

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

The RA TNC male to type N female cable using LMR-400-UF coax, part number FMCA3250, from Fairview Microwave is in-stock and ships same day. This Fairview TNC to type N cable assembly has a male to female 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 FMCA3250 TNC male to type N female cable assembly operates to 5.8 GHz. The right angle TNC interface on the LMR-400-UF 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 |     | 1.07 [3.51]  |       | $\Omega$ /1000ft [ $\Omega$ /Km] |
| DC Resistance Outer Conductor |     | 1.65 [5.41]  |       | $\Omega$ /1000ft [ $\Omega$ /Km] |
| Operating Voltage (AC)        |     |              | 500   | Vrms                             |
| 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.) | 0.023 | 0.035 | 0.05 | 0.081 | 0.13 | dB/ft |
|                       | 0.08  | 0.11  | 0.16 | 0.27  | 0.43 | dB/m  |

#### Electrical Specification Notes:

Insertion Loss does not include the loss of the connectors. Insertion Loss is estimated as 0.2 for the TNC connector and 0.1 dB for the N connector.

### Mechanical Specifications

#### Cable Assembly

Weight 0.29 lbs [131.54 g]

#### Cable

Cable Type LMR-400-UF  
 Impedance 50 Ohms



### Configuration:

- TNC Male Right Angle
- N Female
- 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 Type                 | Stranded            |
| 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                      | TPE, 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               | 0.38 lbs-ft [0.52 N-m] |
| Flat Plate Crush             | 20 lbs/in [0.36 Kg/mm] |
| Tensile Strength             | 160 lbs [72.57 Kg]     |

### Connectors

| Description                     | Connector 1      | Connector 2      |
|---------------------------------|------------------|------------------|
| Type                            | TNC Male         | N Female         |
| Specification                   |                  | MIL-STD-348      |
| Impedance                       | 50 Ohms          | 50 Ohms          |
| Contact Material & Plating      | Brass, Gold      | Copper, Gold     |
| Contact Plating Spec.           | 50µin minimum    |                  |
| Dielectric Type                 | PTFE             | PTFE             |
| Outer Cond Material & Plating   |                  | Brass, Tri-Metal |
| Body Material & Plating         | Brass, Tri-Metal | Brass, Tri-Metal |
| Coupling Nut Material & Plating | Brass, Tri-Metal |                  |

### 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:

**FMCA3250 - xx uu**

cm = Centimeters  
 <blank> = Inches

Length

Example: FMCA3250-12 = 12 inches long cable  
 FMCA3250-100cm = 100 cm long cable

Low Loss RA TNC Male to N Female Cable LMR-400-UF Coax With 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 TNC Male to N Female Cable LMR-400-UF Coax With Times Microwave Components FMCA3250](https://www.fairviewmicrowave.com/low-loss-ra-tnc-male-to-n-female-cable-lmr-400-uf-coax-with-times-micro-wave-components-fmca3250-p.aspx)

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