

1 M Outdoor Rated 4.3-10 to 7/16 DIN M/M SPO-500 Low PIM Cable Jumper



CASPO500001-1M

Configuration

Connector 1: 4.3-10 MaleConnector 2: 7/16 DIN Male

· Cable Type: SPO-375

Features

• Max Frequency 5.8 GHz

. Low PIM: -160 dBc Max

FRPE 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

- · Outdoor Installations
- · Multi-Carrier Communication Systems

Description

PolyPhaser CASPO500001-1M is a 1 M Outdoor Rated 4.3-10 to 7/16 DIN M/M SPO-500 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 outdoor 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 outdoor installations, low PIM applications, distributed antenna systems (DAS), and many other RF systems. The CASPO500001-1M 4.3-17 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 outdoor rated coax used in these 4.3-17 to 7/16 DIN assemblies is a .500 inch diameter copper corrugated coax with a black FRPE jacket. This cable's foam PE dielectric is low loss material with a phase velocity of 83% 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 4.3-17 to 7/16 DIN M/M and Times Microwave's SPO-507 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.

OUTER SHIELD

OUTER SHIELD

DIELECTRIC

SOLID CENTER
CONDUCTOR

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: 1 M Outdoor Rated 4.3-10 to 7/16 DIN M/M SPO-500 Low PIM Cable Jumper CASPO500001-1M



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Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	DC		6	GHz
VSWR			1.4:1	
Velocity of Propagation		83		%
Passive Intermodulation			-158	dBc
Capacitance		24 [78.74]		pF/ft [pF/m]

Specifications by Frequency

Description	F1	F2	F3	F4	F5	Units
Frequency	0.5	1	2	6		GHz
Insertion Loss (Max.)	0.22	0.31	0.45	0.8		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*SQRT(FGHz) dB per connector.

Mechanical Specifications

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 Length
 39.37 in [100 cm]

 Diameter
 1.14 in [28.96 mm]

 Weight
 0.63 lbs [285.76 g]

Cable

Cable Type SPO-375
Impedance 50 Ohms
Inner Conductor Type Solid

Inner Conductor Material and Plating Copper Clad Aluminum

Dielectric Type Foam PE

Number of Shields

Shield Layer 1 Helically Corrugated Copper Tube

Outer Conductor Material and Plating Copper Jacket Material PE, Black

Jacket Diameter 0.53 in [13.46 mm]

One Time Minimum Bend Radius 2.25 in [57.15 mm]

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Connectors

Description	Connector 1	Connector 2	
Туре	4.3-10 Male	7/16 DIN Male	
Impedance	50 Ohms	50 Ohms	
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	

Environmental Specifications

Temperature

Operating Range

-40 to +85 deg C

Compliance Certifications

Plotted and Other Data

Notes:

Values at 25°C, sea level.

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.

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URL: https://www.polyphaser.com/1-m-outdoor-rated-4.3-10-to-7-16-din-m-m-spo-500-low-pim-cable-jumper-p.aspx

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CASPO500001-1M CAD Drawing

