

Low Loss 4.3-10 Male to 4.3-10 Male Cable LMR-240-UF Coax with Times Microwave Components



FMCA100227

Configuration

- Connector 1: 4.3-10 Male
- Connector 2: 4.3-10 Male
- Cable Type: LMR-240-UF
- Coax Flex Type: Flexible

Features

- Max Frequency 6 GHz
- Shielding Effectivity > 90 dB
- 84% 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-240-UF coax, part number FMCA100227, 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-240-UF coax. Fairview Microwave's flexible RF cable assemblies are ideal for applications where tight bends and continual flexure are required. The FMCA100227 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		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		4.28 [14.04]		Ohms/1000ft [Ohms/Km]
DC Resistance Outer Conductor		3.89 [12.76]		Ohms/1000ft [Ohms/Km]

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Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Jacket Spark			5,000	Vrms

Specifications by Frequency

Part Number	Length	Description	F1	F2	F3	F4	F5	Units	Weight (lbs)
		Frequency	250	500	1000	2500	6000	MHz	
FMCA100227	Custom Lengths Available	Insertion Loss (Typ.)	0.046	0.066	0.096	0.155	0.212	dB/ft	
			0.16	0.22	0.32	0.51	0.7	dB/m	
FMCA100227-12	12 inch	Insertion Loss (Typ.)	0.25	0.27	0.3	0.36	0.42	dB	0.234
FMCA100227-24	24 inch	Insertion Loss (Typ.)	0.3	0.34	0.4	0.51	0.63	dB	0.267
FMCA100227-36	36 inch	Insertion Loss (Typ.)	0.34	0.4	0.49	0.67	0.84	dB	0.299
FMCA100227-60	60 inch	Insertion Loss (Typ.)	0.43	0.53	0.68	0.98	1.26	dB	0.363
FMCA100227-300	300 inch	Insertion Loss (Typ.)	1.35	1.85	2.6	4.08	5.5	dB	1.003

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:	0.234 pounds
Additional Weight per Inch:	0.00267 pounds

Mechanical Specifications

Cable Assembly

Width/Diameter	0.5 in [12.7 mm]
Weight	0.234 lbs [106.14 g]

Cable

Cable Type	LMR-240-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	0.24 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	0.13 lbs-ft [0.18 N-m]
Flat Plate Crush	13 lbs/in [0.23 Kg/mm]
Tensile Strength	80 lbs [36.29 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
Contact Plating Specification	200 µin thickness	200 µin thickness
Dielectric Type	PTFE	PTFE
Body Material and Plating	Brass, Tri-Metal	Brass, Tri-Metal
Body Plating Specification	80 µin thickness	80 µin thickness
Coupling Nut Material and Plating	Brass, Tri-Metal	Brass, Tri-Metal
Coupling Nut Plating Specification	80 µin thickness	80 µin thickness
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

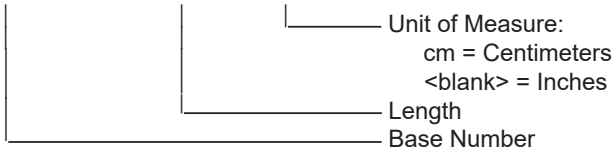
How to Order

Part Number Configuration:

FMCA100227

- xx

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Example: FMCA100227-12 = 12 inches long cable
FMCA100227-100cm = 100 cm long cable

Low Loss 4.3-10 Male to 4.3-10 Male Cable LMR-240-UF Coax with Times Microwave Components 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.

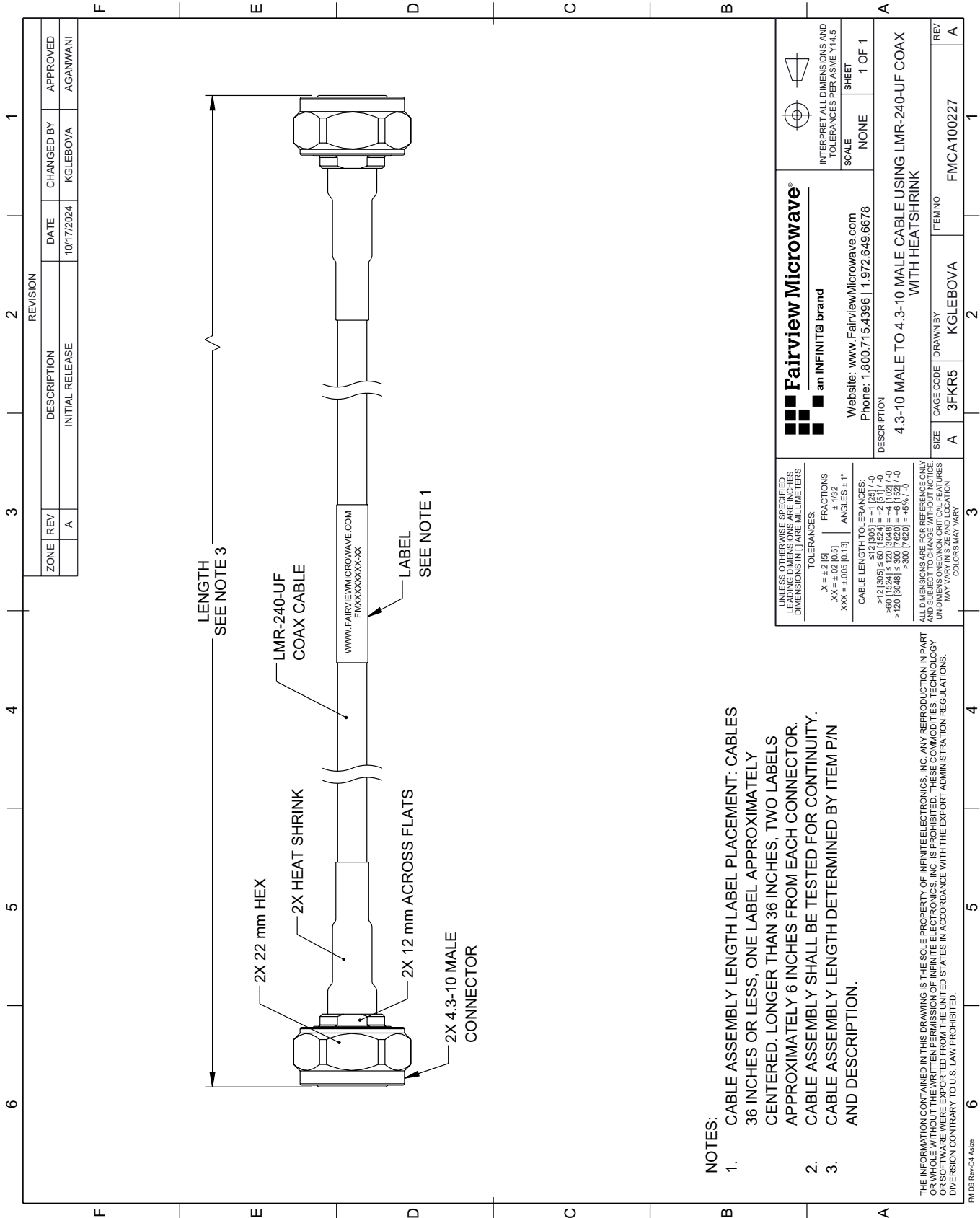
For additional information on this product, please click the following link: [Low Loss 4.3-10 Male to 4.3-10 Male Cable LMR-240-UF Coax with Times Microwave Components FMCA100227](#)

URL: <https://www.fairviewmicrowave.com/low-loss-4.3-10-male-to-4.3-10-male-cable-lmr-240-uf-coax-with-times-microwave-components-fmca100227-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.

FMCA100227 CAD Drawing

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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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FM DS Rev-D4 Alt26

<p>Fairview Microwave® an INFINIT® brand</p>		<p>INTERPRET ALL DIMENSIONS AND TOLERANCES PER ASME Y14.5</p>
<p>Website: www.FairviewMicrowave.com Phone: 1.800.715.4396 1.972.649.6678</p>		<p>SCALE: NONE SHEET: 1 OF 1</p>
<p>DESCRIPTION 4.3-10 MALE TO 4.3-10 MALE CABLE USING LMR-240-UF COAX WITH HEATSHRINK</p>		
<p>UNLESS OTHERWISE SPECIFIED, LEADING DIMENSIONS ARE IN INCHES, DIMENSIONS IN [] ARE MILLIMETERS</p>	<p>TOLERANCES: .X = ±.2 [5] .XX = ±.02 [0.5] .XXX = ±.005 [0.13] FRACTIONS ± 1/32 ANGLES ± 1°</p>	<p>REVISION DATE: 10/17/2024 CHANGED BY: KGLEBOVA APPROVED: AGANWANI</p>
<p>CABLE LENGTH TOLERANCES: >12 [305] ≤ 60 [1524] = ±.2 [5] / -0 >60 [1524] ≤ 120 [3048] = ±.4 [102] / -0 >120 [3048] ≤ 300 [7620] = ±.8 [20] / -0</p>	<p>ALL DIMENSIONS ARE FOR REFERENCE ONLY. UNDIMENSIONED NON-CRITICAL FEATURES MAY VARY IN SIZE AND LOCATION. COLORS MAY VARY.</p>	<p>REVISION DATE: 10/17/2024 CHANGED BY: KGLEBOVA APPROVED: AGANWANI</p>
<p>SIZE: A CAGE CODE: 3FKR5</p>	<p>DRAWN BY: KGLEBOVA</p>	<p>ITEM NO.: FMCA100227</p>