



#### FMCA1922-50CM

#### Configuration

- Connector 1: 7/16 DIN Male Right Angle TC-SPP250-716M-RA-LP
- Connector 2: NEX10 Male TC-250-NX10M-LP
- Cable Type: SPP-250-LLPLCoax 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

# SPP-250-LLPL OUTER SHIELD OUTER SHIELD OUTER SHIELD SOLID CENTER SOLID CENTER

PIM Testing

### **Applications**

- · General Purpose
- · Laboratory Use
- Low PIM Applications

- Distributed Antenna Systems (DAS)
- Plenum Installations
- Multi-Carrier Communication Systems

# Description

The RA 7/16 DIN male to NEX10 male 50 cm cable using SPP-250-LLPL coax, part number FMCA1922-50CM, 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 FMCA1922-50CM 7/16 DIN male to NEX10 male cable assembly operates to 5.8 GHz. The right angle 7/16 DIN interface on the SPP-250-LLPL cable allows for easier connections in tight spaces. 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	





#### FMCA1922-50CM

#### **Electrical Specifications**

Description	Minimum	Typical	Maximum	Units
Velocity of Propagation		76		%
RF Shielding	100			dB
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	0.25	0.5	1	2.5	5.8	GHz
Insertion Loss (Max.)	0.24	0.27	0.3	0.42	0.6	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 right angle connector and 0.1\*SQRT(FGHz) dB for the straight connector.

#### **Mechanical Specifications**

#### **Cable Assembly**

Length 19.685 in [500 mm] Width/Diameter 1.14 in [28.96 mm]

#### Cable

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

Dielectric Type **PTFE** Number of Shields

Shield Layer 1 Helically Corrugated Copper Tube Copper

Outer Conductor 1 Material and Plating

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]





## FMCA1922-50CM

#### **Connectors**

Description	Connector 1	Connector 2
Туре	7/16 DIN Male Right Angle	NEX10 Male
Impedance	50 Ohms	50 Ohms
Configuration	Right Angle	Straight
Mating Cycles		500
Contact Material and Plating	Brass, Silver	Brass, Silver
Contact Plating Specification	196μ in	100 μin
Dielectric Type	PTFE	PTFE
Body Material and Plating	Brass, Nickel	Brass, Tri-Metal
Body Plating Specification	118μ in	100 μin
Coupling Nut Material and Plating	Brass, Nickel	Brass, Tri-Metal
Coupling Nut Plating Specification	118μ in	100 μin
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.





## FMCA1922-50CM

#### **Typical Performance Data**

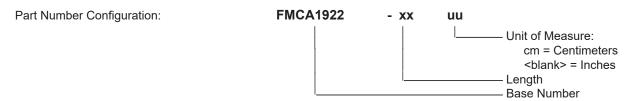






#### FMCA1922-50CM

#### **How to Order**



Example: FMCA1922-12 = 12 inches long cable FMCA1922-100cm = 100 cm long cable

Plenum Low PIM RA 7/16 DIN Male to NEX10 Male Cable SPP-250-LLPL Coax in 50 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 RA 7/16 DIN Male to NEX10 Male Cable SPP-250-LLPL Coax in 50 cm Using Times Microwave Parts FMCA1922-50CM

URL: https://www.fairviewmicrowave.com/low-pim-ra-7-16-din-male-nex10-male-cable-spp250llpl-coax-fmca1922-50cm-p.aspx

The information contained within 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 impliment 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 liability arising out of the use of any part or document.

## FMCA1922-50CM CAD Drawing

Plenum Low PIM RA 7/16 DIN Male to NEX10 Male Cable SPP-250-LLPL Coax in 50 cm Using Times Microwave Parts

