



OUTER SHIELD

DIELECTRIC

CASPO250010-50FT

Configuration

• Connector 1: 7/16 DIN Male · Connector 2: N Female

· Cable Type: SPO-250

Features

· Max Frequency 5.8 GHz

. Low PIM: -160 dBc Max

Applications

· Low PIM Applications

• Multi-Carrier Communication Systems

Description

PolyPhaser CASPO250010-50FT is a 50 FT Outdoor Rated Type N to 7/16 DIN F/M SPO-250 Low PIM Cable Jumper built using high quality components by skilled technicians to ensure a reliable product. The Type N Female 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 low PIM applications, distributed antenna systems (DAS), outdoor installations, and many other RF systems. The CASPO250010-50FT Type N 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 quarter inch low PIM outdoor rated coax used in these Type N to 7/16 DIN assemblies is a .250 inch diameter copper corrugated coax with a black PE 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 quarter inch copper corrugated jumper results in a minimum bend radius of 1.25 inches. The cable assembly's combination of Type N to 7/16 DIN F/M and Times Microwave's SPO-256 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.

7.69 PE Jacket JACKET • Shielding Effectivity > 100 dB • 100% Tested with PIM Test Results Marked on Cable SOLID CENTER CONDUCTOR • 1.25 Inch Minimum Bend Radius · Low Loss with Excellent VSWR Distributed Antennas Systems (DAS) · Outdoor Installations

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: 50 FT Outdoor Rated Type N to 7/16 DIN F/M SPO-250 Low PIM Cable Jumper CASPO250010-50FT

SPO-250

Ø.303





CASPO250010-50FT

Electrical Specifications

Minimum	Typical	Maximum	Units
DC		5.8	GHz
		1.4:1	
	83		%
100			dB
		-160	dBc
	24 [78.74]		pF/ft [pF/m]
	0.054 [0.18]		uH/ft [uH/m]
	DC	DC 83 100 24 [78.74]	DC 5.8 1.4:1 83 100 -160

Specifications by Frequency

Description	F1	F2	F3	F4	F5	Units
Frequency	0.25	0.5	1	2.5	5.8	GHz
Insertion Loss (Max.)	1.9	2.34	3.44	5.37	8.53	dB
VSWR (Max.)	1.4:1	1.4:1	1.4:1	1.4:1	1.4:1	
Return Loss (Max.)	15.56	15.563	15.563	15.563	15.563	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 dB per connector.

Mechanical Specifications

Size

Length 600 in [15.24 m] Diameter 1.14 in [28.96 mm] Weight 2.853 lbs [1.29 Kg]

Cable

Cable Type SPO-250 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

Outer Conductor Diameter 0.252 in [6.4 mm]

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Jacket Material PE, Black

Jacket Diameter 0.303 in [7.7 mm]

One Time Minimum Bend Radius 1.25 in [31.75 mm]
Bending Moment 0.5 lbs-ft [0.68 N-m]

Connectors

Description	Connector 1	Connector 2	
Туре	7/16 DIN Male	N Female	
Impedance	50 Ohms	50 Ohms	
Contact Material and Plating	Brass, Silver	Phosphor Bronze, 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	Brass, Tri-Metal	
Body Plating Specification	80 μin	118 µin	
Coupling Nut Material and Plating	Brass, Nickel		
Coupling Nut Plating Specification	80 µin		
Torque	6 in-lbs [0.68 Nm]	6 in-lbs [0.68 Nm]	
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Environmental Specifications

Temperature

Operating Range -40 to +85 deg C Storage Range -40 to +85 deg C

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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/50-ft-outdoor-rated-type-n-to-7-16-din-f-m-spo-250-low-pim-cable-jumper-p.aspx

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CASPO250010-50FT CAD Drawing

