Non-Magnetic SMA Male to SMA Male Cable FM-141FL-NM Coax



FMCA100381

Configuration

- Connector 1: SMA Male
- Connector 2: SMA Male
- Cable Type: FM-141FL-NM
- Coax Flex Type: Formable

Features

- Max Frequency 18 GHz
- Shielding Effectivity > 90 dB
- 70% Phase Velocity
- Copper Jacket
- 500 Mating Cycles

Applications

- General Purpose
- Laboratory Use

Description

The SMA male to SMA male cable using FM-141FL-NM coax, part number FMCA100381, 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 formable FM-141FL-NM coax. Fairview Microwave's formable RF cable assemblies provide an alternative to costly pre-formed semi-rigid assemblies since they are hand formable. The FMCA100381 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		70		%
RF Shielding	90			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	
FMCA100381	Custom Lengths Available	Insertion Loss (Typ.)	0.162	0.219	0.363	0.553	0.852	dB/ft	
			0.54	0.72	1.2	1.82	2.8	dB/m	
FMCA100381-6	6 inch	Insertion Loss (Typ.)	0.42	0.45	0.52	0.62	0.77	dB	0.664
FMCA100381-12	12 inch	Insertion Loss (Typ.)	0.5	0.56	0.71	0.9	1.19	dB	1.324
FMCA100381-24	24 inch	Insertion Loss (Typ.)	0.67	0.78	1.07	1.45	2.05	dB	2.644
FMCA100381-36	36 inch	Insertion Loss (Typ.)	0.83	1	1.43	2	2.9	dB	3.964
FMCA100381-60	60 inch	Insertion Loss (Typ.)	1.15	1.44	2.16	3.11	4.6	dB	6.604

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:	1.324	pounds
Additional Weight per Inch:	0.11	pounds

Mechanical Specifications

Cable Assembly

Width/Diameter	0.5 in [12.7 mm]
Weight	1.324 lbs [600.56 g]

Cable

Cable Type	FM-141FL-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-Tin Composite
Jacket Material	Copper
Repeated Minimum Bend Radius	0.375 in [9.53 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 +165 deg C

Compliance Certifications (see product page for current document)

Plotted and Other Data

Notes:

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FMCA100381

Typical Performance Data

How to Order

Part Number Configuration: **FMCA100381 - xx uu**

- uu — Unit of Measure:
  - cm = Centimeters
  - <blank> = Inches
- xx — Length
- FMCA100381 — Base Number

Example: FMCA100381-12 = 12 inches long cable
FMCA100381-100cm = 100 cm long cable

Non-Magnetic SMA Male to SMA Male Cable FM-141FL-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-141FL-NM Coax FMCA100381

URL: https://www.fairviewmicrowave.com/non-magnetic-sma-male-to-sma-male-cable-fm-141fl-nm-coax-fmca100381-p.aspx

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FMCA100381 CAD Drawing

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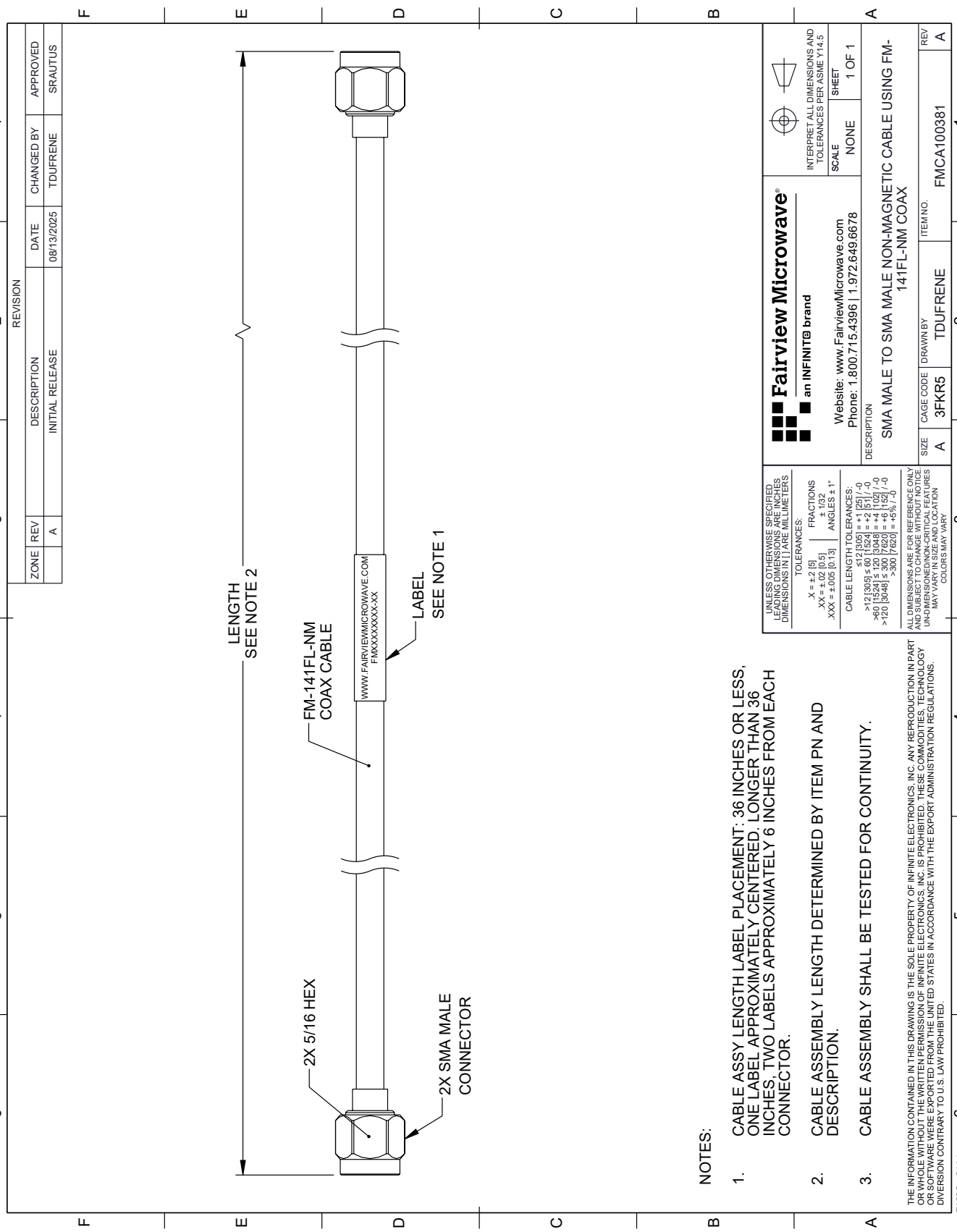

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