

## Low Loss TNC Male to TNC Male Cable LMR-400-DB Coax in 200 cm

The TNC male to TNC male 200 cm cable using LMR-400-DB coax, part number FMC00153-200CM, from Fairview Microwave is in-stock and ships same day. This Fairview TNC to TNC cable assembly has a male to male gender configuration with 50 ohm flexible LMR-400-DB coax. Fairview Microwave's flexible RF cable assemblies are ideal for applications where tight bends and continual flexure are required. The FMC00153-200CM TNC male to TNC male cable assembly operates to 5.8 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  |              | 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 (Max.) | 0.31 | 0.35 | 0.42 | 0.65 | 0.92 | dB    |

#### Electrical Specification Notes:

The Insertion Loss data above is based on the performance specifications of the coax used in this assembly. Insertion Loss is estimated as 0.1 dB per connector.

### Mechanical Specifications

#### Cable Assembly

Length\* 78.74 in [200 cm]

#### Cable

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



### Configuration:

- TNC Male
- TNC Male
- LMR-400-DB

### Features:

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

### Applications:

- General Purpose
- Laboratory Use

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|                                      |                        |
|--------------------------------------|------------------------|
| 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                            | TNC Male               | TNC Male               |
| Impedance                       | 50 Ohms                | 50 Ohms                |
| Mating Cycles                   | 500                    | 500                    |
| Contact Material & Plating      | Beryllium Copper, Gold | Beryllium Copper, Gold |
| Dielectric Type                 | PTFE                   | PTFE                   |
| Outer Cond Material & Plating   | Brass, Tri-Metal       | Brass, Tri-Metal       |
| Body Material & Plating         | Brass, Tri-Metal       | Brass, Tri-Metal       |
| Coupling Nut Material & Plating | Brass, Tri-Metal       | Brass, Tri-Metal       |
| Hex Size                        | 8-May inch             | 8-May inch             |

### Environmental Specifications

#### Temperature

Operating Range -40 to +85 deg C

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

### Plotted and Other Data

Notes:

- Values at 25°C, sea level.

### How to Order

Part Number Configuration:

**FMC00153 - xx uu**

cm = Centimeters  
 <blank> = Inches

Length

Example: FMC00153-12 = 12 inches long cable  
 FMC00153-100cm = 100 cm long cable

Low Loss TNC Male to TNC Male Cable LMR-400-DB Coax in 200 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.

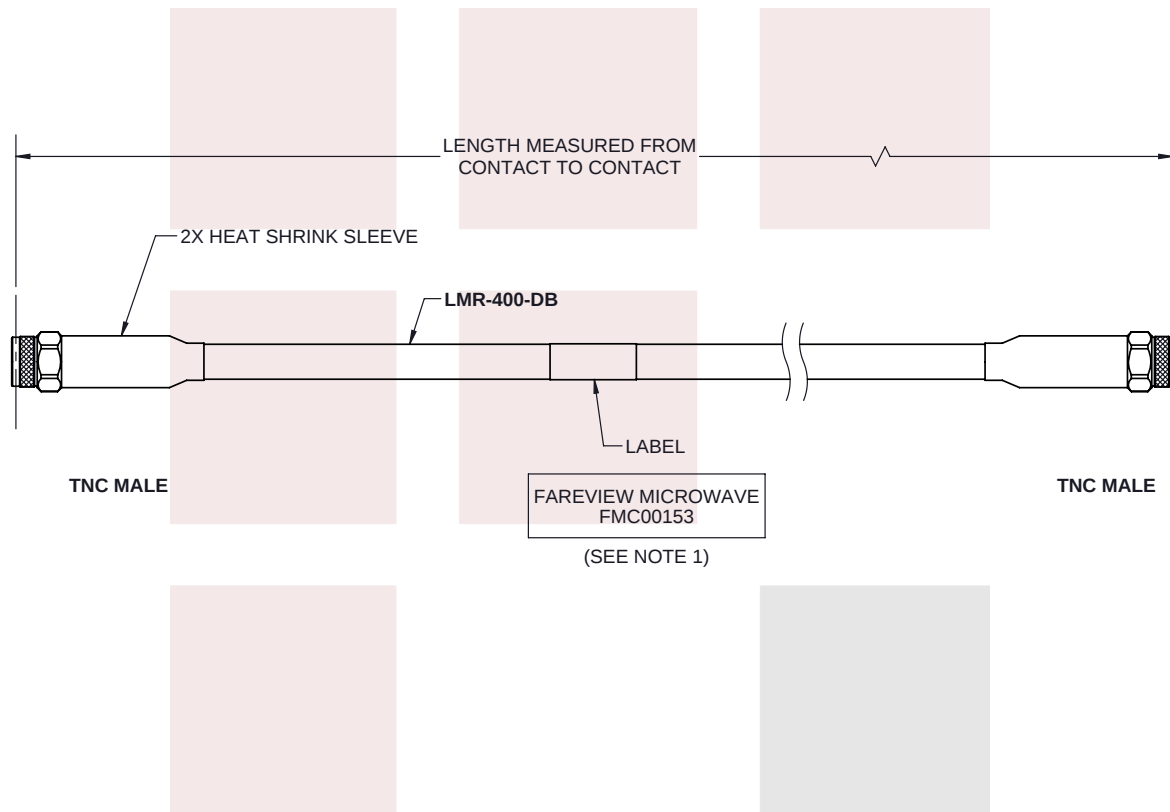
Click the following link to obtain additional part information: [Low Loss TNC Male to TNC Male Cable LMR-400-DB Coax in 200 cm FMC00153-200CM](#)

URL: <https://www.fairviewmicrowave.com/low-loss-tnc-male-tnc-male-cable-lmr400db-coax-fmc00153-200cm-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 |
| A         | INITIAL RELEASE | 08/21/20 | S.ELLIS  |



**NOTES:**

1. CABLES 36" AND UNDER HAVE 1 LABEL CENTERED.  
CABLES OVER 36" HAVE 2 LABELS, ONE AT EACH  
END 6.0" FROM THE END OF THE CONNECTOR.

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TITLE

Low Loss TNC Male to TNC Male Cable LMR-400-DB  
Coax in 200 cm

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

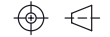
TOLERANCES:

.X = ±.2 [5.08] FRACTIONS  
.XX = ±.02 [.51] ± 1/32  
.XXX = ±.005 [.13] ANGLES ± 1°

CABLE LENGTH (L) TOLERANCES:

L ≤ 12 [305] = +1 [25] / -0  
12 [305] < L ≤ 60 [1524] = +2 [51] / -0  
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

SCALE N/A

|           |                    |                       |                      |          |
|-----------|--------------------|-----------------------|----------------------|----------|
| SIZE<br>A | CAGE CODE<br>3FKR5 | DRAWN BY<br>BPUCHASKI | ITEM NO.<br>FMC00153 | REV<br>A |
|-----------|--------------------|-----------------------|----------------------|----------|

T-Rev.D