

## SMPS Female to 1.85mm Female Cable FM-P047HF Coax

The SMPS female to 1.85mm female cable using FM-P047HF coax, part number FMCA9957, from Fairview Microwave is in-stock and ships same day. This Fairview SMPS to 1.85mm 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 FMCA9957 SMPS female to 1.85mm female cable assembly operates to 40 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		40	GHz
VSWR			1.5:1	
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	
FMCA9957	Custom Lengths Available	Insertion Loss (Typ.)	0.55	0.8	1.17	1.78	2.77	dB/ft	
			1.81	2.63	3.84	5.84	9.09	dB/m	
FMCA9957-6	6 inch	Insertion Loss (Typ.)	0.54	0.73	1.01	1.44	2.12	dB	0.014
FMCA9957-12	12 inch	Insertion Loss (Typ.)	0.81	1.13	1.59	2.33	3.51	dB	0.016
FMCA9957-18	18 inch	Insertion Loss (Typ.)	1.09	1.53	2.18	3.22	4.89	dB	0.018

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(FGHz) dB
Loss due to Connector 2:	0.1 dB
Base Weight:	0.016 pounds
Additional Weight per Inch:	0.00033 pounds

### Mechanical Specifications

#### Cable Assembly

Weight 0.01711 lbs [7.76 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
- 1.85mm Female
- FM-P047HF

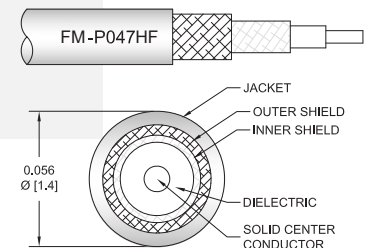
### Features:

- Max Frequency 40 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	1.85mm Female Threaded
Impedance	50 Ohms	50 Ohms
Contact Material & Plating	Beryllium Copper, Gold	Beryllium Copper, Gold
Contact Plating Spec.	50 µin minimum	50 µin minimum
Dielectric Type	PTFE	
Outer Cond Material & Plating	Beryllium Copper, Gold	Passivated Stainless Steel
Outer Cond Plating Spec.	50 µin minimum	SAE-AMS-2700
Body Material & Plating	Beryllium Copper, Gold	Passivated Stainless Steel
Body Plating Spec.	30 µin minimum	SAE-AMS-2700

**Environmental Specifications**

**Temperature**

Operating Range -55 to +165 deg C

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

**Plotted and Other Data**

Notes:

**How to Order**

Part Number Configuration:

**FMCA9957 - xx uu**

cm = Centimeters  
<blank> = Inches  
Length

Example: FMCA9957-12 = 12 inches long cable  
FMCA9957-100cm = 100 cm long cable

SMPS Female to 1.85mm 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 1.85mm Female Cable FM-P047HF Coax FMCA9957](#)

URL: <https://www.fairviewmicrowave.com/smps-female-to-1.85mm-female-cable-fm-p047hf-coax-fmca9957-p.aspx>

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