

LCCA9866/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 LCCA9866/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 LCCA9866/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 LCCA9866/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



with Times Microwave Components LCCA9866/WP



Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Jacket Spark			5,000	Vrms

0.24 in [6.1 mm]

Specifications by Frequency

Part Number	Longth	Description	F1	F2	F3	F4	F5	Units	Maight (lbs)
Part Number	Length	Frequency	250	500	1000	2500	6000	MHz	Weight (lbs)
LCCA9866/WP	Custom Lengths	Insertion Loss (Typ.)	0.039	0.055	0.079	0.129	0.204	dB/ft	
LCCA3800/ WF	Available	ilisertion Loss (Typ.)	0.13	0.19	0.26	0.43	0.67	dB/m	
LCCA9866/WP-FT1	12 In	Insertion Loss (Typ.)	0.24	0.26	0.28	0.33	0.41	dB	1.073
LCCA9866/WP-FT2	24 In	Insertion Loss (Typ.)	0.28	0.31	0.36	0.46	0.61	dB	1.106
LCCA9866/WP-FT3	36 In	Insertion Loss (Typ.)	0.32	0.37	0.44	0.59	0.82	dB	1.139
LCCA9866/WP-FT4	48 In	Insertion Loss (Typ.)	0.36	0.42	0.52	0.72	1.02	dB	1.172
LCCA9866/WP-FT5	60 In	Insertion Loss (Typ.)	0.4	0.48	0.6	0.85	1.22	dB	1.205

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: 1.073 pounds

Additional Weight per Inch: 0.00275 pounds

Mechanical Specifications

Cable Assembly

 Width/Diameter
 0.5 in [12.7 mm]

 Weight
 1.073 lbs [486.7 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

Number of Shields 2
Shield Layer 1 Aluminum Tape
Shield Layer 2 Tinned Copper Braid

Jacket Material Jacket Diameter

One Time Minimum Bend Radius 0.75 in [19.05 mm]
Repeated Minimum Bend Radius 2.5 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]



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Connectors

Description	Connector 1	Connector 2	
Туре	SMA Male	SMA Male	
Option	Weatherproof Boot	Weatherproof Boot	
Specification	MIL-STD-348	MIL-STD-348	
Impedance	50 Ohms	50 Ohms	
Configuration	Straight	Straight	
Contact Material and Plating	Beryllium Copper, Gold	Beryllium Copper, Gold	
Contact Plating Specification	ASTM B488	ASTM B488	
Dielectric Type	PTFE	PTFE	
Outer Conductor Material and Plating	Brass, Tri-Metal	Brass, Tri-Metal	
Body Material and Plating	Brass, Tri-Metal	Brass, Tri-Metal	
Coupling Nut Material and Plating	Brass, Tri-Metal	Brass, Tri-Metal	
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.



LCCA9866/WP

Typical Performance Data

How to Order

Part Number Configuration:

LCCA9866/WP - xx uu

Unit of Measure:
cm = Centimeters

Length
Base Number

Example: LCCA9866/WP-12 = 12 inches long cable

LCCA9866/WP-100cm = 100 cm long cable

Low Loss SMA Male to SMA Male Weatherproof Cable Assembly with Silicone using LMR-240 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/sma-male-sma-male-cable-assembly-lcca9866-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.

LCCA9866/WP CAD Drawing

Low Loss SMA Male to SMA Male Weatherproof Cable Assembly with Silicone using LMR-240 Coax with Times Microwave Components

