

## Low Loss SMA Male to RA SMA Male Weatherproof Cable LMR-240 Coax with Times Microwave Components



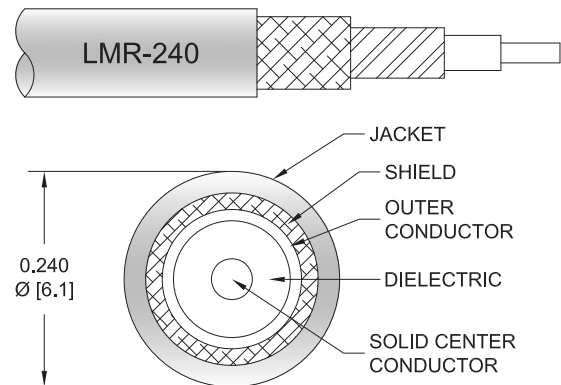
### FMCA100310/WP

#### Configuration

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

#### Features

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



#### Applications

- General Purpose
- Laboratory Use

#### Description

The Fairview Microwave FMCA100310/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. 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 SMA male to SMA male cable assembly FMCA100310/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 FMCA100310/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 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]

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#### 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	Weight (lbs)
		Frequency	250	500	1000	2500	6000	MHz	
FMCA100310/WP	Custom Lengths Available	Insertion Loss (Typ.)	0.039	0.055	0.079	0.129	0.204	dB/ft	
			0.13	0.19	0.26	0.43	0.67	dB/m	
FMCA100310/WP-12	12 Inch	Insertion Loss (Typ.)	0.34	0.36	0.38	0.43	0.51	dB	0.574
FMCA100310/WP-24	24 Inch	Insertion Loss (Typ.)	0.38	0.41	0.46	0.56	0.71	dB	0.607
FMCA100310/WP-36	36 Inch	Insertion Loss (Typ.)	0.42	0.47	0.54	0.69	0.92	dB	0.64
FMCA100310/WP-48	48 Inch	Insertion Loss (Typ.)	0.46	0.52	0.62	0.82	1.12	dB	0.673
FMCA100310/WP-60	60 Inch	Insertion Loss (Typ.)	0.5	0.58	0.7	0.95	1.32	dB	0.706

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:	0.2 dB
Base Weight:	0.574 pounds
Additional Weight per Inch:	0.00275 pounds

#### Mechanical Specifications

##### Cable Assembly

Width/Diameter	0.5 in [12.7 mm]
Weight	0.574 lbs [260.36 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]

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Tensile Strength	80 lbs [36.29 Kg]
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#### Connectors

Description	Connector 1	Connector 2
Type	SMA Male	SMA Male Right Angle
Option	Weatherproof Boot	Weatherproof Boot
Specification	MIL-STD-348	MIL-STD-348
Impedance	50 Ohms	50 Ohms
Configuration	Straight	Right Angle
Contact Material and Plating	Beryllium Copper, Gold	Brass/Phosphor Bronze, Gold
Contact Plating Specification	ASTM B488	50 µin minimum
Dielectric Type	PTFE	Teflon
Outer Conductor Material and Plating	Brass, Tri-Metal	
Body Material and Plating	Brass, Tri-Metal	Brass, Tri-Metal
Body Plating Specification		80 µin minimum
Coupling Nut Material and Plating	Brass, Tri-Metal	Brass, Tri-Metal
Coupling Nut Plating Specification		80 µin minimum
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.

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### FMCA100310/WP

#### Typical Performance Data

#### How to Order

Part Number Configuration: **FMCA100310/WP - xx uu**

Unit of Measure:  
cm = Centimeters  
<blank> = Inches

Length

Base Number

Example: FMCA100310/WP-12 = 12 inches long cable  
FMCA100310/WP-100cm = 100 cm long cable

Low Loss SMA Male to RA SMA Male Weatherproof Cable LMR-240 Coax with Times Microwave Components from Fairview Microwave is in-stock 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 SMA Male to RA SMA Male Weatherproof Cable LMR-240 Coax with Times Microwave Components FMCA100310/WP](#)

URL: <https://www.fairviewmicrowave.com/low-loss-sma-male-to-ra-sma-male-weatherproof-cable-lmr-240-coax-with-times-microwave-components-fmca100310-wp-p.aspx>

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