

## Low Loss N Male to N Female Cable LMR-400 Coax

The type N male to type N female cable using LMR-400 coax, part number FMC00428, from Fairview Microwave is in-stock and ships same day. This Fairview type N to type N cable assembly has a male to female gender configuration with 50 ohm flexible LMR-400 coax. Fairview Microwave's flexible RF cable assemblies are ideal for applications where tight bends and continual flexure are required. The FMC00428 type N male to type N female cable assembly operates to 6 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	Min	Typ	Max	Units
Frequency Range	DC		6	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		1.39 [4.56]		$\Omega$ /1000ft [ $\Omega$ /Km]
DC Resistance Outer Conductor		1.65 [5.41]		$\Omega$ /1000ft [ $\Omega$ /Km]
Jacket Spark			8,000	Vrms

### Performance by Frequency

Description	F1	F2	F3	F4	F5	Units
Frequency	0.25	0.5	1	2.5	5.8	GHz
Insertion Loss (Typ.)	0.02	0.028	0.041	0.068	0.1	dB/ft
	0.07	0.09	0.13	0.22	0.33	dB/m

#### Electrical Specification Notes:

Insertion Loss does not include the loss of the connectors. Insertion Loss is estimated as 0.1 dB per connector.

### Mechanical Specifications

#### Cable Assembly

Weight 0.215 lbs [97.52 g]

#### Cable

Cable Type LMR-400  
 Impedance 50 Ohms  
 Inner Conductor Type Solid  
 Inner Conductor Material and Plating Copper Clad Aluminum



### Configuration:

- N Male
- N Female
- LMR-400

### Features:

- Max Frequency 6 GHz
- Shielding Effectivity > 90 dB
- 85% Phase Velocity
- Double Shielded
- PE Jacket

### Applications:

- General Purpose
- Laboratory Use

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Dielectric Type PE (F)  
 Number of Shields 2  
 Shield Layer 1 Aluminum Tape  
 Shield Layer 2 Tinned Copper Braid  
 Jacket Material PE, 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 0.5 lbs-ft [0.68 N-m]  
 Flat Plate Crush 40 lbs/in [0.71 Kg/mm]  
 Tensile Strength 160 lbs [72.57 Kg]

### Connectors

Description	Connector 1	Connector 2
Type	N Male	N Female
Specification		MIL-STD-348
Impedance	50 Ohms	50 Ohms
Contact Material & Plating	Brass, Gold	Copper, Gold
Contact Plating Spec.	3 µin minimum	
Dielectric Type	PTFE	PTFE
Body Material & Plating	Brass, Nickel	Brass, Tri-Metal
Body Plating Spec.	100 µin minimum	
Coupling Nut Material & Plating	Brass, Nickel	Brass, Tri-Metal
Coupling Nut Plating Spec.	100 µin minimum	

### Environmental Specifications

#### Temperature

Operating Range -40 to +85 deg C

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

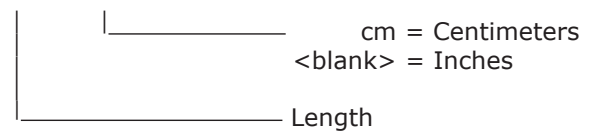
### Plotted and Other Data

Notes:

### How to Order

Part Number Configuration:

**FMC00428 - xx uu**



Example: FMC00428-12 = 12 inches long cable  
 FMC00428-100cm = 100 cm long cable

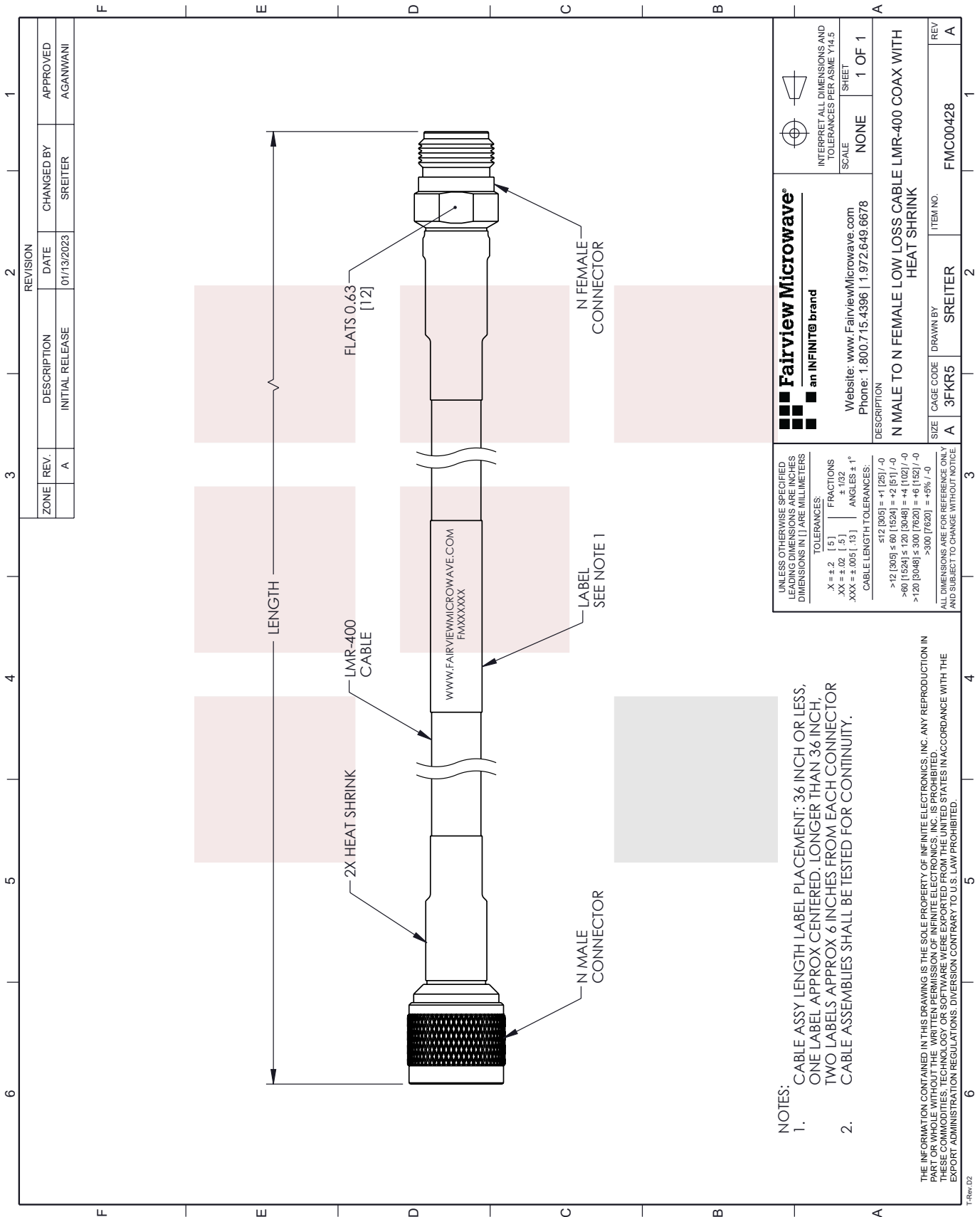
Low Loss N Male to N Female Cable LMR-400 Coax from Fairview Microwave has same day shipment for domestic and International orders. Our RF, microwave and millimeter wave products maintain a 99% availability and are part of the broadest selection in the industry.

Click the following link to obtain additional part information: [Low Loss N Male to N Female Cable LMR-400 Coax FMC00428](#)

URL: <https://www.fairviewmicrowave.com/low-loss-n-male-to-n-female-cable-lmr-400-coax-fmc00428-p.aspx>

The information contained in 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 any liability arising out of the use of any part or documentation.





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Website: [www.FairviewMicrowave.com](http://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 N FEMALE LOW LOSS CABLE LMR-400 COAX WITH HEAT SHRINK

SIZE: A  
CAGE CODE: 3FKR5  
DRAWN BY: SREITER  
ITEM NO.: FMC00428  
REV: A

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

TOLERANCES:  
 .X = ±.2 [ .5 ] FRACTIONS  
 .XX = ±.02 [ .5 ] ±.132  
 .XXX = ±.005 [ .13 ] ANGLES ± 1°

CABLE LENGTH TOLERANCES:  
 .512 [ 305 ] = +1 [ 25 ] / -0  
 >.12 [ 305 ] ≤ .60 [ 1524 ] = +2 [ 51 ] / -0  
 >.60 [ 1524 ] ≤ 1.20 [ 3048 ] = +4 [ 102 ] / -0  
 >1.20 [ 3048 ] ≤ 3.00 [ 7620 ] = +6 [ 152 ] / -0  
 >3.00 [ 7620 ] = +5% / -0

ALL DIMENSIONS ARE FOR REFERENCE ONLY AND SUBJECT TO CHANGE WITHOUT NOTICE

NOTES:

- CABLE ASSY LENGTH LABEL PLACEMENT: 36 INCH OR LESS, ONE LABEL APPROX CENTERED. LONGER THAN 36 INCH, TWO LABELS APPROX 6 INCHES FROM EACH CONNECTOR. CABLE ASSEMBLIES SHALL BE TESTED FOR CONTINUITY.

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