

FMCA1861-24 DATA SHEET

Plenum Low PIM 7/16 DIN Male to N Female Bulkhead Cable SPP-250-LLPL Coax in 24 Inch Using Times Microwave Parts

The 7/16 DIN male to type N female bulkhead 24 inch cable using SPP-250-LLPL coax, part number FMCA1861-24, from Fairview Microwave is in-stock and ships same day. This Fairview 7/16 DIN 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 FMCA1861-24 7/16 DIN 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 [0.22]		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.)	0.25	0.29	0.32	0.45	0.65	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 dB for the female connector.



Configuration:

- 7/16 DIN Male
- TC-250-716M-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* 24 in [609.6 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	Connector	1	Connector 2		
Туре	7/16 DIN Ma	ale	N Female		
Mount Method			Bulkhead		
Impedance	50 Ohms		50 Ohms		
Contact Material & Plating	Brass, Silve	r	Phosphor Bronze, Silve		
Contact Plating Spec.	200μ in		196µ in		
Dielectric Type	PTFE		PTFE		
Outer Cond Material & Plati	ng		Brass, Tri-Metal		
Outer Cond Plating Spec.			118µ in		
Body Material & Plating	Brass, Tri-Me	tal	Brass, Tri-Metal		
Body Plating Spec.	80 µin		118µ in		
Coupling Nut Material & Pla	iting Brass, Nicke	el			
Coupling Nut Plating Spec.	80 µin				
Torque	22.127 ft-lbs 3	0 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:	FMCA1861	- xx	uu	
				<pre>— cm = Centimeters <black> = Inches</black></pre>
		İ		— Length

Example: FMCA1861-12 = 12 inches long cable FMCA1861-100cm = 100 cm long cable

Plenum Low PIM 7/16 DIN Male to N Female Bulkhead Cable SPP-250-LLPL Coax in 24 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 7/16 DIN Male to N Female Bulkhead Cable SPP-250-LLPL Coax in 24 Inch Using Times Microwave Parts FMCA1861-24

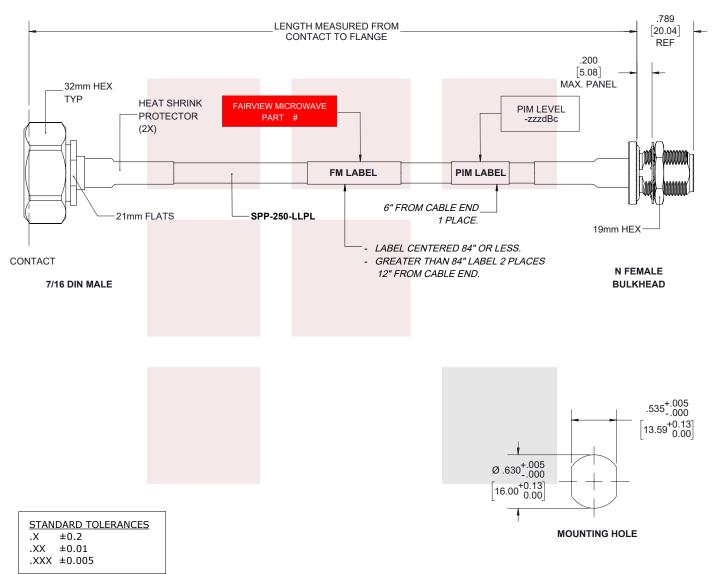
URL: https://www.fairviewmicrowave.com/low-pim-7-16-din-male-n-female-cable-spp250llpl-coax-fmca1861-24-p.aspx

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*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.						
an INFINIT [®] brand	3. DIMENSIONS ARE IN INCHES [mm].						
Plenum Low PIM 7/16 DIN Male to N Female Bulkhead Cable SPP-250-LLPL Coax in 24 Inch Using Times Microwave Parts	DWG NO FMCA1861				CAGE CODE 3FKR5		
	CAD FILE 06/05/19	SHEET 1	OF 1	SCAL	_E N/A	SIZE A	7361