

Low Loss RA 7/16 DIN Male to RA 7/16 DIN Male Cable LMR-600-UF Coax

FMCA100285



Configuration

- Connector 1: 7/16 DIN Male Right Angle
- Connector 2: 7/16 DIN Male Right Angle
- Cable Type: LMR-600-UF
- Coax Flex Type: Flexible

Features

- Max Frequency 3 GHz
- Shielding Effectivity > 90 dB
- 87% Phase Velocity
- Double Shielded
- TPE Jacket

Applications

- General Purpose
- Laboratory Use

Description

The RA 7/16 DIN male to RA 7/16 DIN male cable using LMR-600-UF coax, part number FMCA100285, from Fairview Microwave is in-stock and ships same day. This Fairview 7/16 DIN to 7/16 DIN cable assembly has a male to male gender configuration with 50 ohm flexible LMR-600-UF coax. Fairview Microwave's flexible RF cable assemblies are ideal for applications where tight bends and continual flexure are required. The FMCA100285 7/16 DIN male to 7/16 DIN male cable assembly operates to 3 GHz. The right angle 7/16 DIN interfaces on the LMR-600-UF 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	Minimum	Typical	Maximum	Units
Frequency Range	DC		3	GHz
VSWR			1.33:1	
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		0.43 [1.41]		Ohms/1000ft [Ohms/Km]
DC Resistance Outer Conductor		1.2 [3.94]		Ohms/1000ft [Ohms/Km]
Dielectric Withstanding Voltage (AC)			4,000	Vrms

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Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Jacket Spark			8,000	Vrms

Specifications by Frequency

Part Number	Length	Description	F1	F2	F3	F4	F5	Units	Weight (lbs)
		Frequency	100	250	500	1000	3000	MHz	
FMCA100285	Custom Lengths Available	Insertion Loss (Typ.)	0.001	0.015	0.022	0.032	0.056	dB/ft	
			0.01	0.05	0.08	0.11	0.19	dB/m	
FMCA100285-12	12 inch	Insertion Loss (Typ.)	0.41	0.42	0.43	0.44	0.46	dB	0.74
FMCA100285-24	24 inch	Insertion Loss (Typ.)	0.41	0.43	0.45	0.47	0.52	dB	0.917
FMCA100285-36	36 inch	Insertion Loss (Typ.)	0.41	0.45	0.47	0.5	0.57	dB	1.093
FMCA100285-60	60 inch	Insertion Loss (Typ.)	0.41	0.48	0.51	0.56	0.68	dB	1.445
FMCA100285-300	300 inch	Insertion Loss (Typ.)	0.43	0.78	0.95	1.2	1.8	dB	4.965

The insertion loss data for the base model does not include loss due to the connectors. Each length includes insertion loss due to the connectors.

Loss due to Connector 1:	0.2 dB
Loss due to Connector 2:	0.2 dB
Base Weight:	0.74 pounds
Additional Weight per Inch:	0.01467 pounds

Mechanical Specifications

Cable Assembly

Width/Diameter	0.5 in [12.7 mm]
Weight	0.74 lbs [335.66 g]

Cable

Cable Type	LMR-600-UF
Impedance	50 Ohms
Inner Conductor Type	Stranded
Inner Conductor Material and Plating	Copper
Dielectric Type	Foam PE
Number of Shields	2
Shield Layer 1	Aluminum Tape
Shield Layer 2	Tinned Copper
Jacket Material	TPE, 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	1.75 lbs-ft [2.37 N-m]
Flat Plate Crush	40 lbs/in [0.71 Kg/mm]
Tensile Strength	350 lbs [158.76 Kg]

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Connectors

Description	Connector 1	Connector 2
Type	7/16 DIN Male Right Angle	7/16 DIN Male Right Angle
Impedance	50 Ohms	50 Ohms
Configuration	Right Angle	Right Angle
Contact Material and Plating	Brass, Silver	Brass, Silver
Contact Plating Specification	3µ m minimum	3µ m minimum
Dielectric Type	PTFE	PTFE
Outer Conductor Material and Plating	Brass, Tri-Metal	Brass, Tri-Metal
Outer Conductor Plating Specification	3µ m minimum	3µ m minimum
Body Material and Plating	Brass, Tri-Metal	Brass, Tri-Metal
Body Plating Specification	3µ m minimum	3µ m minimum
Coupling Nut Material and Plating	Brass, Tri-Metal	Brass, Tri-Metal
Coupling Nut Plating Specification	3µ m minimum	3µ m minimum
Hex Size	1 1/4 in.	1 1/4 in.
Torque	18.417 ft-lbs 24.97 Nm	18.417 ft-lbs 24.97 Nm

Environmental Specifications

Operating Range Temperature -40 to +85 deg C

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

Plotted and Other Data

Notes:

Low Loss RA 7/16 DIN Male to RA 7/16 DIN Male Cable LMR-600-UF Coax



FMCA100285

Typical Performance Data

How to Order

Part Number Configuration: **FMCA100285** **- xx** **uu**

Unit of Measure:
cm = Centimeters
<blank> = Inches

Length

Base Number

Example: FMCA100285-12 = 12 inches long cable
FMCA100285-100cm = 100 cm long cable

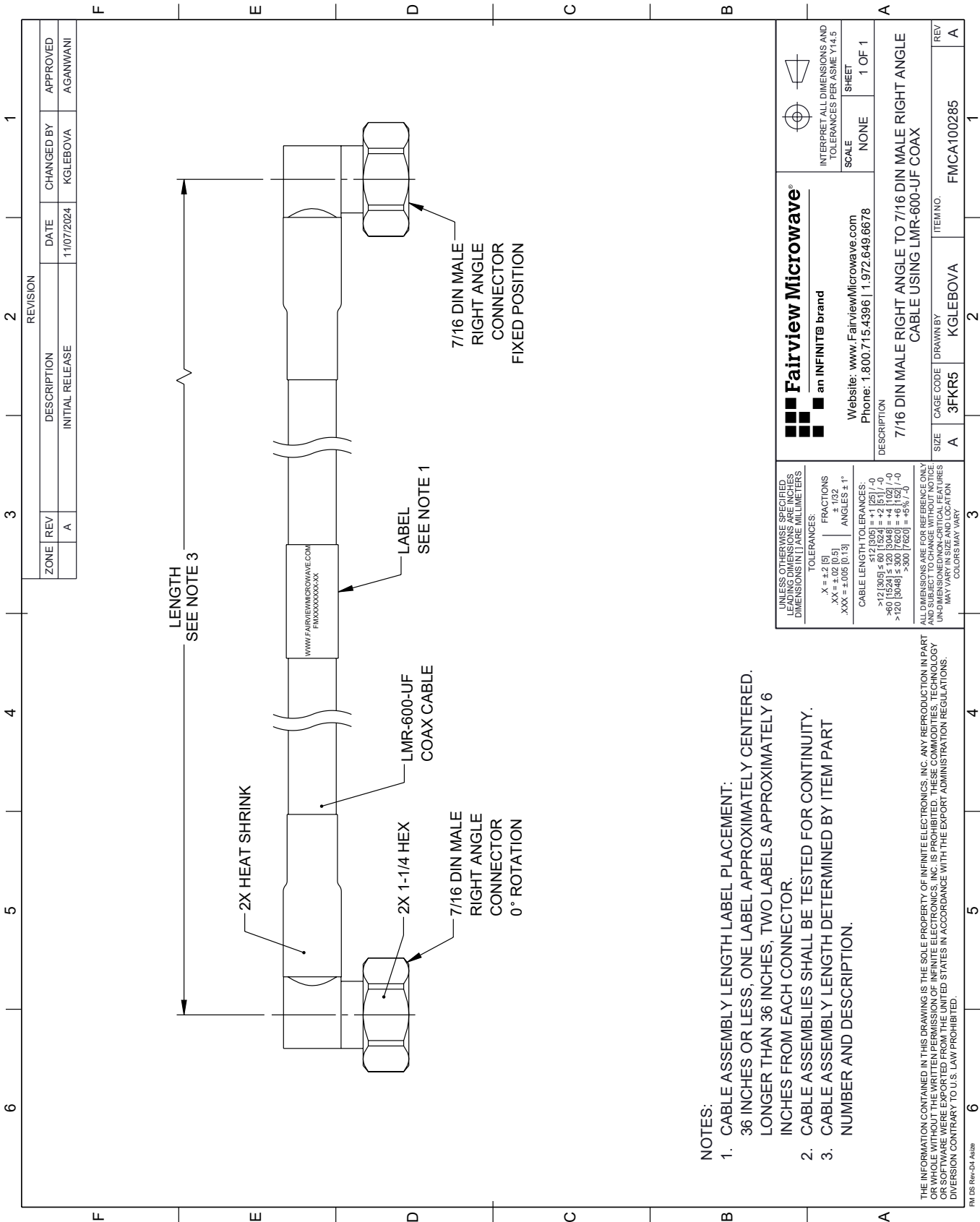
Low Loss RA 7/16 DIN Male to RA 7/16 DIN Male Cable LMR-600-UF Coax from Fairview Microwave is in-stock and available to ship same-day. All of our RF/microwave products are available off-the-shelf from our ISO 9001:2008 certified facilities in Lewisville, Texas. Fairview Microwave is RF on-demand.

For additional information on this product, please click the following link: [Low Loss RA 7/16 DIN Male to RA 7/16 DIN Male Cable LMR-600-UF Coax FMCA100285](#)

URL: <https://www.fairviewmicrowave.com/low-loss-ra-7-16-din-male-to-ra-7-16-din-male-cable-lmr-600-uf-coax-fm-ca100285-p.aspx>

The information contained within 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 liability arising out of the use of any part or document.

FMCA100285 CAD Drawing
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- NOTES:
- 1. CABLE ASSEMBLY LENGTH LABEL PLACEMENT: 36 INCHES OR LESS, ONE LABEL APPROXIMATELY CENTERED. LONGER THAN 36 INCHES, TWO LABELS APPROXIMATELY 6 INCHES FROM EACH CONNECTOR.
 - 2. CABLE ASSEMBLIES SHALL BE TESTED FOR CONTINUITY.
 - 3. CABLE ASSEMBLY LENGTH DETERMINED BY ITEM PART NUMBER AND DESCRIPTION.

UNLESS OTHERWISE SPECIFIED, LEADING DIMENSIONS ARE IN INCHES, OTHER DIMENSIONS ARE IN MILLIMETERS		Fairview Microwave® an INFINITI® brand		INTERPRET ALL DIMENSIONS AND TOLERANCES PER ASME Y14.5	
TOLERANCES:		Website: www.FairviewMicrowave.com Phone: 1.800.715.4396 1.972.649.6678		SCALE NONE	
X = ±.2 [5] .XX = ±.02 [0.5] .XXX = ±.005 [0.13]		FRACTIONS ± 1/32 ANGLES ± 1°		SHEET 1 OF 1	
CABLE LENGTH TOLERANCES:		DESCRIPTION 7/16 DIN MALE RIGHT ANGLE TO 7/16 DIN MALE RIGHT ANGLE CABLE USING LMR-600-UF COAX		REV A	
>12 [305] ≤ 60 [1524] = ±.125 [-.0]		SIZE A		CAGE CODE 3FKR5	
>60 [1524] ≤ 120 [3048] = ±.125 [-.0]		DRAWN BY KGLEBOVA		ITEM NO. FMCA100285	
>120 [3048] ≤ 300 [7620] = ±.125 [-.0]		ALL DIMENSIONS ARE FOR REFERENCE ONLY. UNDIMENSIONED/NON-CRITICAL FEATURES MAY VARY IN SIZE AND LOCATION. COLORS MAY VARY.		1	

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