

FMCA1213/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

JACKET SHIELD OUTER CONDUCTOR 0.240 Ø [6.1] SOLID CENTER CONDUCTOR

Applications

General Purpose

· Laboratory Use

Description

The Fairview Microwave FMCA1213/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 FMCA1213/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 FMCA1213/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	Maight (lbs)
		Frequency	250	500	1000	2500	6000	MHz	Weight (lbs)
FMCA1213/WP	Custom Lengths	Insertion Loss (Typ.)	0.039	0.055	0.079	0.129	0.204	dB/ft	
FIVICA1213/WP	Available		0.13	0.19	0.26	0.43	0.67	dB/m	
FMCA1213/WP-12	12 Inch	Insertion Loss (Typ.)	0.24	0.26	0.28	0.33	0.41	dB	1.059
FMCA1213/WP-24	24 Inch	Insertion Loss (Typ.)	0.28	0.31	0.36	0.46	0.61	dB	1.092
FMCA1213/WP-36	36 Inch	Insertion Loss (Typ.)	0.32	0.37	0.44	0.59	0.82	dB	1.125
FMCA1213/WP-48	48 Inch	Insertion Loss (Typ.)	0.36	0.42	0.52	0.72	1.02	dB	1.158
FMCA1213/WP-60	60 Inch	Insertion Loss (Typ.)	0.4	0.48	0.6	0.85	1.22	dB	1.191

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: 1.059 pounds

Additional Weight per Inch: 0.00275 pounds

Mechanical Specifications

Cable Assembly

 Width/Diameter
 0.5 in [12.7 mm]

 Weight
 1.059 lbs [480.35 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 Diameter0.24 in [6.1 mm]One Time Minimum Bend Radius0.75 in [19.05 mm]Repeated Minimum Bend Radius2.5 in [63.5 mm]

| 2.5 in [65.5 fm]
| 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	SMA Male	SMA Male
Option	Weatherproof Boot	Weatherproof Boot
Impedance	50 Ohms	50 Ohms
Configuration	Straight	Straight
Contact Material and Plating	Brass, Gold	Brass, Gold
Dielectric Type	PTFE	PTFE
Body Material and Plating	Brass, Gold	Brass, Gold
Coupling Nut Material and Plating	Brass, Gold	Brass, Gold
Boot Material	Silicone	Silicone

Environmental Specifications

Operating Range Temperature Ingress Protection (IP) Rating

-40 to +85 deg C

Compliance Certifications (see product page for current document)

Plotted and Other Data

Notes:

Values at 25°C, sea level.





FMCA1213/WP

Typical Performance Data

How to Order

Part Number Configuration:

FMCA1213/WP - xx uu

Unit of Measure:
cm = Centimeters

Length
Base Number

Example: FMCA1213/WP-12 = 12 inches long cable

FMCA1213/WP-100cm = 100 cm long cable

Low Loss SMA Male to SMA Male Weatherproof Cable LMR-240 Coax from Fairview Microwave is in-stock and available to ship sameday. 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 SMA Male Weatherproof Cable LMR-240 Coax FMCA1213/WP

URL: https://www.fairviewmicrowave.com/low-loss-sma-male-to-sma-male-weatherproof-cable-lmr-240-coax-fmca1213-wp-p.aspx

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