

Low Loss SMA Male to TNC Male Cable Assembly using LMR-100 Coax, 1.5 FT with Times Microwave Components



## LCCA30224-FT1.5

### Configuration

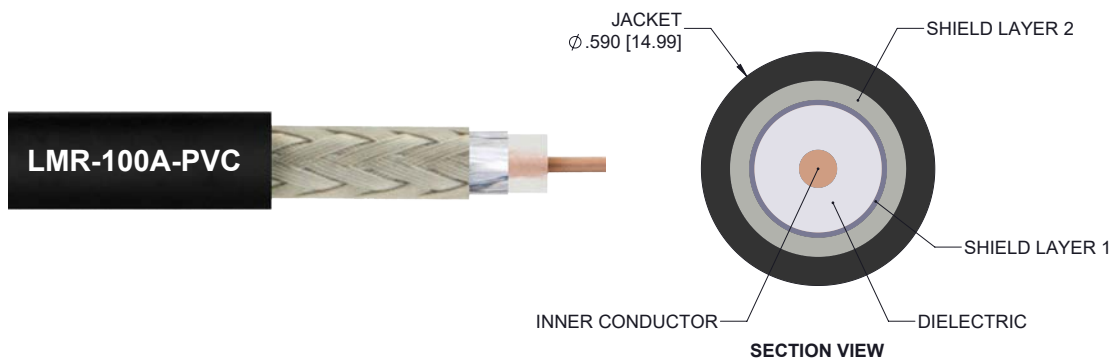
- Connector 1: SMA Male
- Connector 2: TNC Male
- Cable Type: LMR-100A-PVC

### Features

- Using Times Microwave Components
- Max Frequency 5.8 GHz
- Shielding Effectivity > 90 dB
- 66% Phase Velocity
- PVC Jacket
- Low Insertion Loss
- Bend Radius of 1 Inch

### Applications

- General Purpose
- Laboratory Use
- Antenna Installations
- Land Mobile Radio & Other Communication Systems
- Cellular & Wi-Fi Systems



### Description

L-com's LCCA30224-FT1.5 is a low loss SMA male to TNC male cable assembly using LMR-100 coax, 1.5 FT with Times Microwave components and ships same-day. The LMR-100A-PVC coax of this SMA cable uses the PE dielectric with a VoP of 66%, 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 SMA to TNC cable assembly has a male to male gender configuration with flexible LMR-100A-PVC series coax and operates to 5.8 GHz. The double shield of this SMA 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 SMA male to SMA 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 LCCA30224-FT1.5 L-com Low Loss SMA Male to TNC Male Cable Assembly using LMR-100 Coax, 1.5 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		5.8	GHz
Velocity of Propagation		66		%
RF Shielding	90			dB
Group Delay		1.54 [5.05]		ns/ft [ns/m]
Capacitance		30.8 [101.05]		pF/ft [pF/m]
Inductance		0.077 [0.25]		uH/ft [uH/m]
DC Resistance Inner Conductor		81 [265.75]		Ohms/1000ft [Ohms/Km]
DC Resistance Outer Conductor		9.5 [31.17]		Ohms/1000ft [Ohms/Km]
Jacket Spark			2,000	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.)	0.37	0.45	0.56	0.8	1.16	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	18 in [457.2 mm]
Diameter	0.6 in [15.24 mm]
Weight	0.121 lbs [54.88 g]

#### Cable

Cable Type	LMR-100A-PVC
Impedance	50 Ohms
Inner Conductor Type	Solid
Inner Conductor Material and Plating	Copper Clad Steel
Dielectric Type	PE
Number of Shields	2
Shield Layer 1	Aluminum Tape
Shield Layer 2	Tinned Copper Braid

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Jacket Material	PVC, Black
Jacket Diameter	0.11 in [2.79 mm]
One Time Minimum Bend Radius	0.25 in [6.35 mm]
Repeated Minimum Bend Radius	1 in [25.4 mm]
Bending Moment	0.1 lbs-ft [0.14 N-m]
Flat Plate Crush	10 lbs/in [0.18 Kg/mm]
Tensile Strength	15 lbs [6.8 Kg]

### Connectors

Description	Connector 1	Connector 2
Type	SMA Male	TNC Male
Impedance	50 Ohms	50 Ohms
Contact Material and Plating	Brass, Gold	Beryllium Copper, Gold
Dielectric Type	Teflon	Teflon
Body Material and Plating	Stainless Steel	Brass, Silver
Coupling Nut Material and Plating	Stainless Steel	Brass, Silver

### 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:

- Values at 25°C, sea level.

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## LCCA30224-FT1.5

### How to Order

Part Number Configuration:

**LCCA30224 - xx uu**



Example: LCCA30224-12 = 12 inches long cable  
LCCA30224-100cm = 100 cm long cable

Low Loss SMA Male to TNC Male Cable Assembly using LMR-100 Coax, 1.5 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 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 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.

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L-com CAD Drawing

REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
A	INITIAL RELEASE	02/03/2020	SELLIS

SMA MALE

TNC MALE

WWW.L-COM.COM  
L-COMP/N  
(SEE NOTE 1)

LENGTH MEASURED FROM CONTACT TO CONTACT

LMR-100A-PVC

2X HEAT SHRINK

L-COM<sup>TM</sup>  
an INFINITE brand

50 High Street, West Mill, 3rd Floor, Suite #30  
North Andover, MA 01845 USA.  
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Fax: 1.978.689.9484  
Website: www.L-com.com  
E-mail: CustomerService@L-com.com

UNLESS OTHERWISE SPECIFIED  
LEADING DIMENSIONS ARE INCHES  
DIMENSIONS IN [ ] ARE MILLIMETERS

TOLERANCES:

.X ± .2	[5.08]	FRACTIONS	± 1/32
.XX ± .02	[.51]	ANGLES ± 1°	
.XXX ± .005	[.13]	CABLE LENGTH (L) TOLERANCES:	
		L ≤ 12 [305]	± 1 [25] / -0
		12 [305] < L ≤ 60 [1524]	± 2 [51] / -0
		60 [1524] < L ≤ 120 [3048]	± 4 [102] / -0
		120 [3048] < L ≤ 300 [7620]	± 6 [152] / -0
		300 [7620] < L	± 9% L / -0

THIRD-ANGLE PROJECTION

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SHEET 1 OF 1

SCALE N/A

REV A

PART NUMBER LCCA30224

DRAWN BY MVEERAPPAN

CAGE CODE A 43321

SIZE A

**NOTES:**

1. CABLES 36" AND UNDER HAVE 1 LABEL CENTERED.  
CABLES OVER 36" HAVE 2 LABELS, ONE AT EACH END,  
6.0" FROM THE FRONT OF THE CONNECTOR.

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