

# FMCA1811 DATA SHEET

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

The type N male to SMA female cable using SPP-250-LLPL coax, part number FMCA1811, 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 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	Min	Т	ур	Max	ι	Jnits	
Frequency Range	DC			5.8		GHz	
VSWR				1.4:1			
Velocity of Propagation		7	76			%	
RF Shielding	100					dB	
Passive Intermodulation				-160		dBc	
Capacitance		27 [88.58]			pF/ft [pF/m]		
Inductance		0.067 [0.22]			uH/ft [uH/m]		
DC Resistance Inner Conductor		3 [9.84]		Ω/1000ft [Ω/Km]			
·							

#### **Performance by Frequency**

Description	F1	F2	F3	F4	F5	Units
Frequency	0.45	0.7	1	2.5	5.8	GHz
Insertion Loss (Max	.) 0.038	0.048	0.057	0.094	0.148	dB/ft
	0.12	0.16	0.19	0.31	0.49	dB/m

**Electrical Specification Notes:** 

Insertion loss does not include the loss of the connectors. Insertion loss is estimated as 0.04\*SQRT(FGHz) dB per connector.

#### **Mechanical Specifications**

### **Cable Assembly**

Length\* 0 in [0 mm]

Cable

Cable Type SPP-250-LLPL Impedance 50 Ohms Inner Conductor Type Solid Inner Conductor Material and Plating Copper



## **Configuration:**

- N Male
- SMA Female
- SPP-250-LLPL

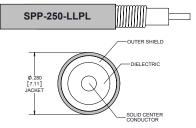
### Features:

- 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

# **Cable Diagram:**



Fairview Microwave 301 Leora Ln., Suite 100 Lewisville, TX 75056

Tel: 1-800-715-4396 / (972) 649-6678 Fax: (972) 649-6689

www.fairviewmicrowave.com sales@fairviewmicrowave.com





Dielectric Type PTFE
Number of Shields 1
Outer Conductor 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]

#### **Connectors**

Description	Connector 1	Connector 2
Туре	N Male	SMA Female
Impedance	50 Ohms	50 Ohms
Contact Material & Plating	Phosphor Bronze, Sil	ver Beryllium Copper, Silver
Dielectric Type	PTFE	PTFE
Outer Cond Material & Plat	ing	Brass, Tri-Metal
Body Material & Plating	Brass, Tri-Metal	Brass, Tri-Metal
Coupling Nut Material & Pla	ating Brass, Tri-Metal	

### **Environmental Specifications**

Temperature

Operating Range -55 to +165 deg C

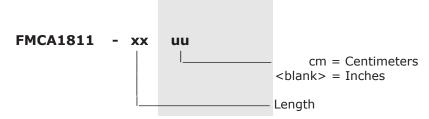
**Compliance Certifications** (see product page for current document)

### **Plotted and Other Data**

Notes:

#### **How to Order**

Part Number Configuration:



Example: FMCA1811-12 = 12 inches long cable

FMCA1811-100cm = 100 cm long cable

301 Leora Ln., Suite 100, Lewisville, TX 75056 | Tel: 1-800-715-4396 / (972) 649-6678 / Fax: (972) 649-6689

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Low PIM N Male to SMA Female Plenum Cable SPP-250-LLPL Coax with LF Solder 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 N Male to SMA Female Plenum Cable SPP-250-LLPL Coax with LF Solder FMCA1811

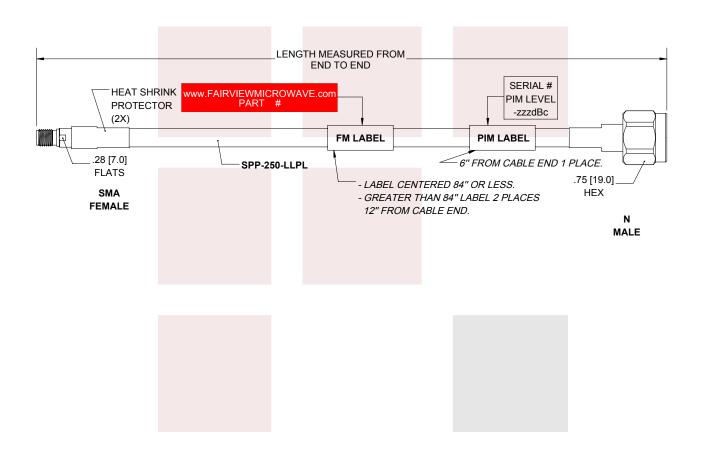
The information contained in this document is accurate to the best of our knowledge and representative of the part described herein. It may be necessary to make modifications to the part and/or the documentation of the part, in order

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

to implem	ent improvements	. Fairview	Microw	ave reserv	es the righ	nt to mal	ke such	changes	as req	uired.	Unless	otherwise
	specifications are											
suitability	of the part descri	bed herein	for any	particular	purpose,	and Fai	rview M	licrowave	does	not ass	ume a	ny liability
arising out	t of the use of any	part or do	cument	ation.								







STANDARD TOLERANCES

.X ±0.2 .XX ±0.01 .XXX ±0.005

\*STANDARD TOLERANCES APPLY ONLY TO DIMENSIONS IN INCHES

Fairview Microwave	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].						
Low PIM N Male to SMA Female Plenum Cable SPP-	DWG NO FMCA1811				CAGE CODE 3FKR5		
250-LLPL Coax with LF Solder	CAD FILE 12/27/18	SHEET 1 OF 1	SCAL	E N/A	SIZE A	CN2379	