

#### **FMCA2040**

#### Configuration

Connector 1: N Male TC-SPP500-NM-LP
 Connector 2: N Male TC-SPP500-NM-LP

Cable Type: SPP-500-LLPLCoax 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

# SPP-500-LLPL OUTER SHIELD DIELECTRIC [12.7] JACKET SOLID CENTER

#### **Applications**

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

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

#### · PIM Testing

#### **Description**

The type N male to type N male cable using SPP-500-LLPL coax, part number FMCA2040, from Fairview Microwave is in-stock and ships same day. This Fairview type N 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 FMCA2040 type N 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 superflexible 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		%





#### **FMCA2040**

#### **Electrical Specifications**

Description	Minimum	Typical	Maximum	Units
Passive Intermodulation		-165	-160	dBc
IM3 (2x43dBm Tones) at 850 MHz or 1900 MHz				
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.)	0.023	0.029	0.035	0.058	0.092	dB/ft
	0.08	0.1	0.11	0.19	0.3	dB/m

**Electrical Specification Notes:** 

PIM test results vary between cables

Insertion Loss does not include the loss of the connectors. Insertion Loss is estimated as 0.1\*SQRT(FGHz) dB per connector.

#### **Mechanical Specifications**

#### **Cable Assembly**

Weight 0.25 lbs [113.4 g]

Cable

Cable Type Impedance Inner Conductor Type

Inner Conductor Material and Plating

Dielectric Type Number of Shields Shield Layer 1

Outer Conductor 1 Material and Plating

Jacket Material Jacket Diameter

One Time Minimum Bend Radius

SPP-500-LLPL 50 Ohms Solid Copper Clad Aluminum

**PTFE** 

Helically Corrugated Copper Tube

Copper FEP, Blue 0.5 in [12.7 mm] 1.5 in [38.1 mm]







#### **FMCA2040**

#### **Connectors**

Description	Connector 1	Connector 2
Туре	N Male	N Male
Impedance	50 Ohms	50 Ohms
Configuration	Straight	Straight
Contact Material and Plating	Brass, Silver	Brass, Silver
Contact Plating Specification	200 μin	200 μin
Dielectric Type	PTFE	PTFE
Body Material and Plating	Brass, Tri-Metal	Brass, Tri-Metal
Body Plating Specification	80 μin	80 μin
Coupling Nut Material and Plating	Brass, Tri-Metal	Brass, Tri-Metal
Coupling Nut Plating Specification	80 μin	80 μin
Torque	10 in-lbs 1.13 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.



### **FMCA2040**

### **Typical Performance Data**







#### **FMCA2040**

#### **How to Order**



Example: FMCA2040-12 = 12 inches long cable FMCA2040-100cm = 100 cm long cable

Plenum Low PIM N Male to N Male Cable SPP-500-LLPL Coax 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 Male to N Male Cable SPP-500-LLPL Coax Using Times Microwave Parts FMCA2040

URL: https://www.fairviewmicrowave.com/low-pim-n-male-n-male-cable-spp500llpl-coax-fmca2040-p.aspx

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