



SMA Male to RA TNC Male Cable LMR-200 Coax

The SMA male to RA TNC male cable using LMR-200 coax, part number FMC00277, from Fairview Microwave is in-stock and ships same day. This Fairview SMA to TNC 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 FMC00277 SMA male to TNC male cable assembly operates to 5.8 GHz. The right angle TNC interface on the LMR-200 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 | Т | ур | Max | ι | Jnits | |
|-------------------------|---------|-------|---------|-------|-------|---------|-----|
| Frequency Range | DC | | | 5.8 | | GHz | |
| VSWR | | | | 1.4:1 | | | |
| Velocity of Propagation | | 8 | 33 | | | % | |
| RF Shielding | 90 | | | | | dB | |
| Group Delay | | 1.2 | 2 [4] | | ns/f | t [ns/n | n] |
| Capacitance | | 24.5 | [80.38] | | pF/fl | t [pF/r | n] |
| Inductance | | 0.06 | 1 [0.2] | | uH/f | t [uH/r | m] |
| DC Resistance Inner Cor | nductor | 5.36 | [17.59] | | Ω/100 | Oft [Ω/ | Km] |
| DC Resistance Outer Cor | nductor | 4.9 [| 16.08] | | Ω/100 | Oft [Ω/ | Km] |
| Jacket Spark | | | | 3,000 | ١ | /rms | |

Performance by Frequency

| Description | F1 | F2 | F3 | F4 | F5 | Units |
|-----------------------|------|------|------|------|------|-------|
| Frequency | 0.25 | 0.5 | 1 | 2.5 | 5.8 | GHz |
| Insertion Loss (Typ.) | 0.05 | 0.07 | 0.1 | 0.17 | 0.26 | dB/ft |
| | 0.16 | 0.23 | 0.33 | 0.56 | 0.85 | 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 straight connector and 0.2 dB for the right angle connector.

Mechanical Specifications Cable Assembly

Cable

Cable Type Impedance LMR-200 50 Ohms

Configuration:

- SMA Male
- TNC 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

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Inner Conductor Type

Inner Conductor Material and Plating

Dielectric Type Number of Shields

Shield Layer 1 Shield Layer 2 Jacket Material

Jacket Diameter

One Time Minimum Bend Radius Repeated Minimum Bend Radius

Bending Moment Flat Plate Crush Tensile Strength Solid Copper PE (F)

> Aluminum Tape Tinned Copper Braid

PE, Black

0.195 in [4.95 mm]

0.5 in [12.7 mm] 2 in [50.8 mm]

0.2 lbs-ft [0.27 N-m] 15 lbs/in [0.27 Kg/mm] 40 lbs [18.14 Kg]

Connectors

| Description | Connector 1 | Connector 2 | | |
|-----------------------------|------------------|---------------|--|--|
| Туре | SMA Male | TNC Male | | |
| Specification | MIL-STD-348A | | | |
| Impedance | 50 Ohms | 50 Ohms | | |
| Contact Material & Plating | Brass, Gold | Brass, Gold | | |
| Contact Plating Spec. | 50 μin minimum | | | |
| Dielectric Type | PTFE | PTFE | | |
| Outer Cond Material & Plati | ng | Brass, Nickel | | |
| Body Material & Plating | Brass, Gold | Brass, Nickel | | |
| Body Plating Spec. | 3 µin minimum | | | |
| Coupling Nut Material & Pla | ting Brass, Gold | Brass, Nickel | | |
| Coupling Nut Plating Spec. | 3 µin minimum | | | |
| Hex Size | 5/16 inch | | | |

Mechanical Specification Notes:

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:

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





How to Order

| Part Number Configuration: | FMC00277 | - xx | uu | |
|----------------------------|----------|------|----|--|
| | | | | cm = Centimeters <blank> = Inches</blank> |
| | | | | ——— Length |

Example: FMC00277-12 = 12 inches long cable FMC00277-100cm = 100 cm long cable

SMA Male to RA TNC Male Cable LMR-200 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: SMA Male to RA TNC Male Cable LMR-200 Coax FMC00277

URL: https://www.fairviewmicrowave.com/sma-male-ra-tnc-male-cable-lmr200-coax-fmc00277-p.aspx

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