

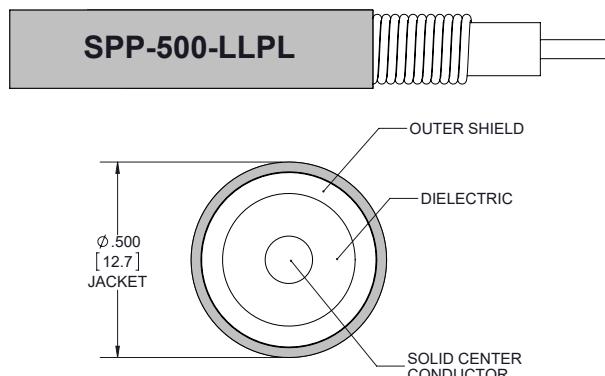
10 M Plenum Rated 4.3-10 to 7/16 DIN M/M
SPP-500-LLPL Low PIM Cable Jumper



CASPP500LLPL002-10M

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 CASPP500LLPL002-10M is a 10 M 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 CASPP500LLPL002-10M 4.3-18 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 4.3-18 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 4.3-18 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 |

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



CASPP500LLPL002-10M

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.) | 0.92 | 1.13 | 1.34 | 2.16 | 3.35 | 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 $0.1 * \text{SQRT}(F\text{GHz})$ dB per connector.

Mechanical Specifications

Cable Assembly

| | |
|--------|-------------------|
| Length | 393.7 in [10 m] |
| Weight | 2.6 lbs [1.18 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] |

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



CASPP500LLPL002-10M

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 μ in | 196 μ in |
| Dielectric Type | PTFE | PTFE |
| Outer Conductor Material and Plating | | Brass, Tri-Metal |
| Outer Conductor Plating Specification | | 118 μ in |
| Body Material and Plating | Brass, Tri-Metal | |
| Body Plating Specification | 80 μ in | |
| Coupling Nut Material and Plating | Brass, Tri-Metal | Brass, Tri-Metal |
| Coupling Nut Plating Specification | 80 μ in | 200 μ in |
| 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.

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



CASPP500LLPL002-10M

Typical Performance Data

How to Order

Part Number Configuration:

CASPP500LLPL002 - **xx** **uu**

Unit of Measure:
cm = Centimeters
<blank> = Inches

Length
Base Number

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: [10 M Plenum Rated 4.3-10 to 7/16 DIN M/M SPP-500-LLPL Low PIM Cable Jumper CASPP500LLPL002-10M](#)

URL: <https://www.polyphaser.com/10-m-plenum-rated-4.3-10-to-7-16-din-m-m-spp-500-llpl-low-pim-cable-jumper-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 implement improvements. PolyPhaser reserves the right to make such changes as required. Unless otherwise stated, all specifications are nominal. PolyPhaser does not make any representation or warranty regarding the suitability of the part described herein for any particular purpose, and PolyPhaser does not assume liability arising out of the use of any part or document.

CASPP500LLPL002-10M CAD Drawing

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

