

## Low PIM 4.1/9.5 Mini DIN Male to SMA Female Plenum Cable SPP-250-LLPL Coax in 48 Inch with LF Solder

The 4.1/9.5 Mini DIN male to SMA female 48 inch cable using SPP-250-LLPL coax, part number FMCA1809-48, from Fairview Microwave is in-stock and ships same day. This Fairview 4.1/9.5 Mini DIN 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 FMCA1809-48 4.1/9.5 Mini DIN 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	Typ	Max	Units
Frequency Range	DC		5.8	GHz
VSWR			1.4:1	
Velocity of Propagation		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]		$\Omega$ /1000ft [ $\Omega$ /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	0.26	0.31	0.51	0.79	dB

#### Electrical Specification Notes:

The insertion loss data above is based on the performance specifications of the coax cable used in this assembly. The insertion loss includes an estimated insertion loss of  $0.04 * \text{SQRT}(\text{FGHz})$  dB maximum per connector.

### Mechanical Specifications

#### Cable Assembly

Length\* 48 in [121.92 cm]

#### Cable

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



### Configuration:

- 4.1/9.5 Mini DIN 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 Light-weight

### Applications:

- General Purpose
- Laboratory Use
- Low PIM Applications
- DAS
- Mobile Networks
- In-Building Wireless
- Small Cells
- PIM Testing

### Cable Diagram:



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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
Type	4.1/9.5 Mini DIN Male	SMA Female
Impedance	50 Ohms	50 Ohms
Contact Material & Plating	Brass, Silver	Beryllium Copper, Silver
Dielectric Type	PTFE	PTFE
Outer Cond Material & Plating		Brass, Tri-Metal
Body Material & Plating	Brass, Tri-Metal	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:

**FMCA1809 - xx uu**

cm = Centimeters  
 <blank> = Inches

Length

Example: FMCA1809-12 = 12 inches long cable  
 FMCA1809-100cm = 100 cm long cable

Low PIM 4.1/9.5 Mini DIN Male to SMA Female Plenum Cable SPP-250-LLPL Coax in 48 Inch 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 4.1/9.5 Mini DIN Male to SMA Female Plenum Cable SPP-250-LLPL Coax in 48 Inch with LF Solder FMCA1809-48](https://www.fairviewmicrowave.com/4.1-9.5-mini-din-male-sma-female-cable-spp250llpl-coax-fmca1809-48-p.aspx)

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