

## Plenum Low PIM 7/16 DIN Male to N Male Cable SPP-500-LLPL Coax in 24 Inch Using Times Microwave Parts



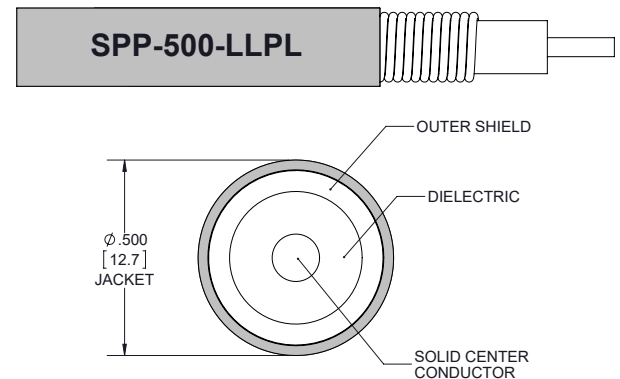
### FMCA2039-24

#### Configuration

- Connector 1: 7/16 DIN Male TC-SPP500-716M-LP
- Connector 2: N Male TC-SPP500-NM-LP
- Cable Type: SPP-500-LLPL
- Coax Flex Type: Corrugated

#### Features

- Max Frequency 5.8 GHz
- Low PIM: -160 dBc Max
- 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 type N male 24 inch cable using SPP-500-LLPL coax, part number FMCA2039-24, from Fairview Microwave is in-stock and ships same day. This Fairview 7/16 DIN to type N cable assembly has a male to male gender configuration with 50 ohm corrugated SPP-500-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 FMCA2039-24 7/16 DIN male to type N 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		%

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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		26.2 [85.96]		pF/ft [pF/m]

**Specifications by Frequency**

Description	F1	F2	F3	F4	F5	Units
Frequency	0.45	0.7	1	2.5	5.8	GHz
Insertion Loss (Max.)	0.22	0.25	0.27	0.38	0.53	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 7/16 DIN connector and 0.1\*SQRT(FGHz) dB for the N male connector.

**Mechanical Specifications**

**Cable Assembly**

Length 24 in [609.6 mm]  
Width/Diameter 0 in [0 mm]

**Cable**

Cable Type SPP-500-LLPL  
Impedance 50 Ohms  
Inner Conductor Type Solid  
Inner Conductor Material and Plating Copper Clad Aluminum  
Dielectric Type PTFE  
Number of Shields 1  
Shield Layer 1 Helically Corrugated Copper Tube  
Outer Conductor 1 Material and Plating Copper  
Jacket Material FEP, Blue  
Jacket Diameter 0.5 in [12.7 mm]  
One Time Minimum Bend Radius 1.5 in [38.1 mm]

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**Connectors**

Description	Connector 1	Connector 2
Type	7/16 DIN Male	N Male
Impedance	50 Ohms	50 Ohms
Configuration	Straight	Straight
Contact Material and Plating	Brass, Silver	Brass, Silver
Contact Plating Specification	196 µin	200 µin
Dielectric Type	PTFE	PTFE
Outer Conductor Material and Plating	Brass, Tri-Metal	
Outer Conductor Plating Specification	118 µin	
Body Material and Plating		Brass, Tri-Metal
Body Plating Specification		80 µin
Coupling Nut Material and Plating	Brass, Tri-Metal	Brass, Tri-Metal
Coupling Nut Plating Specification	200 µin	80 µin
Torque	22.127 ft-lbs 30 Nm	10 in-lbs 1.13 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



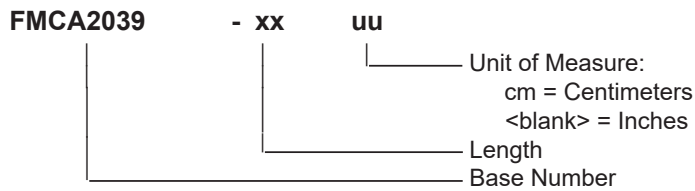
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**FMCA2039-24**

**How to Order**

Part Number Configuration:



Example: FMCA2039-12 = 12 inches long cable  
FMCA2039-100cm = 100 cm long cable

Plenum Low PIM 7/16 DIN Male to N Male Cable SPP-500-LLPL Coax in 24 Inch 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.

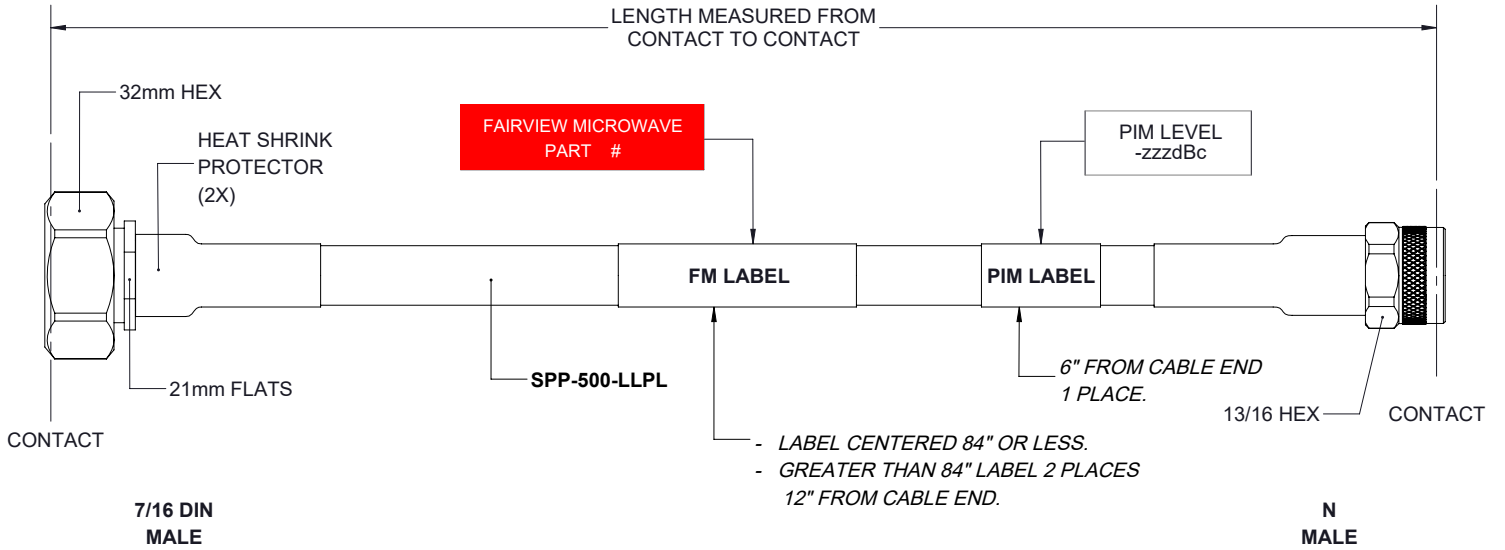
For additional information on this product, please click the following link: [Plenum Low PIM 7/16 DIN Male to N Male Cable SPP-500-LLPL Coax in 24 Inch Using Times Microwave Parts FMCA2039-24](https://www.fairviewmicrowave.com/low-pim-7-16-din-male-n-male-cable-spp500llpl-coax-fmca2039-24-p.aspx)

URL: <https://www.fairviewmicrowave.com/low-pim-7-16-din-male-n-male-cable-spp500llpl-coax-fmca2039-24-p.aspx>

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# FMCA2039-24 CAD Drawing


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### STANDARD TOLERANCES

.X ±0.2  
.XX ±0.01  
.XXX ±0.005

\*STANDARD TOLERANCES APPLY ONLY TO DIMENSIONS IN INCHES

 <b>Fairview Microwave</b> an INFINIT <sup>®</sup> 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].						
	DWG NO <b>FMCA2039</b>			CAGE CODE <b>3FKR5</b>			
CAD FILE 06/05/19		SHEET 1 OF 1		SCALE N/A		SIZE A	7361