

## 1 M Type N to Type N M/M 400 Series Low Loss Cable Jumper

### CA400LL001-1M

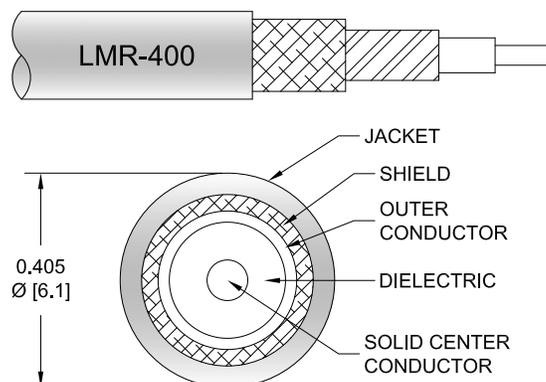


#### Configuration

- Connector 1: N Male
- Connector 2: N 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



#### Applications

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

#### Description

PolyPhaser CA400LL001-1M is a 1 meter Type N to Type N M/M 400 Series Low Loss Cable Jumper built using high quality components by skilled technicians to ensure a reliable product. The Type N Male jumper connections are designed to industry standard interface dimensions to ensure superior performance. All of these products 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 IoT network, military / defense, Land Mobile Radio (LMR), and many other RF systems. The CA400LL001-1M Type N to Type N 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 Type N to Type N 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 CA400LL001-1M 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 Type N to Type N Male/Male and 400 Series Low Loss Cable supports a maximum operating frequency of 5800 MHz. You can find detailed performance specifications in the product datasheet. All PolyPhaser assemblies are tested and inspected prior to shipping.

For additional strength, these Type N Male to Type N Male 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 Type N to Type N M/M 400 Series Low Loss Cable Jumper CA400LL001-1M](#)

1 M Type N to Type N M/M 400 Series Low Loss Cable Jumper



**CA400LL001-1M**

**Electrical Specifications**

| Description             | Minimum | Typical    | Maximum | Units        |
|-------------------------|---------|------------|---------|--------------|
| Frequency Range         | 0.03    |            | 5.8     | GHz          |
| VSWR                    |         |            | 1.3:1   |              |
| Velocity of Propagation |         | 85         |         | %            |
| RF Shielding            | 90      |            |         | dB           |
| Capacitance             |         | 24 [78.74] |         | pF/ft [pF/m] |
| Operating Voltage (AC)  |         |            | 1,000   | Vrms         |
| 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.) | 0.99 | 1.39 | 2.17 | 3.35 | 4.93 | 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   | 39.37 in [100 cm]      |
| Diameter | 0.405 in [10.29 mm]    |
| Weight   | 0.35197 lbs [159.65 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 | 1 in [25.4 mm]  |
| Repeated Minimum Bend Radius | 4 in [101.6 mm] |

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications:  
[1 M Type N to Type N M/M 400 Series Low Loss Cable Jumper CA400LL001-1M](#)

1 M Type N to Type N M/M 400 Series Low Loss Cable Jumper



**CA400LL001-1M**

|                  |                       |
|------------------|-----------------------|
| Bending Moment   | 0.5 lbs-ft [0.68 N-m] |
| Tensile Strength | 160 lbs [72.57 Kg]    |

**Connectors**

| Description                   | Connector 1      | Connector 2      |
|-------------------------------|------------------|------------------|
| Type                          | N Male           | N Male           |
| Specification                 | MIL-STD-348A     | MIL-STD-348A     |
| Impedance                     | 50 Ohms          | 50 Ohms          |
| Contact Material and Plating  | Brass, Silver    | Brass, Silver    |
| Contact Plating Specification | 70µ in. minimum  | 70µ in. minimum  |
| Dielectric Type               | Teflon           | Teflon           |
| Body Material and Plating     | Brass, Nickel    | Brass, Nickel    |
| Body Plating Specification    | 100µ in. minimum | 100µ in. minimum |

**Environmental Specifications**

|                    |                  |
|--------------------|------------------|
| <b>Temperature</b> |                  |
| 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 Type N to Type N M/M 400 Series Low Loss Cable Jumper CA400LL001-1M](#)

URL: <https://www.polyphaser.com/1-m-type-n-to-type-n-m-m-400-series-low-loss-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.

# 1 M Type N to Type N M/M 400 Series Low Loss Cable Jumper

## CA400LL001-1M CAD Drawing

| REVISIONS |                 |                    |
|-----------|-----------------|--------------------|
| REV.      | DESCRIPTION     | DATE               |
| A         | INITIAL RELEASE | 07/26/2020         |
|           |                 | APPROVED<br>SELLIS |

N MALE

N MALE

**UNLESS OTHERWISE SPECIFIED LEADING DIMENSIONS ARE INCHES DIMENSIONS IN [ ] ARE MILLIMETERS**

**TOLERANCES:**

|             |          |            |       |
|-------------|----------|------------|-------|
| X = +2      | [ 5.08 ] | FRACTIONS  | +1/32 |
| .XX = +02   | [ .51 ]  |            |       |
| .XXX = +005 | [ .13 ]  | ANGLES ±1° |       |

**CABLE LENGTH (L) TOLERANCES:**

|                             |                 |                |
|-----------------------------|-----------------|----------------|
| L ≤ 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.**

**THIRD-ANGLE PROJECTION**

THE INFORMATION AND DESIGN IN THIS DOCUMENT IS THE PROPERTY OF POLYPHASER. ALL RIGHTS RESERVED.

SHEET 1 OF 1

SCALE N/A

**NOTES:**

- CABLES 36" AND UNDER HAVE 1 LABEL CENTERED. CABLES OVER 36" HAVE 2 LABELS, ONE AT EACH END 6.0" FROM THE FRONT OF THE CONNECTOR.

THESE COMMODITIES, TECHNOLOGY OR SOFTWARE WERE EXPORTED FROM THE UNITED STATES IN ACCORDANCE WITH THE EXPORT ADMINISTRATION REGULATIONS. DIVERSION CONTRARY TO U.S. LAW PROHIBITED.