

## RA N Male to RA N Male Cable LMR-200 Coax in 50 CM

The RA type N male to RA type N male 50 cm cable using LMR-200 coax, part number FMC00399-50CM, 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-200 coax. Fairview Microwave's flexible RF cable assemblies are ideal for applications where tight bends and continual flexure are required. The FMC00399-50CM type N male to type N male cable assembly operates to 5.8 GHz. The right angle type N interfaces on the LMR-200 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                   | Min | Typ          | Max   | Units                            |
|-------------------------------|-----|--------------|-------|----------------------------------|
| Frequency Range               | DC  |              | 5.8   | GHz                              |
| VSWR                          |     |              | 1.4:1 |                                  |
| Velocity of Propagation       |     | 83           |       | %                                |
| RF Shielding                  | 90  |              |       | dB                               |
| Group Delay                   |     | 1.22 [4]     |       | ns/ft [ns/m]                     |
| Capacitance                   |     | 24.5 [80.38] |       | pF/ft [pF/m]                     |
| Inductance                    |     | 0.061 [0.2]  |       | uH/ft [uH/m]                     |
| DC Resistance Inner Conductor |     | 5.36 [17.59] |       | $\Omega$ /1000ft [ $\Omega$ /Km] |
| DC Resistance Outer Conductor |     | 4.9 [16.08]  |       | $\Omega$ /1000ft [ $\Omega$ /Km] |
| Jacket Spark                  |     |              | 3,000 | 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.) | 0.48 | 0.52 | 0.57 | 0.67 | 0.83 | dB    |

#### Electrical Specification Notes:

The Insertion Loss data above is based on the performance specifications of the coax cable and connectors used in this assembly. The Insertion Loss includes an estimated insertion loss of 0.2 dB per connector.

### Mechanical Specifications

#### Cable Assembly

Length\* 19.68 in [499.87 mm]  
 Diameter 0.9 in [22.86 mm]

#### Cable

Cable Type LMR-200



### Configuration:

- N Male Right Angle
- N Male Right Angle
- LMR-200

### Features:

- Max Frequency 5.8 GHz
- Shielding Effectivity > 90 dB
- 83% Phase Velocity
- Double Shielded
- PE Jacket

### Applications:

- General Purpose
- Laboratory Use
- Antenna Installations
- Land Mobile Radio & Other Communication Systems
- Cellular & Wi-Fi Systems

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Impedance 50 Ohms  
 Inner Conductor Type Solid  
 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 PE, Black  
 Jacket Diameter 0.195 in [4.95 mm]

One Time Minimum Bend Radius 0.5 in [12.7 mm]  
 Repeated Minimum Bend Radius 2 in [50.8 mm]  
 Bending Moment 0.2 lbs-ft [0.27 N-m]  
 Flat Plate Crush 15 lbs/in [0.27 Kg/mm]  
 Tensile Strength 40 lbs [18.14 Kg]

**Connectors**

| Description                     | Connector 1   | Connector 2   |
|---------------------------------|---------------|---------------|
| Type                            | N Male        | N Male        |
| Impedance                       | 50 Ohms       | 50 Ohms       |
| Contact Material & Plating      | Brass, Gold   | Brass, Gold   |
| Dielectric Type                 | PTFE          | PTFE          |
| Outer Cond Material & Plating   | Brass, Nickel | Brass, Nickel |
| Body Material & Plating         | Brass, Nickel | Brass, Nickel |
| Coupling Nut Material & Plating | Brass, Nickel | Brass, Nickel |

**Mechanical Specification Notes:**

\*All cable assemblies have a length tolerance of 1.5% or ± 3/8", whichever is greater.

**Environmental Specifications**

**Temperature**

Operating Range -40 to +85 deg C  
 Storage Range -70 to +85 deg C

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

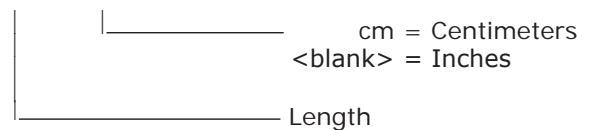
**Plotted and Other Data**

Notes:

**How to Order**

Part Number Configuration:

**FMC00399 - xx uu**



Example: FMC00399-12 = 12 inches long cable  
 FMC00399-100cm = 100 cm long cable

RA N Male to RA N Male Cable LMR-200 Coax in 50 CM from Fairview Microwave has same day shipment for domestic and International orders. Our RF, microwave and fiber optic products maintain a 99% availability and are part of the broadest selection in the industry.

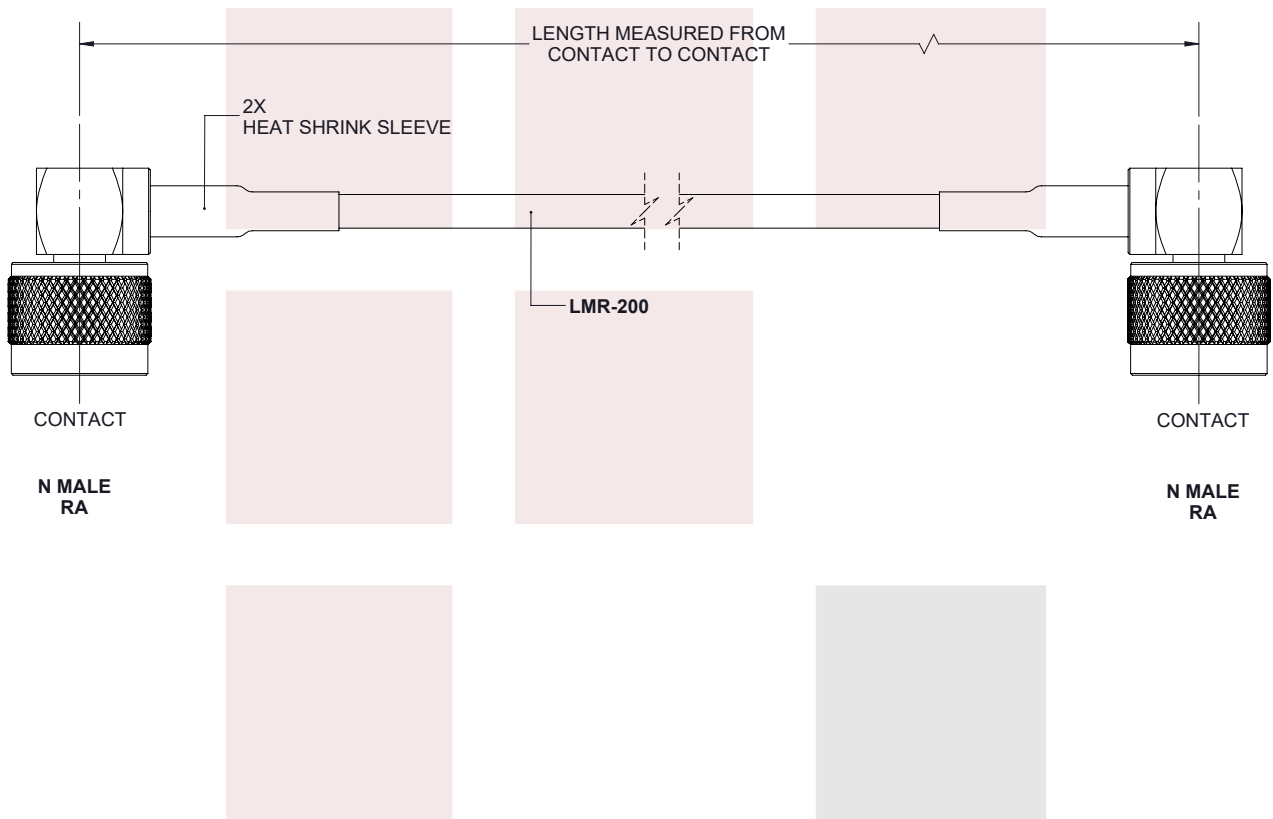
Click the following link to obtain additional part information: [RA N Male to RA N Male Cable LMR-200 Coax in 50 CM FMC00399-50CM](https://www.fairviewmicrowave.com/ra-n-male-ra-n-male-cable-lmr200-coax-fmc00399-p.aspx)

URL: <https://www.fairviewmicrowave.com/ra-n-male-ra-n-male-cable-lmr200-coax-fmc00399-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.



| REVISIONS |                 |           |          |
|-----------|-----------------|-----------|----------|
| REV.      | DESCRIPTION     | DATE      | APPROVED |
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TITLE  
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UNLESS OTHERWISE SPECIFIED LEADING DIMENSIONS ARE INCHES  
DIMENSIONS IN [ ] ARE MILLIMETERS

TOLERANCES: CABLE LENGTH (L) TOLERANCES:

|                      |                  |   |
|----------------------|------------------|---|
| .X = ±.2 [ .508 ]    | FRACTIONS ± 1/32 | L ≤ 12 [ 305 ] = +1 [ 25 ] / -0                   |
| .XX = ±.02 [ .51 ]   | ANGLES ± 1°      | 12 [ 305 ] < L ≤ 60 [ 1524 ] = +2 [ 51 ] / -0     |
| .XXX = ±.005 [ .13 ] |                  | 60 [ 1524 ] < L ≤ 120 [ 3048 ] = +4 [ 102 ] / -0  |
|                      |                  | 120 [ 3048 ] < L ≤ 300 [ 7620 ] = +6 [ 152 ] / -0 |
|                      |                  | 300 [ 7620 ] < L = +5%L / -0                      |

THIRD-ANGLE PROJECTION



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SHEET 1 OF 1

ALL DIMENSIONS SHOWN ARE FOR REFERENCE ONLY.

SCALE N/A

|           |                    |                    |                      |          |
|-----------|--------------------|--------------------|----------------------|----------|
| SIZE<br>A | CAGE CODE<br>3FKR5 | DRAWN BY<br>K.DANG | ITEM NO.<br>FMC00399 | REV<br>A |
|-----------|--------------------|--------------------|----------------------|----------|

T-Rev.D