

Low Loss SMA Male to N Male Weatherproof Cable I MR-240 Coax

FMC00439/WP

Configuration

Connector 1: SMA MaleConnector 2: N 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 DIELECTRIC SOLID CENTER CONDUCTOR

Applications

General Purpose

· Laboratory Use

Description

The Fairview Microwave FMC00439/WP is a weatherproof low loss cable assembly that comes with SMA male connection with weatherproof boot on one end and type N 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 type N male cable assembly FMC00439/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 FMC00439/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 type N 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)
Part Nulliber	Length	Frequency	250	500	1000	2500	6000	MHz	
FMC00439/WP	Custom Lengths	Insertion Loss (Typ.)	0.039	0.055	0.079	0.129	0.204	dB/ft	
1 1V1C0043 <i>3/</i> VVF	Available	ilisertion Loss (Typ.)	0.13	0.19	0.26	0.43	0.67	dB/m	
FMC00439/WP-12	12 Inch	Insertion Loss (Typ.)	0.24	0.26	0.28	0.33	0.41	dB	0.614
FMC00439/WP-24	24 Inch	Insertion Loss (Typ.)	0.28	0.31	0.36	0.46	0.61	dB	0.647
FMC00439/WP-36	36 Inch	Insertion Loss (Typ.)	0.32	0.37	0.44	0.59	0.82	dB	0.68
FMC00439/WP-48	48 Inch	Insertion Loss (Typ.)	0.36	0.42	0.52	0.72	1.02	dB	0.713
FMC00439/WP-60	60 Inch	Insertion Loss (Typ.)	0.4	0.48	0.6	0.85	1.22	dB	0.746

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: 0.614 pounds

Additional Weight per Inch: 0.00275 pounds

Mechanical Specifications

Cable Assembly

 Width/Diameter
 0.5 in [12.7 mm]

 Weight
 0.614 lbs [278.51 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
 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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FMC00439/WP

Tensile Strength

80 lbs [36.29 Kg]

Connectors

Description	Connector 1	Connector 2
Туре	SMA Male	N Male
Option	Weatherproof Boot	Weatherproof Boot
Specification		MIL-STD-348A
Impedance	50 Ohms	50 Ohms
Configuration	Straight	Straight
Contact Material and Plating	Brass, Gold	Brass, Gold
Contact Plating Specification		30 μin minimum
Dielectric Type	PTFE	PTFE
Body Material and Plating	Brass, Gold	Brass, Nickel
Body Plating Specification		100 µin minimum
Coupling Nut Material and Plating	Brass, Gold	Brass, Nickel
Coupling Nut Plating Specification		100 μin minimum
Boot Material	Silicone	Silicone

Environmental Specifications

Operating Range Temperature Ingress Protection (IP) Rating

-40 to +85 deg C IP68

Compliance Certifications (see product page for current document)

Plotted and Other Data

Notes:

Values at 25°C, sea level.



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FMC00439/WP

Typical Performance Data

How to Order

Part Number Configuration:

FMC00439/WP - xx uu

Unit of Measure:
cm = Centimeters

Length
Base Number

Example: FMC00439/WP-12 = 12 inches long cable

FMC00439/WP-100cm = 100 cm long cable

Low Loss SMA Male to N Male Weatherproof Cable LMR-240 Coax 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 N Male Weatherproof Cable LMR-240 Coax FMC00439/WP

URL: https://www.fairviewmicrowave.com/low-loss-sma-male-to-n-male-weatherproof-cable-lmr-240-coax-fmc00439-wp-p.aspx

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