



#### LCCA9868/WP

#### Configuration

Connector 1: SMA MaleConnector 2: SMA MaleCable Type: LMR-240Coax Flex Type: Flexible

#### **Features**

- · Max Frequency 6 GHz
- Shielding Effectivity > 90 dB
- · 84% Phase Velocity
- · Double Shielded
- PF Jacket
- · Silicone Connector Boot
- IP68 Rated



#### **Description**

The L-com LCCA9868/WP is a weatherproof low loss cable assembly that comes with SMA male connection with weatherproof boot on one end and SMA 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 0.240 inches diameter. The SMA male to SMA male cable assembly LCCA9868/WP is built with LMR-240 coax, which has a flexible design. This RF cable assembly with 0.5 inches diameter has copper as cable's inner conducting material and PE (F) 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 LCCA9868/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 SMA male to SMA 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              |         | 84           |         | %                     |
| RF Shielding                         | 90      |              |         | dB                    |
| Capacitance                          |         | 24.2 [79.4]  |         | pF/ft [pF/m]          |
| Inductance                           |         | 0.06 [0.2]   |         | uH/ft [uH/m]          |
| DC Resistance Inner Conductor        |         | 3.2 [10.5]   |         | Ohms/1000ft [Ohms/Km] |
| DC Resistance Outer Conductor        |         | 3.89 [12.76] |         | Ohms/1000ft [Ohms/Km] |
| Dielectric Withstanding Voltage (DC) |         |              | 1,500   | Vdc                   |





# LCCA9868/WP

#### **Electrical Specifications**

| Description  | Minimum | Typical | Maximum | Units |
|--------------|---------|---------|---------|-------|
| Jacket Spark |         |         | 5,000   | Vrms  |

Specifications by Frequency

| positional by i requestey |                |                       |       |       |       |       |       |       |              |
|---------------------------|----------------|-----------------------|-------|-------|-------|-------|-------|-------|--------------|
| Part Number               | Length         | Description           | F1    | F2    | F3    | F4    | F5    | Units | Weight (lbs) |
|                           |                | Frequency             | 250   | 500   | 1000  | 2500  | 6000  | MHz   |              |
| LCCA9868/WP               | Custom Lengths | Insertion Loss (Typ.) | 0.039 | 0.055 | 0.079 | 0.129 | 0.204 | dB/ft |              |
| LCCA9808/WP               | Available      |                       | 0.13  | 0.19  | 0.26  | 0.43  | 0.67  | dB/m  |              |
| LCCA9868/WP-FT1           | 12 ln          | Insertion Loss (Typ.) | 0.24  | 0.26  | 0.28  | 0.33  | 0.41  | dB    | 1.059        |
| LCCA9868/WP-FT2           | 24 In          | Insertion Loss (Typ.) | 0.28  | 0.31  | 0.36  | 0.46  | 0.61  | dB    | 1.092        |
| LCCA9868/WP-FT3           | 36 In          | Insertion Loss (Typ.) | 0.32  | 0.37  | 0.44  | 0.59  | 0.82  | dB    | 1.125        |
| LCCA9868/WP-FT4           | 48 In          | Insertion Loss (Typ.) | 0.36  | 0.42  | 0.52  | 0.72  | 1.02  | dB    | 1.158        |
| LCCA9868/WP-FT5           | 60 In          | Insertion Loss (Typ.) | 0.4   | 0.48  | 0.6   | 0.85  | 1.22  | dB    | 1.191        |

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: 1.059 pounds
Additional Weight per Inch: 0.00275 pounds

#### **Mechanical Specifications**

## Cable Assembly

 Width/Diameter
 0.5 in [12.7 mm]

 Weight
 1.059 lbs [480.35 g]

#### Cable

Cable Type LMR-240
Impedance 50 Ohms
Inner Conductor Type Solid
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 PE

Jacket Diameter0.24 in [6.1 mm]One Time Minimum Bend Radius0.75 in [19.05 mm]Repeated Minimum Bend Radius2.5 in [63.5 mm]

 Bending Moment
 0.25 lbs-ft [0.34 N-m]

 Flat Plate Crush
 20 lbs/in [0.36 Kg/mm]

 Tensile Strength
 80 lbs [36.29 Kg]





## **LCCA9868/WP**

#### **Connectors**

| Description                       | Connector 1       | Connector 2       |
|-----------------------------------|-------------------|-------------------|
| Туре                              | SMA Male          | SMA Male          |
| Option                            | Weatherproof Boot | Weatherproof Boot |
| Impedance                         | 50 Ohms           | 50 Ohms           |
| Configuration                     | Straight          | Straight          |
| Contact Material and Plating      | Brass, Gold       | Brass, Gold       |
| Dielectric Type                   | PTFE              | PTFE              |
| Body Material and Plating         | Brass, Gold       | Brass, Gold       |
| Coupling Nut Material and Plating | Brass, Gold       | Brass, Gold       |
| Boot Material                     | Silicone          | Silicone          |

#### **Environmental Specifications**

Operating Range Temperature Ingress Protection (IP) Rating

-40 to +85 deg C

11-00

Compliance Certifications (see product page for current document)

#### **Plotted and Other Data**

Notes:

Values at 25°C, sea level.





### LCCA9868/WP

### **Typical Performance Data**

#### **How to Order**

Part Number Configuration:

LCCA9868/WP - xx uu

Unit of Measure:
cm = Centimeters
<br/>
<br/>
<br/>
<br/>
Length
Base Number

Example: LCCA9868/WP-12 = 12 inches long cable

LCCA9868/WP-100cm = 100 cm long cable

Low Loss SMA Male to SMA Male Weatherproof Cable Assembly with Silicone using LMR-240 Coax 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/sma-male-sma-male-cable-assembly-lcca9868-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 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.

