

6 FT 7/16 to 7/16 M/M 400 Series Low Loss Cable Jumper



### CA400LL005-6FT

### Configuration

Connector 1: 7/16 DIN Male
Connector 2: 7/16 DIN Male
Cable Type: PPBC-400LL

### **Features**

- · LMR Equivalent Coax
- Max Frequency 5.8 GHz
- Shielding Effectivity > 90 dB
- · 85% Phase Velocity
- · Low Insertion Loss
- · Double Shielded
- PE Jacket
- · One Time Bend Radius of 1 Inch

# JACKET SHIELD OUTER CONDUCTOR DIELECTRIC SOLID CENTER CONDUCTOR

### **Applications**

- · General Purpose
- Laboratory Use
- Antenna Installations

- Land Mobile Radio & Other Communication Systems
- · Cellular & Wi-Fi Systems

# Description

PolyPhaser CA400LL005-6FT is a 6 foot 7/16 to 7/16 M/M 400 Series Low Loss Cable Jumper is built using high quality components by skilled technicians to ensure a reliable product. The 7/16 M cable jumper connections are designed to industry standard interface dimensions to ensure superior performance. If you have an immediate need, these products are available to ship same day. This high-quality RF coaxial assembly is perfect in many RF Interconnect applications such as IoT network, Wi-Fi, industrial / commercial, and many other RF systems. The CA400LL005-6FT 7/16 to 7/16 cable assembly is the perfect companion to PolyPhaser line of RF surge protection devices particularly when used as an antenna jumper cable.

The 400 Series coax used in these 7/16 to 7/16 assemblies is a 0.4 inch diameter coax with a black PE jacket. This cable's foam PE dielectric is low loss material with a phase velocity of 85% reducing the attenuation when compared to solid dielectric coax cables. PolyPhaser Low Loss 400 Series coax has a solid center conductor and uses a double shield comprised of a wire braid over a foil tape construction providing >90% shielding effectivity. The construction and materials of the CA400LL005-6FT result in a coax cable assembly with 1 inch one time bend radius and a repeat bend radius of 4 inches. The cable assembly's combination of 7/16 to 7/16 M/M and 400 Series Low Loss Cable supports a maximum operating frequency of 5.8 GHz. You can find detailed performance specifications in the product datasheet. All PolyPhaser assemblies are tested and inspected prior to shipping.

For additional strength, these 7/16 M to 7/16 M cable assemblies have polyolefin heat shrink strain relief boots on both ends of the RF Cable Assembly Jumpers. The heat shrink booting uses a double walled epoxy filled material to prolong the life of the assembly.

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: 6 FT 7/16 to 7/16 M/M 400 Series Low Loss Cable Jumper CA400LL005-6FT



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### **Electrical Specifications**

Description	Minimum	Typical	Maximum	Units
Frequency Range	DC		5.8	GHz
VSWR			1.5:1	
Velocity of Propagation		85		%
RF Shielding	90			dB
Capacitance		24 [78.74]		pF/ft [pF/m]
Jacket Spark			8,000	Vrms

### Specifications by Frequency

Description	F1	F2	F3	F4	F5	Units
Frequency	0.25	0.5	1	2.5	5.8	GHz
Insertion Loss (Max.)	0.32	0.38	0.5	0.68	0.92	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 per connector.

### **Mechanical Specifications**

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 Length
 72 in [182.88 cm]

 Diameter
 0.405 in [10.29 mm]

 Weight
 0.88 lbs [399.16 g]

### Cable

Cable Type PPBC-400LL
Impedance 50 Ohms
Inner Conductor Type Solid
Inner Conductor Material and Plating Copper Clad Aluminum
Dielectric Type PF (F)

Dielectric Type PE (F)

Number of Shields 2

Shield Layer 1 Aluminum Tape

Shield Layer 2 Tinned Copper Braid

Jacket Material PE, Black

Jacket Diameter 0.4 in [10.16 mm]

One Time Minimum Bend Radius
Repeated Minimum Bend Radius
4 in [101.6 mm]
Bending Moment
0.5 lbs-ft [0.68 N-m]
Tensile Strength
160 lbs [72.57 Kg]

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### **Connectors**

7/16 DIN Male 50 Ohms Brass, Silver
Brass, Silver
PTFE
Brass, Tri-Metal
Brass, Tri-Metal
1 1/4 in.

# **Environmental Specifications**

**Temperature** 

Operating Range

-40 to +85 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.

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: 6 FT 7/16 to 7/16 M/M 400 Series Low Loss Cable Jumper CA400LL005-6FT

URL: https://www.polyphaser.com/6-ft-7-16-to-7-16-m-m-400-series-low-loss-cable-jumper-p.aspx

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## CA400LL005-6FT CAD Drawing

