

25 FT Type N to Type N M/F 400 Series Low Loss Cable Jumper

CA400LL002-25FT



Configuration

- Connector 1: N Male
- Connector 2: N 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



Applications

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

Description

PolyPhaser CA400LL002-25FT is a 25 foot Type N to Type N M/F 400 Series Low Loss Cable Jumper is built using high quality components by skilled technicians to ensure a reliable product. The Type N Male and Type N Female 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 Wireless Lan, telecom, industrial / commercial, and many other applications. The CA400LL002-25FT 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" diameter coax with a black polyethylene 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 CA400LL002-25FT result in a coax cable assembly with a one inch one time bend radius and a repeat bend radius of 4 inches. The cable assembly's combination of Type N to Type N (M)/(F) and 400 Series Low Loss Assembly supports a maximum operating frequency of 5.8 GHz. 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. The epoxy filled heat shrink extends the life of these cables by distributing the stresses applied to the connector/coax attachment.

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications:
[25 FT Type N to Type N M/F 400 Series Low Loss Cable Jumper CA400LL002-25FT](#)

25 FT Type N to Type N M/F 400 Series Low Loss Cable Jumper

CA400LL002-25FT



Electrical Specifications

| Description | Minimum | Typical | Maximum | Units |
|-------------------------|---------|------------|---------|--------------|
| Frequency Range | DC | | 5.8 | GHz |
| VSWR | | | 1.3:1 | |
| 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

Size

| | |
|----------|----------------------|
| Length | 300 in [762 cm] |
| Diameter | 0.405 in [10.29 mm] |
| Weight | 1.742 lbs [790.16 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] |
| Bending Moment | 0.5 lbs-ft [0.68 N-m] |
| Tensile Strength | 160 lbs [72.57 Kg] |

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications:
[25 FT Type N to Type N M/F 400 Series Low Loss Cable Jumper CA400LL002-25FT](#)

25 FT Type N to Type N M/F 400 Series Low Loss Cable Jumper

CA400LL002-25FT



Connectors

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

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 Type N to Type N M/F 400 Series Low Loss Cable Jumper CA400LL002-25FT](https://www.polyphaser.com/25-ft-type-n-to-type-n-m-f-400-series-low-loss-cable-jumper-p.aspx)

URL: <https://www.polyphaser.com/25-ft-type-n-to-type-n-m-f-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.

CA400LL002-25FT CAD Drawing

