

Low PIM N Male to N Male Plenum Cable
SPP-250-LLPL Coax in 100 CM

FMCA1312-100CM

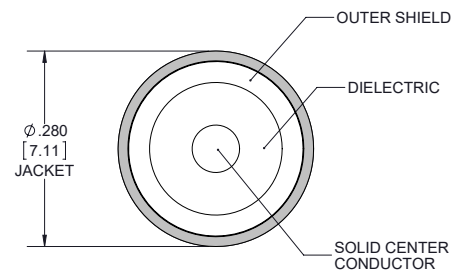


Configuration

- 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 in 100cm part number FMCA1312-100CM from Fairview Microwave is in-stock and ships same day. This low PIM N male to N male in 100cm 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 in 100cm cable assembly is marked with its actual Passive Intermodulation (PIM) test result.

Fairview's FMCA1312-100CM 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.) | 0.53 | 0.58 | 0.67 | 0.8 | 0.9 | 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 | 39.37 in [100 cm] |
| Width/Diameter | .28 in [7.11 mm] |
| Weight | 0.36 lbs [163.29 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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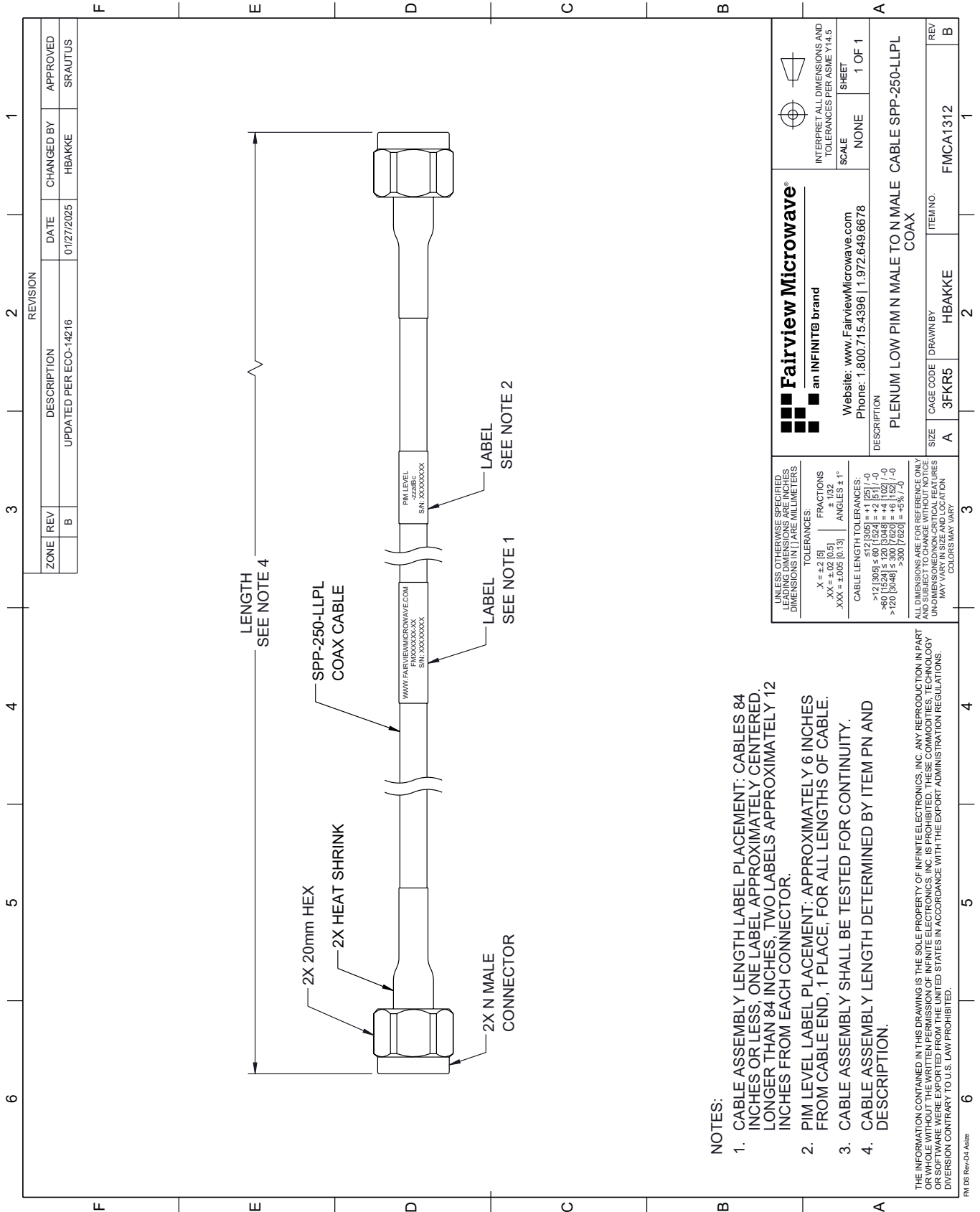


Typical Performance Data



FMCA1312-100CM CAD Drawing

Low PIM N Male to N Male Plenum Cable SPP-250-LLPL Coax in 100 CM



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>Fairview Microwave an INFINIT® brand</p> <p>Website: www.FairviewMicrowave.com Phone: 1.800.715.4396 1.972.649.6678</p> | | <p>INTERPRET ALL DIMENSIONS AND TOLERANCES PER ASME Y14.5</p> <p>SCALE: NONE SHEET: 1 OF 1</p> |
| <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: >12 [305] ≤ 60 [1524] = ±1 [25] / -0 >60 [1524] ≤ 120 [3048] = ±4 [102] / -0 >120 [3048] ≤ 300 [7620] = ±5% / -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>REV B</p> |
| <p>SIZE A</p> | <p>CAGE CODE 3FKR5</p> | <p>ITEM NO. FMCA1312</p> |
| <p>DRAWN BY HBAKKE</p> | | <p>REV B</p> |