

Low PIM N Male to SMA Female Plenum Cable  
SPP-250-LLPL Coax in 36 Inch with LF Solder

**FMCA1811-36**



**Configuration**

- Connector 1: N Male
- Connector 2: SMA Female
- Cable Type: SPP-250-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
- 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**

The type N male to SMA female 36 inch cable using SPP-250-LLPL coax, part number FMCA1811-36, from Fairview Microwave is in-stock and ships same day. This Fairview type N to SMA cable assembly has a male to female gender configuration with 50 ohm corrugated SPP-250-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 FMCA1811-36 type N male to SMA 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    |
| Passive Intermodulation                    |         |         | -160    | dBc   |
| IM3 (2x43dBm Tones) at 850 MHz or 1900 MHz |         |         |         |       |

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**Electrical Specifications**

| Description                   | Minimum | Typical      | Maximum | Units                 |
|-------------------------------|---------|--------------|---------|-----------------------|
| Capacitance                   |         | 27 [88.58]   |         | pF/ft [pF/m]          |
| Inductance                    |         | 0.067 [0.22] |         | uH/ft [uH/m]          |
| DC Resistance Inner Conductor |         | 3 [9.84]     |         | Ohms/1000ft [Ohms/Km] |

**Specifications by Frequency**

| Description           | F1   | F2   | F3   | F4   | F5   | Units |
|-----------------------|------|------|------|------|------|-------|
| Frequency             | 0.45 | 0.7  | 1    | 2.5  | 5.8  | GHz   |
| Insertion Loss (Max.) | 0.17 | 0.22 | 0.26 | 0.41 | 0.64 | dB    |

Electrical Specification Notes:

The insertion loss data above is based on the performance specifications of the coax cable used in this assembly. The insertion loss includes an estimated insertion loss of  $0.04 * \text{SQRT}(F\text{GHz})$  dB maximum per connector.

**Mechanical Specifications**

**Cable Assembly**

|        |                     |
|--------|---------------------|
| Length | 36 in [914.4 mm]    |
| Weight | 0.85 lbs [385.55 g] |

**Cable**

|  |                       |
|--|-----------------------|
| Cable Type                             | SPP-250-LLPL          |
| Impedance                              | 50 Ohms               |
| Inner Conductor Type                   | Solid                 |
| Inner Conductor Material and Plating   | Copper                |
| Dielectric Type                        | PTFE                  |
| Number of Shields                      | 1                     |
| Outer Conductor 1 Material and Plating | Copper                |
| Jacket Material                        | FEP, Blue             |
| Jacket Diameter                        | 0.28 in [7.11 mm]     |
| One Time Minimum Bend Radius           | 1.25 in [31.75 mm]    |
| Bending Moment                         | 0.8 lbs-ft [1.08 N-m] |

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**Connectors**

| Description                          | Connector 1             | Connector 2              |
|--------------------------------------|-------------------------|--------------------------|
| Type                                 | N Male                  | SMA Female               |
| Impedance                            | 50 Ohms                 | 50 Ohms                  |
| Configuration                        | Straight                | Straight                 |
| Contact Material and Plating         | Phosphor Bronze, Silver | Beryllium Copper, Silver |
| Dielectric Type                      | PTFE                    | PTFE                     |
| Outer Conductor Material and Plating |                         | Brass, Tri-Metal         |
| Body Material and Plating            | Brass, Tri-Metal        | Brass, Tri-Metal         |
| Coupling Nut Material and Plating    | Brass, Tri-Metal        |                          |

**Environmental Specifications**

Operating Range Temperature -55 to +165 deg C

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

**Plotted and Other Data**

Notes:

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Typical Performance Data



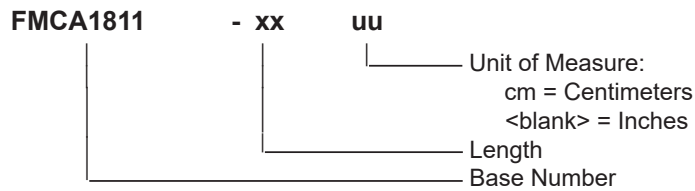
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**How to Order**

Part Number Configuration:



Example: FMCA1811-12 = 12 inches long cable  
FMCA1811-100cm = 100 cm long cable

Low PIM N Male to SMA Female Plenum Cable SPP-250-LLPL Coax in 36 Inch with LF Solder 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 SMA Female Plenum Cable SPP-250-LLPL Coax in 36 Inch with LF Solder FMCA1811-36](https://www.fairviewmicrowave.com/n-male-sma-female-cable-spp250llpl-coax-fmca1811-36-p.aspx)

URL: <https://www.fairviewmicrowave.com/n-male-sma-female-cable-spp250llpl-coax-fmca1811-36-p.aspx>

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# FMCA1811-36 CAD Drawing

Low PIM N Male to SMA Female Plenum Cable SPP-250-LLPL Coax in 36 Inch with LF Solder

