

10 FT Outdoor Rated 4.3-10 to 4.3-10 M Right Angle/F
SPO-250 Low PIM Cable Jumper



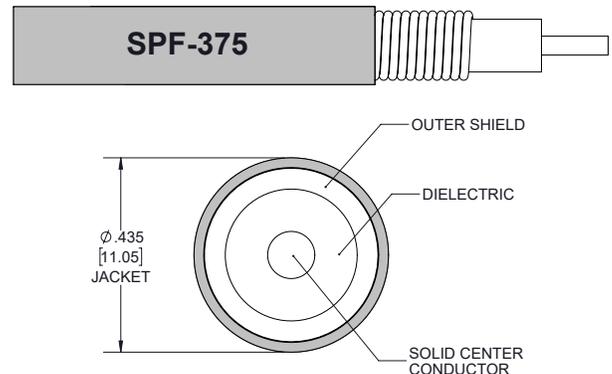
CASPO250001-10FT

Configuration

- Connector 1: 4.3-10 Male Right Angle
- Connector 2: 4.3-10 Female
- Cable Type: SPF-375

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

Description

PolyPhaser CASPO250001-10FT is a 10 FT Outdoor Rated 4.3-10 to 4.3-10 M Right Angle/F SPO-250 Low PIM Cable Jumper built using high quality components by skilled technicians to ensure a reliable product. The 4.3-10 Male Right Angle to 4.3-10 Female 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 CASPO250001-10FT 4.3-14 to 4.3-14 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 4.3-14 to 4.3-14 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 4.3-14 to 4.3-14 M Right Angle/F and Times Microwave's SPO-254 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:
[10 FT Outdoor Rated 4.3-10 to 4.3-10 M Right Angle/F SPO-250 Low PIM Cable Jumper CASPO250001-10FT](#)

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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.) | 0.54 | 0.67 | 0.81 | 1.34 | 2.15 | 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 $0.1 \cdot \sqrt{\text{FGHz}}$ dB per connector.

Mechanical Specifications

Size

| | |
|----------|---------------------|
| Length | 120 in [304.8 cm] |
| Diameter | 0.78 in [19.81 mm] |
| Weight | 0.72 lbs [326.59 g] |

Cable

| | |
|--------------------------------------|----------------------------------|
| Cable Type | SPF-375 |
| 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 Right Angle | 4.3-10 Female |
| Impedance | 50 Ohms | 50 Ohms |
| Contact Material and Plating | Brass, Silver | Phosphor Bronze, Silver |
| Contact Plating Specification | 200 µin | 200 µin |
| Dielectric Type | PTFE | PTFE |
| Outer Conductor Material and Plating | | Brass, Tri-Metal |
| Outer Conductor Plating Specification | | 80 µin |
| Body Material and Plating | Brass, Tri-Metal | Brass, Tri-Metal |
| Body Plating Specification | 80 µin | 80 µin |
| Coupling Nut Material and Plating | Brass, Nickel | |
| Coupling Nut Plating Specification | 200 µin | |
| Torque | 15.05 in-lbs [1.7 Nm] | |

Environmental Specifications

Temperature

Operating Range -55 to +200 deg C
Storage Range -55 to +200 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/10-ft-outdoor-rated-4.3-10-to-4.3-10-m-right-angle-f-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 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.

CASPO250001-10FT CAD Drawing

| REVISIONS | | |
|-----------|-----------------|--------------------|
| REV. | DESCRIPTION | DATE |
| A | INITIAL RELEASE | 9/23/2020 |
| | | APPROVED SELLIS |

LENGTH MEASURED FROM
CONTACT TO CONTACT

4.3-10 MALE

7/16 DIN FEMALE

CONTACT

NOTES:

- CABLES 84" AND UNDER HAVE 1 LABEL CENTERED. CABLES OVER 84" HAVE 2 LABELS, ONE AT EACH END 12.0" FROM THE END OF THE CONNECTOR.
- 6" FROM CABLE END 1 PLACE FOR ALL LENGTHS OF CABLE.

UNLESS OTHERWISE SPECIFIED LEADING DIMENSIONS ARE INCHES DIMENSIONS IN [] ARE MILLIMETERS

TOLERANCES:

| | | |
|---------------|----------|------------|
| X = +2 | [5.08] | FRACTIONS |
| .XX = +0.02 | [.51] | +1/32 |
| .XXX = +0.005 | [.13] | ANGLES ±1° |

CABLE LENGTH (L) TOLERANCES:

| | |
|-----------------------------|-----------------|
| L ≤ 12 [305] | = +1 [25] / -0 |
| 12 [305] < L ≤ 60 [1524] | = +2 [51] / -0 |
| 60 [1524] < L ≤ 120 [3048] | = +4 [102] / -0 |
| 120 [3048] < L ≤ 300 [7620] | = +6 [152] / -0 |
| 300 [7620] < L | = +6%L / -0 |

ALL DIMENSIONS SHOWN ARE FOR REFERENCE ONLY.

www.POLYPHASER.com
CASPF375004
S/N: XXXXXXXXXX
(SEE NOTE 1)

PIM LEVEL
100dB
S/N: XXXXXXXXXX
(SEE NOTE 2)

2X HEAT SHRINK BOOT

SPF-375

THIRD-ANGLE PROJECTION

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SHEET 1 OF 1

SCALE N/A

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an INFINITE brand

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|------|-----------|----------|-------------|
| SIZE | CAGE CODE | DRAWN BY | ITEM NO. |
| A | 30992 | K.DANG | CASPF375004 |
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