

Low Loss 4.3-10 Male to 4.3-10 Male Cable LMR-400-UF  
Coax with Times Microwave Components with LF Solder



**FMCA100257**

**Configuration**

- Connector 1: 4.3-10 Male
- Connector 2: 4.3-10 Male
- Cable Type: LMR-400-UF
- Coax Flex Type: Flexible

**Features**

- Max Frequency 6 GHz
- Shielding Effectivity > 90 dB
- 85% Phase Velocity
- Double Shielded
- TPE Jacket
- 500 Mating Cycles

**Applications**

- General Purpose
- Laboratory Use

**Description**

The 4.3-10 male to 4.3-10 male cable using LMR-400-UF coax, part number FMCA100257, from Fairview Microwave is in-stock and ships same day. This Fairview 4.3-10 to 4.3-10 cable assembly has a male to male gender configuration with 50 ohm flexible LMR-400-UF coax. Fairview Microwave's flexible RF cable assemblies are ideal for applications where tight bends and continual flexure are required. The FMCA100257 4.3-10 male to 4.3-10 male cable assembly operates to 6 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	Minimum	Typical	Maximum	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		1.07 [3.51]		Ohms/1000ft [Ohms/Km]
DC Resistance Outer Conductor		1.65 [5.41]		Ohms/1000ft [Ohms/Km]

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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	250	500	1000	2500	6000	MHz	
FMCA100257	Custom Lengths Available	Insertion Loss (Typ.)	0.023	0.035	0.05	0.081	0.112	dB/ft	
			0.08	0.12	0.17	0.27	0.37	dB/m	
FMCA100257-12	12 inch	Insertion Loss (Typ.)	0.23	0.24	0.25	0.29	0.32	dB	0.279
FMCA100257-24	24 inch	Insertion Loss (Typ.)	0.25	0.27	0.3	0.37	0.43	dB	0.366
FMCA100257-36	36 inch	Insertion Loss (Typ.)	0.27	0.31	0.35	0.45	0.54	dB	0.453
FMCA100257-60	60 inch	Insertion Loss (Typ.)	0.32	0.38	0.45	0.61	0.76	dB	0.627
FMCA100257-300	300 inch	Insertion Loss (Typ.)	0.78	1.08	1.45	2.23	3	dB	2.367

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:	0.1 dB
Loss due to Connector 2:	0.1 dB
Base Weight:	0.279 pounds
Additional Weight per Inch:	0.00725 pounds

**Mechanical Specifications**

**Cable Assembly**

Width/Diameter	0.5 in [12.7 mm]
Weight	0.279 lbs [126.55 g]

**Cable**

Cable Type	LMR-400-UF
Impedance	50 Ohms
Inner Conductor Type	Stranded
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	TPE, 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	0.38 lbs-ft [0.52 N-m]
Flat Plate Crush	20 lbs/in [0.36 Kg/mm]
Tensile Strength	160 lbs [72.57 Kg]

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**Connectors**

Description	Connector 1	Connector 2
Type	4.3-10 Male	4.3-10 Male
Impedance	50 Ohms	50 Ohms
Configuration	Straight	Straight
Mating Cycles	500	500
Contact Material and Plating	Brass, Silver	Brass, Silver
Dielectric Type	PTFE	PTFE
Body Material and Plating	Brass, Tri-Metal	Brass, Tri-Metal
Coupling Nut Material and Plating	Brass, Tri-Metal	Brass, Tri-Metal
Seal Gasket Material	Silicone	Silicone

**Environmental Specifications**

Operating Range Temperature -40 to +85 deg C

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

**Plotted and Other Data**

Notes:

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**Typical Performance Data**

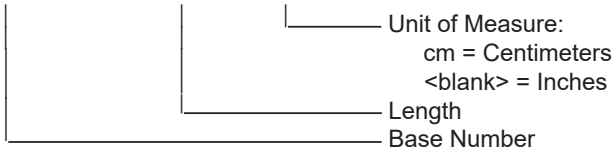
**How to Order**

Part Number Configuration:

**FMCA100257**

**- xx**

**uu**



Example: FMCA100257-12 = 12 inches long cable  
FMCA100257-100cm = 100 cm long cable

Low Loss 4.3-10 Male to 4.3-10 Male Cable LMR-400-UF Coax with Times Microwave Components with LF Solder 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.

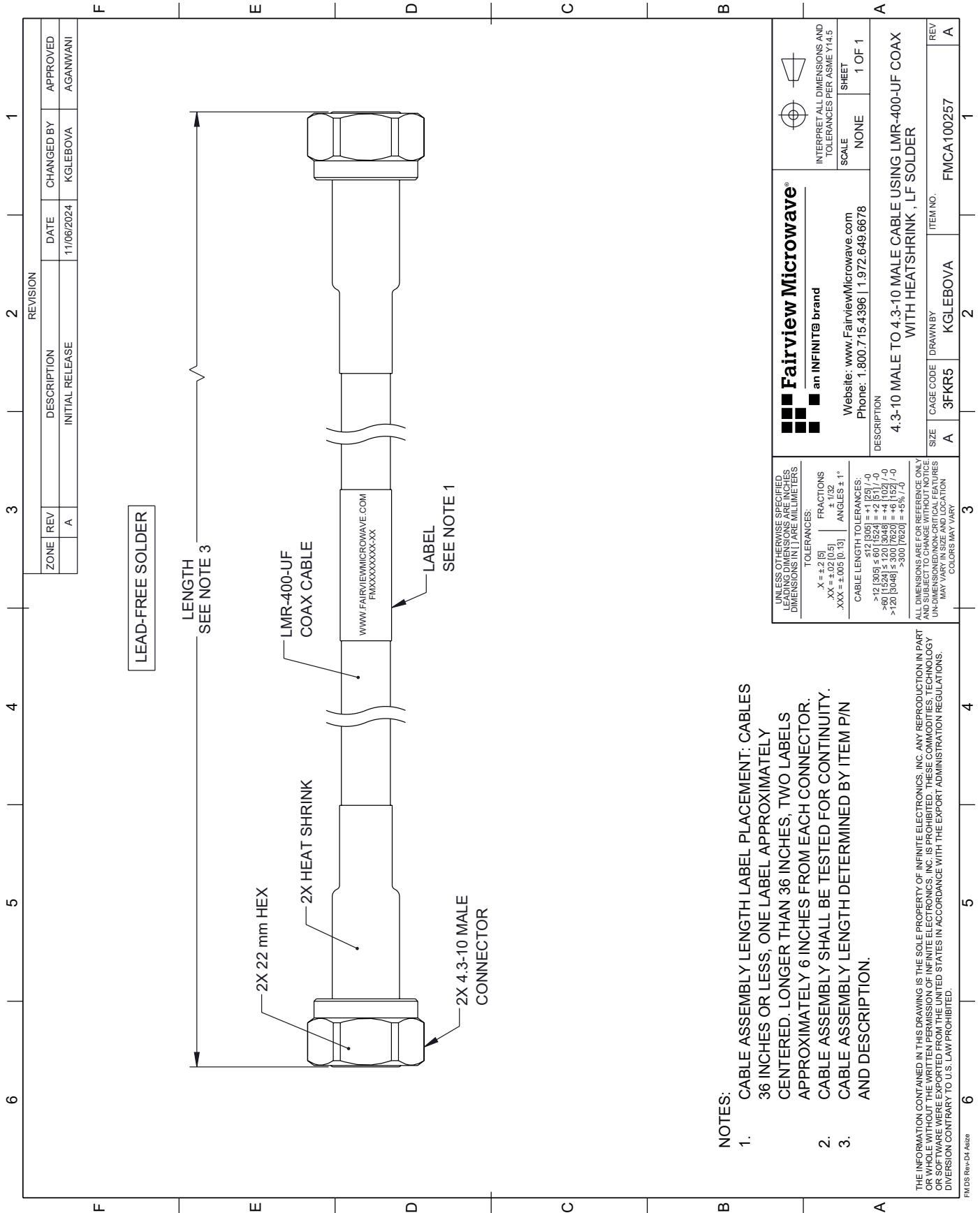
For additional information on this product, please click the following link: [Low Loss 4.3-10 Male to 4.3-10 Male Cable LMR-400-UF Coax with Times Microwave Components with LF Solder FMCA100257](#)

URL: <https://www.fairviewmicrowave.com/low-loss-4.3-10-male-to-4.3-10-male-cable-lmr-400-uf-coax-with-times-microwave-components-with-lf-solder-fmca100257-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.

# FMCA100257 CAD Drawing

Low Loss 4.3-10 Male to 4.3-10 Male Cable LMR-400-UF Coax with Times Microwave Components with LF Solder



LEAD-FREE SOLDER

LENGTH  
SEE NOTE 3

LMR-400-UF  
COAX CABLE

WWW.FAIRVIEWMICROWAVE.COM  
FMXXXXXXXX-XX

LABEL  
SEE NOTE 1

2X 22 mm HEX

2X HEAT SHRINK

2X 4.3-10 MALE  
CONNECTOR

**NOTES:**

1. CABLE ASSEMBLY LENGTH LABEL PLACEMENT: CABLES 36 INCHES OR LESS, ONE LABEL APPROXIMATELY CENTERED. LONGER THAN 36 INCHES, TWO LABELS APPROXIMATELY 6 INCHES FROM EACH CONNECTOR.
2. CABLE ASSEMBLY SHALL BE TESTED FOR CONTINUITY.
3. CABLE ASSEMBLY LENGTH DETERMINED BY ITEM P/N AND DESCRIPTION.

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<p><b>Fairview Microwave</b> an INFINIT<sup>®</sup> brand</p> <p>Website: <a href="http://www.FairviewMicrowave.com">www.FairviewMicrowave.com</a> Phone: 1.800.715.4396   1.972.649.6678</p>		<p>INTERPRET ALL DIMENSIONS AND TOLERANCES PER ASME Y14.5</p> <p>SCALE: NONE SHEET: 1 OF 1</p>
<p>UNLESS OTHERWISE SPECIFIED LEADING DIMENSIONS ARE INCHES DIMENSIONS IN PAREMILLIMETERS</p> <p>TOLERANCES:          .X = ±.2 [5]    FRACTIONS ± 1/32          .XX = ±.02 [0.5]    ANGLES ± 1°          .XXX = ±.005 [0.13]</p> <p>CABLE LENGTH TOLERANCES:          &gt;12 [305] ≤ 60 [1524] = +.2 [5] / -0          &gt;60 [1524] ≤ 120 [3048] = +.4 [102] / -0          &gt;120 [3048] ≤ 300 [7620] = +.8 [20] / -0          &gt;300 [7620] = +.8 [20] / -0</p> <p>ALL DIMENSIONS ARE FOR REFERENCE ONLY DIMENSIONS OF CRITICAL FEATURES UNLESS OTHERWISE SPECIFIED MAY VARY IN SIZE AND LOCATION COLORS MAY VARY</p>		
<p>DESCRIPTION 4.3-10 MALE TO 4.3-10 MALE CABLE USING LMR-400-UF COAX WITH HEATSHRINK, LF SOLDER</p>	<p>SIZE A</p>	<p>ITEM NO. FMCA100257</p>
<p>REVISION A</p>	<p>DATE 11/06/2024</p>	<p>APPROVED AGANWANI</p>
<p>INITIAL RELEASE</p>	<p>CHANGED BY KGLEBOVA</p>	<p>REVISION A</p>