

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

CASPO500003-1M

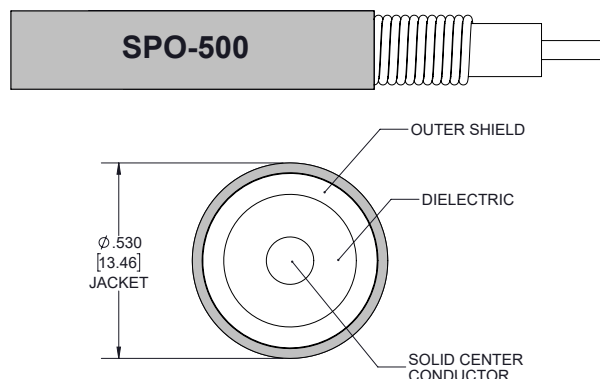


Configuration

- Connector 1: 7/16 DIN Male
- Connector 2: 7/16 DIN Male
- Cable Type: SPO-500

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)
- Outdoor Installations
- Low PIM Applications
- Multi-Carrier Communication Systems

Description

PolyPhaser CASPO500003-1M is a 1 M Outdoor Rated 7/16 DIN 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 7/16 DIN 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, distributed antenna systems (DAS), low PIM applications, and many other RF systems. The CASPO500003-1M 7/16 DIN 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 7/16 DIN 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 7/16 DIN 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.

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 7/16 DIN to 7/16 DIN M/M SPO-500 Low PIM Cable Jumper CASPO500003-1M](#)

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Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	DC		5.8	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	0.45	0.7	1	2.5	5.8	GHz
Insertion Loss (Max.)	1.05	1.3	1.59	2.56	4.18	dB

Electrical Specification Notes:

The Insertion Loss data above is based on the performance specifications of the coax cable and connectors used in this assembly. The Insertion Loss is estimated as $0.1 \times \sqrt{\text{FGHz}}$ dB per connector.

Mechanical Specifications

Size

Length	39.37 in [100 cm]
Diameter	0.94 in [23.88 mm]
Weight	0.678 lbs [307.54 g]

Cable

Cable Type	SPO-500
Impedance	50 Ohms
Inner Conductor Type	Solid
Inner Conductor Material and Plating	Copper Clad Aluminum
Dielectric Type	Foam PE
Number of Shields	1
Shield Layer 1	Helically Corrugated Copper Tube
Outer Conductor Material and Plating	Copper
Outer Conductor Plating Specification	Corrugated
Outer Conductor Diameter	0.48 in [12.19 mm]
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
Type	7/16 DIN 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
Torque	22.127 ft-lbs [30 Nm]	22.127 ft-lbs [30 Nm]
Seal Gasket Material	Silicone Rubber	Silicone Rubber

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-7-16-din-to-7-16-din-m-m-spo-500-low-pim-cable-jumper-p.aspx>

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CASPO500003-1M CAD Drawing

