

FMCA2038-100CM

Configuration

Connector 1: 7/16 DIN Male TC-SPP500-716M-LP
 Connector 2: 7/16 DIN Male TC-SPP500-716M-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 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 7/16 DIN male to 7/16 DIN male 100 cm cable using SPP-500-LLPL coax, part number FMCA2038-100CM, from Fairview Microwave is in-stock and ships same day. This Fairview 7/16 DIN to 7/16 DIN 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 FMCA2038-100CM 7/16 DIN male to 7/16 DIN 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		-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.)	0.28	0.3	0.32	0.4	0.51	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 per connector.

Mechanical Specifications

Cable Assembly

Length 39.37 in [100 cm] Width/Diameter 1.14 in [28.96 mm]

Cable

SPP-500-LLPL Cable Type Impedance 50 Ohms Inner Conductor Type Solid

Inner Conductor Material and Plating Copper Clad Aluminum

PTFE Dielectric Type Number of Shields

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
Туре	7/16 DIN Male	7/16 DIN Male
Impedance	50 Ohms	50 Ohms
Configuration	Straight	Straight
Contact Material and Plating	Brass, Silver	Brass, Silver
Contact Plating Specification	196 µin	196 µin
Dielectric Type	PTFE	PTFE
Outer Conductor Material and Plating	Brass, Tri-Metal	Brass, Tri-Metal
Outer Conductor Plating Specification	118 μin	118 µin
Coupling Nut Material and Plating	Brass, Tri-Metal	Brass, Tri-Metal
Coupling Nut Plating Specification	200 μin	200 μin
Torque	22.127 ft-lbs 30 Nm	22.127 ft-lbs 30 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.



FMCA2038-100CM



Typical Performance Data





FMCA2038-100CM

How to Order



Example: FMCA2038-12 = 12 inches long cable FMCA2038-100cm = 100 cm long cable

Plenum Low PIM 7/16 DIN Male to 7/16 DIN Male Cable SPP-500-LLPL Coax in 100 cm Using Times Microwave Parts and RoHS 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 7/16 DIN Male Cable SPP-500-LLPL Coax in 100 cm Using Times Microwave Parts and RoHS FMCA2038-100CM

URL: https://www.fairviewmicrowave.com/low-pim-7-16-din-male-7-16-din-male-cable-spp500llpl-coax-fmca2038-100cm-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.

FMCA2038-100CM CAD Drawing

Plenum Low PIM 7/16 DIN Male to 7/16 DIN Male Cable SPP-500-LLPL Coax in 100 cm Using Times Microwave Parts and RoHS

