



LCCA30172-FT10

Configuration

Connector 1: BNC MaleConnector 2: BNC MaleCable Type: LMR-240

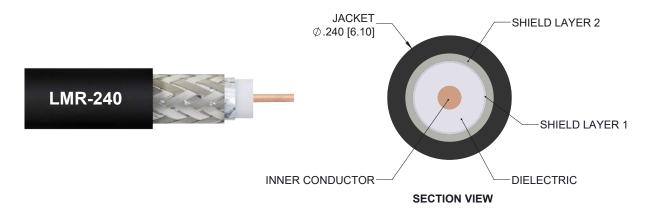
Features

- · Using Times Microwave Components
- Max Frequency 5.8 GHz
- Shielding Effectivity > 90 dB
- 84% Phase Velocity

Applications

- General Purpose
- · Laboratory Use
- Antenna Installations

- PE Jacket
- Low Insertion Loss
- · Bend Radius of 2.5 Inches
- Land Mobile Radio & Other Communication Systems
- · Cellular & Wi-Fi Systems



Description

L-com's LCCA30172-FT10 is a low loss BNC male to BNC male cable assembly using LMR-240 coax, 10 FT with Times Microwave components and ships same-day. The LMR-240 coax of this BNC cable uses the PE (F) dielectric with a VoP of 84%, resulting in very low insertion loss compared to solid dielectrics. These flexible RF cable assemblies are ideal for applications where flexure is required. Our L-com BNC to BNC cable assembly has a male to male gender configuration with flexible LMR-240 series coax and operates to 5.8 GHz. The double shield of this BNC cable is layered by tinned copper braid over aluminum tape providing shielding effectiveness greater than 90dB. *LMR™ is a trademark of Times Microwave Systems.

Custom versions of this BNC male to BNC male cable, along with the rest of L-com's other RF assemblies, can also be built and shipped same day. Other available RF cable assembly value added services from L-com include connector orientation or clocking, heat shrink booting and custom labeling. RF testing can also be performed to document the electrical performance of your cable assembly. Contact a sales representative for testing or custom RF cable quotes. Part number LCCA30172-FT10 L-com Low Loss BNC Male to BNC Male Cable Assembly using LMR-240 Coax, 10 FT with Times Microwave Components data sheet PDF includes details of the RF product specifications, CAD drawing(s) and dimensions below.





LCCA30172-FT10

Electrical Specifications

| Description | Minimum | Typical | Maximum | Units |
|---------------------------|---------|--------------|---------|-----------------------|
| Frequency Range | DC | | 5.8 | GHz |
| Velocity of Propagation | | 84 | | % |
| RF Shielding | 90 | | | dB |
| Group Delay | | 1.21 [3.97] | | ns/ft [ns/m] |
| Capacitance | | 24.2 [79.4] | | pF/ft [pF/m] |
| Inductance | | 0.06 [0.2] | | uH/ft [uH/m] |
| DC Resistance Inner Condu | ctor | 3.2 [10.5] | | Ohms/1000ft [Ohms/Km] |
| DC Resistance Outer Condu | ıctor | 3.89 [12.76] | | Ohms/1000ft [Ohms/Km] |
| Jacket Spark | | | 5,000 | Vrms |

Specifications by Frequency

| Frequency 0.25 0.5 1 2.5 5.8 GHz Insertion Loss (Typ.) 0.59 0.75 0.99 1.48 2.24 dB | Description | F1 | F2 | F3 | F4 | F5 | Units | |
|--|-----------------------|------|------|------|------|------|-------|--|
| Insertion Loss (Typ.) 0.59 0.75 0.99 1.48 2.24 dB | Frequency | 0.25 | 0.5 | 1 | 2.5 | 5.8 | GHz | |
| | Insertion Loss (Typ.) | 0.59 | 0.75 | 0.99 | 1.48 | 2.24 | 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. The Insertion Loss includes an estimated insertion loss of 0.1 dB per connector.

Mechanical Specifications

 Length
 120 in [304.8 cm]

 Diameter
 0.58 in [14.73 mm]

 Weight
 0.056 lbs [25.4 g]

Cable

Cable TypeLMR-240Impedance50 OhmsInner Conductor TypeSolidInner Conductor Material and PlatingCopperDielectric TypePE (F)Number of Shields2

Shield Layer 1 Aluminum Tape
Shield Layer 2 Tinned Copper Braid





LCCA30172-FT10

Jacket MaterialPE, BlackJacket Diameter0.24 in [6.1 mm]

One Time Minimum Bend Radius0.75 in [19.05 mm]Repeated Minimum Bend Radius2.5 in [63.5 mm]Bending Moment0.25 lbs-ft [0.34 N-m]Flat Plate Crush20 lbs/in [0.36 Kg/mm]Tensile Strength80 lbs [36.29 Kg]

Connectors

| Description | Connector 1 | Connector 2 |
|-----------------------------------|---------------|---------------|
| Туре | BNC Male | BNC Male |
| Specification | MIL-STD-348 | MIL-STD-348 |
| Impedance | 50 Ohms | 50 Ohms |
| Contact Material and Plating | Brass, Gold | Brass, Gold |
| Dielectric Type | PTFE | PTFE |
| Body Material and Plating | Brass, Nickel | Brass, Nickel |
| Coupling Nut Material and Plating | Brass, Nickel | Brass, Nickel |

Environmental Specifications

Temperature

Operating Range -40 to +85 deg C Storage Range -70 to +85 deg C

Compliance Certifications (see product page for current document)

Plotted and Other Data

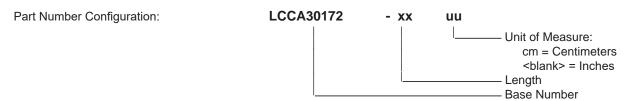
Notes:





LCCA30172-FT10

How to Order



Example: LCCA30172-12 = 12 inches long cable

LCCA30172-100cm = 100 cm long cable

Low Loss BNC Male to BNC Male Cable Assembly using LMR-240 Coax, 10 FT with Times Microwave Components from L-com has same day shipment for domestic and International orders. L-com is a leading manufacturer of wired and wireless connectivity products and committed to in-stock availability and same day shipping. Our portfolio includes coaxial cable assemblies, connectors, adapters and custom products as well as lightning and surge protectors, NEMA rated enclosures, and an RF product line which includes antennas, amplifiers, passive, and active components.

The information contained within 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 impliment improvements. L-com reserves the right to make such changes as required. Unless otherwise stated, all specifications are nominal. L-com does not make any representation or warranty regarding the suitability of the part described herein for any particular purpose, and L-com does not assume liability arising out of the use of any part or document.ontained within 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 impliment improvements. L-com reserves the right to make such changes as required. Unless otherwise stated, all specifications are nominal. L-com does not make any representation or warranty regarding the suitability of the part described herein for any particular purpose, and L-com does not assume liability arising out of the use of any part or document.

L-com CAD Drawing

