

Low Loss SMA Male to SMA Female Weatherproof Cable Assembly with Silicone using LMR-240 Coax, 4 FT



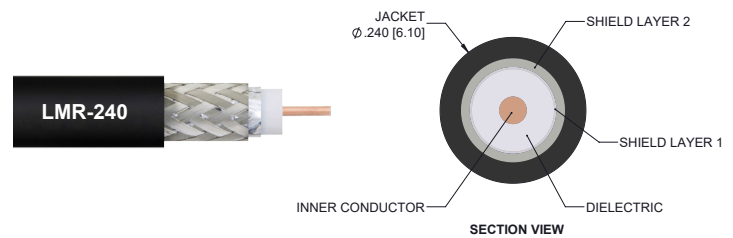
LCCA9871/WP-FT4

Configuration

- Connector 1: SMA Male
- Connector 2: SMA Female
- Cable Type: LMR-240
- Coax Flex Type: Flexible

Features

- Silicone Connector Boot
- IP68 Rated



Description

L-com's LCCA9871/WP-FT4 is a low loss SMA male to SMA female weatherproof cable assembly with silicone using LMR-240 coax, 4 FT and ships same-day. The LMR-240 coax of this SMA cable uses the PE (F) dielectric with a VoP of 84%, 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 SMA cable assembly has a male to female gender configuration with flexible LMR-240 series coax and operates to 6 GHz. The double shield of this SMA cable is layered by tinned copper braid over aluminum tape providing shielding effectiveness greater than 90dB.

Custom versions of this SMA male to SMA female 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 LCCA9871/WP-FT4 L-com Low Loss SMA Male to SMA Female Weatherproof Cable Assembly with Silicone using LMR-240 Coax, 4 FT 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		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
Jacket Spark			5,000	Vrms

Specifications by Frequency

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Part Number	Length	Description	F1	F2	F3	F4	F5	Units	Weight (lbs)
			Frequency		250	500	1000	2500	
LCCA9871/WP	Custom Lengths Available	Insertion Loss (Typ.)	0.057	0.055	0.079	0.129	0.204	dB/ft	
			0.19	0.19	0.26	0.43	0.67	dB/m	
LCCA9871/WP-FT2	24 In	Insertion Loss (Typ.)	0.28	0.31	0.36	0.46	0.61	dB	0.599
LCCA9871/WP-FT3	36 In	Insertion Loss (Typ.)	0.32	0.37	0.44	0.59	0.82	dB	0.632
LCCA9871/WP-FT4	48 In	Insertion Loss (Typ.)	0.36	0.42	0.52	0.72	1.02	dB	0.665
LCCA9871/WP-FT5	60 In	Insertion Loss (Typ.)	0.4	0.48	0.6	0.85	1.22	dB	0.698

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: 0.566 pounds
 Additional Weight per Inch: 0.00275 pounds

Mechanical Specifications

Cable Assembly

Length 48 in [121.92 cm]
 Width/Diameter 0.5 in [12.7 mm]
 Weight 0.665 lbs [301.64 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 Diameter 0.24 in [6.1 mm]
 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
Type	SMA Male	SMA Female
Option	Weatherproof Boot	
Specification	MIL-STD-348	
Impedance	50 Ohms	50 Ohms
Configuration	Straight	
Contact Material and Plating	Beryllium Copper, Gold	Beryllium Copper, Gold
Contact Plating Specification	ASTM B488	
Dielectric Type	PTFE	PTFE
Outer Conductor Material and Plating	Passivated Stainless Steel, Gold	
Body Material and Plating	Passivated Stainless Steel, Gold	Brass, Gold
Body Plating Specification	SAE-AMS-2700	
Coupling Nut Material and Plating	Passivated Stainless Steel	
Coupling Nut Plating Specification	SAE-AMS-2700	
Boot Material	Silicone	Silicone

Environmental Specifications

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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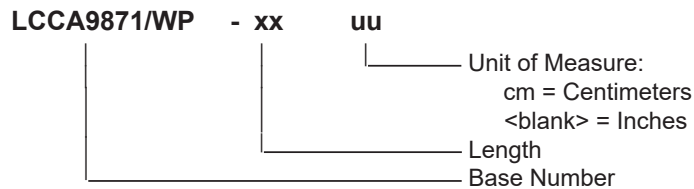


LCCA9871/WP-FT4

Typical Performance Data

How to Order

Part Number Configuration:



Example: LCCA9871/WP-12 = 12 inches long cable
LCCA9871/WP-100cm = 100 cm long cable

Low Loss SMA Male to SMA Female Weatherproof Cable Assembly with Silicone using LMR-240 Coax, 4 FT 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-female-cable-assembly-lcca9871-wp-ft4-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.

LCCA9871/WP-FT4 CAD Drawing

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