

## Plenum Low PIM N Female to NEX10 Male Cable SPP-250-LLPL Coax in 100 cm Using Times Microwave Parts

### FMCA1924-100CM

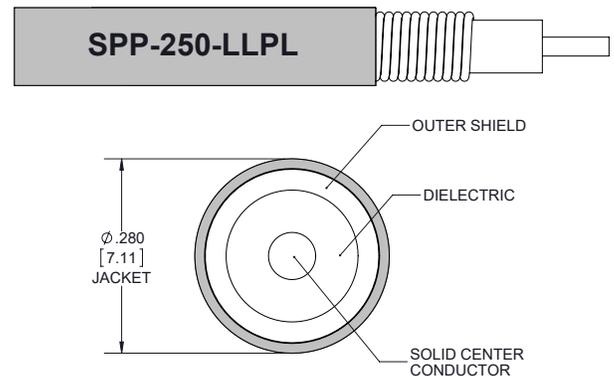


#### Configuration

- Connector 1: N Female TC-SPP250-NF-LP
- Connector 2: NEX10 Male TC-250-NX10M-LP
- Cable Type: SPP-250-LLPL
- Coax Flex Type: Corrugated

#### 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

#### Description

The type N female to NEX10 male 100 cm cable using SPP-250-LLPL coax, part number FMCA1924-100CM, from Fairview Microwave is in-stock and ships same day. This Fairview type N to NEX10 cable assembly has a female 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 FMCA1924-100CM type N female to NEX10 male 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	Minimum	Typical	Maximum	Units
Frequency Range	DC		5.8	GHz
VSWR			1.4:1	
Velocity of Propagation		76		%
RF Shielding	100			dB

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**Electrical Specifications**

Description	Minimum	Typical	Maximum	Units
Passive Intermodulation IM3 (2x43dBm Tones) at 850 MHz or 1900 MHz		-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]		Ohms/1000ft [Ohms/Km]

**Specifications by Frequency**

Description	F1	F2	F3	F4	F5	Units
Frequency	0.45	0.7	1	2.5	5.8	GHz
Insertion Loss (Max.)	0.3	0.35	0.39	0.57	0.84	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 dB for the female connector and  $0.1 \cdot \sqrt{FGHz}$  dB for the male connector.

**Mechanical Specifications**

**Cable Assembly**

Length 39.3701 in [100 cm]  
Width/Diameter .94 in [23.88 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 1  
Shield Layer 1 Helically Corrugated Copper Tube  
Outer Conductor 1 Material and Plating Copper  
Outer Conductor Diameter 0.25 in [6.35 mm]  
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]

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**Connectors**

Description	Connector 1	Connector 2
Type	N Female	NEX10 Male
Impedance	50 Ohms	50 Ohms
Configuration	Straight	Straight
Mating Cycles		500
Contact Material and Plating	Phosphor Bronze, Silver	Brass, Silver
Contact Plating Specification	196µ in	100 µin
Dielectric Type	PTFE	PTFE
Outer Conductor Material and Plating	Brass, Tri-Metal	
Outer Conductor Plating Specification	118µ in	
Body Material and Plating	Brass, Tri-Metal	Brass, Tri-Metal
Body Plating Specification	118µ in	100 µin
Coupling Nut Material and Plating		Brass, Tri-Metal
Coupling Nut Plating Specification		100 µin
Torque	10 in-lbs 1.13 Nm	13.28 in-lbs 1.5 Nm

**Environmental Specifications**

Operating Range Temperature	-55 to +200 deg C
Storage Range Temperature	-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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Typical Performance Data



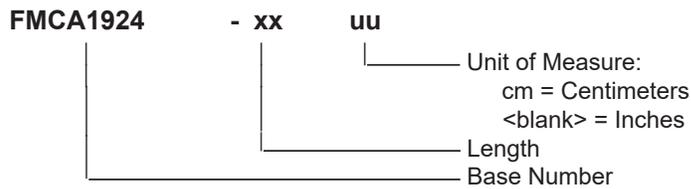
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**FMCA1924-100CM**

**How to Order**

Part Number Configuration:



Example: FMCA1924-12 = 12 inches long cable  
FMCA1924-100cm = 100 cm long cable

Plenum Low PIM N Female to NEX10 Male Cable SPP-250-LLPL Coax in 100 cm Using Times Microwave Parts from Fairview Microwave is in-stock and available to ship same-day. All of our RF/microwave products are available off-the-shelf from our ISO 9001:2008 certified facilities in Lewisville, Texas. Fairview Microwave is RF on-demand.

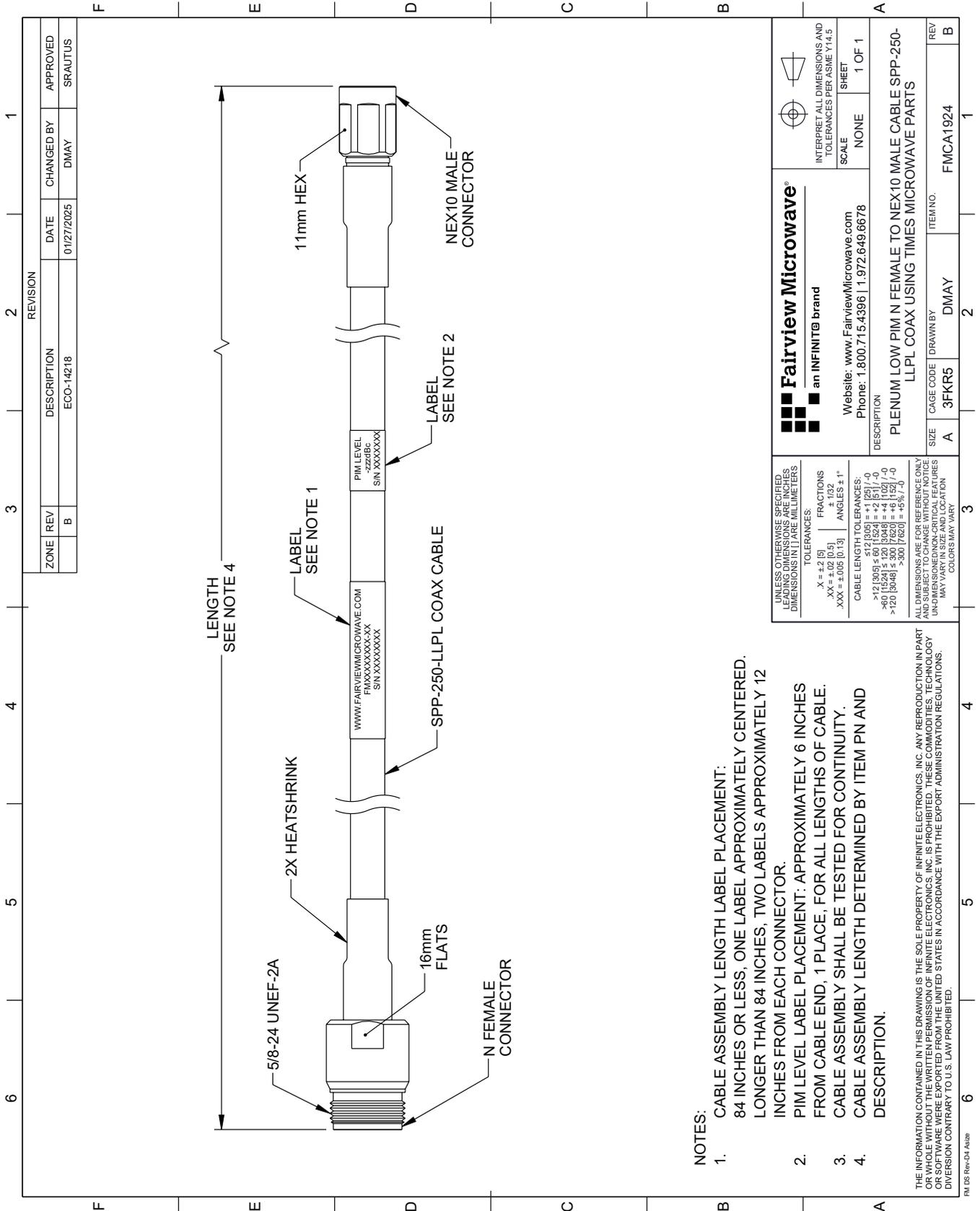
For additional information on this product, please click the following link: [Plenum Low PIM N Female to NEX10 Male Cable SPP-250-LLPL Coax in 100 cm Using Times Microwave Parts FMCA1924-100CM](https://www.fairviewmicrowave.com/low-pim-n-female-nex10-male-cable-spp250llpl-coax-fmca1924-100cm-p.aspx)

URL: <https://www.fairviewmicrowave.com/low-pim-n-female-nex10-male-cable-spp250llpl-coax-fmca1924-100cm-p.aspx>

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# FMCA1924-100CM CAD Drawing

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**NOTES:**

1. CABLE ASSEMBLY LENGTH LABEL PLACEMENT: 84 INCHES OR LESS, ONE LABEL APPROXIMATELY CENTERED. LONGER THAN 84 INCHES, TWO LABELS APPROXIMATELY 12 INCHES FROM EACH CONNECTOR.
2. PIM LEVEL LABEL PLACEMENT: APPROXIMATELY 6 INCHES FROM CABLE END, 1 PLACE, FOR ALL LENGTHS OF CABLE.
3. CABLE ASSEMBLY SHALL BE TESTED FOR CONTINUITY.
4. CABLE ASSEMBLY LENGTH DETERMINED BY ITEM PN AND DESCRIPTION.

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FM DS Rev-D4 Alt2b

REVISION		DATE	CHANGED BY	APPROVED	
ZONE	REV	DESCRIPTION	ECO-14218	DMAY	SRAUTUS
	B				

 <b>Fairview Microwave®</b> an INFINITIB® brand		Website: <a href="http://www.FairviewMicrowave.com">www.FairviewMicrowave.com</a> Phone: 1.800.715.4396   1.972.649.6678	INTERPRET ALL DIMENSIONS AND TOLERANCES PER ASME Y14.5 SCALE: NONE SHEET: 1 OF 1
UNLESS OTHERWISE SPECIFIED, LEADING DIMENSIONS ARE IN INCHES AND TRAILING DIMENSIONS ARE IN MILLIMETERS. TOLERANCES: .X = ±.2 (5) .XX = ±.02 (0.5) .XXX = ±.005 (0.13) FRACTIONS: ± 1/32 ANGLES ± 1°		CABLE LENGTH TOLERANCES: <12 [305] ≤ 60 [1524] = ±1 (25) / -0 >60 [1524] ≤ 120 [3048] = ±4 (102) / -0 >120 [3048] ≤ 300 [7620] = ±5% (1.4)	ALL DIMENSIONS ARE FOR REFERENCE ONLY. DIMENSIONS SHALL BE TO UNLESS OTHERWISE SPECIFIED. UNDIMENSIONS/NON-CRITICAL FEATURES MAY VARY IN SIZE AND LOCATION. COLORS MAY VARY.
DESCRIPTION	SIZE	CAGE CODE	ITEM NO.
PLENUM LOW PIM N FEMALE TO NEX10 MALE CABLE SPP-250-LLPL COAX USING TIMES MICROWAVE PARTS	A	3FKR5	DMAY
REV	B	FMCA1924	