

Low Loss 7/16 DIN Male Right Angle to SMA Male Cable Assembly using LMR-400 Coax, 10 FT with Times Microwave Components

## LCCA30298-FT10

## Configuration

- Connector 1: 7/16 DIN Male Right Angle
- Connector 2: SMA MaleCable Type: LMR-400

#### **Features**

- Using Times Microwave Components
- Max Frequency 3 GHz
- Shielding Effectivity > 90 dB
- 85% Phase Velocity

## **Applications**

- General Purpose
- · Laboratory Use
- Antenna Installations

- PE Jacket
- · Low Insertion Loss
- · Bend Radius of 4 Inches
- Land Mobile Radio & Other Communication Systems
- · Cellular & Wi-Fi Systems



#### Description

L-com's LCCA30298-FT10 is a low loss 7/16 DIN male right angle to SMA male cable assembly using LMR-400 coax, 10 FT with Times Microwave components and ships same-day. The LMR-400 coax of this 7/16 DIN cable uses the PE (F) dielectric with a VoP of 85%, 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 SMA cable assembly has a male to male gender configuration with flexible LMR-400 series coax and operates to 3 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. This right angle 7/16 DIN cable interface on the LMR-400 coax allows for easier connections in tight spaces. \*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 LCCA30298-FT10 L-com Low Loss 7/16 DIN Male Right Angle to SMA Male Cable Assembly using LMR-400 Coax, 10 FT with Times Microwave Components data sheet PDF includes details of the RF product specifications, CAD drawing(s) and dimensions below.



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## **Electrical Specifications**

Description	Minimum	Typical	Maximum	Units
Frequency Range	DC		3	GHz
VSWR			1.4:1	
Velocity of Propagation		85		%
RF Shielding	90			dB
Group Delay		1.2 [3.94]		ns/ft [ns/m]
Capacitance		23.9 [78.41]		pF/ft [pF/m]
Inductance		0.06 [0.2]		uH/ft [uH/m]
DC Resistance Inner Conducto	r	1.39 [4.56]		Ohms/1000ft [Ohms/Km]
DC Resistance Outer Conducto	or	1.65 [5.41]		Ohms/1000ft [Ohms/Km]
Jacket Spark			8,000	Vrms

# **Specifications by Frequency**

Description	F1	F2	F3	F4	F5	Units
Frequency	0.1	0.25	0.5	1	3	GHz
Insertion Loss (Typ.)	0.42	0.5	0.58	0.71	1.03	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 120 in [304.8 cm] Diameter 1.26 in [32 mm]

#### Cable

Cable Type LMR-400 Impedance 50 Ohms Inner Conductor Type Solid

Copper Clad Aluminum Inner Conductor Material and Plating

Dielectric Type PE(F) Number of Shields

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

0.405 in [10.29 mm]

1 in [25.4 mm] 4 in [101.6 mm] 0.5 lbs-ft [0.68 N-m] 40 lbs/in [0.71 Kg/mm] 160 lbs [72.57 Kg]

#### **Connectors**

Connector 1	Connector 2		
7/16 DIN Male Right Angle	SMA Male		
50 Ohms	50 Ohms		
Spring Copper, Silver	Brass, Gold		
200μ ln.	50µ" Minimum		
PTFE	Teflon		
Brass, Tri-Metal	Brass, Tri-Metal		
150μ ln.			
Brass, Tri-Metal	Brass, Tri-Metal		
150μ ln.			
	7/16 DIN Male Right Angle 50 Ohms Spring Copper, Silver 200µ In. PTFE Brass, Tri-Metal 150µ In. Brass, Tri-Metal		

## **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:



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#### LCCA30298-FT10

#### **How to Order**



Example: LCCA30298-12 = 12 inches long cable

LCCA30298-100cm = 100 cm long cable

Low Loss 7/16 DIN Male Right Angle to SMA Male Cable Assembly using LMR-400 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**

