

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



### CA400LL006-25FT

### Configuration

Connector 1: 7/16 DIN MaleConnector 2: 7/16 DIN Female

· 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 CA400LL006-25FT is a 25 foot 7/16 to 7/16 M/F 400 Series Low Loss Cable Jumper is built using high quality components by skilled technicians to ensure a reliable product. The 7/16 M and 7/16 F cable jumper connections are designed to industry standard interface dimensions to ensure superior performance. This product is in stock and available for same day shipping. This high-quality RF coaxial assembly is perfect in many RF Interconnect applications such as LMR, military / defense, industrial / commercial, and many other applications. The CA400LL006-25FT 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 VoP 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 CA400LL006-25FT 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/F and 400 Series Low Loss Cable supports a maximum operating frequency of 5800 MHz. Detailed specifications for this configuration includes layout drawings and key performance specifications. All assemblies are design verified and shipped with a certificate of compliance.

Polyolefin heat shrink strain relief boots add additional strength on both ends of this 25 foot assembly. These epoxy filled heat shrinks provide strain relief to help prevent damage from over-bending the assembly ends.

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: 25 FT 7/16 to 7/16 M/F 400 Series Low Loss Cable Jumper CA400LL006-25FT



### 25 FT 7/16 to 7/16 M/F 400 Series Low Loss Cable Jumper



### CA400LL006-25FT

### **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.)	0.7	0.95	1.45	2.2	3.2	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
 300 in [762 cm]

 Diameter
 0.405 in [10.29 mm]

 Weight
 2.043 lbs [926.69 g]

### Cable

Cable Type PPBC-400LL
Impedance 50 Ohms
Inner Conductor Type Solid
Inner Conductor Material and Plating Copper Clad Aluminum

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**

Description	Connector 1	Connector 2	
Туре	7/16 DIN Male	7/16 DIN Female	
Impedance	50 Ohms	50 Ohms	
Contact Material and Plating	Brass, Silver	Silver	
Dielectric Type	PTFE	PTFE	
Body Material and Plating	Brass, Tri-Metal	Brass, Tri-Metal	
Coupling Nut Material and Plating	Brass, Tri-Metal		
Hex Size	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: 25 FT 7/16 to 7/16 M/F 400 Series Low Loss Cable Jumper CA400LL006-25FT

URL: https://www.polyphaser.com/25-ft-7-16-to-7-16-m-f-400-series-low-loss-cable-jumper-p.aspx

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# CA400LL006-25FT CAD Drawing

