

# Plenum Low PIM 7/16 DIN Male to N Female Cable SPP-250-LLPL Coax in 36 Inch Using Times Microwave Parts

The 7/16 DIN male to type N female 36 inch cable using SPP-250-LLPL coax, part number FMCA1860-36, 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 FMCA1860-36 7/16 DIN male to type N female cable assembly operates to 5.8 GHz. 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	Typ 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	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.)	0.29	0.34	0.38	0.55	0.8	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.

## **Mechanical Specifications**

**Cable Assembly** 

Length\*

36 in [914.4 mm]

# FMCA1860-36 DATA SHEET



## **Configuration:**

- 7/16 DIN Male
- TC-250-716M-LP
- N Female
- TC-SPP250-NF-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





Cable

Cable Type
Impedance
Inner Conductor Type
Inner Conductor Material and Plating

Dielectric Type Number of Shields Shield Layer 1

Outer Conductor Material and Plating

Outer Conductor Diameter

Jacket Material

Jacket Diameter

SPP-250-LLPL 50 Ohms Solid Copper PTFE

Helically Corrugated Copper Tube

Copper

0.25 in [6.35 mm]

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	Connector 2		
Type	7/16 DIN Ma	ale	N Female		
Impedance	50 Ohms		50 Ohms		
Contact Material & Plating	Brass, Silve	r	Phosphor Bronze, Silver		
Contact Plating Spec.	200μ in		196μ in		
Dielectric Type	PTFE		PTFE		
Outer Cond Material & Plat	ting		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 & Plating Brass, Nickel					
Coupling Nut Plating Spec.	80 μin	80 μin			
Torque	22.127 ft-lbs 3	22.127 ft-lbs 30 Nm 10 in-lbs 1.13 N			

# **Environmental Specifications**

**Temperature**Operating Range

Storage Range Plenum Rating -55 to +200 deg C -55 to +200 deg C

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:	FMCA1860	-	XX	uu	
					cm = Centimeters <blank> = Inches Length</blank>
					Length

Example: FMCA1860-12 = 12 inches long cable FMCA1860-100cm = 100 cm long cable

Plenum Low PIM 7/16 DIN Male to N Female Cable SPP-250-LLPL Coax in 36 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 Cable SPP-250-LLPL Coax in 36 Inch Using Times Microwave Parts FMCA1860-36

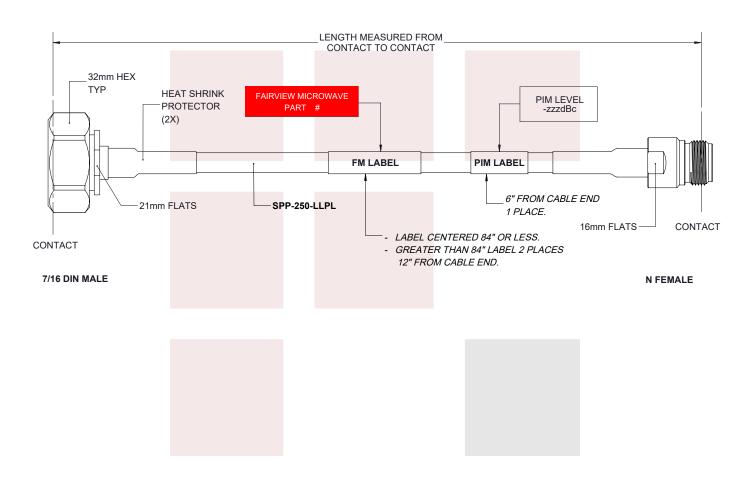
URL: https://www.fairviewmicrowave.com/low-pim-7-16-din-male-n-female-cable-spp250llpl-coax-fmca1860-36-p.aspx

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

.X ±0.2 .XX ±0.01 .XXX ±0.005

\*STANDARD TOLERANCES APPLY ONLY TO DIMENSIONS IN INCHES

Fairview Microwave an INFINIT® brand	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].						
TITLE	DWG NO FMCA1860			CAGE CODE 3FKR5			
Plenum Low PIM 7/16 DIN Male to N Female Cable SPP-250-LLPL Coax in 36 Inch Using Times Microwave Parts	CAD FILE 06/05/19	SHEET 1 OF 1	SCAL	E N/A	SIZE A	7361	