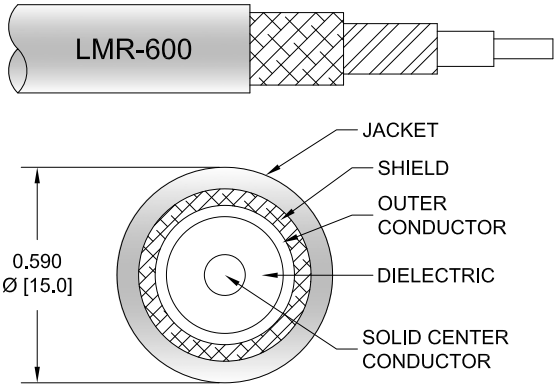
PolyPhaser
an INFINITE brand

# 6 FT 7/16 to 7/16 M/M 600 Series Low Loss Cable Jumper

## CA600LL051-6FT

## 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

## Applications

- General Purpose
- Laboratory Use
- Antenna Installations
- Land Mobile Radio & Other Communication Systems
- Cellular & Wi-Fi Systems

## Description

PolyPhaser CA600LL051-6FT is a 6 foot 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 CA600LL051-6FT 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 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 CA600LL051-6FT 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:
6 FT 7/16 to 7/16 M/M 600 Series Low Loss Cable Jumper CA600LL051-6FT

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## CA600LL051-6FT

### Electrical Specifications

| Description | Minimum | Typical | Maximum | Units |
|---|---|---|---|---|
| Frequency Range | DC | | 5.8 | GHz |
| VSWR | | | 1.5:1 | |
| Velocity of Propagation | | 87 | | % |
| RF Shielding | 90 | | | dB |
| Capacitance | | 23.4 [76.77] | | pF/ft [pF/m] |
| Jacket Spark | | | 5,000 | 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.) | 0.26 | 0.32 | 0.38 | 0.5 | 0.68 | 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

**Size**

| | |
|---|---|
| Length | 72 in [182.88 cm] |
| Diameter | 0.59 in [14.99 mm] |
| Weight | 1.006 lbs [456.31 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 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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## CA600LL051-6FT

### Connectors

| Description | Connector 1 | Connector 2 |
|---|---|---|
| Type | 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] |

## 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 600 Series Low Loss Cable Jumper CA600LL051-6FT

URL: https://www.polyphaser.com/6-ft-7-16-to-7-16-m-m-600-series-low-loss-cable-jumper-p.aspx

## CA600LL051-6FT CAD Drawing