

## 1 M TNC to TNC M/M 240 Series Low Loss Cable Jumper

### CA240LL025-1M



#### Configuration

- Connector 1: TNC Male
- Connector 2: TNC Male
- 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 CA240LL025-1M is a 1 meter TNC to TNC M/M 240 Series Low Loss Cable Jumper is built using high quality components by skilled technicians to ensure a reliable product. The TNC Male 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 cellular, IoT network, industrial / commercial, and many other RF systems. The CA240LL025-1M TNC to TNC 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 TNC to TNC 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 phase velocity 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 CA240LL025-1M 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 TNC to TNC Male/Male and 240 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 TNC Male to TNC 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 TNC to TNC M/M 240 Series Low Loss Cable Jumper CA240LL025-1M](#)

## 1 M TNC to TNC M/M 240 Series Low Loss Cable Jumper

### CA240LL025-1M



#### 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.) | 1.78 | 2.17 | 3.75 | 6.11 | 9.26 | 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 | 0.24 in [6.1 mm]      |
| Weight   | 0.16243 lbs [73.68 g] |

##### 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]    |

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications:  
[1 M TNC to TNC M/M 240 Series Low Loss Cable Jumper CA240LL025-1M](#)

## 1 M TNC to TNC M/M 240 Series Low Loss Cable Jumper

### CA240LL025-1M



#### Connectors

| Description                  | Connector 1   | Connector 2   |
|------------------------------|---------------|---------------|
| Type                         | TNC Male      | TNC Male      |
| Impedance                    | 50 Ohms       | 50 Ohms       |
| Contact Material and Plating | Brass, Gold   | Brass, Gold   |
| Dielectric Type              | Delrin        | Delrin        |
| Body Material and Plating    | Brass, Nickel | Brass, Nickel |

#### 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: [1 M TNC to TNC M/M 240 Series Low Loss Cable Jumper CA240LL025-1M](#)

URL: <https://www.polyphaser.com/1-m-tnc-to-tnc-m-m-240-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.

CA240LL025-1M CAD Drawing

