

2 FT Plenum Rated Type N to 7/16 DIN M/M Right Angle  
SPP-250-LLPL Low PIM Cable Jumper

**CASPP250LLPL058-2FT**

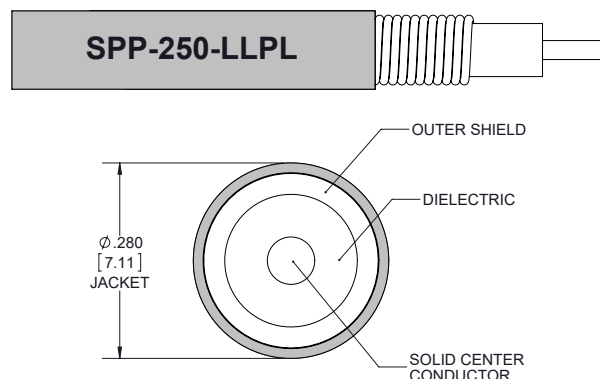


**Configuration**

- Connector 1: 7/16 DIN Male Right Angle
- Connector 2: N 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



**Applications**

- Distributed Antennas Systems (DAS)
- Plenum Installations
- Low PIM Applications
- Multi-Carrier Communication Systems

**Description**

PolyPhaser CASPP250LLPL058-2FT is a 2 FT Plenum Rated Type N to 7/16 DIN M/M Right Angle SPP-250-LLPL Low PIM Cable Jumper built using high quality components by skilled technicians to ensure a reliable product. The Type N Male to 7/16 DIN Male Right Angle 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 CASPP250LLPL058-2FT 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 plenum rated coax used in these Type N to 7/16 DIN 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 Type N to 7/16 DIN M/M Right Angle 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:  
[2 FT Plenum Rated Type N to 7/16 DIN M/M Right Angle SPP-250-LLPL Low PIM Cable Jumper CASPP250LLPL058-2FT](#)

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## CASPP250LLPL058-2FT

### 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.)	0.25	0.28	0.32	0.45	0.64	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. Insertion Loss is estimated as 0.1 dB for the right angle connector and  $0.1 \cdot \sqrt{FGHz}$  dB for the straight connector.

### Mechanical Specifications

#### Size

Length	24 in [609.6 mm]
Diameter	1.14 in [28.96 mm]
Weight	0.443 lbs [200.94 g]

#### Cable

Cable Type	SPP-250-LLPL
Impedance	50 Ohms
Inner Conductor Type	Solid
Inner Conductor Material and Plating	Copper
Dielectric Type	PTFE
Number of Shields	1
Shield Layer 1	Helically Corrugated Copper Tube
Outer Conductor Material and Plating	Copper
Outer Conductor Diameter	0.25 in [6.35 mm]

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## CASPP250LLPL058-2FT

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
Type	7/16 DIN Male Right Angle	N Male
Impedance	50 Ohms	50 Ohms
Contact Material and Plating	Brass, Silver	Phosphor Bronze, Silver
Contact Plating Specification	196 µin	196 µin
Dielectric Type	PTFE	PTFE
Body Material and Plating	Brass, Nickel	Brass, Tri-Metal
Body Plating Specification	118 µin	118 µin
Coupling Nut Material and Plating	Brass, Nickel	Brass, Tri-Metal
Coupling Nut Plating Specification	118 µin	118 µin
Torque	22.127 ft-lbs [30 Nm]	9.74 in-lbs [1.1 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/2-ft-plenum-rated-type-n-to-7-16-din-m-m-right-angle-spp-250-llpl-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.

CASPP250LLPL058-2FT CAD Drawing

REVISIONS		
REV.	DESCRIPTION	DATE
A	INITIAL RELEASE	9/16/2020
		APPROVED SELLIS

**N MALE**

**7/16 DIN MALE RA**

**CONTACT**

**CONTACT**

**2X HEAT SHRINK BOOT**

**SPP-250-LLPL**

**LENGTH MEASURED FROM CONTACT TO CONTACT**

**www.POLYPHASER.com  
CASPP250LLPL058  
S/N: XXXXXXXXXXXX  
(SEE NOTE 1)**

**PIM LEVEL  
-zzzBbc  
S/N: XXXXXXXXXXXX  
(SEE NOTE 2)**

**THIRD-ANGLE PROJECTION**

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SHEET 1 OF 1  
SCALE N/A

CAGE CODE DRAWN BY ITEM NO.  
A 30992 K.DANG CASPP250LLPL058 REV A

**NOTES:**

1. 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.
2. 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 = +0.2	[ .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.

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