

SMPS Female to SMP Female Cable FM-P047HF Coax

The SMPS female to SMP female cable using FM-P047HF coax, part number FMCA9959, from Fairview Microwave is in-stock and ships same day. This Fairview SMPS to SMP cable assembly has a female to female gender configuration with 50 ohm flexible FM-P047HF coax. Fairview Microwave's flexible RF cable assemblies are ideal for applications where tight bends and continual flexure are required. The FMCA9959 SMPS female to SMP female cable assembly operates to 18 GHz. The double shielding of this Fairview cable assembly provides excellent shielding effectiveness of better than 90 dB.

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	Min	Typ	Max	Units
Frequency Range	DC		18	GHz
VSWR			1.46:1	
Velocity of Propagation		70		%
RF Shielding	90			dB
Capacitance		29 [95.14]		pF/ft [pF/m]

Specifications by Frequency

Part Number	Length	Description	F1	F2	F3	F4	F5	Units	Weight (lbs)
			Frequency					MHz	
FMCA9959	Custom Lengths Available	Insertion Loss (Typ.)	0.35	0.49	0.76	1.11	1.681	dB/ft	
			1.15	1.61	2.51	3.64	5.52	dB/m	
FMCA9959-6	6 inch	Insertion Loss (Typ.)	0.38	0.49	0.7	0.96	2.03	dB	0.011
FMCA9959-12	12 inch	Insertion Loss (Typ.)	0.55	0.74	1.08	1.51	2.87	dB	0.013
FMCA9959-18	18 inch	Insertion Loss (Typ.)	0.73	0.98	1.46	2.07	3.71	dB	0.015

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:	$0.1 * \sqrt{\text{SQRT}(\text{FGHz})}$ dB
Loss due to Connector 2:	0.1 dB
Base Weight:	0.013 pounds
Additional Weight per Inch:	0.00033 pounds

Mechanical Specifications

Cable Assembly

Weight 0.01011 lbs [4.59 g]

Cable

Cable Type	FM-P047HF
Impedance	50 Ohms
Inner Conductor Type	Solid
Inner Conductor Material and Plating	Copper, Silver
Dielectric Type	PTFE
Number of Shields	2
Shield Layer 1	Silver Plated Copper Tape
Shield Layer 2	Silver Plated Copper Braid
Jacket Material	FEP, Blue



Configuration:

- SMPS Female
- SMP Female
- FM-P047HF

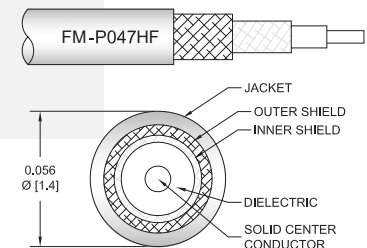
Features:

- Max Frequency 18 GHz
- Shielding Effectivity > 90 dB
- 70% Phase Velocity
- Double Shielded
- FEP Jacket

Applications:

- General Purpose
- Laboratory Use
- Scientific research
- High-reliability, high-density for aerospace & defense application
- Ground base station & communication systems, avionics, radar systems

Cable Diagram:



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Jacket Diameter 0.06 in [1.52 mm]
Repeated Minimum Bend Radius 0.1 in [2.54 mm]

Connectors

Description	Connector 1	Connector 2
Type	SMPS Female Push-on	SMP Female Push-On
Specification		DESC 94008
Impedance	50 Ohms	50 Ohms
Contact Material & Plating	Beryllium Copper, Gold	Beryllium Copper, Gold
Contact Plating Spec.	50 µin minimum	MIL-G-45204
Dielectric Type	PTFE	PTFE
Outer Cond Material & Plating	Beryllium Copper, Gold	Beryllium Copper, Gold
Outer Cond Plating Spec.	50 µin minimum	MIL-G-45204
Body Material & Plating	Beryllium Copper, Gold	Beryllium Copper, Gold
Body Plating Spec.	30 µin minimum	MIL-G-45204

Environmental Specifications

Temperature
Operating Range -55 to +125 deg C

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

Plotted and Other Data

Notes:

How to Order

Part Number Configuration:

FMCA9959 - xx uu

cm = Centimeters
<blank> = Inches
Length

Example: FMCA9959-12 = 12 inches long cable
FMCA9959-100cm = 100 cm long cable

SMPS Female to SMP Female Cable FM-P047HF Coax from Fairview Microwave has same day shipment for domestic and International orders. Our RF, microwave and millimeter wave products maintain a 99% availability and are part of the broadest selection in the industry.

Click the following link to obtain additional part information: [SMPS Female to SMP Female Cable FM-P047HF Coax FMCA9959](#)

URL: <https://www.fairviewmicrowave.com/smps-female-to-smp-female-cable-fm-p047hf-coax-fmca9959-p.aspx>

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