

## 25 M SMA to SMA M/F 240 Series Low Loss Cable Jumper

### CA240LL023-25M

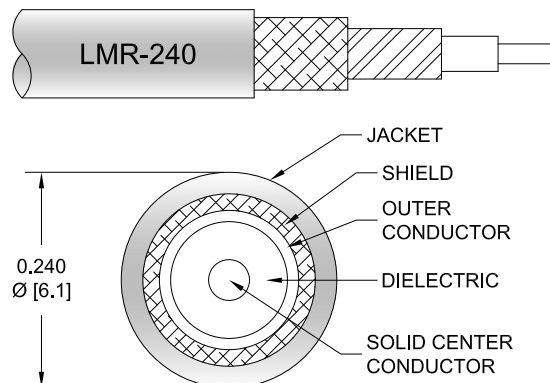


#### Configuration

- Connector 1: SMA Male
- Connector 2: SMA Female
- Cable Type: PPBC-240LL

#### Features

- LMR Equivalent Coax
- Max Frequency 5.8 GHz
- Shielding Effectivity > 90 dB
- 84% Phase Velocity
- Low Insertion Loss
- Double Shielded
- PE Jacket
- One Time Bend Radius of 0.75 Inches



#### Applications

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

#### Description

PolyPhaser CA240LL023-25M is a 25 meter SMA to SMA M/F 240 Series Low Loss Cable Jumper is built using high quality components by skilled technicians to ensure a reliable product. The SMA Male and SMA Female 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, IoT network, Wi-LAN, and many other applications. The CA240LL023-25M 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 240 Series coax used in these SMA to SMA assemblies is a 0.24 inch diameter coax with a black PE jacket. This cable's foam PE dielectric is low loss material with a VoP of 84% reducing the attenuation when compared to solid dielectric coax cables. PolyPhaser Low Loss 240 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 CA240LL023-25M result in a coax cable assembly with 0.75 inch one time bend radius and a repeat bend radius of 2.5 inches. The cable assembly's combination of SMA to SMA Male/Female and 240 Series Low Loss Cable supports a maximum operating frequency of 5800 MHz. Detailed specifications for this configuration includes layout drawings and performance and material 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 meter assembly. These epoxy filled heat shrinks provide strain relief to help prevent damage from over-bending the assembly ends.

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications:  
[25 M SMA to SMA M/F 240 Series Low Loss Cable Jumper CA240LL023-25M](#)

## 25 M SMA to SMA M/F 240 Series Low Loss Cable Jumper



### CA240LL023-25M

#### Electrical Specifications

| Description             | Minimum | Typical     | Maximum | Units        |
|-------------------------|---------|-------------|---------|--------------|
| Frequency Range         | DC      |             | 5.8     | GHz          |
| VSWR                    |         |             | 1.5:1   |              |
| Velocity of Propagation |         | 84          |         | %            |
| RF Shielding            | 90      |             |         | dB           |
| Capacitance             |         | 24.2 [79.4] |         | 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.) | 39.58 | 49.42 | 88.79 | 147.84 | 226.58 | 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   | 984.252 in [25 m]     |
| Diameter | 0.24 in [6.1 mm]      |
| Weight   | 2.48563 lbs [1.13 Kg] |

##### Cable

|                                      |                     |
|--------------------------------------|---------------------|
| Cable Type                           | PPBC-240LL          |
| Impedance                            | 50 Ohms             |
| Inner Conductor Type                 | Solid               |
| Inner Conductor Material and Plating | Copper              |
| 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                      | 0.24 in [6.1 mm]    |
| One Time Minimum Bend Radius         | 0.752 in [19.1 mm]  |
| Repeated Minimum Bend Radius         | 2.5 in [63.5 mm]    |

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## 25 M SMA to SMA M/F 240 Series Low Loss Cable Jumper



### CA240LL023-25M

#### Connectors

| Description                       | Connector 1           | Connector 2            |
|-----------------------------------|-----------------------|------------------------|
| Type                              | SMA Male              | SMA Female             |
| Impedance                         | 50 Ohms               | 50 Ohms                |
| Contact Material and Plating      | Phosphor Bronze, Gold | Beryllium Copper, Gold |
| Dielectric Type                   | Teflon                | PTFE                   |
| Body Material and Plating         | Brass, Gold           | Brass, Gold            |
| Coupling Nut Material and Plating | Brass, Gold           |                        |
| Hex Size                          | 16-May in             |                        |
| Torque                            | 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: [25 M SMA to SMA M/F 240 Series Low Loss Cable Jumper CA240LL023-25M](https://www.polyphaser.com/25-m-sma-to-sma-m-f-240-series-low-loss-cable-jumper-p.aspx)

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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.

CA240LL023-25M CAD Drawing

