

Low Loss 4.3-10 Male to SMA Male Weatherproof Cable LMR-240 Coax with Times Microwave Components



FMCA100299/WP

Configuration

• Connector 1: 4.3-10 Male · Connector 2: SMA Male · Cable Type: LMR-240 · Coax Flex Type: Flexible

Features

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

LMR-240 JACKET SHIELD OUTER CONDUCTOR 0.240 **DIELECTRIC** Ø [6.1] SOLID CENTER CONDUCTOR

Applications

· General Purpose

· Laboratory Use

Description

The Fairview Microwave FMCA100299/WP is a weatherproof low loss cable assembly that comes with 4.3-10 male connection with weatherproof boot on one end and SMA male with weatherproof boot on the other. Fairview Microwave'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 4.3-10 male to SMA male cable assembly FMCA100299/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 is reusable and can withstand elements including extreme temperature. Additional dimensions, specifications, and CAD drawings for this FMCA100299/WP low loss RF cable are available on our downloadable PDF datasheet.

Fairview Microwave 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 4.3-10 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]		
Inductance		0.06 [0.2]		uH/ft [uH/m]



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Description	Minimum	Typical	Maximum	Units
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

Part Number	Length	Description	F1	F2	F3	F4	F5	Units	Maight (lbs)
		Frequency	250	500	1000	2500	6000	MHz	Weight (lbs)
FMCA100299/WP	Custom Lengths	Insertion Loss (Typ.)	0.039	0.055	0.079	0.129	0.204	dB/ft	
FIVICA100299/VVP	Available		0.13	0.19	0.26	0.43	0.67	dB/m	
FMCA100299/WP-12	12 Inch	Insertion Loss (Typ.)	0.19	0.23	0.28	0.39	0.55	dB	0.655
FMCA100299/WP-24	24 Inch	Insertion Loss (Typ.)	0.23	0.29	0.36	0.52	0.76	dB	0.688
FMCA100299/WP-36	36 Inch	Insertion Loss (Typ.)	0.27	0.34	0.44	0.65	0.96	dB	0.721
FMCA100299/WP-48	48 Inch	Insertion Loss (Typ.)	0.31	0.4	0.52	0.78	1.17	dB	0.754
FMCA100299/WP-60	60 Inch	Insertion Loss (Typ.)	0.35	0.45	0.6	0.91	1.37	dB	0.787

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: 0.655 pounds

Additional Weight per Inch: 0.00275 pounds

Mechanical Specifications

Cable Assembly

 Width/Diameter
 0.5 in [12.7 mm]

 Weight
 0.655 lbs [297.1 g]

Cable

Cable TypeLMR-240Impedance50 OhmsInner Conductor TypeSolidInner Conductor Material and PlatingCopperDielectric TypePE (F)

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

Jacket Material Jacket Diameter

 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]



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Tensile Strength

80 lbs [36.29 Kg]

Connectors

Description	Connector 1	Connector 2
Туре	4.3-10 Male	SMA Male
Option	Weatherproof Boot	Weatherproof Boot
Specification		MIL-STD-348
Impedance	50 Ohms	50 Ohms
Configuration	Straight	Straight
Contact Material and Plating	Brass, Silver	Beryllium Copper, Gold
Contact Plating Specification	200 μin minimum	ASTM B488
Dielectric Type	PTFE	PTFE
Outer Conductor Material and Plating		Passivated Stainless Steel, Gold
Body Material and Plating	Brass, Tri-Metal	Passivated Stainless Steel, Gold
Body Plating Specification	80 µin minimum	SAE-AMS-2700
Coupling Nut Material and Plating	Brass, Tri-Metal	Passivated Stainless Steel
Coupling Nut Plating Specification	80 µin minimum	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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Typical Performance Data

How to Order

Part Number Configuration:

FMCA100299/WP - xx uu

Unit of Measure:
cm = Centimeters

Length
Base Number

Example: FMCA100299/WP-12 = 12 inches long cable

FMCA100299/WP-100cm = 100 cm long cable

Low Loss 4.3-10 Male to SMA Male Weatherproof Cable LMR-240 Coax with Times Microwave Components from Fairview Microwave is instock and available to ship same-day. All of our RF/microwave products are available off-the-shelf from our ISO 9001:2008 certified facilities in Lewisville, Texas. Fairview Microwave is RF on-demand.

For additional information on this product, please click the following link: Low Loss 4.3-10 Male to SMA Male Weatherproof Cable LMR-240 Coax with Times Microwave Components FMCA100299/WP

URL: https://www.fairviewmicrowave.com/low-loss-4.3-10-male-to-sma-male-weatherproof-cable-lmr-240-coax-with-times-microwave-components-fmca100299-wp-p.aspx

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