

50 FT SMA to SMA M/M 240 Series Low Loss Cable Jumper

CA240LL022-50FT

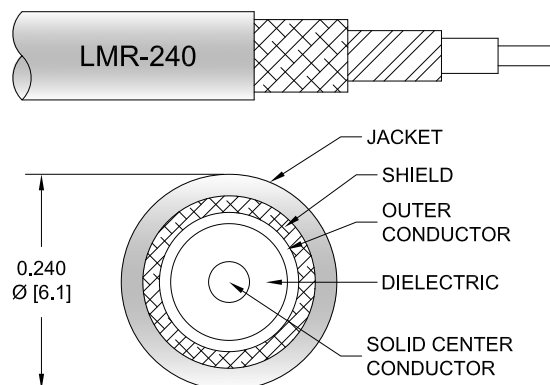


Configuration

- Connector 1: SMA Male
- Connector 2: SMA 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 CA240LL022-50FT is a 50 foot SMA to SMA M/M 240 Series Low Loss Cable Jumper is built using high quality components by skilled technicians to ensure a reliable product. The SMA Male cable jumper connections are designed to industry standard interface dimensions to ensure superior performance. This product is in stock and available for same day shipping. This high-quality RF coaxial assembly is perfect in many RF Interconnect applications such as IoT network, test and measurement, Wireless Lan, and many other RF systems. The CA240LL022-50FT 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 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 CA240LL022-50FT 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/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. All PolyPhaser assemblies are tested and inspected prior to shipping.

For additional strength, these SMA Male to SMA 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:
[50 FT SMA to SMA M/M 240 Series Low Loss Cable Jumper CA240LL022-50FT](#)

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CA240LL022-50FT

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.)	2.2	2.7	4.7	7.7	11.7	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	600 in [15.24 m]
Diameter	0.24 in [6.1 mm]
Weight	1.526 lbs [692.18 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	SMA Male	SMA Male
Impedance	50 Ohms	50 Ohms
Contact Material and Plating	Phosphor Bronze, Gold	Phosphor Bronze, Gold
Dielectric Type	Teflon	Teflon
Body Material and Plating	Brass, Gold	Brass, Gold
Coupling Nut Material and Plating	Brass, Gold	Brass, Gold
Hex Size	16-May in	16-May in
Torque	5 in-lbs [0.57 Nm]	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: [50 FT SMA to SMA M/M 240 Series Low Loss Cable Jumper CA240LL022-50FT](https://www.polyphaser.com/50-ft-sma-to-sma-m-m-240-series-low-loss-cable-jumper-p.aspx)

URL: <https://www.polyphaser.com/50-ft-sma-to-sma-m-m-240-series-low-loss-cable-jumper-p.aspx>

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CA240LL022-50FT CAD Drawing

REV. A

DESCRIPTION

DATE

APPROVED

INITIAL RELEASE

07/26/2020

SELLIS

LENGTH MEASURED FROM CONTACT TO CONTACT

2X HEAT SHRINK BOOTING

LOW LOSS 240 SERIES COAX

SMA MALE

SMA MALE

LABEL (SEE NOTE 1)

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

TOLERANCES:
X = +2 [5.08]
.XX = +.02 [.51]
.XXX = +.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

CA240LL022

ITEM NO.

CA240LL022

SIZE A

CAGE CODE 30992

DRAWN BY MVEERAPPAN

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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