



LCCA30178-FT1

Configuration

• Connector 1: TNC Male

Connector 2: TNC Male Right Angle

• Cable Type: LMR-240

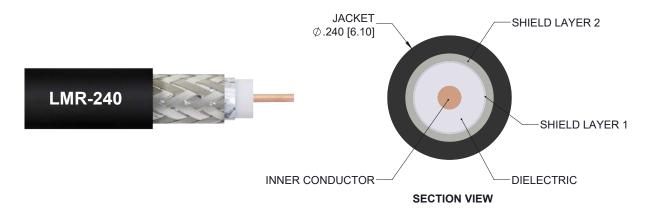
Features

- Using Times Microwave Components
- Max Frequency 2 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 LCCA30178-FT1 is a low loss TNC male to TNC male right angle cable assembly using LMR-240 coax, 1 FT with Times Microwave components and ships same-day. The LMR-240 coax of this TNC 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 TNC to TNC cable assembly has a male to male gender configuration with flexible LMR-240 series coax and operates to 2 GHz. The double shield of this TNC cable is layered by tinned copper braid over aluminum tape providing shielding effectiveness greater than 90dB. This right angle TNC cable interface on the LMR-240 coax allows for easier connections in tight spaces. *LMR™ is a trademark of Times Microwave Systems.

Custom versions of this TNC male to TNC 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 LCCA30178-FT1 L-com Low Loss TNC Male to TNC Male Right Angle Cable Assembly using LMR-240 Coax, 1 FT with Times Microwave Components data sheet PDF includes details of the RF product specifications, CAD drawing(s) and dimensions below.





LCCA30178-FT1

Electrical Specifications

| Description | Minimum | Typical | Maximum | Units |
|---------------------------|---------|--------------|---------|-----------------------|
| Frequency Range | DC | | 2 | GHz |
| VSWR | | | 1.4:1 | |
| 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 | uctor | 3.89 [12.76] | | Ohms/1000ft [Ohms/Km] |
| Jacket Spark | | | 5,000 | Vrms |

Specifications by Frequency

| Description | F1 | F2 | F3 | F4 | F5 | Units |
|-----------------------|------|------|------|------|------|-------|
| Frequency | 0.05 | 0.1 | 0.25 | 0.5 | 2 | GHz |
| Insertion Loss (Typ.) | 0.31 | 0.32 | 0.33 | 0.35 | 0.41 | 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 for the straight connector and 0.2 dB for the right angle connector.

Mechanical Specifications

Cable Assembly

Length 12 in [304.8 mm]
Diameter 0.59 in [14.99 mm]

Cable

Cable Type LMR-240
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 Ta

Shield Layer 1 Aluminum Tape
Shield Layer 2 Tinned Copper Braid





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

 One Time Minimum Bend Radius
 0.75 in [19.05 mm]

 Repeated Minimum Bend Radius
 2.5 in [63.5 mm]

 Bending Moment
 0.25 lbs-ft [0.34 N-m]

 Flat Plate Crush
 20 lbs/in [0.36 Kg/mm]

 Tensile Strength
 80 lbs [36.29 Kg]

Connectors

| Description | Connector 1 | Connector 2 | | |
|-----------------------------------|------------------|----------------------|--|--|
| Туре | TNC Male | TNC Male Right Angle | | |
| 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, Nickel | | |
| Coupling Nut Material and Plating | Brass, Tri-Metal | 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:





LCCA30178-FT1

How to Order



Example: LCCA30178-12 = 12 inches long cable LCCA30178-100cm = 100 cm long cable

which includes antennas, amplifiers, passive, and active components.

Low Loss TNC Male to TNC Male Right Angle Cable Assembly using LMR-240 Coax, 1 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

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L-com CAD Drawing

