

# Low Loss SMA Male to N Male Cable LMR-400-UF Coax

The SMA male to type N male cable using LMR-400-UF coax, part number FMC00254, from Fairview Microwave is in-stock and ships same day. This Fairview SMA to type N cable assembly has a male to male gender configuration with 50 ohm flexible LMR-400-UF coax. Fairview Microwave's flexible RF cable assemblies are ideal for applications where tight bends and continual flexure are required. The FMC00254 SMA male to type N 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 | т    | ур      | Max   | U     | Inits     |
|-------------------------|---------|-----|------|---------|-------|-------|-----------|
| Frequency Range         |         | DC  |      |         | 5.8   |       | GHz       |
| VSWR                    |         |     |      |         | 1.4:1 |       |           |
| Velocity of Propagation |         |     | 8    | 35      |       |       | %         |
| RF Shielding            |         | 90  |      |         |       |       | dB        |
| Group Delay             |         |     | 1.2  | [3.94]  |       | ns/ft | t [ns/m]  |
| Capacitance             |         |     | 23.9 | [78.41] |       | pF/ft | t [pF/m]  |
| Inductance              |         |     | 0.06 | 6 [0.2] |       | uH/ft | t [uH/m]  |
| DC Resistance Inner Cor | ductor  |     | 1.07 | [3.51]  |       | Ω/100 | Oft [Ω/Km |
| DC Resistance Outer Cor | nductor |     | 1.65 | [5.41]  |       | Ω/100 | 0ft [Ω/Km |
| Jacket Spark            |         |     |      |         | 8,000 | V     | /rms      |

| Performance by        | Freq <mark>ue</mark> i | тсу  |      |      |      |       |
|-----------------------|------------------------|------|------|------|------|-------|
| Description           | F1                     | F2   | F3   | F4   | F5   | Units |
| Frequency             | 0.25                   | 0.5  | 1    | 2.5  | 5.8  | GHz   |
| Insertion Loss (Typ.) | 0.02                   | 0.03 | 0.05 | 0.08 | 0.13 | dB/ft |
|                       | 0.07                   | 0.1  | 0.16 | 0.26 | 0.43 | 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**

Inner Conductor Type

Cable Assembly Diameter

Cable

Cable Type

Impedance

0.827 in [21.01 mm]

LMR-400-UF 50 Ohms Stranded

# FMC00254 DATA SHEET



## **Configuration:**

- SMA Male
- N Male
- LMR-400-UF

#### **Features:**

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

## **Applications:**

- General Purpose
- Laboratory Use

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| Inner Conductor Materi<br>Dielectric Type<br>Number of Shields<br>Shield Layer 1<br>Shield Layer 2     | al and Plating | Copper<br>PE (F)<br>2<br>Aluminum Tape<br>Tinned Copper Braid   |  |
|--|----------------|---|--|
| Jacket Material  |                | TPE, Black  |  |
| Jacket Diameter  |                | 0.405 in [10.29 mm]   |  |
| One Time Minimum Ber<br>Repeated Minimum Ber<br>Bending Moment<br>Flat Plate Crush<br>Tensile Strength |                | 1 in [25.4 mm]<br>4 in [101.6 mm]<br>0.38 lbs-ft [0.52 N-m]<br>20 lbs/in [0.36 Kg/mm]<br>160 lbs [72.57 Kg] |  |
| 5  |                | [,,, ]  |  |
| Connectors   |                |   |  |

| Description                 | Connector 1           | Connector 2     |  |
|-----------------------------|-----------------------|-----------------|--|
| Туре                        | SMA Male              | N Male          |  |
| Impedance                   | 50 Ohms               | 50 Ohms         |  |
| Contact Material & Plating  | Brass, Gold           | Brass, Gold     |  |
| Contact Plating Spec.       | 50µ″ Min              | 3 µin minimum   |  |
| Dielectric Type             | Teflon                | PTFE            |  |
| Body Material & Plating     | Brass, Tri-Metal      | Brass, Nickel   |  |
| Body Plating Spec.          |                       | 100 µin minimum |  |
| Coupling Nut Material & Pla | ting Brass, Tri-Metal | Brass, Nickel   |  |
| Coupling Nut Plating Spec.  |                       | 100 µin minimum |  |
|                             |                       |                 |  |

#### **Environmental Specifications**

**Temperature** Operating Range Storage Range

-40 to +85 deg C -70 to +85 deg C

**Compliance Certifications** (see product page for current document)

#### **Plotted and Other Data**

Notes:

#### How to Order

Part Number Configuration:



Example: FMC00254-12 = 12 inches long cable FMC00254-100cm = 100 cm long cable

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Low Loss SMA Male to N Male Cable LMR-400-UF Coax 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 SMA Male to N Male Cable LMR-400-UF Coax FMC00254

The information contained in this document is accurate to the best of our knowledge and representative of the part

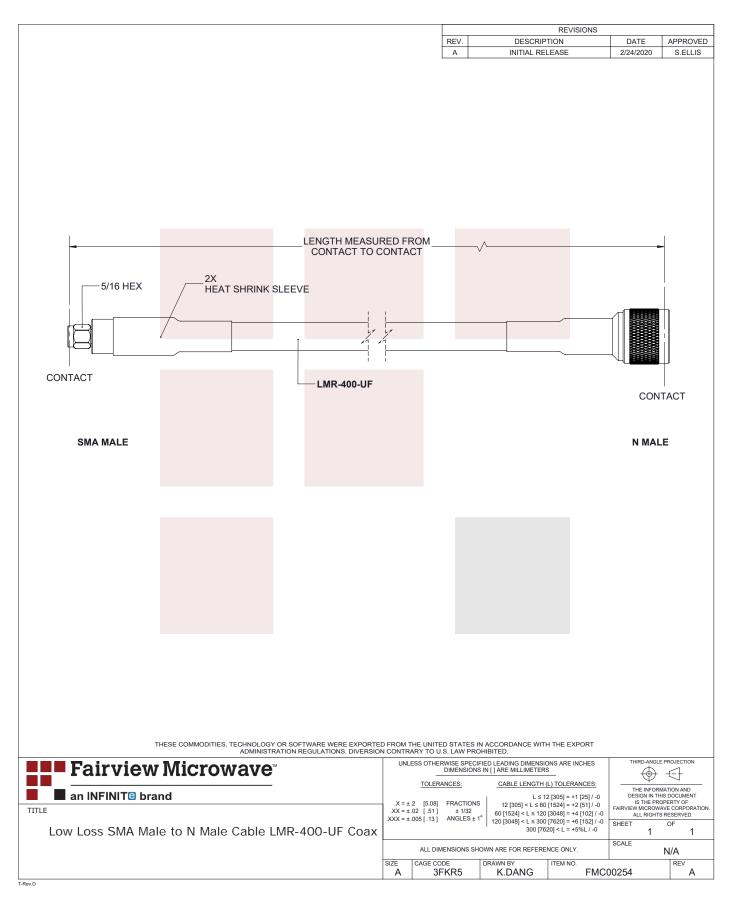
URL: https://www.fairviewmicrowave.com/low-loss-sma-male-n-male-cable-Imr400uf-coax-fmc00254-p.aspx

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 warraty 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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