

## Low Loss TNC Male RA to TNC Male RA Cable Assembly using LMR-400-UF Coax With Times Microwave Components with HeatShrink and 180 Deg. Clock



### LCCA9897

#### Configuration

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

#### Description

L-com's LCCA9897 is a low loss TNC male RA to TNC male RA cable assembly using LMR-400-UF coax with Times Microwave components with heatshrink and 180 deg. clock and ships same-day. The LMR-400-UF coax of this TNC 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 TNC 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 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-400-UF coax allows for easier connections in tight spaces.

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 LCCA9897 L-com Low Loss TNC Male RA to TNC Male RA Cable Assembly using LMR-400-UF Coax With Times Microwave Components with HeatShrink and 180 Deg. Clock 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

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Part Number	Length	Description	F1	F2	F3	F4	F5	Units	Weight (lbs)
		Frequency	250	500	1000	2500	5800	MHz	
LCCA9897	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	
LCCA9897-12	12 inch	Insertion Loss (Typ.)	0.43	0.44	0.45	0.49	0.53	dB	0.307
LCCA9897-24	24 inch	Insertion Loss (Typ.)	0.45	0.47	0.5	0.57	0.66	dB	0.394
LCCA9897-36	36 inch	Insertion Loss (Typ.)	0.47	0.51	0.55	0.65	0.79	dB	0.481
LCCA9897-60	60 inch	Insertion Loss (Typ.)	0.52	0.57	0.65	0.81	1.05	dB	0.655
LCCA9897-300	300 inch	Insertion Loss (Typ.)	0.98	1.25	1.63	2.43	3.65	dB	2.395

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:	0.307 pounds
Additional Weight per Inch:	0.00725 pounds

### Mechanical Specifications

#### Cable Assembly

Width/Diameter	0.5 in [12.7 mm]
Weight	0.307 lbs [139.25 g]

#### Cable

Cable Type	LMR-400-UF
Impedance	50 Ohms
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]

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using LMR-400-UF Coax With Times Microwave  
Components with HeatShrink and 180 Deg. Clock



## LCCA9897

### Connectors

Description	Connector 1	Connector 2
Type	TNC Male Right Angle	TNC Male Right Angle
Impedance	50 Ohms	50 Ohms
Configuration	Right Angle	Right Angle
Contact Material and Plating	Brass, Silver	Brass, Silver
Dielectric Type	PTFE	PTFE
Body Material and Plating	Brass, Silver	Brass, Silver
Coupling Nut Material and Plating	Brass, Silver	Brass, Silver

### 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.

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### LCCA9897

#### Typical Performance Data

#### How to Order

Part Number Configuration:

**LCCA9897**

**- xx**

**uu**

Unit of Measure:  
cm = Centimeters  
<blank> = Inches  
Length  
Base Number

Example: LCCA9897-12 = 12 inches long cable  
LCCA9897-100cm = 100 cm long cable

Low Loss TNC Male RA to TNC Male RA Cable Assembly using LMR-400-UF Coax With Times Microwave Components with HeatShrink and 180 Deg. Clock 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.

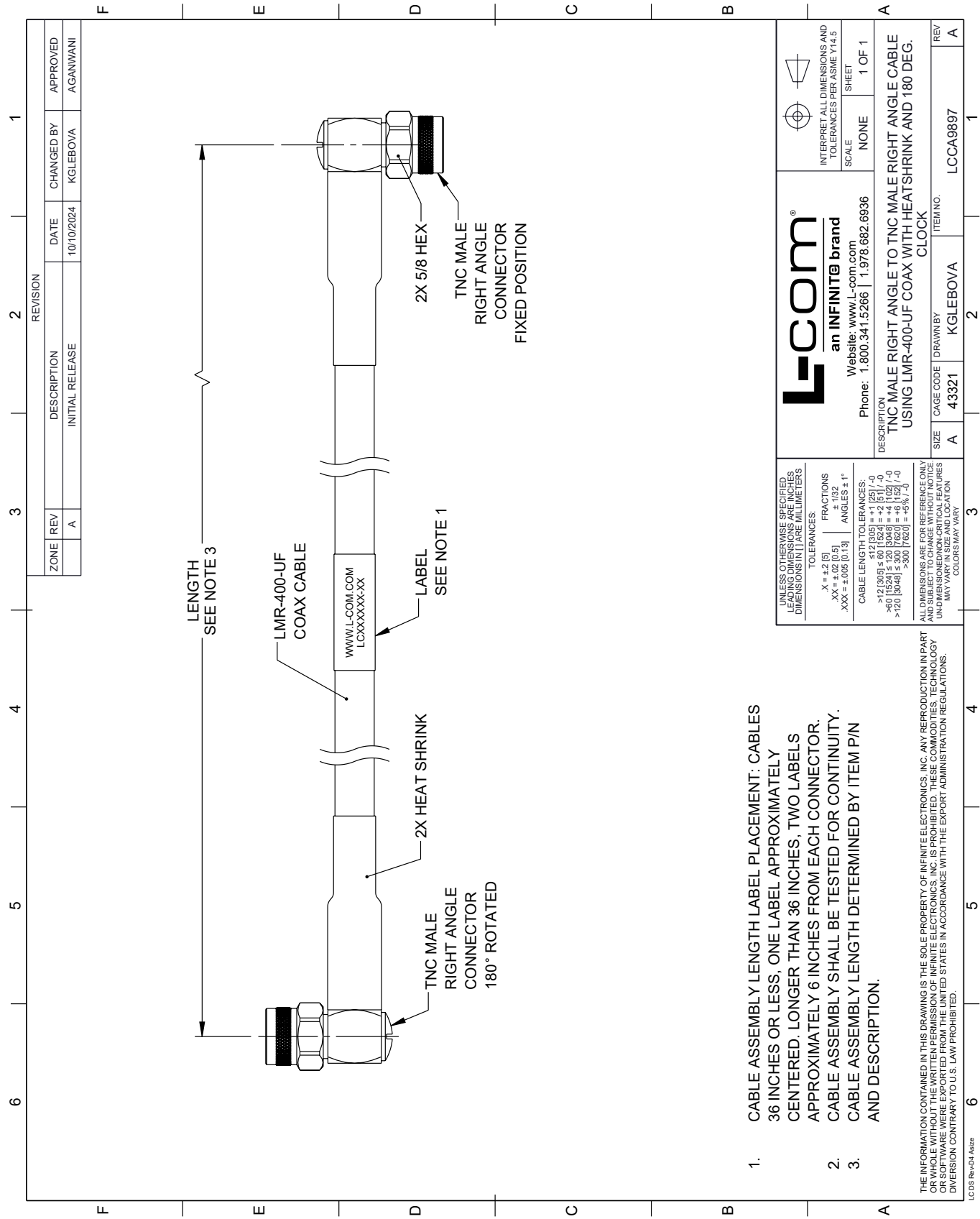
URL: <https://www.l-com.com/tnc-male-tnc-male-cable-assembly-invalid-lcca9897-p.aspx>

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 implement 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.



LCCA9897 CAD Drawing

Low Loss TNC Male RA to TNC Male RA Cable Assembly using LMR-400-UF Coax

With Times Microwave Components with HeatShrink and 180 Deg. Clock



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

UNLESS OTHERWISE SPECIFIED LEADING DIMENSIONS ARE IN INCHES DIMENSIONS IN IT ARE IN MILLIMETERS		TOLERANCES:  X = ±.2 [5] XX = ±.02 [0.5] XXX = ±.005 [0.13]		FRACTIONS  X = 1/32 ANGLES ± 1°		L-com®  an INFINITE® brand  Website: <a href="http://www.L-com.com">www.L-com.com</a>  Phone: 1.800.341.5266   1.978.682.6936		INTERPRET ALL DIMENSIONS AND TOLERANCES PER ASME Y14.5		  					
CABLE LENGTH TOLERANCES:  >12 [305] ≤ 60 [1524] = ±.1 [2.5] / -0 >60 [1524] ≤ 120 [3048] = ±.004 [0.102] / -0 >120 [3048] ≤ 300 [7620] = ±.005 [0.125] / -0 >300 [7620] = ±6% / -0						DESCRIPTION		SCALE		SHEET					
						TNC MALE RIGHT ANGLE TO TNC MALE RIGHT ANGLE CABLE USING LMR-400-UF COAX WITH HEATSHRINK AND 180 DEG. CLOCK		NONE		1 OF 1					
ALL DIMENSIONS ARE FOR REFERENCE ONLY UNLESS OTHERWISE SPECIFIED, DIMENSIONS MAY VARY IN SIZE AND LOCATION COLORS MAY VARY						SIZE		CAGE CODE		DRAWN BY		ITEM NO.		REV	
						A		43321		KGLEBOVA		LCCA9897		A	