

## Plenum Low PIM 7/16 DIN Male to NEX10 Male Cable SPP-250-LLPL Coax in 100 cm Using Times Microwave Parts



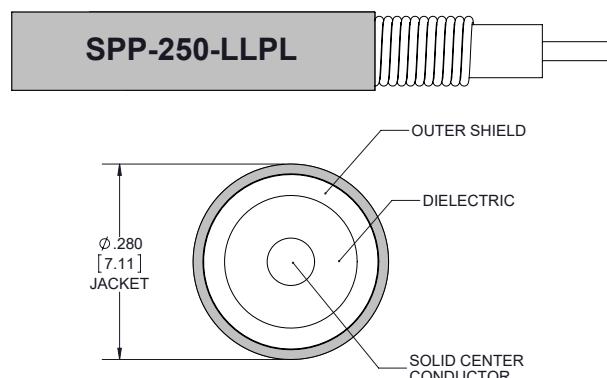
### FMCA1921-100CM

#### Configuration

- Connector 1: 7/16 DIN Male TC-250-716M-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 7/16 DIN male to NEX10 male 100 cm cable using SPP-250-LLPL coax, part number FMCA1921-100CM, from Fairview Microwave is in-stock and ships same day. This Fairview 7/16 DIN to NEX10 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 FMCA1921-100CM 7/16 DIN male 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		-165	-160	dBc
IM3 (2x43dBm Tones) at 850 MHz or 1900 MHz				
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.)	0.27	0.34	0.39	0.63	0.99	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  $0.1 * \text{SQRT}(F\text{GHz})$  dB per connector.

### Mechanical Specifications

#### Cable Assembly

Length	39.3701 in [100 cm]
Width/Diameter	1.14 in [28.96 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	7/16 DIN Male	NEX10 Male
Impedance	50 Ohms	50 Ohms
Configuration	Straight	Straight
Mating Cycles		500
Contact Material and Plating	Brass, Silver	Brass, Silver
Contact Plating Specification	200 $\mu$ in	100 $\mu$ in
Dielectric Type	PTFE	PTFE
Body Material and Plating	Brass, Tri-Metal	Brass, Tri-Metal
Body Plating Specification	80 $\mu$ in	100 $\mu$ in
Coupling Nut Material and Plating	Brass, Nickel	Brass, Tri-Metal
Coupling Nut Plating Specification	80 $\mu$ in	100 $\mu$ in
Torque	22.127 ft-lbs 30 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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## FMCA1921-100CM

### Typical Performance Data



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## FMCA1921-100CM

### How to Order

Part Number Configuration:

**FMCA1921** - **xx** **uu**

			Unit of Measure:
			cm = Centimeters
			<blank> = Inches
			Length
			Base Number

Example: FMCA1921-12 = 12 inches long cable  
FMCA1921-100cm = 100 cm long cable

Plenum Low PIM 7/16 DIN Male 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.

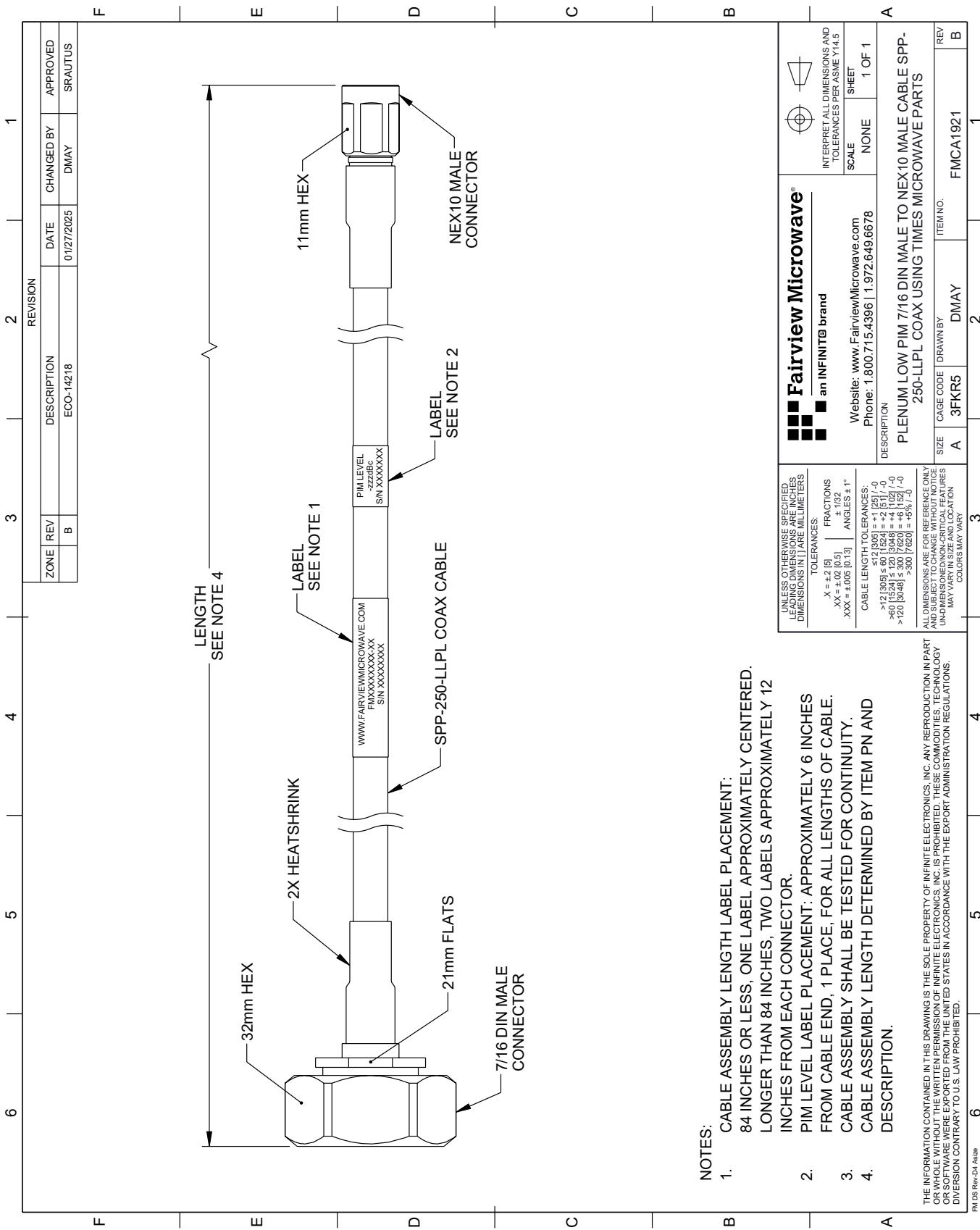
For additional information on this product, please click the following link: [Plenum Low PIM 7/16 DIN Male to NEX10 Male Cable SPP-250-LLPL Coax in 100 cm Using Times Microwave Parts FMCA1921-100CM](#)

URL: <https://www.fairviewmicrowave.com/low-pim-7-16-din-male-nex10-male-cable-spp250llpl-coax-fmca1921-100cm-p.aspx>

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# FMCA1921-100CM CAD Drawing

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Fairview Microwave®		PLEM LOW PIM 7/16 DIN MALE TO NEX10 MALE CABLE SPP-250-LLPL COAX USING TIMES MICROWAVE PARTS	
an INFINITE® brand		INTERPRET ALL DIMENSIONS AND TOLERANCES PER ASME Y14.5 SCALE NONE SHEET 1 OF 1	
DESCRIPTION	ITEM NO.	ITEM NO.	FMCA1921

SIZE	CAGE CODE	DRAWN BY	REV
A	3FKRS	DMAY	B

1	2	3	4
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