

Low Loss UHF Male to N Male Cable LMR-400-UF Coax



FMCA100242

Configuration

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

Features

- Max Frequency 3 GHz
- Shielding Effectivity > 90 dB
- 85% Phase Velocity
- Double Shielded
- TPE Jacket

Applications

- General Purpose
- Laboratory Use

Description

The UHF male to type N male cable using LMR-400-UF coax, part number FMCA100242, from Fairview Microwave is in-stock and ships same day. This Fairview UHF 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 FMCA100242 UHF male to type N male cable assembly operates to 3 GHz. 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		3	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]
Jacket Spark			8,000	Vrms

Specifications by Frequency

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Part Number	Length	Description	F1	F2	F3	F4	F5	Units	Weight (lbs)
			Frequency	100	250	500	1000	3000	
FMCA100242	Custom Lengths Available	Insertion Loss (Typ.)	0.015	0.023	0.035	0.5	0.085	dB/ft	
			0.05	0.08	0.12	1.65	0.28	dB/m	
FMCA100242-12	12 inch	Insertion Loss (Typ.)	0.22	0.23	0.24	0.7	0.29	dB	0.201
FMCA100242-24	24 inch	Insertion Loss (Typ.)	0.23	0.25	0.27	1.2	0.37	dB	0.288
FMCA100242-36	36 inch	Insertion Loss (Typ.)	0.25	0.27	0.31	1.7	0.46	dB	0.375
FMCA100242-60	60 inch	Insertion Loss (Typ.)	0.28	0.32	0.38	2.7	0.63	dB	0.549
FMCA100242-300	300 inch	Insertion Loss (Typ.)	0.58	0.78	1.08	12.7	2.33	dB	2.289

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: 0.201 pounds
 Additional Weight per Inch: 0.00725 pounds

Mechanical Specifications

Cable Assembly

Width/Diameter 0.5 in [12.7 mm]
 Weight 0.201 lbs [91.17 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]

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Connectors

Description	Connector 1	Connector 2
Type	UHF Male	N Male
Impedance	50 Ohms	50 Ohms
Configuration	Straight	Straight
Contact Material and Plating	Phosphor Bronze, Silver	Brass, Gold
Contact Plating Specification	200 µin	15 µin minimum
Dielectric Type	PTFE	PTFE
Body Material and Plating	Brass, Tin/Nickel	Brass, Tri-Metal
Body Plating Specification	100 µin	
Coupling Nut Material and Plating	Brass, Tin/Nickel	Brass, Tri-Metal
Coupling Nut Plating Specification	100 µin	
Hex Size		18 mm

Environmental Specifications

Operating Range Temperature -40 to +85 deg C

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

Plotted and Other Data

Notes:

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FMCA100242

Typical Performance Data

How to Order

Part Number Configuration:

FMCA100242

- **xx**

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Unit of Measure:
cm = Centimeters
<blank> = Inches
Length
Base Number

Example: FMCA100242-12 = 12 inches long cable
FMCA100242-100cm = 100 cm long cable

Low Loss UHF Male to N Male Cable LMR-400-UF 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.

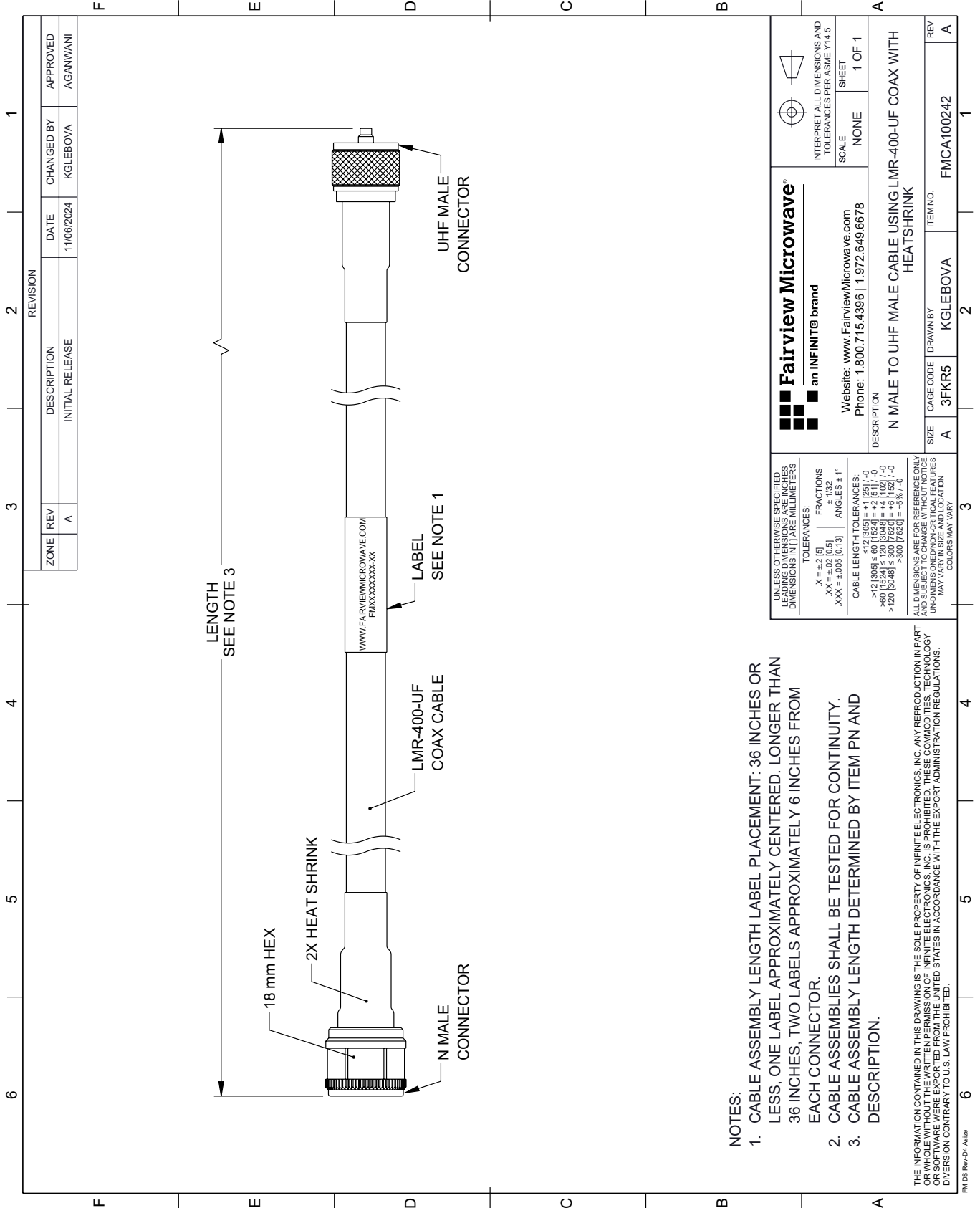
For additional information on this product, please click the following link: [Low Loss UHF Male to N Male Cable LMR-400-UF Coax FMCA100242](#)

URL: <https://www.fairviewmicrowave.com/low-loss-uhf-male-to-n-male-cable-lmr-400-uf-coax-fmca100242-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.

FMCA100242 CAD Drawing

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NOTES:

1. CABLE ASSEMBLY LENGTH LABEL PLACEMENT: 36 INCHES OR LESS, ONE LABEL APPROXIMATELY CENTERED. LONGER THAN 36 INCHES, TWO LABELS APPROXIMATELY 6 INCHES FROM EACH CONNECTOR.
2. CABLE ASSEMBLIES SHALL BE TESTED FOR CONTINUITY.
3. CABLE ASSEMBLY LENGTH DETERMINED BY ITEM PN AND DESCRIPTION.

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FM DS Rev-D4 Alt2b

REVISION		DATE	CHANGED BY	APPROVED
ZONE	REV			
	A	11/06/2024	KGLEBOVA	AGANWANI
DESCRIPTION				
INITIAL RELEASE				

 Fairview Microwave an INFINITe brand		Website: www.FairviewMicrowave.com Phone: 1.800.715.4396 1.972.649.6678	INTERPRET ALL DIMENSIONS AND TOLERANCES PER ASME Y14.5 SCALE: NONE SHEET: 1 OF 1
DESCRIPTION N MALE TO UHF MALE CABLE USING LMR-400-UF COAX WITH HEATSHRINK			
SIZE	CAGE CODE	DRAWN BY	ITEM NO.
A	3FKR5	KGLEBOVA	FMCA100242
REV			A

UNLESS OTHERWISE SPECIFIED, LEADING DIMENSIONS ARE IN INCHES. DIMENSIONS IN [] ARE MILLIMETERS.

TOLERANCES:
 .X = ±.2 [5]
 .XX = ±.02 [0.5]
 .XXX = ±.005 [0.13]

FRACTIONS
 ± 1/32
 ANGLES ± 1°

CABLE LENGTH TOLERANCES:
 <12 [305] ≤ 60 [1524] = ±.1 [25] / -0
 >60 [1524] ≤ 120 [3048] = ±.4 [102] / -0
 >120 [3048] ≤ 300 [7620] = ±.6 [152] / -0
 >300 [7620] = ±.6 [152] / -0

ALL DIMENSIONS ARE FOR REFERENCE ONLY. DIMENSIONS SHALL BE TO UNLESS OTHERWISE SPECIFIED. UNDIMENSIONED NON-CRITICAL FEATURES MAY VARY IN SIZE AND LOCATION. COLORS MAY VARY.