

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



LCCA9894

Configuration

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

Description

L-com's LCCA9894 is a low loss TNC male to TNC male cable assembly using LMR-400-UF coax with Times Microwave components with heatshrink 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.

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 LCCA9894 L-com Low Loss TNC Male to TNC Male 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

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LCCA9894

Part Number	Length	Description	F1	F2	F3	F4	F5	Units	Weight (lbs)
			Frequency	250	500	1000	2500	5800	
LCCA9894	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	
LCCA9894-12	12 inch	Insertion Loss (Typ.)	0.23	0.24	0.25	0.29	0.33	dB	0.269
LCCA9894-24	24 inch	Insertion Loss (Typ.)	0.25	0.27	0.3	0.37	0.46	dB	0.356
LCCA9894-36	36 inch	Insertion Loss (Typ.)	0.27	0.31	0.35	0.45	0.59	dB	0.443
LCCA9894-60	60 inch	Insertion Loss (Typ.)	0.32	0.37	0.45	0.61	0.85	dB	0.617
LCCA9894-300	300 inch	Insertion Loss (Typ.)	0.78	1.05	1.43	2.23	3.45	dB	2.357

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: 0.1 dB
 Loss due to Connector 2: 0.1 dB
 Base Weight: 0.269 pounds
 Additional Weight per Inch: 0.00725 pounds

Mechanical Specifications

Cable Assembly

Width/Diameter 0.5 in [12.7 mm]
 Weight 0.269 lbs [122.02 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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Connectors

Description	Connector 1	Connector 2
Type	TNC Male	TNC Male
Impedance	50 Ohms	50 Ohms
Configuration	Straight	Straight
Mating Cycles	500	500
Contact Material and Plating	Brass, Gold	Brass, Gold
Body Material and Plating	Brass, Tri-Metal	Brass, Tri-Metal
Coupling Nut Material and Plating	Brass, Tri-Metal	Brass, Tri-Metal

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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Typical Performance Data

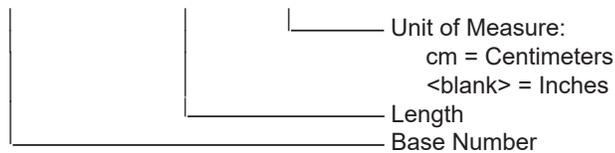
How to Order

Part Number Configuration:

LCCA9894

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Example: LCCA9894-12 = 12 inches long cable
LCCA9894-100cm = 100 cm long cable

Low Loss TNC Male to TNC Male 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/tnc-male-tnc-male-cable-assembly-invalid-lcca9894-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.

LCCA9894 CAD Drawing

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

