

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

CA400LL001-25M

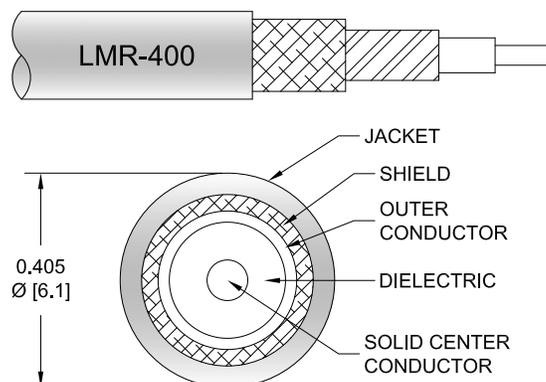


Configuration

- Connector 1: N Male
- Connector 2: N 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 CA400LL001-25M is a 25 meter Type N to Type N M/M 400 Series Low Loss Cable Jumper built using high quality components by skilled technicians to ensure a reliable product. The Type N Male 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 IoT network, military / defense, Land Mobile Radio (LMR), and many other RF systems. The CA400LL001-25M 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 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 comprised of a wire braid over a foil tape construction providing >90% shielding effectivity. The construction and materials of the CA400LL001-25M 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 Type N to Type N Male/Male and 400 Series Low Loss Cable supports a maximum operating frequency of 5800 MHz. You can find detailed performance specifications in the product datasheet. All PolyPhaser assemblies are tested and inspected prior to shipping.

For additional strength, these Type N Male to Type N 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:
[25 M Type N to Type N M/M 400 Series Low Loss Cable Jumper CA400LL001-25M](#)

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Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	0.03		5.8	GHz
VSWR			1.3:1	
Velocity of Propagation		85		%
RF Shielding	90			dB
Capacitance		24 [78.74]		pF/ft [pF/m]
Operating Voltage (AC)			1,000	Vrms
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.)	19.89	29.73	49.42	78.95	118.32	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	0.405 in [10.29 mm]
Weight	5.39134 lbs [2.45 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]

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Bending Moment	0.5 lbs-ft [0.68 N-m]
Tensile Strength	160 lbs [72.57 Kg]

Connectors

Description	Connector 1	Connector 2
Type	N Male	N Male
Specification	MIL-STD-348A	MIL-STD-348A
Impedance	50 Ohms	50 Ohms
Contact Material and Plating	Brass, Silver	Brass, Silver
Contact Plating Specification	70µ in. minimum	70µ in. minimum
Dielectric Type	Teflon	Teflon
Body Material and Plating	Brass, Nickel	Brass, Nickel
Body Plating Specification	100µ in. minimum	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 M Type N to Type N M/M 400 Series Low Loss Cable Jumper CA400LL001-25M](https://www.polyphaser.com/25-m-type-n-to-type-n-m-m-400-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.

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

CA400LL001-25M CAD Drawing

REVISIONS		
REV.	DESCRIPTION	DATE
A	INITIAL RELEASE	07/26/2020
		APPROVED SELLIS

LENGTH MEASURED FROM CONTACT TO CONTACT

2X HEAT SHRINK BOOTING

LOW LOSS 400 SERIES COAX

N MALE

N MALE

LABEL (SEE NOTE 1)

UNLESS OTHERWISE SPECIFIED LEADING DIMENSIONS ARE INCHES DIMENSIONS IN [] ARE MILLIMETERS

TOLERANCES:

X = +2	[5.08]	FRACTIONS	+1/32
.XX = +02	[.51]		
.XXX = +005	[.13]	ANGLES ±1°	

CABLE LENGTH (L) TOLERANCES:

L ≤ 12 [305]	±1 [25] / -0
12 [305] < L ≤ 60 [1524]	±2 [51] / -0
60 [1524] < L ≤ 120 [3048]	±4 [102] / -0
120 [3048] < L ≤ 300 [7620]	±6 [152] / -0
300 [7620] < L	±6%L / -0

ALL DIMENSIONS SHOWN ARE FOR REFERENCE ONLY.

THIRD-ANGLE PROJECTION

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SHEET 1 OF 1

SCALE N/A

NOTES:

- CABLES 36" AND UNDER HAVE 1 LABEL CENTERED. CABLES OVER 36" HAVE 2 LABELS, ONE AT EACH END 6.0" FROM THE FRONT OF THE CONNECTOR.

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