

## 50 FT SMA to SMA M/M 400 Series Low Loss Cable Jumper

### CA400LL009-50FT

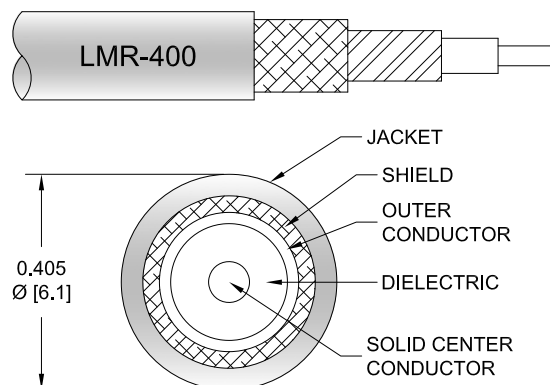


#### Configuration

- Connector 1: SMA Male
- Connector 2: SMA 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 CA400LL009-50FT is a 50 foot SMA to SMA M/M 400 Series Low Loss Cable Jumper is built using high quality components by skilled technicians to ensure a reliable product. The SMA M cable 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 research and development, industrial / commercial, LMR, and many other RF systems. The CA400LL009-50FT SMA to SMA 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 SMA to SMA 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 consisting of a wire braid over a foil tape construction providing >90% shielding effectivity. The construction and materials of the CA400LL009-50FT 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 SMA to SMA M/M and 400 Series Low Loss Cable supports a maximum operating frequency of 5.8 GHz. You can find detailed performance specifications in the product datasheet. Processes and procedures are in place to ensure products meet the published specifications.

For additional strength, these SMA M to SMA 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:  
[50 FT SMA to SMA M/M 400 Series Low Loss Cable Jumper CA400LL009-50FT](#)

## 50 FT SMA to SMA M/M 400 Series Low Loss Cable Jumper

### CA400LL009-50FT



#### 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.) | 1.2  | 1.7 | 2.7 | 4.2 | 6.2 | 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   | 600 in [15.24 m]    |
| Diameter | 0.405 in [10.29 mm] |
| Weight   | 3.34 lbs [1.51 Kg]  |

##### 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]    |

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## 50 FT SMA to SMA M/M 400 Series Low Loss Cable Jumper

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#### Connectors

| Description                       | Connector 1        | Connector 2        |
|-----------------------------------|--------------------|--------------------|
| Type                              | SMA Male           | SMA Male           |
| Impedance                         | 50 Ohms            | 50 Ohms            |
| Contact Material and Plating      | Brass, Gold        | Brass, Gold        |
| Dielectric Type                   | Teflon             | Teflon             |
| Body Material and Plating         | Brass, Gold        | Brass, Gold        |
| Coupling Nut Material and Plating | Brass, Gold        | Brass, Gold        |
| Hex Size                          | 16-May in          | 16-May in          |
| Torque                            | 5 in-lbs [0.57 Nm] | 5 in-lbs [0.57 Nm] |

#### Environmental Specifications

##### Temperature

Operating Range -40 to +85 deg C

#### Compliance Certifications

#### Plotted and Other Data

##### Notes:

- Values at 25°C, sea level.

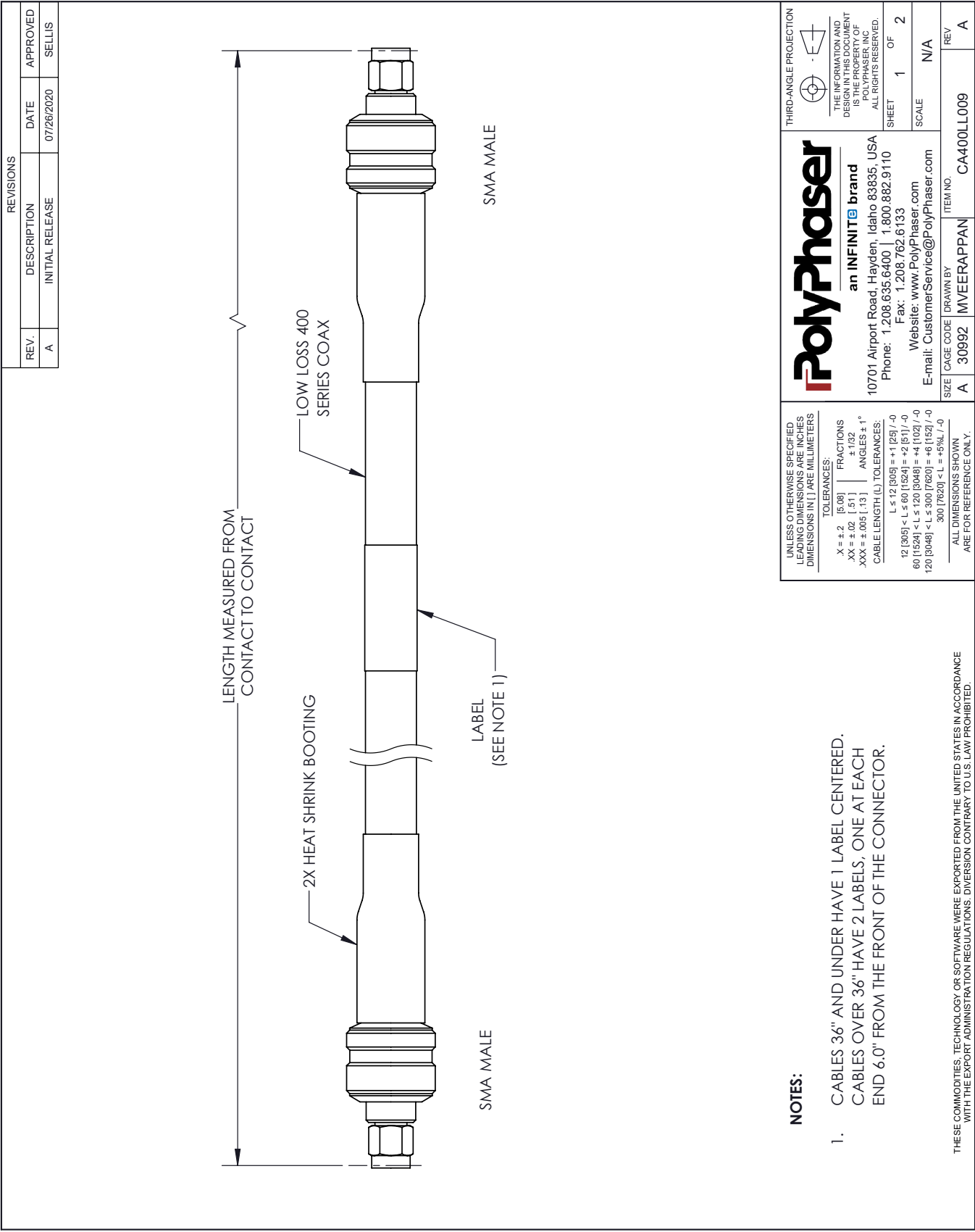
PolyPhaser protects and increases the reliability of global RF communications networks, including transportation, telecommunications, defense, security and industrial applications, with superior RF surge protection technologies including DC Block, DC Pass and Ultra Low PIM. Backed by responsive service 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: [50 FT SMA to SMA M/M 400 Series Low Loss Cable Jumper CA400LL009-50FT](https://www.polyphaser.com/50-ft-sma-to-sma-m-m-400-series-low-loss-cable-jumper-p.aspx)

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CA400LL009-50FT CAD Drawing



T-Rev/D