Low Loss N Male to SMA Male Weatherproof Cable LMR-400 Coax with Times Microwave Components



FMCA100302/WP

Configuration

- Connector 1: N Male
- Connector 2: SMA Male
- Cable Type: LMR-400
- Coax Flex Type: Flexible

Features

- Max Frequency 6 GHz
- Shielding Effectivity > 90 dB
- 85% Phase Velocity
- Double Shielded
- PE Jacket
- Silicone Connector Boot
- IP68 Rated

Applications

- General Purpose
- Laboratory Use

Description

The Fairview Microwave FMCA100302/WP is a weatherproof low loss cable assembly that comes with type N 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 0.405 inches diameter. The type N male to SMA male cable assembly FMCA100302/WP is built with LMR-400 coax, which has a flexible design. This RF cable assembly with 0.5 inches diameter has copper clad aluminum 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 FMCA100302/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 type N 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		85		%
RF Shielding	90			dB
Capacitance		23.9 [78.41]		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		1.39 [4.56]		Ohms/1000ft [Ohms/Km]
DC Resistance Outer Conductor		1.65 [5.41]		Ohms/1000ft [Ohms/Km]
Dielectric Withstanding Voltage (DC)			2,500	Vdc
Jacket Spark			8,000	Vrms

Specifications by Frequency

Part Number	Length	Description	F1	F2	F3	F4	F5	Units	Weight (lbs)
		Frequency	250	500	1000	2500	6000	MHz	
FMCA100302/WP	Custom Lengths Available	Insertion Loss (Typ.)	0.02	0.028	0.041	0.068	0.108	dB/ft	
			0.07	0.1	0.14	0.23	0.36	dB/m	
FMCA100302/WP-12	12 Inch	Insertion Loss (Typ.)	0.22	0.23	0.25	0.27	0.31	dB	0.719
FMCA100302/WP-24	24 Inch	Insertion Loss (Typ.)	0.24	0.26	0.29	0.34	0.42	dB	0.786
FMCA100302/WP-36	36 Inch	Insertion Loss (Typ.)	0.26	0.29	0.33	0.41	0.53	dB	0.853
FMCA100302/WP-48	48 Inch	Insertion Loss (Typ.)	0.28	0.32	0.37	0.48	0.64	dB	0.92
FMCA100302/WP-60	60 Inch	Insertion Loss (Typ.)	0.3	0.34	0.41	0.54	0.74	dB	0.987

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:	0.719 pounds
Additional Weight per Inch:	0.00558 pounds

Mechanical Specifications

Cable Assembly

Width/Diameter	0.5 in [12.7 mm]
Weight	0.719 lbs [326.13 g]

Cable

Cable Type	LMR-400
Impedance	50 Ohms
Inner Conductor Type	Solid
Inner Conductor Material and Plating	Copper Clad Aluminum
Dielectric Type	PE (F)
Number of Shields	2
Shield Layer 1	Aluminum Tape
Shield Layer 2	Tinned Copper Braid
Jacket Material	PE
Jacket Diameter	0.405 in [10.29 mm]
One Time Minimum Bend Radius	1 in [25.4 mm]
Repeated Minimum Bend Radius	4 in [101.6 mm]
Bending Moment	0.5 lbs-ft [0.68 N-m]
Flat Plate Crush	40 lbs/in [0.71 Kg/mm]

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Tensile Strength	160 lbs [72.57 Kg]

Connectors

Description	Connector 1	Connector 2
Type	N Male	SMA Male
Option	Weatherproof Boot	Weatherproof Boot
Impedance	50 Ohms	50 Ohms
Configuration	Straight	Straight
Contact Material and Plating	Brass, Gold	Brass, Gold
Contact Plating Specification	50 µin minimum	50 µin minimum
Dielectric Type	PTFE	Teflon
Body Material and Plating	Brass, Tri-Metal	Brass, Tri-Metal
Body Plating Specification	150 µin minimum	
Coupling Nut Material and Plating	Brass, Tri-Metal	Brass, Tri-Metal
Coupling Nut Plating Specification	150 µin minimum	
Hex Size	13/16 inch	
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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Typical Performance Data

How to Order

Part Number Configuration: **FMCA100302/WP - xx uu**

- uu — Unit of Measure:
  - cm = Centimeters
  - <blank> = Inches
- xx — Length
- FMCA100302/WP — Base Number

Example: FMCA100302/WP-12 = 12 inches long cable
FMCA100302/WP-100cm = 100 cm long cable

Low Loss N Male to SMA Male Weatherproof Cable LMR-400 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 N Male to SMA Male Weatherproof Cable LMR-400 Coax with Times Microwave Components FMCA100302/WP

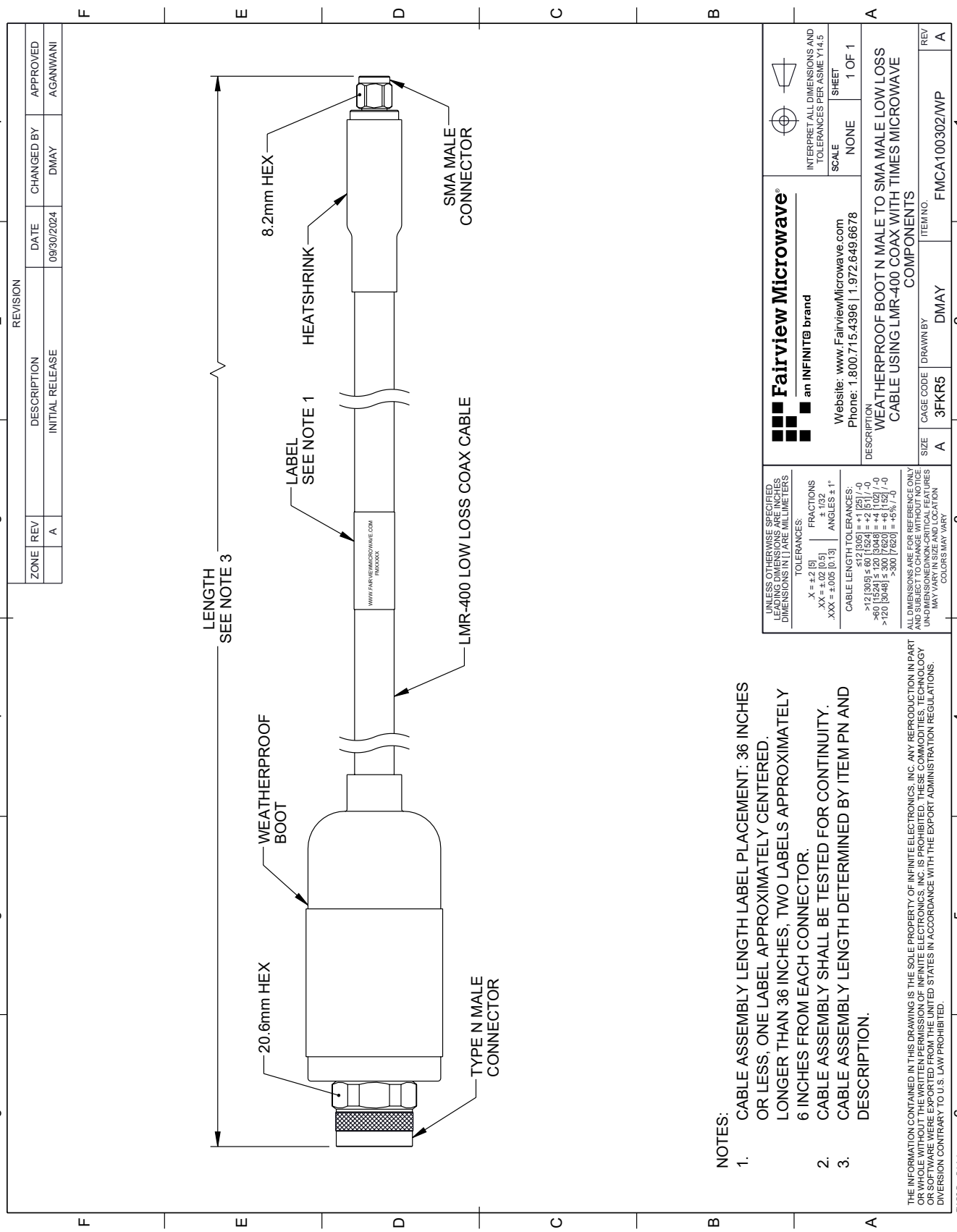
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FMCA100302/WP CAD Drawing

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