



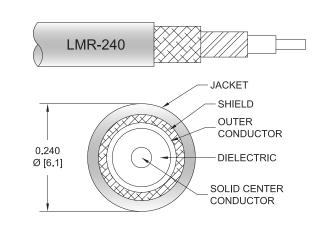
## FMCA100299/WP

#### 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



#### **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 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]		pF/ft [pF/m]
Inductance		0.06 [0.2]		uH/ft [uH/m]





## FMCA100299/WP

### **Electrical Specifications**

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	\A/-:- -+/  \	
		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		
TWICK100299/WF	Available	ilisertion Loss (Typ.)	0.13	0.19	0.26	0.43	0.67	dB/m		
FMCA100299/WP-FT2	24 In	Insertion Loss (Typ.)	0.23	0.29	0.36	0.052	0.76	dB	0.688	
FMCA100299/WP-FT3	36 In	Insertion Loss (Typ.)	0.27	0.34	0.44	0.65	0.96	dB	0.721	
FMCA100299/WP-FT4	48 In	Insertion Loss (Typ.)	0.31	0.2	0.52	0.78	1.17	dB	0.754	
FMCA100299/WP-FT5	60 In	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 MaterialPEJacket Diameter0.24 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	
Туре	4.3-10 Male	SMA Male	
Option		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.





## FMCA100299/WP

#### **Typical Performance Data**

#### **How to Order**

Part Number Configuration:

FMCA100299/WP - xx uu

Unit of Measure:
cm = Centimeters
<br/>
<br/>
<br/>
<br/>
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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