Non-Magnetic SMP Female to SMP Female Cable FM-SR086CU-NM Coax



FMCA100397

Configuration

- Connector 1: SMP Female
- Connector 2: SMP Female
- Cable Type: FM-SR086CU-NM
- Coax Flex Type: Semi-Rigid

Features

- Max Frequency 40 GHz
- Shielding Effectivity > 165 dB
- 69.5% Phase Velocity

Applications

- General Purpose
- Laboratory Use

Description

The SMP female to SMP female cable using FM-SR086CU-NM coax, part number FMCA100397, from Fairview Microwave is in-stock and ships same day. This Fairview SMP to SMP cable assembly has a female to female gender configuration with 50 ohm semi-rigid FM-SR086CU-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 FMCA100397 SMP female to SMP female cable assembly operates to 40 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		40	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	2500	5000	10000	20000	40000	MHz	
FMCA100397	Custom Lengths Available	Insertion Loss (Typ.)	0.294	0.46	0.68	1	1.6	dB/ft	
			0.97	1.51	2.24	3.29	5.25	dB/m	
FMCA100397-6	6 inch	Insertion Loss (Typ.)	0.25	0.37	0.53	0.77	1.18	dB	0.027
FMCA100397-12	12 inch	Insertion Loss (Typ.)	0.39	0.6	0.87	1.27	1.98	dB	0.034
FMCA100397-18	18 inch	Insertion Loss (Typ.)	0.54	0.83	1.21	1.77	2.78	dB	0.042
FMCA100397-24	24 inch	Insertion Loss (Typ.)	0.69	1.06	1.55	2.27	3.58	dB	0.049
FMCA100397-36	36 inch	Insertion Loss (Typ.)	0.98	1.52	2.23	3.27	5.18	dB	0.063

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:	0.21	dB
Loss due to Connector 2:	0.03*SQRT(FGHz)	dB
Base Weight:	0.034	pounds
Additional Weight per Inch:	0.00117	pounds

Mechanical Specifications

Cable Assembly

Width/Diameter	0.5 in [12.7 mm]
Weight	0.034 lbs [15.42 g]

Cable

Cable Type	FM-SR086CU-NM
Impedance	50 Ohms
Inner Conductor Type	Solid
Inner Conductor Material and Plating	Copper, Silver
Dielectric Type	PTFE
Outer Conductor 1 Material and Plating	Copper
One Time Minimum Bend Radius	0.125 in [3.18 mm]

Connectors

Description	Connector 1	Connector 2
Type	SMP Female	SMP Female
Impedance	50 Ohms	50 Ohms
Configuration	Straight	Straight
Contact Material and Plating	Beryllium Copper, Gold	Beryllium Copper, Gold
Dielectric Type	Gold Plated Beryllium Copper	Gold Plated Beryllium Copper
Body Material and Plating	Beryllium Copper, Gold	Beryllium Copper, Gold

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Environmental Specifications

Compliance Certifications (see product page for current document)

Plotted and Other Data

Notes:

Typical Performance Data

How to Order

Part Number Configuration: **FMCA100397 - xx uu**

- uu — Unit of Measure:
  - cm = Centimeters
  - <blank> = Inches
- xx — Length
- FMCA100397 — Base Number

Example: FMCA100397-12 = 12 inches long cable
FMCA100397-100cm = 100 cm long cable

Non-Magnetic SMP Female to SMP Female Cable FM-SR086CU-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 SMP Female to SMP Female Cable FM-SR086CU-NM Coax FMCA100397

URL: https://www.fairviewmicrowave.com/non-magnetic-smp-female-to-smp-female-cable-fm-sr086cu-nm-coax-fm-ca100397-p.aspx

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FMCA100397 CAD Drawing

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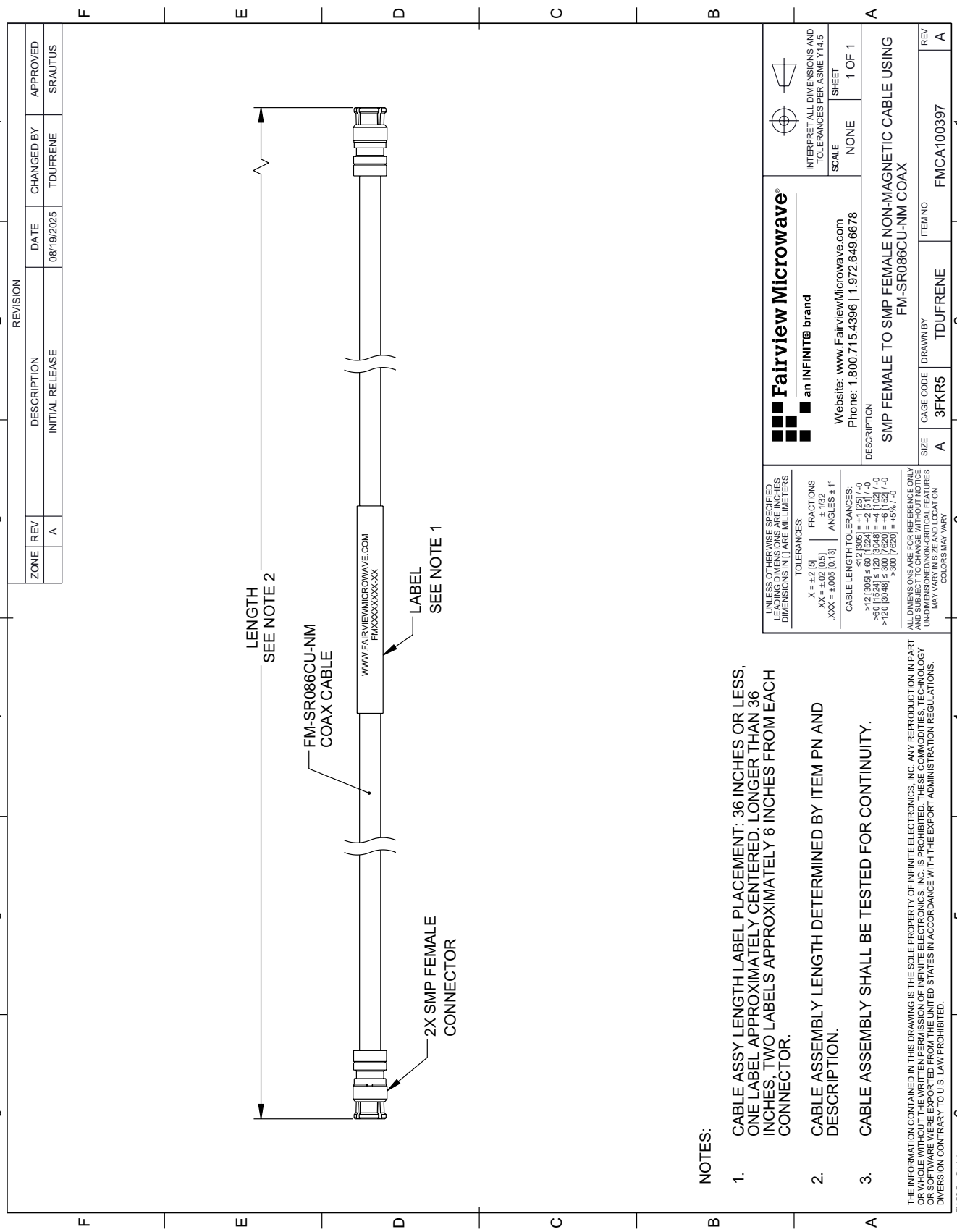

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