)  |     |             | 750    | Vrms         |

### Performance by Frequency

| Description           | F1     | F2     | F3     | F4     | F5     | Units |
|-----------------------|--------|--------|--------|--------|--------|-------|
| Frequency             | 0.5    | 1      | 2      | 4      | 6      | GHz   |
| Insertion Loss (Max.) | 0.52   | 0.57   | 0.64   | 0.76   | 0.85   | dB    |
| VSWR (Max.)           | 1.25:1 | 1.25:1 | 1.25:1 | 1.35:1 | 1.35:1 |       |
| Power Handling (Max.) | 850    | 507    | 460    | 370    | 250    | W     |

Electrical Specification Notes:

Values at 25°C, sea level

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 loss of 0.4dB of connector loss.

### Mechanical Specifications

#### Cable Assembly

Length\* 36 in [914.4 mm]

#### Cable

Cable Type SPP-250-LLPL  
 Inner Conductor Type Solid  
 Inner Conductor Material and Plating Copper, Bare



### Configuration:

- 4.1/9.5 Mini DIN Male
- 4.1/9.5 Mini DIN Male
- SPP-250-LLPL

### Features:

- Max Frequency 6 GHz
- Low PIM: -160 dBc Max
- Shielding Effectivity > 100 dB
- 76% Phase Velocity
- FEP Jacket
- Low PIM < -160 dBc
- IP67 (Mated)
- Low Loss with Excellent VSWR
- PIM Test Results Marked on Each Cable
- UL910 Plenum Rated Cable
- Extremely Flexible and Light-weight

### Applications:

- General Purpose
- Laboratory Use
- Low PIM Applications
- DAS
- Mobile Networks
- In-Building Wireless
- Small Cells
- PIM Testing

### Cable Diagram:

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|                              |                                |
|------------------------------|--------------------------------|
| Dielectric Type              | PTFE                           |
| Number of Shields            | 1                              |
| Shield Layer 1               | Annular Corrugated Copper Tube |
| Outer Conductor Diameter     | 0.25 in [6.35 mm]              |
| Jacket Material              | FEP                            |
| Jacket Diameter              | 0.28 in [7.11 mm]              |
| One Time Minimum Bend Radius | 1.5 in [38.1 mm]               |

**Connectors**

| Description                | Connector 1           | Connector 2           |
|----------------------------|-----------------------|-----------------------|
| Type                       | 4.1/9.5 Mini DIN Male | 4.1/9.5 Mini DIN Male |
| Impedance                  | 50 Ohms               | 50 Ohms               |
| Contact Material & Plating | Brass, Silver         | Brass, Silver         |
| Dielectric Type            | PTFE                  | PTFE                  |
| Body Material & Plating    | Brass, Tri-Metal      | Brass, Tri-Metal      |
| Seal Gasket Material       | Silicone Rubber       | Silicone Rubber       |

**Environmental Specifications**

**Temperature**

|                 |                   |
|-----------------|-------------------|
| Operating Range | -55 to +125 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:

**FMCA1318 - xx uu**

cm = Centimeters  
<blank> = Inches  
Length

Example: FMCA1318-12 = 12 inches long cable  
FMCA1318-100cm = 100 cm long cable

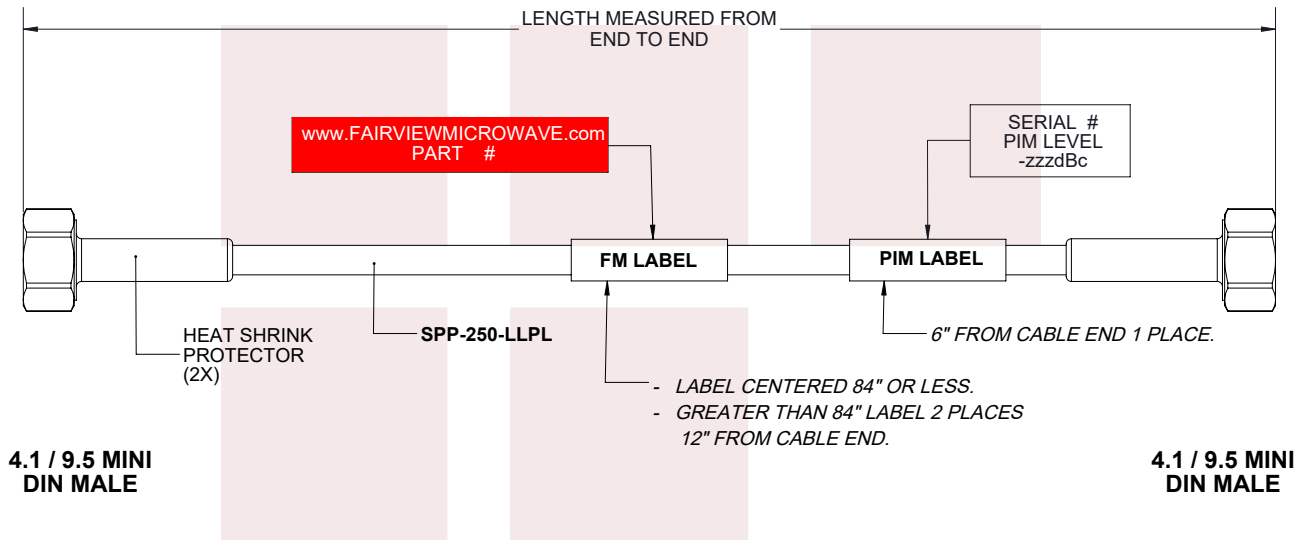
Low PIM 4.1/9.5 Mini DIN Male to 4.1/9.5 Mini DIN Male Plenum Cable SPP-250-LLPL Coax in 36 Inch from Fairview Microwave has same day shipment for domestic and International orders. Our RF, microwave and millimeter wave products maintain a 99% availability and are part of the broadest selection in the industry.

Click the following link to obtain additional part information: [Low PIM 4.1/9.5 Mini DIN Male to 4.1/9.5 Mini DIN Male Plenum Cable SPP-250-LLPL Coax in 36 Inch FMCA1318-36](https://www.fairviewmicrowave.com/4.1-9.5-male-4.1-9.5-male-cable-spp250llpl-fmca1318-36-p.aspx)

URL: <https://www.fairviewmicrowave.com/4.1-9.5-male-4.1-9.5-male-cable-spp250llpl-fmca1318-36-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

|                                                                                                           |          |                                                                                                                                                                                     |        |                    |      |
|-----------------------------------------------------------------------------------------------------------|----------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|--------------------|------|
|                        |          | NOTES:<br>1. UNLESS OTHERWISE SPECIFIED ALL DIMENSIONS ARE NOMINAL.<br>2. ALL SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE AT ANY TIME.<br>3. DIMENSIONS ARE IN INCHES [mm]. |        |                    |      |
| TITLE<br>Low PIM 4.1/9.5 Mini DIN Male to 4.1/9.5 Mini DIN Male Plenum Cable SPP-250-LLPL Coax in 36 Inch |          | DWG NO<br>FMCA1318                                                                                                                                                                  |        | CAGE CODE<br>3FKR5 |      |
| CAD FILE                                                                                                  | 12/05/18 | SHEET                                                                                                                                                                               | 1 OF 1 | SCALE              | N/A  |
|                                                                                                           |          |                                                                                                                                                                                     |        | SIZE               | A    |
|                                                                                                           |          |                                                                                                                                                                                     |        |                    | 7361 |