

Non-Magnetic RA SMP Female to RA SMP Female Cable FM-SR047CU-NM Coax



FMCA100388

Configuration

- Connector 1: SMP Female Right Angle
- Connector 2: SMP Female Right Angle
- Cable Type: FM-SR047CU-NM
- Coax Flex Type: Semi-Rigid

Features

- Max Frequency 12.4 GHz
- Shielding Effectivity > 165 dB
- 69.5% Phase Velocity
- 500 Mating Cycles

Applications

- General Purpose
- Laboratory Use

Description

The RA SMP female to RA SMP female cable using FM-SR047CU-NM coax, part number FMCA100388, 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-SR047CU-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 FMCA100388 SMP female to SMP female cable assembly operates to 12.4 GHz. The right angle SMP interfaces on the FM-SR047CU-NM cable allow for easier connections in tight spaces.

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		12.4	GHz
VSWR			1.4:1	
Velocity of Propagation		69.5		%
RF Shielding	165			dB
Operating Voltage (AC)			250	Vrms
Dielectric Withstanding Voltage (AC)			500	Vrms

Specifications by Frequency

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Part Number	Length	Description	F1	F2	F3	F4	F5	Units	Weight (lbs)
		Frequency	500	1000	2500	5000	12400	MHz	
FMCA100388	Custom Lengths Available	Insertion Loss (Typ.)	0.24	0.34	0.508	0.79	1.26	dB/ft	
			0.79	1.12	1.67	2.6	4.14	dB/m	
FMCA100388-6	6 inch	Insertion Loss (Typ.)	0.36	0.41	0.5	0.64	0.87	dB	0.005
FMCA100388-9	9 inch	Insertion Loss (Typ.)	0.48	0.73	1.05	1.43	1.95	dB	0.006
FMCA100388-12	12 inch	Insertion Loss (Typ.)	0.48	0.58	0.75	1.03	1.5	dB	0.007
FMCA100388-18	18 inch	Insertion Loss (Typ.)	0.6	0.75	1.01	1.43	2.13	dB	0.01
FMCA100388-24	24 inch	Insertion Loss (Typ.)	0.72	0.92	1.26	1.82	2.76	dB	0.012

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:	0.12 dB
Loss due to Connector 2:	0.12 dB
Base Weight:	0.007 pounds
Additional Weight per Inch:	0.00034 pounds

Mechanical Specifications

Cable Assembly

Width/Diameter	0.5 in [12.7 mm]
Weight	0.007 lbs [3.18 g]

Cable

Cable Type	FM-SR047CU-NM
Impedance	50 Ohms
Inner Conductor Material and Plating	Copper, Silver
Dielectric Type	PTFE
Outer Conductor 1 Material and Plating	Copper
One Time Minimum Bend Radius	0.05 in [1.27 mm]

Connectors

Description	Connector 1	Connector 2
Type	SMP Female Right Angle	SMP Female Right Angle
Impedance	50 Ohms	50 Ohms
Configuration	Right Angle	Right Angle
Mating Cycles	500	500
Contact Material and Plating	Beryllium Copper, Gold over Copper	Beryllium Copper, Gold over Copper
Body Material and Plating	Bronze, Copper-Tin-Zinc Alloy over Silver	Bronze, Copper-Tin-Zinc Alloy over Silver

Environmental Specifications

Operating Range Temperature	-55 to +100 deg C
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FMCA100388

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

Plotted and Other Data

Notes:

Typical Performance Data

How to Order

Part Number Configuration:

FMCA100388

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

Example: FMCA100388-12 = 12 inches long cable
FMCA100388-100cm = 100 cm long cable

Non-Magnetic RA SMP Female to RA SMP Female Cable FM-SR047CU-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 RA SMP Female to RA SMP Female Cable FM-SR047CU-NM Coax FMCA100388](#)

URL: <https://www.fairviewmicrowave.com/non-magnetic-ra-smp-female-to-ra-smp-female-cable-fm-sr047cu-nm-coax-fmca100388-p.aspx>

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FMCA100388 CAD Drawing
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