

Low PIM N Male to N Male Plenum Cable  
SPP-250-LLPL Coax in 24 Inch

**FMCA1312-24**



**Configuration**

- Connector 1: N Male
- Connector 2: N Male
- Cable Type: SPP-250-LLPL
- Coax Flex Type: Corrugated

**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 Lightweight



**Applications**

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

**Description**

Low PIM N male to N male part number FMCA1312 from Fairview Microwave is in-stock and ships same day. This low PIM N male to N 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 N male to N male cable assembly is marked with its actual Passive Intermodulation (PIM) test result.

Fairview's FMCA1312 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	Minimum	Typical	Maximum	Units
Frequency Range	DC		6	GHz
VSWR			1.35:1	
Velocity of Propagation		76		%
RF Shielding	100			dB
Passive Intermodulation IM3 (2x43dBm Tones) at 850 MHz or 1900 MHz		-165	-160	dBc
Capacitance		26.7 [87.6]		pF/ft [pF/m]

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**Electrical Specifications**

Description	Minimum	Typical	Maximum	Units
Operating Voltage (AC)			750	Vrms

**Specifications by Frequency**

Description	F1	F2	F3	F4	F5	Units
Frequency	0.5	1	2	4	6	GHz
Insertion Loss (Max.)	0.48	0.51	0.56	0.64	0.7	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	Watts

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	24 in [609.6 mm]
Width/Diameter	.28 in [7.11 mm]
Weight	0.27 lbs [122.47 g]

**Cable**

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

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**Connectors**

Description	Connector 1	Connector 2
Type	N Male	N Male
Impedance	50 Ohms	50 Ohms
Configuration	Straight	Straight
Contact Material and Plating	Brass, Silver	Brass, Silver
Dielectric Type	PTFE	PTFE
Body Material and Plating	Brass, Tri-Metal	Brass, Tri-Metal
Seal Gasket Material	Silicone Rubber	Silicone Rubber

**Environmental Specifications**

Operating Range Temperature	-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.

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Typical Performance Data

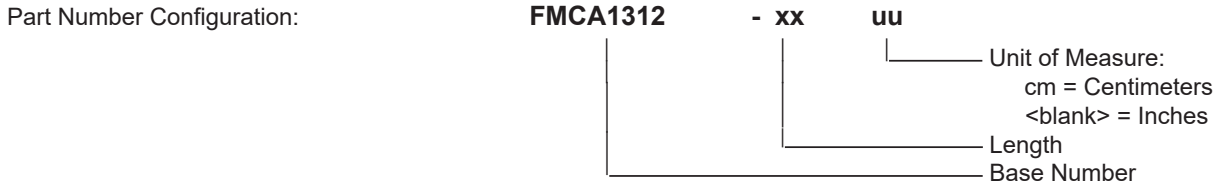


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**FMCA1312-24**

**How to Order**



Example: FMCA1312-12 = 12 inches long cable  
FMCA1312-100cm = 100 cm long cable

Low PIM N Male to N Male Plenum Cable SPP-250-LLPL Coax in 24 Inch 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.

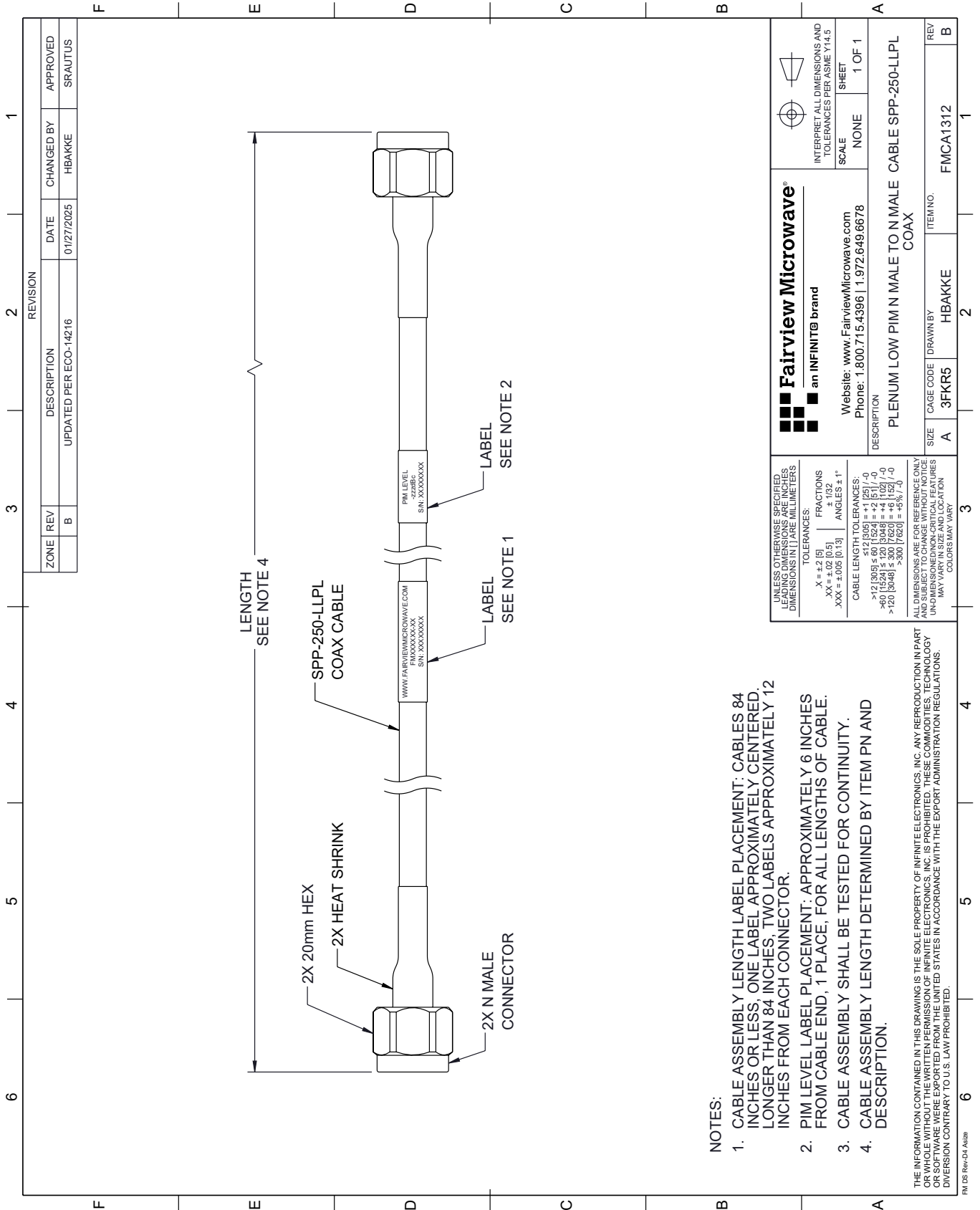
For additional information on this product, please click the following link: [Low PIM N Male to N Male Plenum Cable SPP-250-LLPL Coax in 24 Inch FMCA1312-24](#)

URL: <https://www.fairviewmicrowave.com/low-pim-n-male-n-male-cable-spp250llpl-coax-fmca1312-24-p.aspx>

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# FMCA1312-24 CAD Drawing

Low PIM N Male to N Male Plenum Cable SPP-250-LLPL Coax in 24 Inch



**NOTES:**

1. 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.
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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<p>UNLESS OTHERWISE SPECIFIED, LEADING DIMENSIONS ARE IN INCHES AND DIMENSIONS IN [ ] ARE MILLIMETERS.</p> <p>TOLERANCES:          .X = ±.2 [5]          .XX = ±.02 [0.5]          .XXX = ±.005 [0.13]          FRACTIONS ± 1/32          ANGLES ± 1°</p> <p>CABLE LENGTH TOLERANCES:          &gt;12 [305] ≤ 60 [1524] = ±.1 [25] / -0          &gt;60 [1524] ≤ 120 [3048] = ±.4 [102] / -0          &gt;120 [3048] ≤ 300 [7620] = ±.6 [152] / -0          &gt;300 [7620] = ±.8 [203] / -0</p> <p>ALL DIMENSIONS ARE FOR REFERENCE ONLY. UNKNOWN DIMENSIONS/NON-CRITICAL FEATURES MAY VARY IN SIZE AND LOCATION. COLORS MAY VARY.</p>		
<p>DESCRIPTION PLENUM LOW PIM N MALE TO N MALE CABLE SPP-250-LLPL COAX</p>	<p>SIZE A</p>	<p>ITEM NO. FMCA1312</p>
<p>REV B</p>	<p>CHANGED BY HBAKKE</p>	<p>APPROVED SRAUTUS</p>
<p>DATE 01/27/2025</p>	<p>DESCRIPTION UPDATED PER ECO-14216</p>	<p>REVISION 1</p>