

# LCCA30217-FT1

## Configuration

Connector 1: 7/16 DIN Male
Connector 2: 7/16 DIN Male
Cable Type: LMR-600-DB

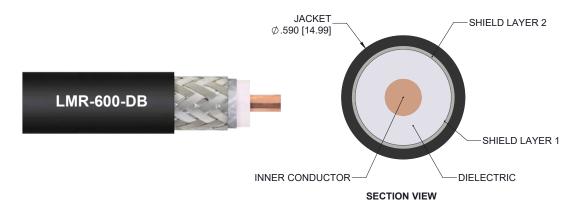
#### **Features**

- · Using Times Microwave Components
- Max Frequency 5.8 GHz
- Shielding Effectivity > 90 dB
- 87% Phase Velocity

#### **Applications**

- General Purpose
- · Laboratory Use
- Antenna Installations

- PE Jacket
- Low Insertion Loss
- · Bend Radius of 6 Inches
- Land Mobile Radio & Other Communication Systems
- · Cellular & Wi-Fi Systems



#### Description

L-com's LCCA30217-FT1 is a low loss 7/16 DIN male to 7/16 DIN male cable assembly using LMR-600-DB coax, 1 FT with Times Microwave components and ships same-day. The LMR-600-DB coax of this 7/16 DIN cable uses the PE (F) dielectric with a VoP of 87%, 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 7/16 DIN to 7/16 DIN cable assembly has a male to male gender configuration with flexible LMR-600-DB series coax and operates to 5.8 GHz. The double shield of this 7/16 DIN 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 7/16 DIN male to 7/16 DIN 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 LCCA30217-FT1 L-com Low Loss 7/16 DIN Male to 7/16 DIN Male Cable Assembly using LMR-600-DB Coax, 1 FT with Times Microwave Components data sheet PDF includes details of the RF product specifications, CAD drawing(s) and dimensions below.





#### LCCA30217-FT1

# **Electrical Specifications**

Description	Minimum	Typical	Maximum	Units
Frequency Range	DC		5.8	GHz
VSWR			1.33:1	
Velocity of Propagation		87		%
RF Shielding	90			dB
Group Delay		1.17 [3.84]		ns/ft [ns/m]
Capacitance		23.4 [76.77]		pF/ft [pF/m]
Inductance		0.058 [0.19]		uH/ft [uH/m]
DC Resistance Inner Conduc	tor	0.53 [1.74]		Ohms/1000ft [Ohms/Km]
DC Resistance Outer Conduc	ctor	1.2 [3.94]		Ohms/1000ft [Ohms/Km]
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 (Typ.)	0.21	0.21	0.22	0.24	0.27	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**

#### **Cable Assembly**

Length 12 in [304.8 mm]
Diameter 1.25 in [31.75 mm]

#### Cable

Cable TypeLMR-600-DBImpedance50 OhmsInner Conductor TypeSolid

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





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Jacket Material Jacket Diameter

One Time Minimum Bend Radius Repeated Minimum Bend Radius Bending Moment Flat Plate Crush Tensile Strength PE, Black 0.59 in [14.99 mm]

1.5 in [38.1 mm] 6 in [152.4 mm] 2.75 lbs-ft [3.73 N-m] 60 lbs/in [1.07 Kg/mm] 350 lbs [158.76 Kg]

#### **Connectors**

Description	Connector 1	Connector 2		
Туре	7/16 DIN Male	7/16 DIN Male		
Impedance	50 Ohms	50 Ohms		
Contact Material and Plating	Copper, Silver	Copper, Silver		
Contact Plating Specification	196μ in. minimum	196μ in. minimum		
Dielectric Type	PTFE	PTFE		
Outer Conductor Material and Plating	Brass, Tri-Metal	Brass, Tri-Metal		
Outer Conductor Plating Specification	78µin. minimum	78µin. minimum		
Body Material and Plating	Brass, Tri-Metal	Brass, Tri-Metal		
Body Plating Specification	78μ in. minimum	78μ in. minimum		
Coupling Nut Material and Plating	Brass, Nickel	Brass, Nickel		
Coupling Nut Plating Specification	196μ in. minimum	196µ in. minimum		
Hex Size	1 1/4 in	1 1/4 in		
Torque	18.417 ft-lbs 24.97 Nm	18.417 ft-lbs 24.97 Nm		

# 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**

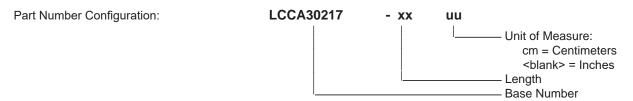
Notes:





# LCCA30217-FT1

#### **How to Order**



Example: LCCA30217-12 = 12 inches long cable

LCCA30217-100cm = 100 cm long cable

Low Loss 7/16 DIN Male to 7/16 DIN Male Cable Assembly using LMR-600-DB 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 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**

