

## Plenum Low PIM N Male to N Female Bulkhead Cable SPP-250-LLPL Coax in 12 Inch Using Times Microwave Parts

The type N male to type N female bulkhead 12 inch cable using SPP-250-LLPL coax, part number FMCA1871-12, from Fairview Microwave is in-stock and ships same day. This Fairview type N to type N 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 FMCA1871-12 type N male to type N female cable assembly operates to 5.8 GHz. Our RF cable assembly with type N bulkhead interface allows designers to create external connections on their product enclosures, and can be used in a variety of other rack mount and panel mount applications. 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	Тур	Max	Units		
Frequency Range	DC		5.8	GHz		
VSWR			1.4:1			
Velocity of Propagation		76		%		
RF Shielding	100			dB		
Passive Intermodulation		-165	-160	dBc		
Capacitance		27 [88.58]		pF/ft [pF/m]		
Inductance	0.067 [0.2		]	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.)	0.21	0.24	0.26	0.36	0.5	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\*SQRT(FGHz) dB for the male connector and 0.1 for the female connector.

# FMCA1871-12 DATA SHEET



## **Configuration:**

- N Male
- TC-250-NM-LP
- N Female Bulkhead
- TC-SPP250-NF-BH-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





### **Mechanical Specifications**

**Cable Assembly** 

Length\* 12 in [304.8 mm]

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 Shield Layer 1 Helically Corrugated Copper Tube

Outer Conductor Material and Plating Copper

Outer Conductor Diameter

Jacket Material

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	Connect	or 1	Connector 2	
Туре	N Mal	e	N Female	
Mount Method			Bulkhead	
Impedance	50 Ohr	ns	50 Ohms	
Contact Material & Plating	Phosphor Bror	nze, Silver	Phosphor Bronze, Silve	er
Contact Plating Spec.	196µ	in	196µ in	
Dielectric Type	PTFE		PTFE	
Outer Cond Material & Plati	ing		Brass, Tri-Metal	
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 & Pla	iting Brass, Tri-	Metal		
Coupling Nut Plating Spec.	118µ	in		
Torque	9.74 in-lbs	1.1 Nm	10 in-lbs 1.13 Nm	

0.25 in [6.35 mm]

FEP, Blue

### **Environmental Specifications**

**Temperature** 

-55 to +200 deg C Operating Range Storage Range -55 to +200 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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#### **How to Order**

Part Number Configuration:	FMCA1871	- xx	uu	
			l	cm = Centimeters <blank> = Inches  Length</blank>

Example: FMCA1871-12 = 12 inches long cable

FMCA1871-100cm = 100 cm long cable

Plenum Low PIM N Male to N Female Bulkhead Cable SPP-250-LLPL Coax in 12 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 Male to N Female Bulkhead Cable SPP-250-LLPL Coax in 12 Inch Using Times Microwave Parts FMCA1871-12

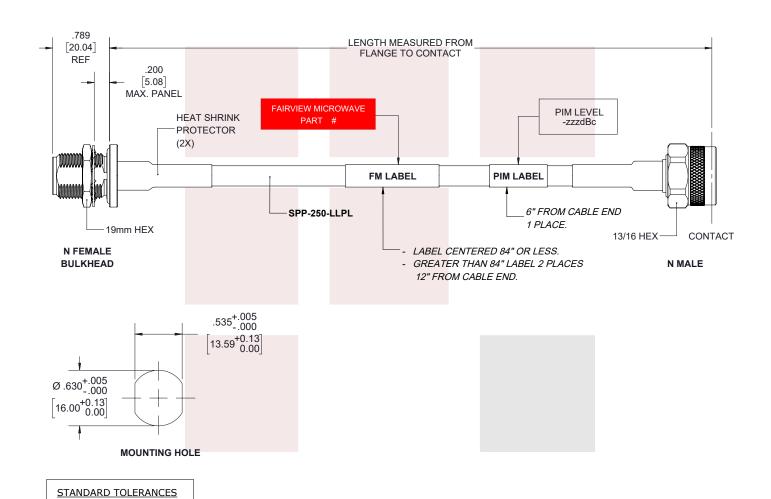
URL: https://www.fairviewmicrowave.com/low-pim-n-male-n-female-cable-spp250llpl-coax-fmca1871-12-p.aspx

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 APPLY ONLY TO DIMENSIONS IN INCHES

±0.2 .XX ±0.01 .XXX ±0.005

.X

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].					ГІМЕ.
an INFINIT <sup>®</sup> brand						
Plenum Low PIM N Male to N Female Bulkhead Cable SPP-250-LLPL Coax in 12 Inch Using Times Microwave Parts	DWG NO FMCA1871			CAGE CODE 3FKR5		
	CAD FILE 06/05/19	SHEET 1 OF 1	SCAL	E N/A	SIZE A	7361