

Low Loss TNC Male to TNC Male Cable LMR-600-DB Coax in 36 Inch

The TNC male to TNC male 36 inch cable using LMR-600-DB coax, part number FMC00297-36, 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-600-DB coax. Fairview Microwave's flexible RF cable assemblies are ideal for applications where tight bends and continual flexure are required. The FMC00297-36 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 | | 87 | | % |
| RF Shielding | 90 | | | dB |
| Group Delay | | 1.17 [3.84] | | ns/ft [ns/m] |
| Capacitance | | 23.4 [76.77] | | pF/ft [pF/m] |
| Inductance | | 0.058 [0.19] | | uH/ft [uH/m] |
| DC Resistance Inner Conductor | | 0.53 [1.74] | | $\Omega/1000\text{ft} [\Omega/\text{Km}]$ |
| DC Resistance Outer Conductor | | 1.2 [3.94] | | $\Omega/1000\text{ft} [\Omega/\text{Km}]$ |
| 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 (Typ.) | 0.24 | 0.25 | 0.28 | 0.33 | 0.42 | 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 0.1 dB per connector.

Mechanical Specifications

Cable Assembly

| | |
|----------|--------------------|
| Length* | 36 in [914.4 mm] |
| Diameter | 0.75 in [19.05 mm] |

Cable

| | |
|------------|------------|
| Cable Type | LMR-600-DB |
| Impedance | 50 Ohms |



Configuration:

- TNC Male
- TNC Male
- LMR-600-DB

Features:

- Max Frequency 5.8 GHz
- Shielding Effectivity > 90 dB
- 87% Phase Velocity
- Double Shielded
- PE Jacket
- 500 Mating Cycles

Applications:

- General Purpose
- Laboratory Use

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| | |
|--------------------------------------|----------------------|
| Inner Conductor Type | Solid |
| 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 | 0.59 in [14.99 mm] |

| | |
|------------------------------|------------------------|
| One Time Minimum Bend Radius | 1.5 in [38.1 mm] |
| Repeated Minimum Bend Radius | 6 in [152.4 mm] |
| Bending Moment | 2.75 lbs-ft [3.73 N-m] |
| Flat Plate Crush | 60 lbs/in [1.07 Kg/mm] |
| Tensile Strength | 350 lbs [158.76 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 |
| Body Material & Plating | Brass, Tri-Metal | Brass, Tri-Metal |
| Coupling Nut Material & Plating | Brass, Tri-Metal | Brass, Tri-Metal |

Environmental Specifications
Temperature

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

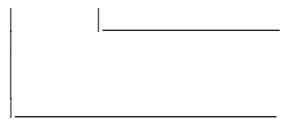
Compliance Certifications (see [product page](#) for current document)

Plotted and Other Data

Notes:

How to Order

Part Number Configuration:

FMC00297 - xx uu

 cm = Centimeters
 <blank> = Inches
 Length

 Example: FMC00297-12 = 12 inches long cable
 FMC00297-100cm = 100 cm long cable

Low Loss TNC Male to TNC Male Cable LMR-600-DB Coax in 36 Inch 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.

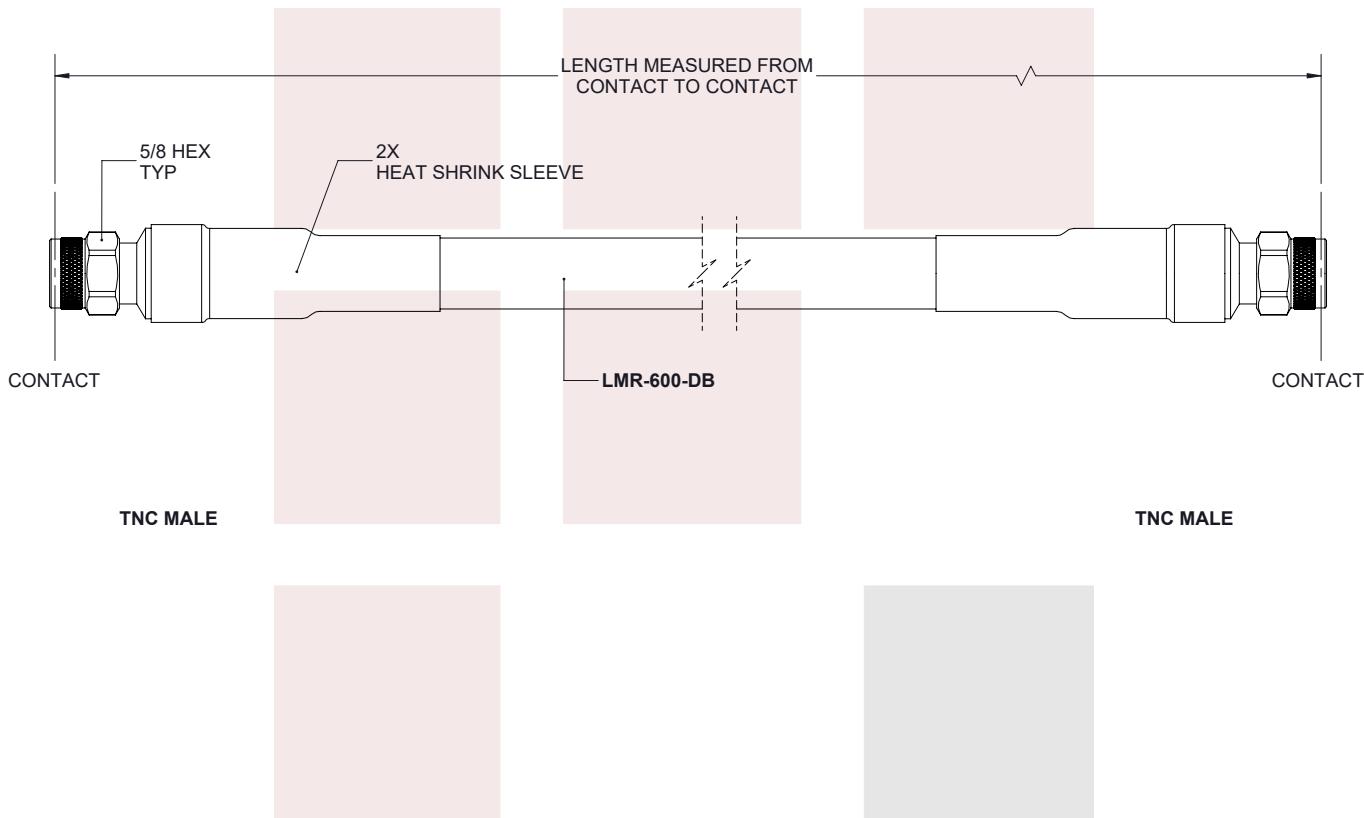
Click the following link to obtain additional part information: [Low Loss TNC Male to TNC Male Cable LMR-600-DB Coax in 36 Inch FMC00297-36](#)

URL: <https://www.fairviewmicrowave.com/low-loss-tnc-male-tnc-male-cable-lmr600db-coax-fmc00297-36-p.aspx>

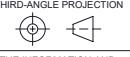
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| REVISIONS | | | |
|-----------|-----------------|-----------|----------|
| REV. | DESCRIPTION | DATE | APPROVED |
| A | INITIAL RELEASE | 2/24/2020 | S.ELLIS |



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| | TOLERANCES: | CABLE LENGTH (L) TOLERANCES: | |
| TITLE Low Loss TNC Male to TNC Male Cable LMR-600-DB Coax in 36 Inch | $X = \pm .2$ [5.08] $XX = \pm .02$ [.51] $XXX = \pm .005$ [.13] | FRACTIONS $\pm 1/32$ ANGLES $\pm 1^\circ$ | $L \leq 12$ [305] = $+1$ [25] / -0 60 [1524] < $L \leq 120$ [3048] = $+4$ [102] / -0 120 [3048] < $L \leq 300$ [7620] = $+6$ [152] / -0 300 [7620] < L = $+5\%L$ / -0 |
| | ALL DIMENSIONS SHOWN ARE FOR REFERENCE ONLY. | | SCALE N/A |
| SIZE A | CAGE CODE 3FKR5 | DRAWN BY K.DANG | ITEM NO. FMC00297 |
| | | | REV A |

T-Rev.D