

# 3 FT TNC to TNC M/M 240 Series Low Loss Cable Jumper



#### CA240LL025-3FT

### Configuration

Connector 1: TNC MaleConnector 2: TNC MaleCable 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

# JACKET SHIELD OUTER CONDUCTOR DIELECTRIC SOLID CENTER CONDUCTOR

### **Applications**

- · General Purpose
- Laboratory Use
- Antenna Installations

- Land Mobile Radio & Other Communication Systems
- · Cellular & Wi-Fi Systems

# Description

PolyPhaser CA240LL025-3FT is a 3 foot 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 CA240LL025-3FT 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 CA240LL025-3FT 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: 3 FT TNC to TNC M/M 240 Series Low Loss Cable Jumper CA240LL025-3FT



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#### **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.)	0.32	0.35	0.47	0.65	0.89	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
OILU

 Length
 36 in [914.4 mm]

 Diameter
 0.24 in [6.1 mm]

 Weight
 0.154 lbs [69.85 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 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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#### **Connectors**

Description	Connector 1	Connector 2
Туре	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.

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URL: https://www.polyphaser.com/3-ft-tnc-to-tnc-m-m-240-series-low-loss-cable-jumper-p.aspx

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# CA240LL025-3FT CAD Drawing

