

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

The type N male to TNC male cable using LMR-400 coax, part number FMC00517, 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 FMC00517 type N male to TNC male 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	0.108	dB/ft
	0.07	0.09	0.13	0.22	0.35	dB/m

#### Electrical Specification Notes:

Insertion Loss does not include the loss of the connectors. Insertion Loss is estimated as 0.1 dB for the TNC connector and 0.06 X SQRT(fGHz) db max for the N connector.

### Mechanical Specifications

#### Cable Assembly

Weight 0.219 lbs [99.34 g]

#### Cable

Cable Type LMR-400  
 Impedance 50 Ohms  
 Inner Conductor Type Solid



### Configuration:

- N Male
- TNC Male
- LMR-400

### Features:

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

### Applications:

- General Purpose
- Laboratory Use

Fairview Microwave  
 301 Leora Ln., Suite 100  
 Lewisville, TX 75056  
 Tel: 1-800-715-4396 / (972) 649-6678  
 Fax: (972) 649-6689  
[www.fairviewmicrowave.com](http://www.fairviewmicrowave.com)  
[sales@fairviewmicrowave.com](mailto:sales@fairviewmicrowave.com)

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	Brass, Gold	Brass, Gold
Contact Plating Spec.	3 µin minimum	50 µinch
Dielectric Type	PTFE	
Body Material & Plating	Brass, Nickel	Brass, Tri-Metal
Body Plating Spec.	100 µin minimum	80 µinch
Coupling Nut Material & Plating	Brass, Nickel	Brass, Tri-Metal
Coupling Nut Plating Spec.	100 µin minimum	80 µinch

**Environmental Specifications**

**Temperature**

Operating Range -40 to +85 deg C

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

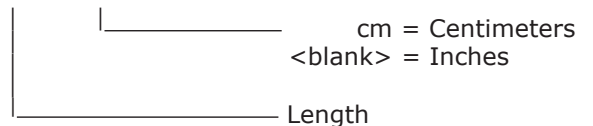
**Plotted and Other Data**

Notes:

**How to Order**

Part Number Configuration:

**FMC00517 - xx uu**



Example: FMC00517-12 = 12 inches long cable  
FMC00517-100cm = 100 cm long cable

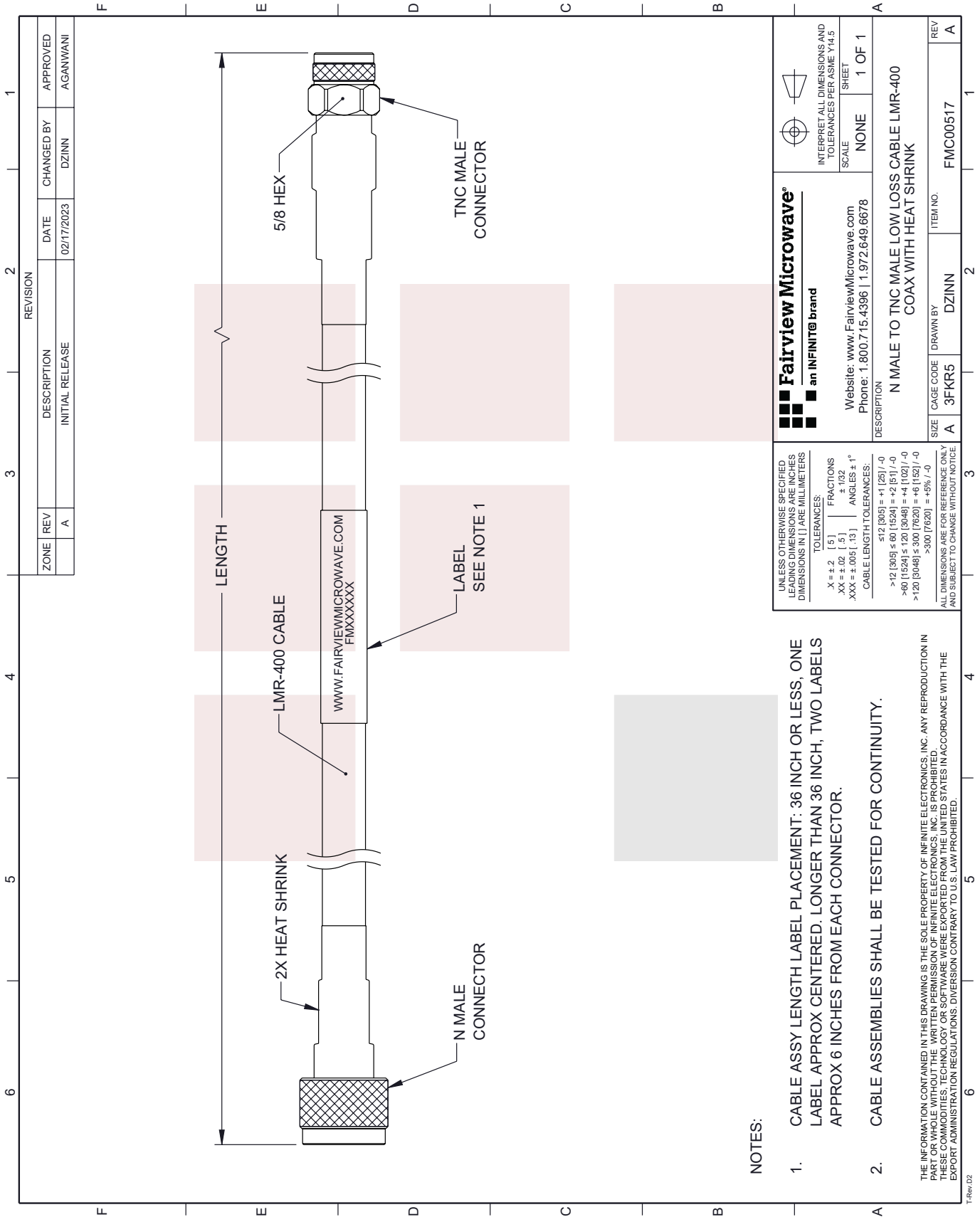
Low Loss N Male to TNC Male Cable LMR-400 Coax from Fairview Microwave has same day shipment for domestic and International orders. Our RF, microwave and millimeter wave products maintain a 99% availability and are part of the broadest selection in the industry.

Click the following link to obtain additional part information: [Low Loss N Male to TNC Male Cable LMR-400 Coax FMC00517](#)

URL: <https://www.fairviewmicrowave.com/low-loss-n-male-to-tnc-male-cable-lmr-400-coax-fmc00517-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.





ZONE		REVISION		DATE		APPROVED	
A	1	INITIAL RELEASE	02/17/2023	DZINN	AGANWANI		

**Fairview Microwave**  
an INFINIT<sup>®</sup> brand

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 TNC MALE LOW LOSS CABLE LMR-400  
COAX WITH HEAT SHRINK

SIZE	CAGE CODE	DRAWN BY	ITEM NO.
A	3FKR5	DZINN	FMC00517

REV A

**NOTES:**

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

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

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

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

THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF INFINITE ELECTRONICS, INC. ANY REPRODUCTION IN PART OR WHOLE WITHOUT THE WRITTEN PERMISSION OF INFINITE ELECTRONICS, INC. IS PROHIBITED. THESE COMMODITIES, TECHNOLOGY OR SOFTWARE WERE EXPORTED FROM THE UNITED STATES IN ACCORDANCE WITH THE EXPORT ADMINISTRATION REGULATIONS. DIVERSION CONTRARY TO U.S. LAW PROHIBITED.