

## Low Loss RA N Male to RA N Male Cable LMR-400-DB Coax in 50 CM

The RA type N male to RA type N male 50 cm cable using LMR-400-DB coax, part number FMC00287-50CM, from Fairview Microwave is in-stock and ships same day. This Fairview type N to type N cable assembly has a male to male gender configuration with 50 ohm flexible LMR-400-DB coax. Fairview Microwave's flexible RF cable assemblies are ideal for applications where tight bends and continual flexure are required. The FMC00287-50CM type N male to type N male cable assembly operates to 6 GHz. The right angle type N interfaces on the LMR-400-DB cable allow 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		6	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		1.39 [4.56]		$\Omega$ /1000ft [ $\Omega$ /Km]
DC Resistance Outer Conductor		1.65 [5.41]		$\Omega$ /1000ft [ $\Omega$ /Km]
Jacket Spark			8,000	Vrms

### Performance by Frequency

Description	F1	F2	F3	F4	F5	Units
Frequency	0.25	0.5	1	2.5	6	GHz
Insertion Loss (Typ.)	0.43	0.45	0.47	0.51	0.58	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 0.2 dB per connector.

### Mechanical Specifications

#### Cable Assembly

Length\* 19.68 in [499.87 mm]  
 Diameter 0.81 in [20.57 mm]



### Configuration:

- N Male Right Angle
- N Male Right Angle
- LMR-400-DB

### Features:

- Max Frequency 6 GHz
- Shielding Effectivity > 90 dB
- 85% 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](http://www.fairviewmicrowave.com)  
[sales@fairviewmicrowave.com](mailto:sales@fairviewmicrowave.com)

**Cable**

Cable Type LMR-400-DB  
 Impedance 50 Ohms  
 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 0.405 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 0.5 lbs-ft [0.68 N-m]  
 Flat Plate Crush 40 lbs/in [0.71 Kg/mm]  
 Tensile Strength 160 lbs [72.57 Kg]

**Connectors**

Description	Connector 1	Connector 2
Type	N Male	N Male
Impedance	50 Ohms	50 Ohms
Contact Material & Plating	Beryllium Copper, Gold	Beryllium Copper, Gold
Contact Plating Spec.	1.27 µm minimum	1.27 µm minimum
Dielectric Type	PTFE	PTFE
Body Material & Plating	Brass, Tri-Metal	Brass, Tri-Metal
Body Plating Spec.	2 µm minimum	2 µm minimum
Coupling Nut Material & Plating	Brass, Tri-Metal	Brass, Tri-Metal
Coupling Nut Plating Spec.	2 µm minimum	2 µm minimum
Torque	44 in-lbs 4.97 Nm	44 in-lbs 4.97 Nm

**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)

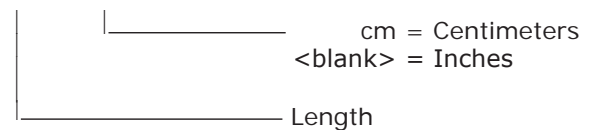
**Plotted and Other Data**

Notes:

**How to Order**

Part Number Configuration:

**FMC00287 - xx uu**



Example: FMC00287-12 = 12 inches long cable  
 FMC00287-100cm = 100 cm long cable

Low Loss RA N Male to RA N Male Cable LMR-400-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.

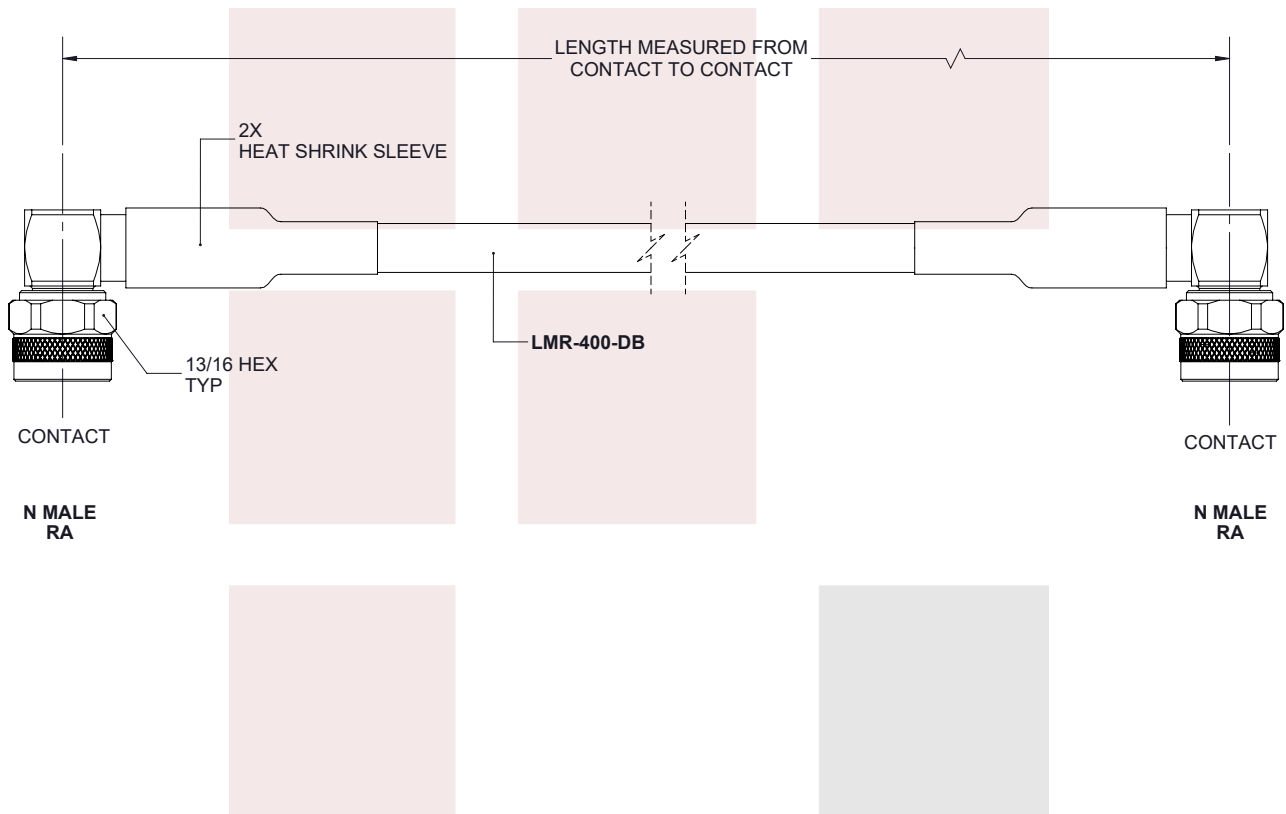
Click the following link to obtain additional part information: [Low Loss RA N Male to RA N Male Cable LMR-400-DB Coax in 50 CM FMC00287-50CM](#)

URL: <https://www.fairviewmicrowave.com/low-loss-ra-n-male-ra-n-male-cable-lmr400db-coax-fmc00287-50cm-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	2/24/2020	S.ELLIS



THESE COMMODITIES, TECHNOLOGY OR SOFTWARE WERE EXPORTED FROM THE UNITED STATES IN ACCORDANCE WITH THE EXPORT ADMINISTRATION REGULATIONS. DIVERSION CONTRARY TO U.S. LAW PROHIBITED.

TITLE  
Low Loss RA N Male to RA N Male Cable LMR-400-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 ± 1/32	L ≤ 12 [305] = +1 [25] / -0	
.XX = ±.02 [ .51 ]		12 [305] < L ≤ 60 [1524] = +2 [51] / -0	
.XXX = ±.005 [ .13 ]	ANGLES ± 1°	60 [1524] < L ≤ 120 [3048] = +4 [102] / -0	
		120 [3048] < L ≤ 300 [7620] = +6 [152] / -0	
		300 [7620] < L = +5%L / -0	

THIRD-ANGLE PROJECTION



THE INFORMATION AND DESIGN IN THIS DOCUMENT IS THE PROPERTY OF FAIRVIEW MICROWAVE CORPORATION. ALL RIGHTS RESERVED.

SHEET 1 OF 1

ALL DIMENSIONS SHOWN ARE FOR REFERENCE ONLY.

SCALE N/A

SIZE A	CAGE CODE 3FKR5	DRAWN BY K.DANG	ITEM NO. FMC00287	REV A
-----------	--------------------	--------------------	----------------------	----------

T-Rev.D