

# Plenum Low PIM RA 4.1/9.5 Mini DIN Male to RA 4.1/9.5 Mini DIN Male Cable SPP-250-LLPL Coax in 24 Inch Using Times Microwave Parts

The RA 4.1/9.5 Mini DIN male to RA 4.1/9.5 Mini DIN male 24 inch cable using SPP-250-LLPL coax, part number FMCA1842-24, from Fairview Microwave is instock and ships same day. This Fairview 4.1/9.5 Mini DIN to 4.1/9.5 Mini DIN cable assembly has a male 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 FMCA1842-24 4.1/9.5 Mini DIN male to 4.1/9.5 Mini DIN male cable assembly operates to 3 GHz. The right angle 4.1/9.5 Mini DIN interfaces on the SPP-250-LLPL cable allow 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	Ty	/p	Max	Units		
Frequency Range	DC			3	GHz		
VSWR				1.4:1			
Velocity of Propagation		7	6		%		
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 Conductor		3 [9.84]			$\Omega/1000$ ft [ $\Omega/$ Km]		

#### **Performance by Frequency**

Description	F1	F2	F3	F4	F5	Units
Frequency	0.45	0.7	1	2	3	GHz
Insertion Loss (Max.)	0.18	0.2	0.22	0.27	0.31	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 0.05 dB per connector.

## **Mechanical Specifications**

**Cable Assembly** 

Length\*

24 in [609.6 mm]

## FMCA1842-24 DATA SHEET



## **Configuration:**

- 4.1/9.5 Mini DIN Male Right Angle
- TC-SPP250-4195M-RALP
- 4.1/9.5 Mini DIN Male Right Angle
- TC-SPP250-4195M-RALP
- SPP-250-LLPL

#### Features:

- Max Frequency 3 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:

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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

Outer Conductor Material and Plating

Outer Conductor Diameter

Jacket Material Jacket Diameter

One Time Minimum Bend Radius

Bending Moment

Helically Corrugated Copper Tube

Copper

0.25 in [6.35 mm]

FEP, Blue

0.28 in [7.11 mm]

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

#### **Connectors**

Description	Connector 1	Connector 2
Туре	4.1/9.5 Mini DIN M	ale 4.1/9.5 Mini DIN Male
Impedance	50 Ohms	50 Ohms
Contact Material & Plating	Brass, Silver	Brass, Silver
Contact Plating Spec.	200μ in	200μ in
Dielectric Type	PTFE	PTFE
Body Material & Plating	Brass, Nickel	Brass, Nickel
Body Plating Spec.	200μ in	200μ in
Coupling Nut Material & Pla	ting Brass, Nickel	Brass, Nickel
Coupling Nut Plating Spec.	200μ in	200μ in
Torque	106.21 in-lbs 12 N	lm 106.21 in-lbs 12 Nm

## **Environmental Specifications**

**Temperature** 

Operating Range -55 to +200 deg C 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.

### **How to Order**

Part Number Configuration: FMCA1842 - xx uu cm = Centimeters <br/>
<br/>
dlank> = Inches Length

Example: FMCA1842-12 = 12 inches long cable

FMCA1842-100cm = 100 cm long cable





Plenum Low PIM RA 4.1/9.5 Mini DIN Male to RA 4.1/9.5 Mini DIN Male 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 RA 4.1/9.5 Mini DIN Male to RA 4.1/9.5 Mini DIN Male Cable SPP-250-LLPL Coax in 24 Inch Using Times Microwave Parts FMCA1842-24

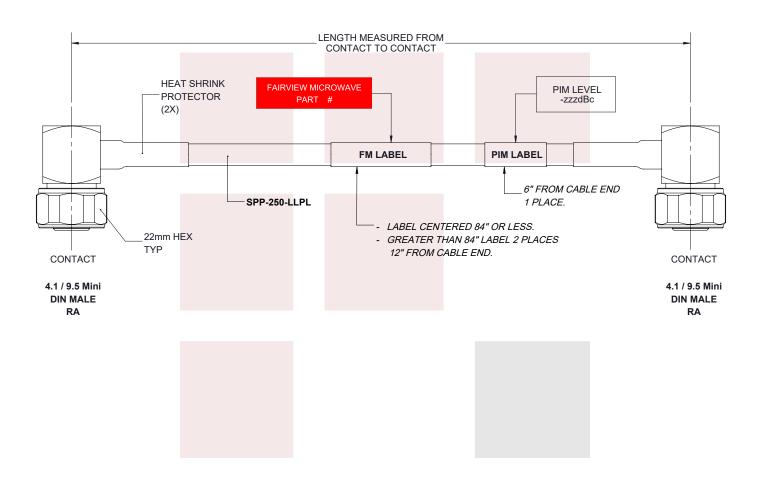
URL: https://www.fairviewmicrowave.com/low-pim-ra-4.1-9.5-male-4.1-9.5-male-cable-spp250llpl-fmca1842-24-p.aspx



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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	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].						
Plenum Low PIM RA 4.1/9.5 Mini DIN Male to RA 4.1/9.5 Mini DIN Male Cable SPP-250-LLPL Coax in Inch Using Times Microwave Parts	DWG NO FMCA1842				CAGE CODE 3FKR5		
	CAD FILE 06/05/19	SHEET 1 OF 1	SCAL	E N/A	SIZE A	7361	