

3 FT Type N to Type N M/M 240 Series Low Loss Cable Jumper

CA240LL015-3FT



Configuration

- Connector 1: N Male
- Connector 2: N 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 CA240LL015-3FT is a 3 foot Type N to Type N M/M 240 Series Low Loss Cable Jumper is built using high quality components by skilled technicians to ensure a reliable product. The Type N (M) jumper connections are designed to industry standard interface dimensions to ensure superior performance. If you have an immediate need, these products are available to ship same day. This high-quality RF coaxial assembly is perfect in many RF Interconnect applications such as Wi-Fi, communications systems, Land Mobile Radio (LMR), and many other RF systems. The CA240LL015-3FT N Type to N Type cable assembly is the perfect companion to PolyPhaser line of RF surge protection devices particularly when used as an antenna jumper.

The 240 Series coax used in these N (M)-N (M) assemblies is a 0.24 inch diameter coax with a black PE jacket. This cable's foam Polyethylene dielectric is low loss material with a phase velocity of 84% reducing the attenuation when compared to solid dielectric coax. PolyPhaser Low Loss 240 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 CA240LL015-3FT result in a coax cable assembly with a 0.75 inch one time bend radius and a repeat bend radius of 2.5 inches. The cable assembly's combination of Type N to Type N (M)/(M) and 240 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. This double wall epoxy filled heat shrink extends the life of these cables by distributing the stresses applied to the connector/coax attachment.

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications:
[3 FT Type N to Type N M/M 240 Series Low Loss Cable Jumper CA240LL015-3FT](#)

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Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	DC		5.8	GHz
VSWR			1.3:1	
Velocity of Propagation		84		%
RF Shielding	90			dB
Capacitance		24.2 [79.4]		pF/ft [pF/m]
Operating Voltage (AC)			1,500	Vrms
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.)	0.42	0.45	0.57	0.75	0.99	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 0.15 dB per connector.

Mechanical Specifications

Size

Length	36 in [914.4 mm]
Diameter	0.24 in [6.1 mm]
Weight	0.228 lbs [103.42 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]

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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, Gold	Brass, Gold
Dielectric Type	Teflon	Teflon
Body Material and Plating	Brass, Tri-Metal	Brass, Tri-Metal
Coupling Nut Material and Plating	Brass, Tri-Metal	Brass, Tri-Metal
Hex Size	18 mm	18 mm
Torque	9 in-lbs [1.02 Nm]	9 in-lbs [1.02 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: [3 FT Type N to Type N M/M 240 Series Low Loss Cable Jumper CA240LL015-3FT](https://www.polyphaser.com/3-ft-type-n-to-type-n-m-m-240-series-low-loss-cable-jumper-p.aspx)

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

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3 FT Type N to Type N M/M 240 Series Low Loss Cable Jumper

CA240LL015-3FT CAD Drawing

REV. A

DESCRIPTION

DATE 07/26/2020

APPROVED SELLIS

REVISIONS

INITIAL RELEASE

LENGTH MEASURED FROM CONTACT TO CONTACT

2X HEAT SHRINK BOOTING

LOW LOSS 240 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]
.XX = +0.02 [.51]
.XXX = +0.005 [.13]

FRACTIONS
+1/32
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

REV A

CA240LL015-3FT

an INFINITE brand

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SIZE A

CAGE CODE 30992

DRAWN BY MVEERAPPAN

ITEM NO. CA240LL015

NOTES:

1. 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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T Rev. D

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