

## Low Loss 7/16 DIN Female to N Male Weatherproof Cable Assembly with Silicone using SPO-250 Coax with Times Microwave Components



### LCCA9880/WP

#### Configuration

- Connector 1: 7/16 DIN Female
- Connector 2: N Male
- Cable Type: SPO-250
- Coax Flex Type: Flexible

#### Features

- Max Frequency 6 GHz
- Low PIM: -160 dBc Max
- 83% Phase Velocity
- PE Jacket
- Silicone Connector Boot
- IP68 Rated

#### Description

The L-com LCCA9880/WP is a weatherproof low loss cable assembly that comes with 7/16 DIN female connection with weatherproof boot on one end and type N male with weatherproof boot on the other. L-com's RF coaxial cable assembly products are designed for typical use, production, laboratory test and measurement, defense/military, aerial antenna towers, etc. The low loss cable has a 50 Ohm impedance and is specifically ready for quicker shipment than most in the industry can provide.

This weatherproof low loss RF cable assembly operates at a maximum frequency of 6 GHz. Our RF cable assembly has a PE jacket with 0.303 inches diameter. The 7/16 DIN female to type N male cable assembly LCCA9880/WP is built with SPO-250 coax, which has a flexible design. This RF cable assembly with 0.5 inches diameter has copper clad aluminum as cable's inner conducting material and foam PE dielectric type. The weatherproof boot low loss cable can operate at a temperature range of -40 to 85 degrees C. Additional dimensions, specifications, and CAD drawings for this LCCA9880/WP low loss RF cable are available on our downloadable PDF datasheet.

L-com stocks a wide selection of weatherproof low loss cable assemblies that ship the same business day as ordered from our warehouse. Make your online purchase right now to take advantage of our same-day shipping. For further information on similar products, our expert technical support and knowledgeable sales team can help you get the ideal 7/16 DIN female to type N male cable assembly as per your requirements.

#### Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	DC		6	GHz
VSWR			1.4:1	
Velocity of Propagation		83		%
Passive Intermodulation IM3 (2x43dBm Tones) at 850 MHz or 1900 MHz			-160	dBc
Capacitance		24 [78.74]		pF/ft [pF/m]
Inductance		0.054 [0.18]		uH/ft [uH/m]

#### Specifications by Frequency

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**LCCA9880/WP**

Part Number	Length	Description	F1	F2	F3	F4	Units	Weight (lbs)
			Frequency	500	1000	2500	6000	
LCCA9880/WP	Custom Lengths Available	Insertion Loss (Typ.)	0.028	0.041	0.068	0.108	dB/ft	
			0.1	0.14	0.23	0.36	dB/m	
LCCA9880/WP-FT1	12 In	Insertion Loss (Typ.)	0.2	0.25	0.33	0.46	dB	0.779
LCCA9880/WP-FT2	24 In	Insertion Loss (Typ.)	0.23	0.29	0.4	0.57	dB	0.826
LCCA9880/WP-FT3	36 In	Insertion Loss (Typ.)	0.26	0.33	0.47	0.67	dB	0.873
LCCA9880/WP-FT5	60 In	Insertion Loss (Typ.)	0.32	0.41	0.6	0.89	dB	0.967
LCCA9880/WP-M0.5	50 CM	Insertion Loss (Typ.)	0.22	0.27	0.37	0.53	dB	0.81

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\*SQRT(FGHz) dB  
 Base Weight: 0.779 pounds  
 Additional Weight per Inch: 0.00391 pounds

**Mechanical Specifications**

**Cable Assembly**

Width/Diameter 0.5 in [12.7 mm]  
 Weight 0.779 lbs [353.35 g]

**Cable**

Cable Type SPO-250  
 Impedance 50 Ohms  
 Inner Conductor Type Stranded  
 Inner Conductor Material and Plating Copper Clad Aluminum  
 Dielectric Type Foam PE  
 Outer Conductor 1 Material and Plating Copper, Corrugated  
 Jacket Material PE  
 Jacket Diameter 0.303 in [7.7 mm]  
 One Time Minimum Bend Radius 1 in [25.4 mm]  
 Bending Moment 0.5 lbs-ft [0.68 N-m]

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**Connectors**

Description	Connector 1	Connector 2
Type	7/16 DIN Female	N Male
Option	Weatherproof Boot	Weatherproof Boot
Impedance	50 Ohms	50 Ohms
Configuration	Straight	Straight
Contact Material and Plating	Phosphor Bronze, Silver	Phosphor Bronze, Silver
Contact Plating Specification	200 µin minimum	196 µin minimum
Dielectric Type	PTFE	PTFE
Outer Conductor Material and Plating	Brass, Tri-Metal	
Outer Conductor Plating Specification	100 µin minimum	
Body Material and Plating	Brass, Tri-Metal	Brass, Tri-Metal
Body Plating Specification	100 µin minimum	118 µin minimum
Coupling Nut Material and Plating		Brass, Tri-Metal
Coupling Nut Plating Specification		118 µin minimum
Boot Material	Silicone	Silicone

**Environmental Specifications**

Operating Range Temperature	-40 to +85 deg C
Ingress Protection (IP) Rating	IP68

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

**Plotted and Other Data**

Notes:  
Values at 25°C, sea level.

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**LCCA9880/WP**

**Typical Performance Data**

**How to Order**

Part Number Configuration:

**LCCA9880/WP - xx uu**



Example: LCCA9880/WP-12 = 12 inches long cable  
LCCA9880/WP-100cm = 100 cm long cable

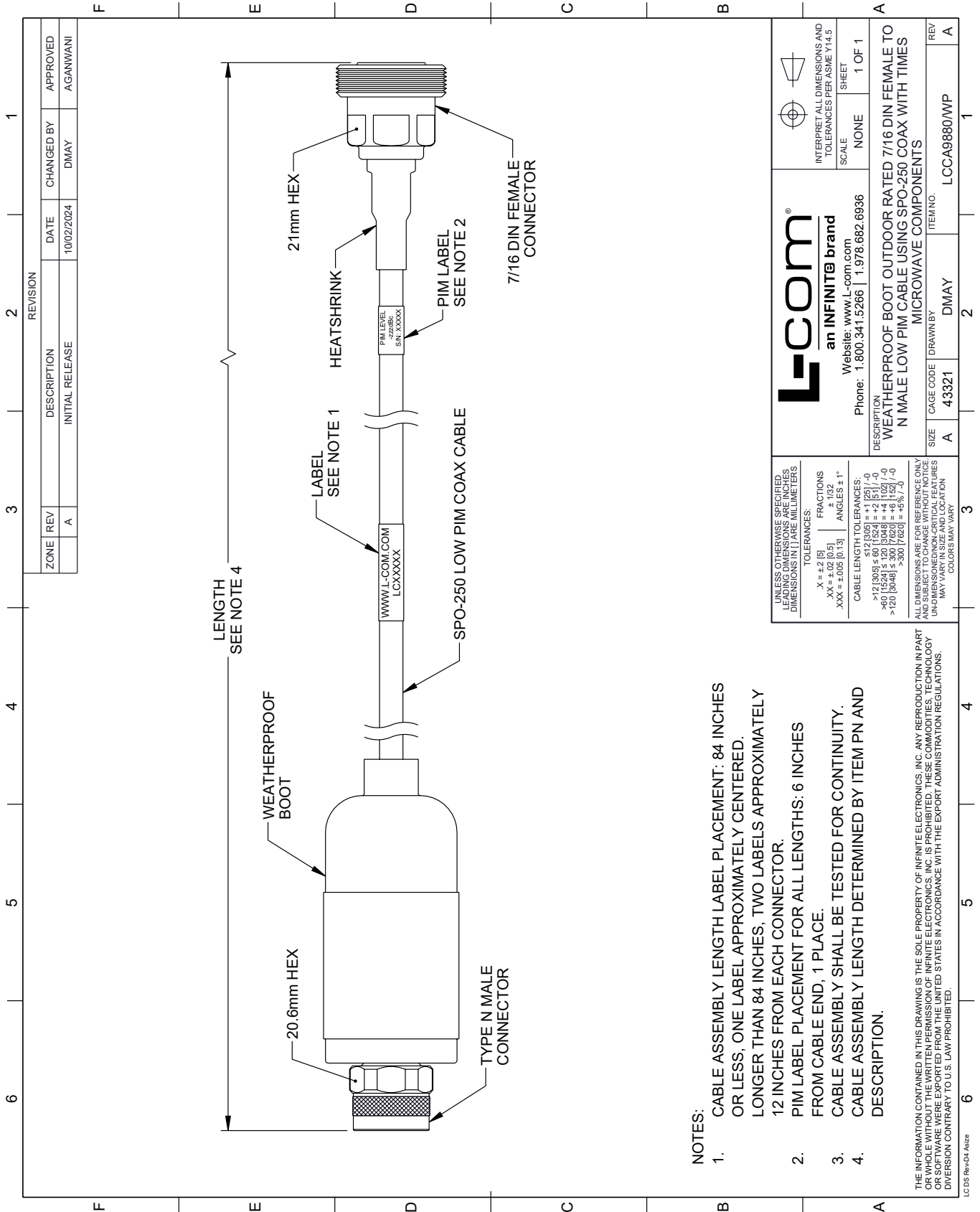
Low Loss 7/16 DIN Female to N Male Weatherproof Cable Assembly with Silicone using SPO-250 Coax with Times Microwave Components from L-com has same day shipment for domestic and International orders. Our portfolio includes coaxial cable assemblies, connectors, adapters and custom products as well as 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/7-16-din-female-n-male-cable-lcca9880-wp-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.

# LCCA9880/WP CAD Drawing



Low Loss 7/16 DIN Female to N Male Weatherproof Cable Assembly with Silicone using SPO-250 Coax with Times Microwave Components



**NOTES:**

1. CABLE ASSEMBLY LENGTH LABEL PLACEMENT: 84 INCHES OR LESS, ONE LABEL APPROXIMATELY CENTERED. LONGER THAN 84 INCHES, TWO LABELS APPROXIMATELY 12 INCHES FROM EACH CONNECTOR.
2. PIM LABEL PLACEMENT FOR ALL LENGTHS: 6 INCHES FROM CABLE END, 1 PLACE.
3. CABLE ASSEMBLY SHALL BE TESTED FOR CONTINUITY.
4. CABLE ASSEMBLY LENGTH DETERMINED BY ITEM PN AND DESCRIPTION.

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<p>UNLESS OTHERWISE SPECIFIED, LEADING DIMENSIONS ARE IN INCHES. DIMENSIONS IN [ ] ARE IN MILLIMETERS.</p> <p>TOLERANCES:</p> <p>X = ±.2 [5]      FRACTIONS ± 1/32</p> <p>.XX = ±.02 [0.5]      ANGLES ± 1°</p> <p>.XXX = ±.005 [0.13]</p> <p>CABLE LENGTH TOLERANCES:</p> <p>&lt;12 [305] ≤ 60 [1524] = ±.1 [25] / -0</p> <p>&gt;60 [1524] ≤ 120 [3048] = ±.1 [25] / -0</p> <p>&gt;120 [3048] ≤ 300 [7620] = ±.5 [12.7] / -0</p>		
<p>ALL DIMENSIONS ARE FOR REFERENCE ONLY. UNDIMENSIONED NON-CRITICAL FEATURES MAY VARY IN SIZE AND LOCATION. COLORS MAY VARY.</p>		
DESCRIPTION	SIZE	REV
WEATHERPROOF BOOT OUTDOOR RATED 7/16 DIN FEMALE TO N MALE LOW PIM CABLE USING SPO-250 COAX WITH TIMES MICROWAVE COMPONENTS	A	A
CAGE CODE	DRAWN BY	ITEM NO.
43321	DMAY	LCCA9880/WP