

50 FT Plenum Rated 4.3-10 to 7/16 DIN M/M
SPP-500-LLPL Low PIM Cable Jumper



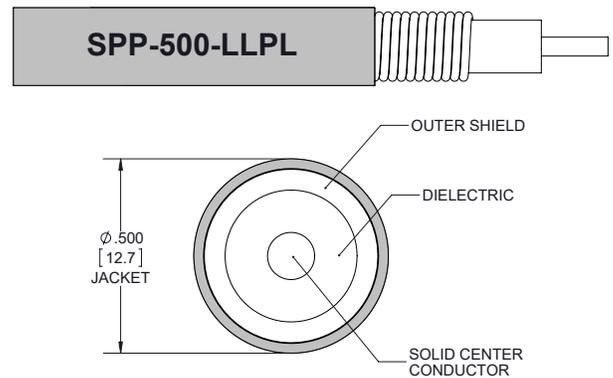
CASPP500LLPL002-50FT

Configuration

- Connector 1: 4.3-10 Male
- Connector 2: 7/16 DIN Male
- Cable Type: SPP-500-LLPL
- Coax Flex Type: Corrugated

Features

- Max Frequency 5.8 GHz
- Low PIM: -160 dBc Max
- UL 910 Plenum Rated
- FEP Jacket
- Shielding Effectivity > 100 dB
- 100% Tested with PIM Test Results Marked on Cable
- 1.25 Inch Minimum Bend Radius
- Low Loss with Excellent VSWR



Applications

- Distributed Antennas Systems (DAS)
- Low PIM Applications
- Plenum Installations
- Multi-Carrier Communication Systems

Description

PolyPhaser CASPP500LLPL002-50FT is a 50 FT Plenum Rated 4.3-10 to 7/16 DIN M/M SPP-500-LLPL Low PIM Cable Jumper built using high quality components by skilled technicians to ensure a reliable product. The 4.3-10 Male to 7/16 DIN Male jumper connections are designed to industry standard interface dimensions to ensure superior performance. These low PIM corrugated cable assemblies are durable and plenum rated for applications that require these parameters. All PolyPhaser cable assemblies are available for same day shipment to fulfill your urgent needs. This high-quality RF coaxial assembly is perfect in many RF Interconnect applications such as low PIM applications, distributed antenna systems (DAS), plenum installations, and many other RF systems. The CASPP500LLPL002-50FT 4.3-10 to 7/16 DIN low PIM cable assembly is the perfect companion to PolyPhaser line of products, particularly when used as an antenna jumper.

The half inch low PIM plenum rated coax used in these 4.3-10 to 7/16 DIN assemblies is a .500 inch diameter copper corrugated coax with a blue FEP jacket. This cable's PTFE dielectric is low loss material with a phase velocity of 76% and offers excellent passive intermodulation (PIM) performance better than -160 dBc. The construction of the half inch copper corrugated jumper results in a minimum bend radius of 1.25 inches. The cable assembly's combination of 4.3-10 to 7/16 DIN M/M and Times Microwave's SPP-500-LLPL low PIM plenum rated cable supports a maximum operation frequency of 5.8 GHz. Each cable assembly is installed with heat shrink booting on each end and a PIM label with the measured PIM level. You can find detailed performance specifications in the product datasheet. All PolyPhaser assemblies are tested and inspected prior to shipping.

Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	DC		5.8	GHz
VSWR			1.4:1	
Velocity of Propagation		83		%
Passive Intermodulation		-165	-160	dBc
IM3 (2x43dBm Tones) at 850 MHz or 1900 MHz				

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Electrical Specifications

Description	Minimum	Typical	Maximum	Units
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.)	1.31	1.63	1.95	3.15	4.94	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 $0.1 \cdot \sqrt{\text{FGHz}}$ dB per connector.

Mechanical Specifications

Cable Assembly

Length	600 in [15.24 m]
Weight	3.83 lbs [1.74 Kg]

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	4.3-10 Male	7/16 DIN Male
Impedance	50 Ohms	50 Ohms
Configuration	Straight	Straight
Contact Material and Plating	Brass, Silver	Brass, Silver
Contact Plating Specification	200 µin	196 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	80 µin	200 µin
Torque	44.25 in-lbs 5 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.

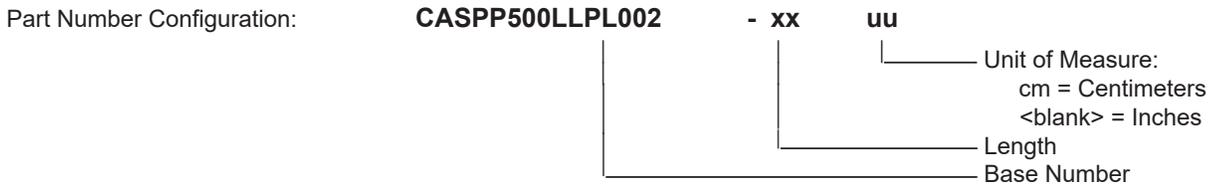
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Typical Performance Data

How to Order



Example: CASPP500LLPL002-12 = 12 inches long cable
 CASPP500LLPL002-100cm = 100 cm long cable

PolyPhaser protects and increases the reliability of global RF communications networks, including transportation, telecommunications, defense, security and industrial applications, with superior RF surge protection technologies including DC Block, DC Pass and Ultra Low PIM. Backed by responsive service and expert technical support PolyPhaser continually expands its product offering and services to serve engineers' urgent needs for RF components in mission critical communication networks.

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [50 FT Plenum Rated 4.3-10 to 7/16 DIN M/M SPP-500-LLPL Low PIM Cable Jumper CASPP500LLPL002-50FT](https://www.polyphaser.com/50-ft-plenum-rated-4.3-10-to-7-16-din-m-m-spp-500-llpl-low-pim-cable-jumper-caspp500llpl002-50ft)

URL: <https://www.polyphaser.com/50-ft-plenum-rated-4.3-10-to-7-16-din-m-m-spp-500-llpl-low-pim-cable-jumper-p.aspx>

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CASPP500LLPL002-50FT CAD Drawing

50 FT Plenum Rated 4.3-10 to 7/16 DIN M/M SPP-500-LLPL Low PIM Cable Jumper

REVISIONS		
REV.	DESCRIPTION	DATE
A	INITIAL RELEASE	9/16/2020
		APPROVED SELLIS

LENGTH MEASURED FROM CONTACT TO CONTACT

CONTACT
7/16 DIN MALE

4.3-10 MALE

NOTES:

- CABLES 84" AND UNDER HAVE 1 LABEL CENTERED. CABLES OVER 84" HAVE 2 LABELS, ONE AT EACH END 12.0" FROM THE END OF THE CONNECTOR.
- 6" FROM CABLE END 1 PLACE FOR ALL LENGTHS OF CABLE.

<p>UNLESS OTHERWISE SPECIFIED LEADING DIMENSIONS ARE INCHES DIMENSIONS IN [] ARE MILLIMETERS</p> <p>TOLERANCES: X = ±.2 [5.08] FRACTIONS ±.132 .XX = ±.02 [.51] ANGLES ± 1° .XXX = ±.005 [.13]</p> <p>CABLE LENGTH (L) TOLERANCES: L ≤ 12 [305] = ±1.25 [/ 0] 12 [305] < L ≤ 60 [1524] = ±2.61 [/ 0] 60 [1524] < L ≤ 120 [3048] = ±4.10 [/ 0] 120 [3048] < L ≤ 300 [7620] = ±6.15 [/ 0] 300 [7620] < L = ±5.81 [/ 0]</p> <p>ALL DIMENSIONS SHOWN ARE FOR REFERENCE ONLY.</p>	<p>THIRD-ANGLE PROJECTION</p> <p>THE INFORMATION AND DIMENSIONS SHOWN ON THIS DRAWING ARE THE PROPERTY OF POLYPHASER, INC. ALL RIGHTS RESERVED.</p> <p>SHEET 1 OF 1</p> <p>SCALE N/A</p>
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<p>PolyPhaser an INFINITE brand</p> <p>10701 Airport Road, Hayden, Idaho 83835, USA Phone: 1.208.635.6400 1.800.882.9110 Fax: 1.208.762.6133 Website: www.PolyPhaser.com E-mail: CustomerService@PolyPhaser.com</p>	<p>SIZE A CAGE CODE 30992 DRAWN BY K. DANG ITEM NO. CASPP500LLPL002 REV. A</p>
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