

# Plenum Low PIM N Female to RA SMA Male Cable SPP-250-LLPL Coax in 48 Inch Using Times Microwave Parts

The type N female to RA SMA male 48 inch cable using SPP-250-LLPL coax, part number FMCA1887-48, from Fairview Microwave is in-stock and ships same day. This Fairview type N to SMA cable assembly has a female to male 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 FMCA1887-48 type N female to SMA male cable assembly operates to 5.8 GHz. The right angle SMA interface on the SPP-250-LLPL cable allows for easier connections in tight spaces. Times Microwave cable is used in each assembly and TMS components are used to form connections with the super flexible low PIM cable. These cable assemblies are expertly built to satisfy your specific need with high quality Times Microwave Systems manufactured parts.

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	T	ур	Max	Units		
Frequency Range	DC			5.8	GHz		
VSWR				1.4:1			
Velocity of Propagation		%					
RF Shielding	100				dB		
Passive Intermodulation		-1	65	-160	dBc		
Capacitance		27 [88.58]			pF/ft [pF/m]		
Inductance		0.067 [0.22]			uH/ft [uH/m]		
DC Resistance Inner Con	ductor	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.)	0.37	0.43	0.48	0.72	1.07	dB

**Electrical Specification Notes:** 

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 insertion loss of 0.1 dB for the female connector and 0.15\*SQRT(FGHz) dB for the male connector.

### **Mechanical Specifications**

**Cable Assembly** 

Length\*

48 in [121.92 cm]

# FMCA1887-48 DATA SHEET



## **Configuration:**

- N Female
- TC-SPP250-NF-LP
- SMA Male Right Angle
- TC-SPP250-SM-RA-LP
- SPP-250-LLPL

#### **Features:**

- Max Frequency 5.8 GHz
- Low PIM: -160 dBc Max
- Shielding Effectivity > 100 dB
- 76% Phase Velocity
- FEP Jacket
- 100% Tested with PIM Test Results Marked on Cable
- UL910 Plenum Rated Cable
- Lightweight and Extremely Flexible
- Low Loss with Excellent VSWR
- IP67 (when mated)
- Using Times Microwave Components

# **Applications:**

- General Purpose
- Laboratory Use
- Low PIM Applications
- Distributed Antenna Systems (DAS)
- Plenum Installations
- Multi-Carrier Communication Systems
- 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





Cable

Cable Type **Impedance** Inner Conductor Type Inner Conductor Material and Plating

Dielectric Type Number of Shields Shield Layer 1

Outer Conductor Material and Plating

Outer Conductor Diameter

Jacket Material Jacket Diameter SPP-250-LLPL 50 Ohms Solid Copper PTFE

Helically Corrugated Copper Tube

Copper

0.25 in [6.35 mm]

FEP, Blue

0.28 in [7.11 mm]

One Time Minimum Bend Radius

Bending Moment

1.25 in [31.75 mm] 0.8 lbs-ft [1.08 N-m]

#### **Connectors**

Description	Connector 1	Connector 2	
Туре	N Female	SMA Male	
Impedance	50 Ohms	50 Ohms	
Contact Material & Plating	Phosphor Bronze, Si	ver Phosphor Bronze, Silver	
Contact Plating Spec.	196µ in	196µ in	
Dielectric Type	PTFE	PTFE	
Outer Cond Material & Plating Brass, Tri-Meta			
Outer Cond Plating Spec.	118µ in		
Body Material & Plating	Brass, Tri-Metal	Brass, Tri-Metal	
Body Plating Spec.	118µ in	118μ in	
Coupling Nut Material & Plating Brass, Tri-Me			
Coupling Nut Plating Spec.	c. 118µ in		
Torque	10 in-lbs 1.13 Nr	m 10 in-lbs 1.13 Nm	

# **Environmental Specifications**

**Temperature** Operating Range Storage Range Plenum Rating

-55 to +200 deg C -55 to +200 deg C

UL910

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

#### **Plotted and Other Data**

Notes:

· Values at 25°C, sea level.

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#### **How to Order**

Part Number Configuration:	FMCA1887	- x	ΚX	uu	
					<pre>- cm = Centimeters   <blank> = Inches - Length</blank></pre>
					- Length

Example: FMCA1887-12 = 12 inches long cable

FMCA1887-100cm = 100 cm long cable

Plenum Low PIM N Female to RA SMA Male Cable SPP-250-LLPL Coax in 48 Inch Using Times Microwave Parts 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: Plenum Low PIM N Female to RA SMA Male Cable SPP-250-LLPL Coax in 48 Inch Using Times Microwave Parts FMCA1887-48

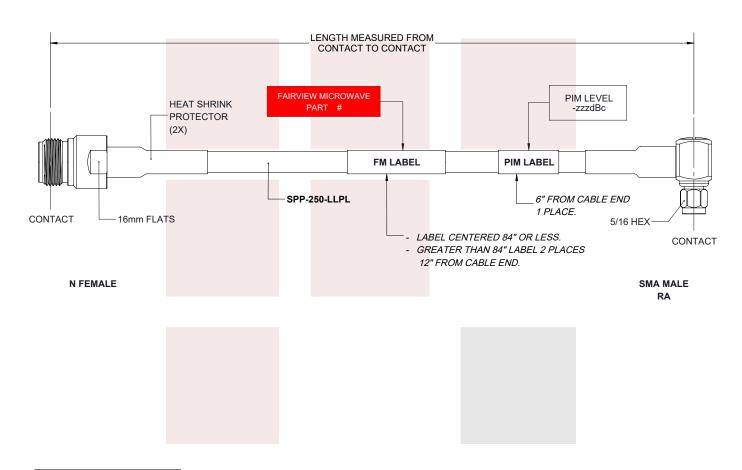
URL: https://www.fairviewmicrowave.com/low-pim-n-female-ra-sma-male-cable-spp250llpl-coax-fmca1887-48-p.aspx

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.

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STANDARD TOLERANCES

.X ±0.2 .XX ±0.01 .XXX ±0.005

\*STANDARD TOLERANCES APPLY ONLY TO DIMENSIONS IN INCHES

Fairview Microwave an INFINIT® brand	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].						
TITLE	DWG NO FMCA1887				CAGE CODE 3FKR5		
Plenum Low PIM N Female to RA SMA Male Cable SPP-250-LLPL Coax in 48 Inch Using Times Microwave Parts	CAD FILE 06/05/19	SHEET 1 OF 1	SCAL	E N/A	SIZE A	7361	