

## Low Loss RA N Male to TNC Male Cable LMR-400 Coax Using Times Microwave Components

The RA type N male to TNC male cable using LMR-400 coax, part number FMC00414, from Fairview Microwave is in-stock and ships same day. This Fairview type N to TNC cable assembly has a male to male 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 FMC00414 type N male to TNC male cable assembly operates to 5.8 GHz. The right angle type N interface on the LMR-400 cable allows 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	Min	Typ	Max	Units
Frequency Range	DC		5.8	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		1.39 [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 0.2 dB for the right angle connector and 0.1 dB for the straight connector.

### Mechanical Specifications

#### Cable Assembly

Weight 0.336 lbs [152.41 g]

#### Cable

Cable Type LMR-400  
Impedance 50 Ohms



### Configuration:

- N Male Right Angle
- TNC Male
- LMR-400

### Features:

- Max Frequency 5.8 GHz
- Shielding Effectivity > 90 dB
- 85% Phase Velocity
- Double Shielded
- PE Jacket

### Applications:

- General Purpose
- Laboratory Use

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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, 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	TNC Male
Impedance	50 Ohms	50 Ohms
Mating Cycles		500
Contact Material & Plating	Beryllium Copper, Gold	Beryllium Copper, Gold
Contact Plating Spec.	1.27 µm minimum	
Dielectric Type	PTFE	PTFE
Outer Cond Material & Plating		Brass, Tri-Metal
Body Material & Plating	Brass, Tri-Metal	Brass, Tri-Metal
Body Plating Spec.	2 µm minimum	
Coupling Nut Material & Plating	Brass, Tri-Metal	Brass, Tri-Metal
Coupling Nut Plating Spec.	2 µm minimum	
Hex Size		5/8 inch
Torque	44 in-lbs 4.97 Nm	4 in-lbs 0.45 Nm

**Environmental Specifications**
**Temperature**

Operating Range -40 to +85 deg C

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

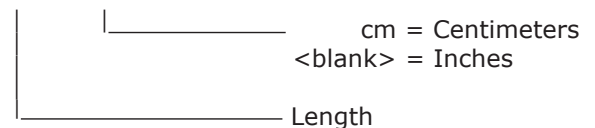
**Plotted and Other Data**

Notes:

**How to Order**

Part Number Configuration:

**FMC00414 - xx uu**



Example: FMC00414-12 = 12 inches long cable  
 FMC00414-100cm = 100 cm long cable

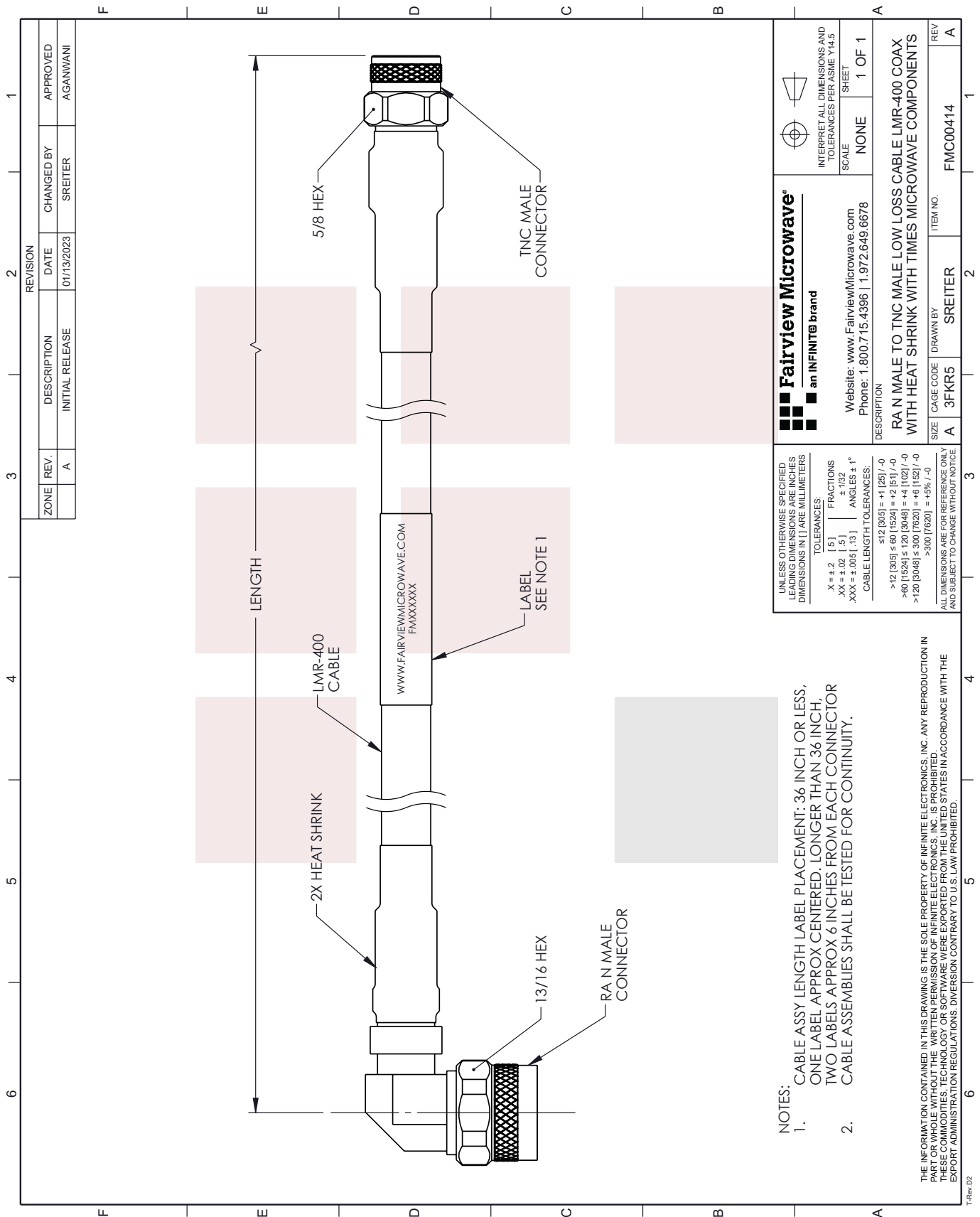
Low Loss RA N Male to TNC Male Cable LMR-400 Coax Using Times Microwave Components from Fairview Microwave has same day shipment for domestic and International orders. Our RF, microwave and millimeter wave products maintain a 99% availability and are part of the broadest selection in the industry.

Click the following link to obtain additional part information: [Low Loss RA N Male to TNC Male Cable LMR-400 Coax Using Times Microwave Components FMC00414](#)

URL: <https://www.fairviewmicrowave.com/low-loss-ra-n-male-to-tnc-male-cable-lmr-400-coax-using-times-microwave-components-fmc00414-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.





REVISION		DATE	CHANGED BY	APPROVED
ZONE	REV.	DESCRIPTION	INITIAL RELEASE	
	A			AGANWANI

**Fairview Microwave**  
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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:  
RA N MALE TO TNC MALE LOW LOSS CABLE LMR-400 COAX WITH HEAT SHRINK WITH TIMES MICROWAVE COMPONENTS

SIZE	CAGE CODE	DRAWN BY	ITEM NO.	REV
A	3FKR5	SREITER	FMC00414	A

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

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

CABLE LENGTH TOLERANCES:  
 ≤12 [305] = +1 [25] / -0  
 >12 [305] ≤ 60 [1524] = +2 [51] / -0  
 >60 [1524] ≤ 120 [3048] = +4 [102] / -0  
 >120 [3048] ≤ 300 [7620] = +6 [152] / -0  
 >300 [7620] = +5% / -0

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

NOTES:  
 1. 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.  
 2.

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