

SMA Male to TNC Male Cable LMR-240-DB Coax in 50 cm

The SMA male to TNC male 50 cm cable using LMR-240-DB coax, part number FMC00381-50CM, 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 FMC00381-50CM 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	Typ	Max	Units
Frequency Range	DC		5.8	GHz
VSWR			1.4:1	
Velocity of Propagation		84		%
RF Shielding	90			dB
Group Delay		1.21 [3.97]		ns/ft [ns/m]
Capacitance		24.2 [79.4]		pF/ft [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	Vrms

Performance by Frequency

Description	F1	F2	F3	F4	F5	Units
Frequency	0.25	0.5	1	2.5	5.8	GHz
Insertion Loss (Max.)	0.27	0.28	0.3	0.41	0.53	dB

Electrical Specification Notes:

The Insertion Loss data above is based on the performance specifications of the coax used in this assembly. Insertion Loss is estimated as 0.1 dB per connector.

Mechanical Specifications

Cable Assembly

Length* 19.68 in [499.87 mm]

Cable

Cable Type LMR-240-DB
 Impedance 50 Ohms
 Inner Conductor Type Solid



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

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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	PE, Black
Jacket Diameter	0.24 in [6.1 mm]
One Time Minimum Bend Radius	0.75 in [19.05 mm]
Repeated Minimum Bend Radius	2.5 in [63.5 mm]
Bending Moment	0.25 lbs-ft [0.34 N-m]
Flat Plate Crush	20 lbs/in [0.36 Kg/mm]
Tensile Strength	80 lbs [36.29 Kg]

Connectors

Description	Connector 1	Connector 2
Type	SMA Male	TNC Male
Specification	MIL-STD-348A	
Impedance	50 Ohms	50 Ohms
Mating Cycles		500
Contact Material & Plating	Beryllium Copper, Gold	Phosphor Bronze, Gold
Contact Plating Spec.	50 µin minimum	50µ in. minimum
Dielectric Type	PTFE	PTFE
Outer Cond Material & Plating		Brass, Tri-Metal
Body Material & Plating	Brass, Gold	Brass, Tri-Metal
Body Plating Spec.	3 µin minimum	80µ in. minimum
Coupling Nut Material & Plating	Brass, Gold	Brass, Tri-Metal
Coupling Nut Plating Spec.	3 µin minimum	80µ in. minimum
Hex Size	5/16 inch	
Torque		20 in-lbs 2.26 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 uu

cm = Centimeters

<blank> = Inches

Length

Example: FMC00381-12 = 12 inches long cable
 FMC00381-100cm = 100 cm long cable

SMA Male to TNC Male Cable LMR-240-DB Coax in 50 cm 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 TNC Male Cable LMR-240-DB Coax in 50 cm FMC00381-50CM](https://www.fairviewmicrowave.com/sma-male-tnc-male-cable-lmr240db-coax-fmc00381-50cm-p.aspx)

URL: <https://www.fairviewmicrowave.com/sma-male-tnc-male-cable-lmr240db-coax-fmc00381-50cm-p.aspx>

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



REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
A	INITIAL RELEASE	09/14/2020	SELLIS

NOTES:

1. CABLES 36" AND UNDER HAVE 1 LABEL CENTERED.
CABLES OVER 36" HAVE 2 LABELS, ONE AT EACH
END 6.0" FROM THE END OF THE CONNECTOR.

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Fairview Microwave

an INFINITE brand

TITLE

SMA Male to TNC Male Cable LMR-240-DB Coax in 50
cm

UNLESS OTHERWISE SPECIFIED LEADING DIMENSIONS ARE INCHES
DIMENSIONS IN [] ARE MILLIMETERS

TOLERANCES:

CABLE LENGTH (L) TOLERANCES:

.X = ±.2 [.51] FRACTIONS
.XX = ±.02 [.51] ± 1/32
.XXX = ±.005 [.13] ANGLES ± 1°

L ≤ 12 [305] = +1 [25] / -0
12 [305] < L ≤ 60 [1524] = +2 [51] / -0
60 [1524] < L ≤ 120 [3048] = +4 [102] / -0
120 [3048] < L ≤ 300 [7620] = +6 [152] / -0
300 [7620] < L = +5%L / -0

ALL DIMENSIONS SHOWN ARE FOR REFERENCE ONLY.

SIZE
A

CAGE CODE
3FKR5

DRAWN BY
BPUCHASKI

ITEM NO.
FMC00381

REV
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THIRD-ANGLE PROJECTION

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SHEET 1 OF 1

SCALE
N/A

T-Rev.D

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