an INFINIT<sup>®</sup> brand

# FMC00381 DATA SHEET

# SMA Male to TNC Male Cable LMR-240-DB Coax

The SMA male to TNC male cable using LMR-240-DB coax, part number FMC00381, 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-240-DB coax. Fairview Microwave's flexible RF cable assemblies are ideal for applications where tight bends and continual flexure are required. The FMC00381 SMA 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          | т    | ур              | Max             | Units |          |
|-------------------------------|--|--------------|------|-----------------|-----------------|-------|----------|
| Frequency Range               |  | DC           |      |                 | 5.8             |       | GHz      |
| VSWR                          |  |              |      |                 | 1.4:1           |       |          |
| Velocity of Propagation       |  |              | 8    | 34              |                 |       | %        |
| RF Shielding                  |  | 90           |      |                 |                 |       | dB       |
| Group Delay                   |  |              | 1.21 | [3.97]          |                 | ns/f  | t [ns/m] |
| Capacitance                   |  |              | 24.2 | [79.4]          |                 | pF/f  | t [pF/m] |
| Inductance                    |  | 0.06 [0.2]   |      |                 | uH/ft [uH/m]    |       |          |
| DC Resistance Inner Conductor |  | 3.2 [10.5]   |      | Ω/1000ft [Ω/Km] |                 |       |          |
| DC Resistance Outer Conductor |  | 3.89 [12.76] |      |                 | Ω/1000ft [Ω/Km] |       |          |
| Jacket Spark                  |  |              |      |                 | 5,000           | ١     | /rms     |

| Performance by        | Freque | ency |      |      |      |       |
|-----------------------|--------|------|------|------|------|-------|
| Description           | F1     | F2   | F3   | F4   | F5   | Units |
| Frequency             | 0.25   | 0.5  | 1    | 2.5  | 5.8  | GHz   |
| Insertion Loss (Max.) | 0.04   | 0.05 | 0.06 | 0.13 | 0.2  | dB/ft |
|                       | 0.13   | 0.16 | 0.2  | 0.43 | 0.66 | 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**

#### **Cable Assembly**

Cable

Cable Type Impedance Inner Conductor Type Inner Conductor Material and Plating LMR-240-DB 50 Ohms Solid Copper



# **Configuration:**

- SMA Male
- TNC Male
- LMR-240-DB

## **Features:**

- Max Frequency 5.8 GHz
- Shielding Effectivity > 90 dB
- 84% Phase Velocity
- Double Shielded
- PE Jacket

# **Applications:**

- General Purpose
- Laboratory Use

Fairview Microwave 301 Leora Ln., Suite 100 Lewisville, TX 75056 Tel: 1-800-715-4396 / (972) 649-6678 Fax: (972) 649-6689 www.fairviewmicrowave.com sales@fairviewmicrowave.com Fairview Microwave

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cm = Centimeters

<blank> = Inches

- Length

| Number of Shields<br>Shield Layer 1<br>Shield Layer 2  |         |   | minum Tape<br>ned Copper Braid |   |  |
|--|---------|---|--------------------------------|---|--|
| Jacket Material<br>Jacket Diameter   |         | PE,   | Black<br>4 in [6.1 mm]         |   |  |
| One Time Minimum Bend Radius<br>Repeated Minimum Bend Radius<br>Bending Moment<br>Flat Plate Crush<br>Tensile Strength |         | 0.75 in [19.05 mm]<br>2.5 in [63.5 mm]<br>0.25 lbs-ft [0.34 N-m]<br>20 lbs/in [0.36 Kg/mm]<br>80 lbs [36.29 Kg] |                                |   |  |
| Connectors   |         |   |                                |   |  |
| Description  | Connect | or 1  | Connector                      | 2 |  |
| Туре   | SMA M   | ale   | TNC Male                       |   |  |
| Crecification  | MU CTD  |   |                                |   |  |

| Specification                 | MIL-STD-348           | 3A            |                       |                  |  |
|-------------------------------|-----------------------|---------------|-----------------------|------------------|--|
| Impedance                     | 50 Ohms               |               | 50 Ohm                | s                |  |
| Mating Cycles                 |                       |               | 500                   |                  |  |
| Contact Material & Plating    | Beryllium Copper, Gol |               | Phosphor Bronze, Gold |                  |  |
| Contact Plating Spec.         | 50 µin minimum        |               | 50µ in. minimum       |                  |  |
| Dielectric Type               | PTFE                  |               | PTFE                  |                  |  |
| Outer Cond Material & Plating |                       |               | Brass, Tri-N          | letal            |  |
| Body Material & Plating       | Brass, Gold           | Brass, Gold   |                       | Brass, Tri-Metal |  |
| Body Plating Spec.            | 3 µin minimu          | m             | 80µ in. minimum       |                  |  |
| Coupling Nut Material & Pla   | iting Brass, Gold     | Brass, Gold   |                       | Brass, Tri-Metal |  |
| Coupling Nut Plating Spec.    | 3 µin minimu          | 3 µin minimum |                       | 80µ in. minimum  |  |
| Hex Size                      | 5/16 inch             |               |                       |                  |  |
| Torque                        |                       |               | 20 in-lbs 2.2         | 6 Nm             |  |
|                               |                       |               |                       |                  |  |

#### **Environmental Specifications**

Temperature Operating Range

-40 to +85 deg C

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

### **Plotted and Other Data**

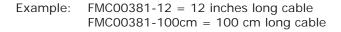
Notes:

• Values at 25°C, sea level.

### How to Order

Part Number Configuration:

FMC00381 - xx



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SMA Male to TNC Male Cable LMR-240-DB 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.

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

Click the following link to obtain additional part information: SMA Male to TNC Male Cable LMR-240-DB Coax FMC00381

URL: https://www.fairviewmicrowave.com/sma-male-tnc-male-cable-lmr240db-coax-fmc00381-p.aspx

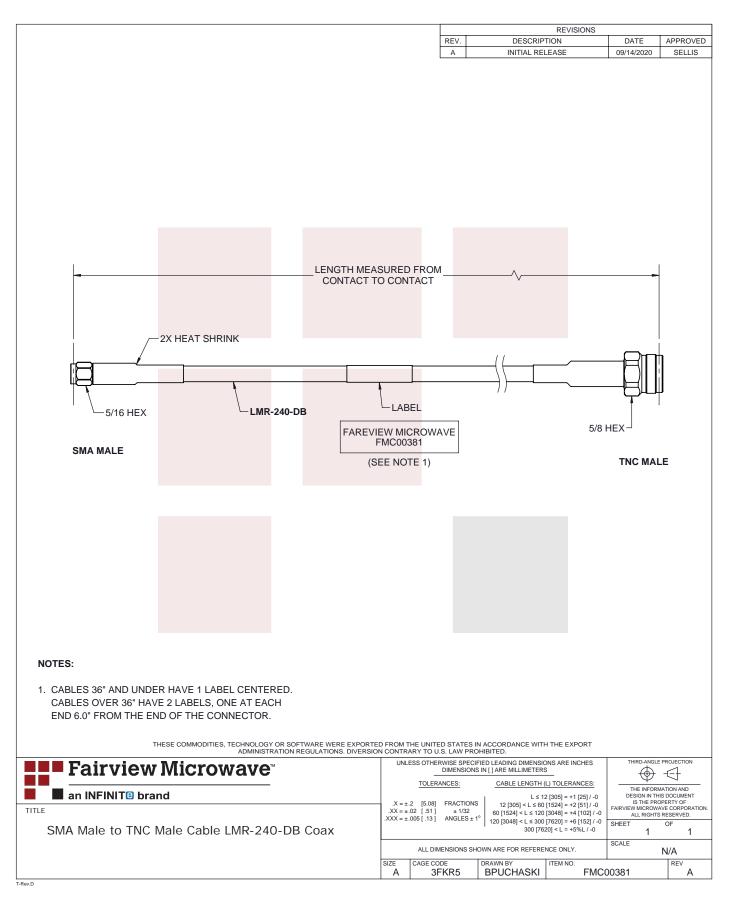
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