

Non-Magnetic SMA Male to SMA Male Cable FM-SR141-NM Coax

FMCA100394



Configuration

- Connector 1: SMA Male
- Connector 2: SMA Male
- Cable Type: FM-SR141-NM
- Coax Flex Type: Semi-Rigid

Features

- Max Frequency 18 GHz
- Shielding Effectivity > 165 dB
- 69.5% Phase Velocity
- Copper Jacket
- 500 Mating Cycles

Applications

- General Purpose
- Laboratory Use

Description

The SMA male to SMA male cable using FM-SR141-NM coax, part number FMCA100394, from Fairview Microwave is in-stock and ships same day. This Fairview SMA to SMA cable assembly has a male to male gender configuration with 50 ohm semi-rigid FM-SR141-NM coax. Fairview Microwave's semi-rigid RF cable assemblies are ideal for high performance applications and can be formed, using proper tooling, to the routing pattern required. The FMCA100394 SMA male to SMA male cable assembly operates to 18 GHz.

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		18	GHz
VSWR			1.4:1	
Velocity of Propagation		69.5		%
RF Shielding	165			dB

Specifications by Frequency

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Part Number	Length	Description	F1	F2	F3	F4	F5	Units	Weight (lbs)
		Frequency	1000	2000	4500	9000	18000	MHz	
FMCA100394	Custom Lengths Available	Insertion Loss (Typ.)	0.111	0.153	0.259	0.403	0.636	dB/ft	
			0.37	0.51	0.85	1.33	2.09	dB/m	
FMCA100394-6	6 inch	Insertion Loss (Typ.)	0.4	0.42	0.47	0.54	0.66	dB	0.014
FMCA100394-12	12 inch	Insertion Loss (Typ.)	0.45	0.5	0.6	0.75	0.98	dB	0.023
FMCA100394-24	24 inch	Insertion Loss (Typ.)	0.56	0.65	0.86	1.15	1.61	dB	0.042
FMCA100394-36	36 inch	Insertion Loss (Typ.)	0.68	0.8	1.12	1.55	2.25	dB	0.06
FMCA100394-60	60 inch	Insertion Loss (Typ.)	0.9	1.11	1.64	2.36	3.52	dB	0.097

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:	0.169 dB
Loss due to Connector 2:	0.169 dB
Base Weight:	0.023 pounds
Additional Weight per Inch:	0.00153 pounds

Mechanical Specifications

Cable Assembly

Width/Diameter	0.5 in [12.7 mm]
Weight	0.023 lbs [10.43 g]

Cable

Cable Type	FM-SR141-NM
Impedance	50 Ohms
Inner Conductor Type	Solid
Inner Conductor Material and Plating	Silver Plated Copper
Dielectric Type	PTFE
Number of Shields	1
Outer Conductor 1 Material and Plating	Copper
Jacket Material	Copper
Repeated Minimum Bend Radius	0.25 in [6.35 mm]

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Connectors

Description	Connector 1	Connector 2
Type	SMA Male	SMA Male
Impedance	50 Ohms	50 Ohms
Configuration	Straight	Straight
Mating Cycles	500	500
Contact Material and Plating	Gold	Gold
Contact Plating Specification	MIL-G-45204	MIL-G-45204
Dielectric Type	PTFE	PTFE
Body Material and Plating	Brass, Gold	Brass, Gold
Body Plating Specification	ASTM-B-16	ASTM-B-16
Coupling Nut Material and Plating	Brass, Gold	Brass, Gold
Coupling Nut Plating Specification	ASTM-B-16	ASTM-B-16

Environmental Specifications

Operating Range Temperature-55 to +125 deg C

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

Plotted and Other Data

Notes:

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FMCA100394

Typical Performance Data

How to Order

Part Number Configuration: **FMCA100394** **- xx** **uu**

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

Length

Base Number

Example: FMCA100394-12 = 12 inches long cable
FMCA100394-100cm = 100 cm long cable

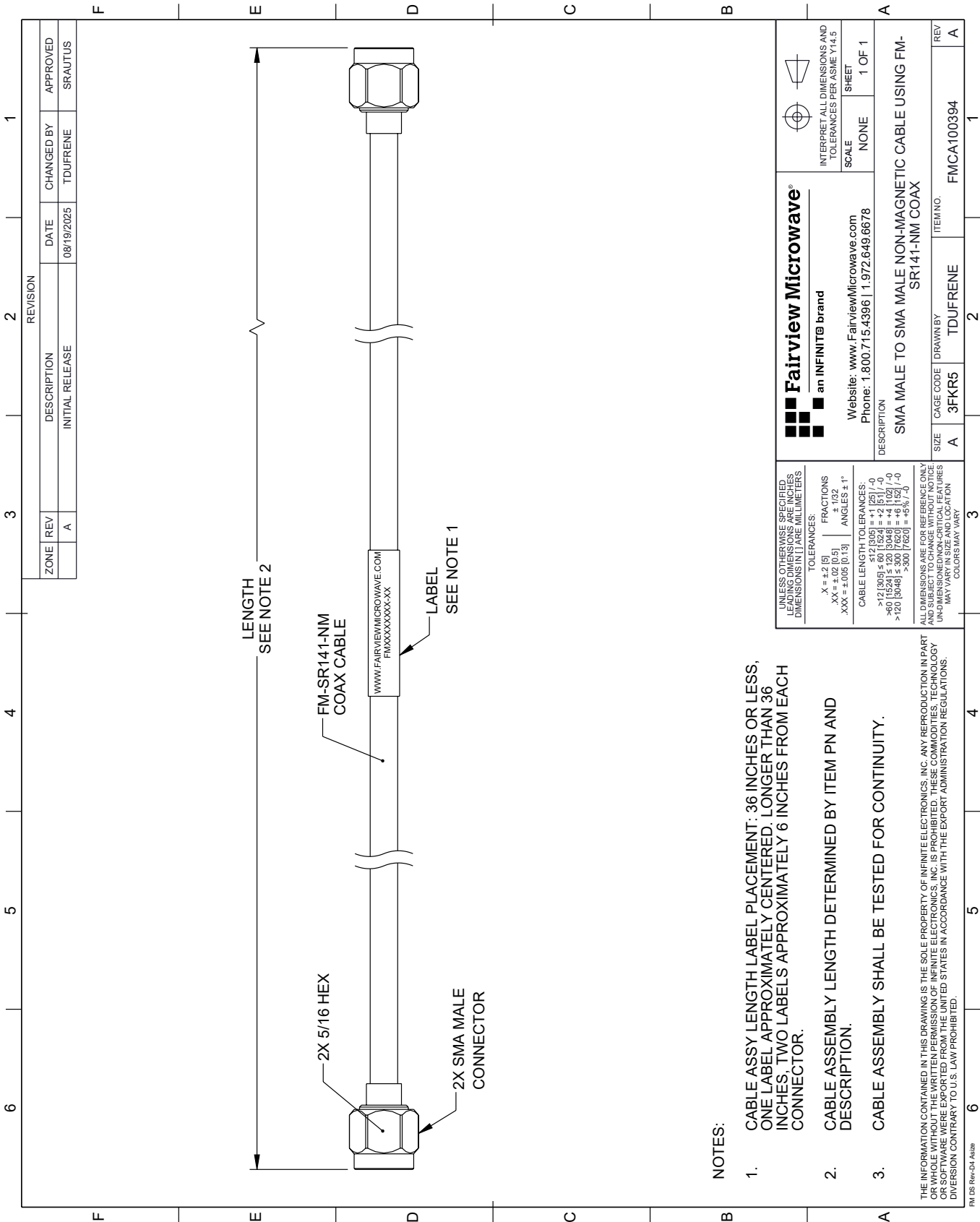
Non-Magnetic SMA Male to SMA Male Cable FM-SR141-NM Coax from Fairview Microwave is in-stock and available to ship same-day. All of our RF/microwave products are available off-the-shelf from our ISO 9001:2008 certified facilities in Lewisville, Texas. Fairview Microwave is RF on-demand.

For additional information on this product, please click the following link: [Non-Magnetic SMA Male to SMA Male Cable FM-SR141-NM Coax FMCA100394](#)

URL: <https://www.fairviewmicrowave.com/non-magnetic-sma-male-to-sma-male-cable-fm-sr141-nm-coax-fm-ca100394-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.

FMCA100394 CAD Drawing
Non-Magnetic SMA Male to SMA Male Cable FM-SR141-NM Coax



NOTES:

- 1. CABLE ASSY 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 ASSEMBLY LENGTH DETERMINED BY ITEM PN AND DESCRIPTION.
- 3. CABLE ASSEMBLY SHALL BE TESTED FOR CONTINUITY.

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FM DS Rev-D4 A424

UNLESS OTHERWISE SPECIFIED, LEADING DIMENSIONS ARE INCHES. DIMENSIONS IN [] ARE MILLIMETERS.		Fairview Microwave® an INFINITI® brand		INTERPRET ALL DIMENSIONS AND TOLERANCES PER ASME Y14.5	
		X = ±.2 [5] XX = ±.02 [0.5] XXX = ±.005 [0.13]		FRACTIONS 1/32 ANGLES ± 1°	
CABLE LENGTH TOLERANCES: >12 [305] ≤ 60 [1524] = ±.125 [-.0] >60 [1524] ≤ 120 [3048] = ±.125 [-.0] >120 [3048] ≤ 300 [7620] = ±.125 [-.0] >300 [7620] = ±.125 [-.0]		Website: www.FairviewMicrowave.com Phone: 1.800.715.4396 1.972.649.6678		SHEET 1 OF 1	
DESCRIPTION SMA MALE TO SMA MALE NON-MAGNETIC CABLE USING FM-SR141-NM COAX					
ALL DIMENSIONS ARE FOR REFERENCE ONLY AND SUBJECT TO CHANGE WITHOUT NOTICE. UNLESS NOTED IN SIZE AND LOCATION, COLORS MAY VARY.		CAGE CODE 3FKR5		DRAWN BY TDUFRENE	
SIZE A		ITEM NO. FMCA100394		REV A	