

# FMCA1810-12 **DATA SHEET**

## Low PIM 7/16 DIN Male to SMA Female Plenum Cable SPP-250-LLPL Coax in 12 Inch with LF Solder

The 7/16 DIN male to SMA female 12 inch cable using SPP-250-LLPL coax, part number FMCA1810-12, from Fairview Microwave is in-stock and ships same day. This Fairview 7/16 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 FMCA1810-12 7/16 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	Т	ур	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]			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.)	0.1	0.12	0.14	0.23	0.35	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\*SQRT(FGHz) dB maximum per connector.

### **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



### **Configuration:**

- 7/16 DIN Male
- SMA Female
- SPP-250-LLPL

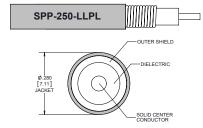
### Features:

- 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 Lightweight

## **Applications:**

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

## Cable Diagram:



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Number of Shields

Outer Conductor Material and Plating

Jacket Material Jacket Diameter 1 Copper 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 Connecto	Connector 2		
Туре	7/16 DIN Male SMA Fem		ale		
Impedance	50 Ohms	50 Ohms	S		
Contact Material & Plating	Brass, Silver	r Beryllium Coppe	er, Silver		
Dielectric Type	PTFE	PTFE			
Outer Cond Material & Plati	ing	Brass, Tri-M	etal		
Body Material & Plating	Brass, Tri-Met	tal Brass, Tri-M	etal		
Coupling Nut Material & Pla	ting Brass, Tri-Met	tal			

**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:

Example: FMCA1810-12 = 12 inches long cable

FMCA1810-100cm = 100 cm long cable





Low PIM 7/16 DIN Male to SMA Female Plenum Cable SPP-250-LLPL Coax in 12 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 7/16 DIN Male to SMA Female Plenum Cable SPP-250-LLPL Coax in 12 Inch with LF Solder FMCA1810-12

The information contained in this document is accurate to the best of our knowledge and representative of the part

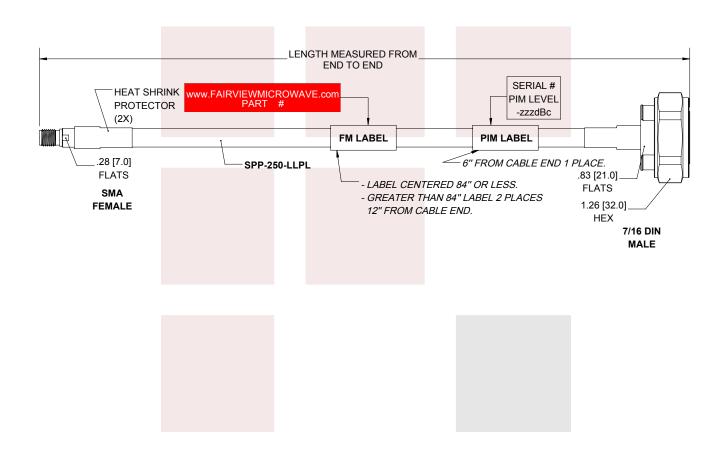
URL: https://www.fairviewmicrowave.com/7-16-din-male-sma-female-cable-spp250llpl-coax-fmca1810-12-p.aspx

described I	herein. It may be necessar	y to make modifica	ations to the part a	and/or th	ne documentation of the par	t, in order
to impleme	ent improvements. Fairview	Microwave reserv	es the right to mak	e such o	changes as required. Unless	otherwise
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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].						
Low PIM 7/16 DIN Male to SMA Female Plenum Cable SPP-250-LLPL Coax in 12 Inch with LF Solder	FMCA1810				CAGE CODE 3FKR5		
	CAD FILE 12/27/18	SHEET 1 OF 1	SCAL	E N/A	SIZE A	CN2379	