

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



FMCA100396

Configuration

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

Features

- Max Frequency 18 GHz
- Shielding Effectivity > 165 dB
- 69.5% Phase Velocity

Applications

- General Purpose
- Laboratory Use

Description

The SMA male to SMP female cable using FM-SR086CU-NM coax, part number FMCA100396, from Fairview Microwave is in-stock and ships same day. This Fairview SMA to SMP cable assembly has a male 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 FMCA100396 SMA male to SMP female 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	
FMCA100396	Custom Lengths Available	Insertion Loss (Typ.)	0.195	0.261	0.426	0.636	0.94	dB/ft	
			0.64	0.86	1.4	2.09	3.09	dB/m	
FMCA100396-6	6 inch	Insertion Loss (Typ.)	0.34	0.39	0.49	0.62	0.81	dB	0.019
FMCA100396-12	12 inch	Insertion Loss (Typ.)	0.44	0.52	0.7	0.94	1.28	dB	0.026
FMCA100396-18	18 inch	Insertion Loss (Typ.)	0.54	0.65	0.92	1.26	1.75	dB	0.034
FMCA100396-24	24 inch	Insertion Loss (Typ.)	0.63	0.78	1.13	1.58	2.22	dB	0.041
FMCA100396-36	36 inch	Insertion Loss (Typ.)	0.83	1.04	1.56	2.21	3.16	dB	0.055

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: 0.026 pounds
 Additional Weight per Inch: 0.00117 pounds

Mechanical Specifications

Cable Assembly

Width/Diameter 0.5 in [12.7 mm]
 Weight 0.026 lbs [11.79 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	SMA Male	SMP Female
Impedance	50 Ohms	50 Ohms
Configuration	Straight	Straight
Contact Material and Plating	Gold	Beryllium Copper, Gold
Contact Plating Specification	MIL-G-45294	
Dielectric Type	PTFE	Gold Plated Beryllium Copper
Body Material and Plating	Brass, Gold	Beryllium Copper, Gold
Body Plating Specification	ASTM-B-16	
Coupling Nut Material and Plating	Brass, Gold	
Coupling Nut Plating Specification	ASTM-B-16	

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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:

FMCA100396

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Unit of Measure:
cm = Centimeters
<blank> = Inches
Length
Base Number

Example: FMCA100396-12 = 12 inches long cable
FMCA100396-100cm = 100 cm long cable

Non-Magnetic SMA Male 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 SMA Male to SMP Female Cable FM-SR086CU-NM Coax FMCA100396](#)

URL: <https://www.fairviewmicrowave.com/non-magnetic-sma-male-to-smp-female-cable-fm-sr086cu-nm-coax-fm-ca100396-p.aspx>

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FMCA100396 CAD Drawing
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