

## Low Loss N Male Right Angle to TNC Male Right Angle Cable Assembly using LMR-400-UF Coax With Times Microwave Components with HeatShrink



### LCCA9959

#### Configuration

- Connector 1: N Male Right Angle
- Connector 2: TNC Male Right Angle
- Cable Type: LMR-400-UF
- Coax Flex Type: Flexible

#### Description

L-com's LCCA9959 is a low loss N male right angle to TNC male right angle cable assembly using LMR-400-UF coax with Times Microwave components with heatshrink and ships same-day. The LMR-400-UF coax of this N 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 N to TNC cable assembly has a male to male gender configuration with flexible LMR-400-UF series coax and operates to 5.8 GHz. The double shield of this N cable is layered by tinned copper braid over aluminum tape providing shielding effectiveness greater than 90dB. This right angle N and TNC cable interface on the LMR-400-UF coax allows for easier connections in tight spaces.

Custom versions of this N male to N 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 LCCA9959 L-com Low Loss N Male Right Angle to TNC Male Right Angle Cable Assembly using LMR-400-UF Coax With Times Microwave Components with HeatShrink data sheet PDF includes details of the RF product specifications, CAD drawing(s) and dimensions below.

#### Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	DC		5.8	GHz
VSWR			1.5:1	
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 Conductor		1.07 [3.51]		Ohms/1000ft [Ohms/Km]
DC Resistance Outer Conductor		1.65 [5.41]		Ohms/1000ft [Ohms/Km]
Dielectric Withstanding Voltage (DC)			2,500	Vdc
Jacket Spark			8,000	Vrms
Input Power (Peak)			16	KWatts

#### Specifications by Frequency

Low Loss N Male Right Angle to TNC Male Right Angle Cable Assembly using LMR-400-UF Coax With Times Microwave Components with HeatShrink



**LCCA9959**

Part Number	Length	Description	F1	F2	F3	F4	F5	Units	Weight (lbs)
			Frequency		250	500	1000	2500	
LCCA9959	Custom Lengths Available	Insertion Loss (Typ.)	0.023	0.034	0.049	0.081	0.13	dB/ft	
			0.08	0.12	0.17	0.27	0.43	dB/m	
LCCA9959-FT1	12 inch	Insertion Loss (Typ.)	0.43	0.44	0.45	0.49	0.53	dB	0.333
LCCA9959-FT2	24 inch	Insertion Loss (Typ.)	0.45	0.47	0.5	0.57	0.66	dB	0.42
LCCA9959-FT3	36 inch	Insertion Loss (Typ.)	0.47	0.51	0.55	0.65	0.79	dB	0.507
LCCA9959-FT5	60 inch	Insertion Loss (Typ.)	0.52	0.57	0.65	0.81	1.05	dB	0.681
LCCA9959-FT25	300 inch	Insertion Loss (Typ.)	0.98	1.25	1.63	2.43	3.65	dB	2.421

The insertion loss data for the base model does not include loss due to the connectors. Each length includes insertion loss due to the connectors.

Loss due to Connector 1: 0.2 dB  
 Loss due to Connector 2: 0.2 dB  
 Base Weight: 0.333 pounds  
 Additional Weight per Inch: 0.00725 pounds

**Mechanical Specifications**

**Cable Assembly**

Width/Diameter 0.5 in [12.7 mm]  
 Weight 0.333 lbs [151.05 g]

**Cable**

Cable Type LMR-400-UF  
 Inner Conductor Type Stranded  
 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 TPE  
 Jacket Diameter 0.405 in [10.29 mm]  
 One Time Minimum Bend Radius 1 in [25.4 mm]  
 Repeated Minimum Bend Radius 4 in [101.6 mm]  
 Bending Moment 0.38 lbs-ft [0.52 N-m]  
 Flat Plate Crush 20 lbs/in [0.36 Kg/mm]  
 Tensile Strength 160 lbs [72.57 Kg]

Low Loss N Male Right Angle to TNC Male Right Angle  
Cable Assembly using LMR-400-UF Coax With Times  
Microwave Components with HeatShrink



**LCCA9959**

**Connectors**

Description	Connector 1	Connector 2
Type	N Male Right Angle	TNC Male Right Angle
Configuration	Right Angle	Right Angle
Mating Cycles	500	
Contact Material and Plating	Brass, Gold	Brass, Silver
Dielectric Type	Teflon	PTFE
Body Material and Plating	Brass, Tri-Metal	Brass, Silver
Coupling Nut Material and Plating	Brass, Tri-Metal	Brass, Silver
Hex Size	13/16 inch	
Torque	30 in-lbs 3.39 Nm	

**Environmental Specifications**

Operating Range Temperature -40 to +85 deg C

**Compliance Certifications** (see [product page](#) for current document)

**Plotted and Other Data**

Notes:  
Values at 25°C, sea level.

Low Loss N Male Right Angle to TNC Male Right Angle Cable Assembly using LMR-400-UF Coax With Times Microwave Components with HeatShrink



**LCCA9959**

**Typical Performance Data**

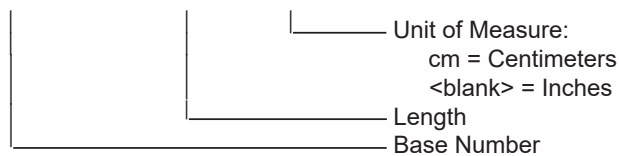
**How to Order**

Part Number Configuration:

**LCCA9959**

**- xx**

**uu**



Example: LCCA9959-12 = 12 inches long cable  
LCCA9959-100cm = 100 cm long cable

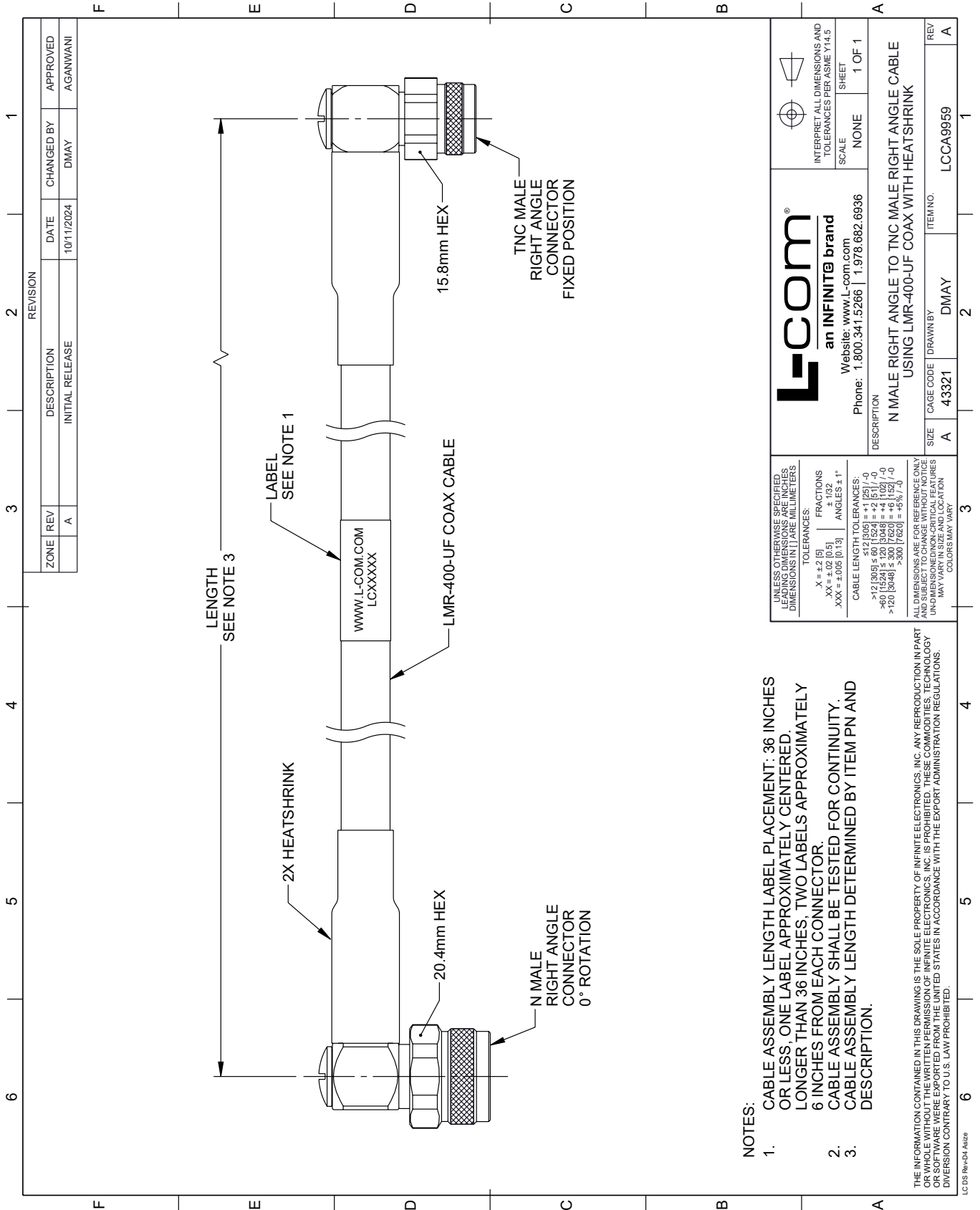
Low Loss N Male Right Angle to TNC Male Right Angle Cable Assembly using LMR-400-UF Coax With Times Microwave Components with HeatShrink from L-com has same day shipment for domestic and International orders. Our portfolio includes coaxial cable assemblies, connectors, adapters and custom products as well as lightning and surge protectors, NEMA rated enclosures, and an RF product line which includes antennas, amplifiers, passive, and active components.

URL: <https://www.l-com.com/n-male-tnc-male-cable-assembly-invalid-lcca9959-p.aspx>

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.

# LCCA9959 CAD Drawing

Low Loss N Male Right Angle to TNC Male Right Angle Cable Assembly using LMR-400-UF Coax With Times Microwave Components with HeatShrink



**NOTES:**

1. CABLE ASSEMBLY LENGTH LABEL PLACEMENT: 36 INCHES OR LESS, ONE LABEL APPROXIMATELY CENTERED, LONGER THAN 36 INCHES, TWO LABELS APPROXIMATELY 6 INCHES FROM EACH CONNECTOR.
2. CABLE ASSEMBLY SHALL BE TESTED FOR CONTINUITY.
3. CABLE ASSEMBLY LENGTH DETERMINED BY ITEM PN AND DESCRIPTION.

THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF INFINITE ELECTRONICS, INC. ANY REPRODUCTION IN PART OR WHOLE WITHOUT THE WRITTEN PERMISSION OF INFINITE ELECTRONICS, INC. IS PROHIBITED. THESE COMMODITIES, TECHNOLOGY OR SOFTWARE WERE EXPORTED FROM THE UNITED STATES IN ACCORDANCE WITH THE EXPORT ADMINISTRATION REGULATIONS. DIVISION CONTRARY TO U.S. LAW PROHIBITED.

LC DS Rev-D4 Altize

UNLESS OTHERWISE SPECIFIED, LEADING DIMENSIONS ARE IN INCHES. DIMENSIONS IN [ ] ARE MILLIMETERS.		L-com® an INFINITE brand Website: www.L-com.com Phone: 1.800.341.5266   1.978.682.6936		INTERPRET ALL DIMENSIONS AND TOLERANCES PER ASME Y14.5	
TOLERANCES: X = ±.2 [5] .XX = ±.02 [0.5] .XXX = ±.005 [0.13]		FRACTIONS ± 1/32 ANGLES ± 1°		SCALE NONE	
CABLE LENGTH TOLERANCES: >12 [305] ≤ 60 [1524] = ±.1 [2.5] / -0 >60 [1524] ≤ 120 [3048] = ±.4 [102] / -0 >120 [3048] ≤ 300 [7620] = ±.6 [15.2] / -0		ALL DIMENSIONS ARE FOR REFERENCE ONLY. UNDIMENSIONED NON-CRITICAL FEATURES MAY VARY IN SIZE AND LOCATION. COLORS MAY VARY.		SHEET 1 OF 1	
DESCRIPTION N MALE RIGHT ANGLE TO TNC MALE RIGHT ANGLE CABLE USING LMR-400-UF COAX WITH HEATSHRINK		ITEM NO. LCCA9959		REV A	
SIZE A		CAGE CODE 43321		DRAWN BY DMAY	

REVISION		DATE	CHANGED BY	APPROVED
ZONE	REV			
	A	10/11/2024	DMAY	AGANWANI
DESCRIPTION				
INITIAL RELEASE				