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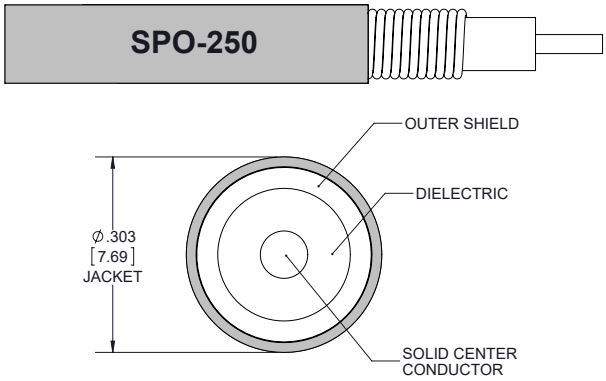
10 M Outdoor Rated 4.3-10 to 4.3-10 M/M SPO-250 Low PIM Cable Jumper

CASPO250008-10M

Configuration

- Connector 1: 4.3-10 Male
- Connector 2: 4.3-10 Male
- Cable Type: SPO-250



Features

- Max Frequency 5.8 GHz
- Low PIM: -160 dBc Max
- PE 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 CASPO250008-10M is a 10 M Outdoor Rated 4.3-10 to 4.3-10 M/M SPO-250 Low PIM Cable Jumper built using high quality components by skilled technicians to ensure a reliable product. The 4.3-10 Male to 4.3-10 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 distributed antenna systems (DAS), low PIM applications, outdoor installations, and many other RF systems. The CASPO250008-10M 4.3-18 to 4.3-18 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 4.3-18 to 4.3-18 assemblies is a .250 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 quarter inch copper corrugated jumper results in a minimum bend radius of 1.25 inches. The cable assembly's combination of 4.3-18 to 4.3-18 M/M and Times Microwave's SPO-258 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:
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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		-165	-160	dBc
Capacitance		24 [78.74]		pF/ft [pF/m]
Inductance		0.054 [0.18]		uH/ft [uH/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.)	1.47	1.84	2.23	3.69	5.96	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

Size

Length	393.7 in [10 m]
Diameter	0.87 in [22.1 mm]
Weight	1.89 lbs [857.29 g]

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	1
Shield Layer 1	Helically Corrugated Copper Tube
Outer Conductor Material and Plating	Copper
Jacket Material	PE, Black
Jacket Diameter	0.303 in [7.7 mm]
One Time Minimum Bend Radius	1.25 in [31.75 mm]

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Bending Moment	0.5 lbs-ft [0.68 N-m]

Connectors

Description	Connector 1	Connector 2
Type	4.3-10 Male	4.3-10 Male
Impedance	50 Ohms	50 Ohms
Contact Material and Plating	Phosphor Bronze, Silver	Phosphor Bronze, 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	44.25 in-lbs [5 Nm]	44.25 in-lbs [5 Nm]

Environmental Specifications

Temperature

Operating Range	-55 to +200 deg C
Storage Range	-55 to +200 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/10-m-outdoor-rated-4.3-10-to-4.3-10-m-m-spo-250-low-pim-cable-jumper-p.aspx

The information contained in this document is accurate to the best of our knowledge and representative of the part described herein. It may be necessary to

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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 any liability arising out of the use of any part or documentation.

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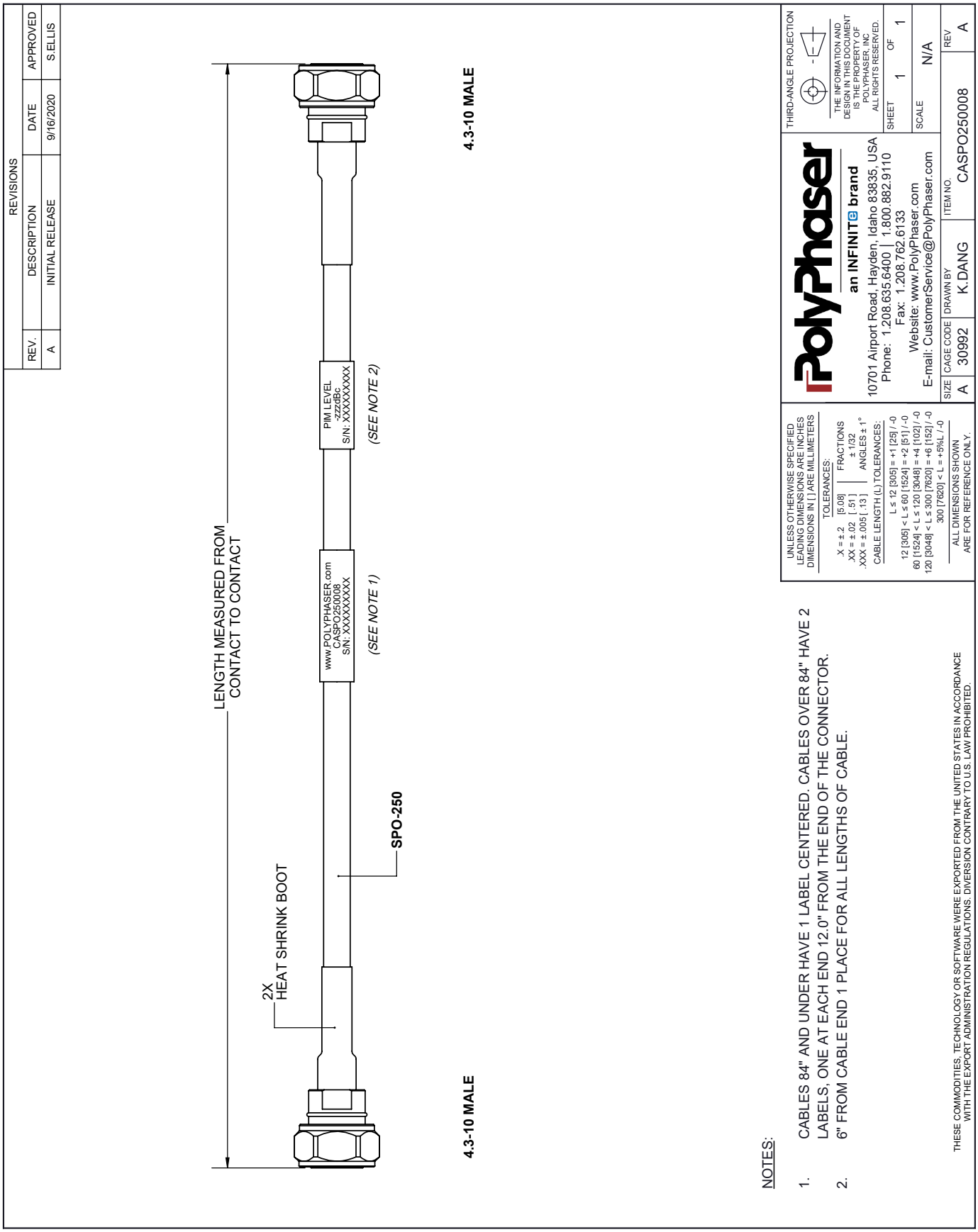
CASPO250008-10M CAD Drawing



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