

6 FT Plenum Rated 4.3-10 to SMA M Right Angle/M SPP-250-LLPL Low PIM Cable Jumper

#### CASPP250LLPL045-6FT

# Configuration

• Connector 1: 4.3-10 Male Right Angle

• Connector 2: SMA Male

• Cable Type: SPP-250-LLPL

#### **Features**

· Max Frequency 5.8 GHz

Low PIM: -160 dBc Max

• UL 910 Plenum Rated

FEP 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

# SPP-250-LLPL OUTER SHIELD OLECTRIC SOLID CENTER CONDUCTOR

# **Applications**

• Distributed Antennas Systems (DAS)

Low PIM Applications

- Plenum Installations
- Multi-Carrier Communication Systems

# **Description**

PolyPhaser CASPP250LLPL045-6FT is a 6 FT Plenum Rated 4.3-10 to SMA M Right Angle/M SPP-250-LLPL 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 SMA Male jumper connections are designed to industry standard interface dimensions to ensure superior performance. These low PIM corrugated cable assemblies are durable and plenum 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), plenum installations, low PIM applications, and many other RF systems. The CASPP250LLPL045-6FT 4.3-13 to SMA 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 plenum rated coax used in these 4.3-13 to SMA assemblies is a .250 inch diameter copper corrugated coax with a blue FEP jacket. This cable's PTFE dielectric is low loss material with a phase velocity of 76% 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 4.3-13 to SMA M Right Angle/M and Times Microwave's SPP-250-LLPL 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: 6 FT Plenum Rated 4.3-10 to SMA M Right Angle/M SPP-250-LLPL Low PIM Cable Jumper CASPP250LLPL045-6FT



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#### **Electrical Specifications**

Description	Minimum	Typical	Maximum	Units
Frequency Range	DC		5.8	GHz
VSWR			1.4:1	
Velocity of Propagation		76		%
RF Shielding	100			dB
Passive Intermodulation		-165	-160	dBc
Capacitance		27 [88.58]		pF/ft [pF/m]
Inductance		0.067 [0.22]		uH/ft [uH/m]
DC Resistance Inner Conductor		3 [9.84]		Ω/1000ft [Ω/Km]

# **Specifications by Frequency**

Description	F1	F2	F3	F4	F5	Units
Frequency	0.45	0.7	1	2.5	5.8	GHz
Insertion Loss (Max.)	0.46	0.53	0.62	0.92	1.39	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 for right angle connector and 0.15 dB for the straight connector.

### **Mechanical Specifications**

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Length 72 in [182.88 cm] 0.99 in [25.15 mm] Diameter Weight 0.55 lbs [249.48 g]

#### Cable

SPP-250-LLPL Cable Type Impedance 50 Ohms Inner Conductor Type Solid Inner Conductor Material and Plating Copper, Bare Dielectric Type PTFE Number of Shields

Shield Layer 1 Helically Corrugated Copper Tube Copper

Outer Conductor Material and Plating

**Outer Conductor Diameter** 0.25 in [6.35 mm]

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Jacket Material FEP, Blue

Jacket Diameter 0.28 in [7.11 mm]

One Time Minimum Bend Radius 1.25 in [31.75 mm]
Bending Moment 0.8 lbs-ft [1.08 N-m]

#### Connectors

Description	Connector 1	Connector 2	
Туре	4.3-10 Male Right Angle	SMA Male	
Impedance	50 Ohms	50 Ohms	
Contact Material and Plating	Brass, Silver	Brass, Silver	
Contact Plating Specification	200 μin	196 µin	
Dielectric Type	PTFE	PTFE	
Body Material and Plating	Brass, Tri-Metal	Brass, Tri-Metal	
Body Plating Specification	80 µin	118 µin	
Coupling Nut Material and Plating	Brass, Nickel	Brass, Tri-Metal	
Coupling Nut Plating Specification	200 μin	118 µin	
Torque	15.05 in-lbs [1.7 Nm]	10 in-lbs [1.13 Nm]	

# **Environmental Specifications**

**Temperature** 

Operating Range -55 to +200 deg C
Storage Range -55 to +200 deg C
Plenum Rating UL910

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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/6-ft-plenum-rated-4.3-10-to-sma-m-right-angle-m-spp-250-llpl-low-pim-cable-jumper-p.aspx

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### CASPP250LLPL045-6FT CAD Drawing

