

## Non-Magnetic 4.3-10 Plug to 4.3-10 Plug Cable FM-SR141-NM Coax

The 4.3-10 plug to 4.3-10 plug cable using FM-SR141-NM, part number FMCA9852, from Fairview Microwave is in-stock and ships same day. This Fairview 4.3-10 to 4.3-10 cable assembly has a plug to plug gender configuration with 50 ohm. The FMCA9852 4.3-10 plug to 4.3-10 plug cable assembly operates to 6 GHz. Fairview Microwave Non Magnetic connectors are manufactured with materials that are especially adapted to non magnetism. Our non-magnetic connectors have a susceptibility of around  $10^{-5}$ , as opposed to  $10^{-2}$  for standard connectors made of brass/nickel materials. As a result, our non-magnetic connectors are transparent to the magnetic field, which means no field distortion and a higher Signal-to-Noise Ratio (SNR).

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		69.5		%
Capacitance		29.4 [96.46]		pF/ft [pF/m]

### Performance by Frequency

Description	F1	F2	F3	F4	F5	Units
Frequency	0.5	1	2.5	6		GHz
Insertion Loss (Typ.)	0.07	0.11	0.17	0.31		dB/ft
	0.23	0.36	0.56	1.02		dB/m

#### Electrical Specification Notes:

Insertion Loss does not include the loss of the connectors. Insertion Loss is estimated as 0.2 dB per connector

### Mechanical Specifications

#### Cable Assembly

##### Cable

Impedance	50 Ohms
Inner Conductor Material and Plating	SPC
Dielectric Type	PTFE



### Configuration:

- 4.3-10 Plug
- 4.3-10 Plug
- 

### Features:

- Max Frequency 6 GHz
- 69.5% Phase Velocity
- Magnetic Susceptibility  $10^{-5}$
- VSWR of 1.4:1

### Applications:

- General Purpose
- Laboratory Use
- Medical
- Quantum Computing
- Military
- Aerospace

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**Connectors**

Description	Connector 1	Connector 2
Type	4.3-10 Plug Threaded	4.3-10 Plug Threaded
Impedance	50 Ohms	50 Ohms
Contact Material & Plating	Brass, Silver	Brass, Silver
Body Material & Plating	Brass, Copper-Tin-Zinc Alloy	Brass, Copper-Tin-Zinc Alloy

**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:

**FMCA9852 - xx uu**

 cm = Centimeters  
 <blank> = Inches

Length

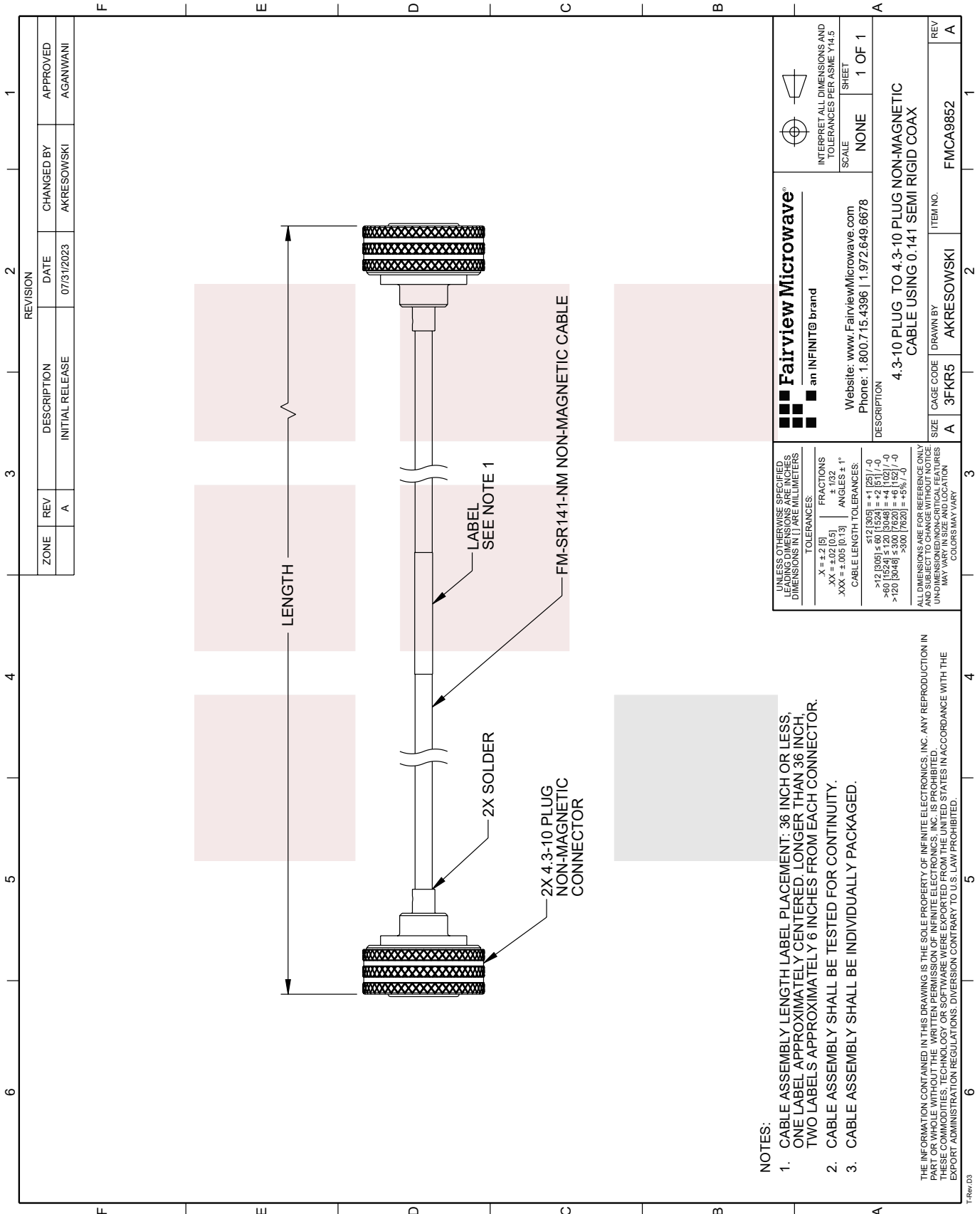
 Example: FMCA9852-12 = 12 inches long cable  
 FMCA9852-100cm = 100 cm long cable

Non-Magnetic 4.3-10 Plug to 4.3-10 Plug Cable FM-SR141-NM Coax from Fairview Microwave has same day shipment for domestic and International orders. Our RF, microwave and millimeter wave products maintain a 99% availability and are part of the broadest selection in the industry.

Click the following link to obtain additional part information: [Non-Magnetic 4.3-10 Plug to 4.3-10 Plug Cable FM-SR141-NM Coax FMCA9852](#)

URL: <https://www.fairviewmicrowave.com/non-magnetic-4.3-10-plug-to-4.3-10-plug-cable-fm-sr141-nm-coax-fm-ca9852-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.



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		A	INITIAL RELEASE	07/31/2023	AKRESOWSKI	AGANWANI

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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 SHEET</p> <p>SCALE: NONE</p> <p>1 OF 1</p>																		
<p>UNLESS OTHERWISE SPECIFIED, LEADING DIMENSIONS ARE IN INCHES, DIMENSIONS IN [ ] ARE MILLIMETERS</p> <p>TOLERANCES:</p> <table border="0"> <tr> <td>.X = ±.2 [5]</td> <td>FRACTIONS ± 1/32</td> </tr> <tr> <td>.XX = ±.02 [0.5]</td> <td>ANGLES ± 1°</td> </tr> <tr> <td>.XXX = ±.005 [0.13]</td> <td></td> </tr> </table> <p>CABLE LENGTH TOLERANCES:</p> <table border="0"> <tr> <td>≤ 12 [305]</td> <td>± .125 [-0]</td> </tr> <tr> <td>&gt; 12 [305]</td> <td>± .1524 [-0]</td> </tr> <tr> <td>≤ 20 [508]</td> <td>± .127 [-0]</td> </tr> <tr> <td>&gt; 20 [508]</td> <td>± .152 [-0]</td> </tr> <tr> <td>≤ 300 [7620]</td> <td>± .125 [-0]</td> </tr> <tr> <td>&gt; 300 [7620]</td> <td>± .152 [-0]</td> </tr> </table>			.X = ±.2 [5]	FRACTIONS ± 1/32	.XX = ±.02 [0.5]	ANGLES ± 1°	.XXX = ±.005 [0.13]		≤ 12 [305]	± .125 [-0]	> 12 [305]	± .1524 [-0]	≤ 20 [508]	± .127 [-0]	> 20 [508]	± .152 [-0]	≤ 300 [7620]	± .125 [-0]	> 300 [7620]	± .152 [-0]
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<p>ALL DIMENSIONS ARE FOR REFERENCE ONLY AND SUBJECT TO CHANGE WITHOUT NOTICE. UNDIMENSIONED/CRITICAL FEATURES MAY VARY IN SIZE AND LOCATION. COLORS MAY VARY.</p>																				
DESCRIPTION	ITEM NO.	REV																		
4.3-10 PLUG TO 4.3-10 PLUG NON-MAGNETIC CABLE USING 0.141 SEMI RIGID COAX	FMCA9852	A																		

**NOTES:**

- CABLE ASSEMBLY LENGTH LABEL PLACEMENT: 36 INCH OR LESS, ONE LABEL APPROXIMATELY CENTERED, LONGER THAN 36 INCH, TWO LABELS APPROXIMATELY 6 INCHES FROM EACH CONNECTOR.
- CABLE ASSEMBLY SHALL BE TESTED FOR CONTINUITY.
- CABLE ASSEMBLY SHALL BE INDIVIDUALLY PACKAGED.

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