

1 M 7/16 to 7/16 M/M 600 Series Low Loss Cable Jumper



## CA600LL051-1M

# Configuration

Connector 1: 7/16 DIN Male
Connector 2: 7/16 DIN Male
Cable Type: PPBC-600LL

### **Features**

- · LMR Equivalent Coax
- · Max Frequency 5.8 GHz
- Shielding Effectivity > 90 dB
- · 87% Phase Velocity
- · Low Insertion Loss
- · Double Shielded
- PE Jacket
- · One Time Bend Radius of 1.5 Inches

# 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 CA600LL051-1M is a 1 meter 7/16 to 7/16 M/M 600 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 LMR, industrial / commercial, Wi-Fi, and many other RF systems. The CA600LL051-1M 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 600 Series coax used in these 7/16 to 7/16 assemblies is a 0.59 inch diameter coax with a black PE jacket. This cable's foam PE dielectric is low loss material with a phase velocity of 87% reducing the attenuation when compared to solid dielectric coax cables. PolyPhaser Low Loss 600 Series coax has a solid center conductor and uses a double shield consisting of a wire braid over a foil tape construction providing >90% shielding effectivity. The construction and materials of the CA600LL051-1M result in a coax cable assembly with 1.5 inch one time bend radius and a repeat bend radius of 6 inches. The cable assembly's combination of 7/16 to 7/16 M/M and 600 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: 1 M 7/16 to 7/16 M/M 600 Series Low Loss Cable Jumper CA600LL051-1M



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## CA600LL051-1M

## **Electrical Specifications**

Minimum	Typical	Maximum	Units
DC		5.8	GHz
		1.5:1	
	87		%
90			dB
	23.4 [76.77]		pF/ft [pF/m]
		5,000	Vrms
	DC	DC 87	DC 5.8 1.5:1 87 90 23.4 [76.77]

# Specifications by Frequency

Description	F1	F2	F3	F4	F5	Units
Frequency	0.25	0.5	1	2.5	5.8	GHz
Insertion Loss (Max.)	0.6	0.99	1.39	2.17	3.35	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
 39.37 in [100 cm]

 Diameter
 0.59 in [14.99 mm]

 Weight
 0.64979 lbs [294.74 g]

### Cable

Cable Type PPBC-600LL
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 1
Shield Layer 2
Tinned Copper Braid
Jacket Material
PE, Black
Jacket Diameter
0.59 in [14.99 mm]

Repeated Minimum Bend Radius 6 in [152.4 mm]

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### **Connectors**

Description	Connector 1	Connector 2	
Туре	7/16 DIN Male	7/16 DIN Male	
Impedance	50 Ohms	50 Ohms	
Contact Material and Plating	Beryllium Copper, Silver	Beryllium Copper, Silver	
Dielectric Type	PTFE	PTFE	
Body Material and Plating	Brass, Tri-Metal	Brass, Tri-Metal	
Coupling Nut Material and Plating	Brass, Tri-Metal	Brass, Tri-Metal	
Hex Size	1 1/4 in.	1 1/4 in.	
Torque	18.417 ft-lbs [24.97 Nm]	18.417 ft-lbs [24.97 Nm]	
Hex Size Torque	·		

# **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: 1 M 7/16 to 7/16 M/M 600 Series Low Loss Cable Jumper CA600LL051-1M

URL: https://www.polyphaser.com/1-m-7-16-to-7-16-m-m-600-series-low-loss-cable-jumper-p.aspx

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# CA600LL051-1M CAD Drawing

