

Low Loss RA N Male to RA N Male Cable LMR-400-UF Coax with Times Microwave Components, 180 Degree Clocking



FMCA100241/0400

Configuration

- Connector 1: N Male Right Angle
- Connector 2: N Male Right Angle
- Cable Type: LMR-400-UF
- Coax Flex Type: Flexible

Features

- Max Frequency 8 GHz
- Shielding Effectivity > 90 dB
- 85% Phase Velocity
- Double Shielded
- TPE Jacket
- 500 Mating Cycles

Applications

- General Purpose
- Laboratory Use

Description

The RA type N male to RA type N male cable using LMR-400-UF coax, part number FMCA100241/0400, from Fairview Microwave is in-stock and ships same day. This Fairview type N to type N cable assembly has a male to male gender configuration with 50 ohm flexible LMR-400-UF coax. Fairview Microwave's flexible RF cable assemblies are ideal for applications where tight bends and continual flexure are required. The FMCA100241/0400 type N male to type N male cable assembly operates to 8 GHz. The right angle type N interfaces on the LMR-400-UF cable allow for easier connections in tight spaces. The double shielding of this Fairview cable assembly provides excellent shielding effectiveness of better than 90 dB.

Custom versions of most RF cable assemblies can be built and shipped same day. Custom cable assembly lengths can be obtained by specifying the desired length on the web site at time of order or by contacting a sales representative. Other RF cable assembly value added services including connector orientation or clocking, heat shrink booting and labeling are also available. RF testing can also be performed to document the electrical performance of your cable assembly.

Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	DC		8	GHz
VSWR			1.4:1	
Velocity of Propagation		85		%
RF Shielding	90			dB
Group Delay		1.2 [3.94]		ns/ft [ns/m]
Capacitance		23.9 [78.41]		pF/ft [pF/m]
Inductance		0.06 [0.2]		uH/ft [uH/m]
DC Resistance Inner Conductor		1.07 [3.51]		Ohms/1000ft [Ohms/Km]
DC Resistance Outer Conductor		1.65 [5.41]		Ohms/1000ft [Ohms/Km]
Operating Voltage (AC)			1,000	Vrms

Low Loss RA N Male to RA N Male Cable LMR-400-UF Coax with Times Microwave Components, 180 Degree Clocking



FMCA100241/0400

Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Dielectric Withstanding Voltage (AC)			1,500	Vrms
Jacket Spark			8,000	Vrms

Specifications by Frequency

Part Number	Length	Description	F1	F2	F3	F4	F5	Units	Weight (lbs)
		Frequency	500	1000	2000	4000	8000	MHz	
FMCA100241/0400	Custom Lengths Available	Insertion Loss (Typ.)	0.035	0.05	0.072	0.094	0.13	dB/ft	
			0.12	0.17	0.24	0.31	0.43	dB/m	
FMCA100241/0400-12	12 inch	Insertion Loss (Typ.)	0.54	0.55	0.58	0.6	0.63	dB	0.359
FMCA100241/0400-24	24 inch	Insertion Loss (Typ.)	0.57	0.6	0.65	0.69	0.76	dB	0.446
FMCA100241/0400-36	36 inch	Insertion Loss (Typ.)	0.61	0.65	0.72	0.79	0.89	dB	0.533
FMCA100241/0400-60	60 inch	Insertion Loss (Typ.)	0.68	0.75	0.86	0.97	1.15	dB	0.707
FMCA100241/0400-300	300 inch	Insertion Loss (Typ.)	1.38	1.75	2.3	2.85	3.75	dB	2.447

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:	0.25 dB
Loss due to Connector 2:	0.25 dB
Base Weight:	0.359 pounds
Additional Weight per Inch:	0.00725 pounds

Mechanical Specifications

Cable Assembly

Width/Diameter	0.5 in [12.7 mm]
Weight	0.359 lbs [162.84 g]

Cable

Cable Type	LMR-400-UF
Impedance	50 Ohms
Inner Conductor Type	Stranded
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	TPE, Black
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	0.38 lbs-ft [0.52 N-m]
Flat Plate Crush	20 lbs/in [0.36 Kg/mm]
Tensile Strength	160 lbs [72.57 Kg]

Low Loss RA N Male to RA N Male Cable LMR-400-UF Coax with Times Microwave Components, 180 Degree Clocking



FMCA100241/0400

Connectors

Description	Connector 1	Connector 2
Type	N Male Right Angle	N Male Right Angle
Impedance	50 Ohms	50 Ohms
Configuration	Right Angle	Right Angle
Mating Cycles	500	500
Contact Material and Plating	Brass, Gold	Brass, Gold
Dielectric Type	Teflon	Teflon
Body Material and Plating	Brass, Tri-Metal	Brass, Tri-Metal
Coupling Nut Material and Plating	Brass, Tri-Metal	Brass, Tri-Metal
Hex Size	13/16 inch	13/16 inch
Torque	30 in-lbs 3.39 Nm	30 in-lbs 3.39 Nm

Environmental Specifications

Operating Range Temperature-40 to +85 deg C

Compliance Certifications (see [product page](#) for current document)

Plotted and Other Data

Notes:

Low Loss RA N Male to RA N Male Cable LMR-400-UF Coax with Times Microwave Components, 180 Degree Clocking



FMCA100241/0400

Typical Performance Data

How to Order

Part Number Configuration: **FMCA100241/0400** **- xx** **uu**

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

Length

Base Number

Example: FMCA100241/0400-12 = 12 inches long cable
FMCA100241/0400-100cm = 100 cm long cable

Low Loss RA N Male to RA N Male Cable LMR-400-UF Coax with Times Microwave Components, 180 Degree Clocking 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 RA N Male to RA N Male Cable LMR-400-UF Coax with Times Microwave Components, 180 Degree Clocking FMCA100241/0400](https://www.fairviewmicrowave.com/low-loss-ra-n-male-to-ra-n-male-cable-lmr-400-uf-coax-with-times-microwave-components-180-degree-clocking-fmca100241-0400)

URL: <https://www.fairviewmicrowave.com/low-loss-ra-n-male-to-ra-n-male-cable-lmr-400-uf-coax-with-times-microwave-components-180-degree-clocking-fmca100241-0400-p.aspx>

The information contained within this document is accurate to the best of our knowledge and representative of the part described herein. It may be necessary to make modifications to the part and/or the documentation of the part in order to implement improvements. Fairview Microwave reserves the right to make such changes as required. Unless otherwise stated, all specifications are nominal. Fairview Microwave does not make any representation or warranty regarding the suitability of the part described herein for any particular purpose, and Fairview Microwave does not assume liability arising out of the use of any part or document.

FMCA100241/0400 CAD Drawing

Low Loss RA N Male to RA N Male Cable LMR-400-UF Coax with Times Microwave Components, 180 Degree Clocking

