

## SMPS Female to SMA Female Cable FM-P047HF Coax

The SMPS female to SMA female cable using FM-P047HF coax, part number FMCA9967, from Fairview Microwave is in-stock and ships same day. This Fairview SMPS to SMA 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 FMCA9967 SMPS female to SMA 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                    |     |            | 1.4:1 |              |
| 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   |              |
| FMCA9967    | Custom Lengths Available | Insertion Loss (Typ.) | 0.35      | 0.49 | 0.763 | 1.107 | 1.681 | dB/ft |              |
|             |                          |                       | 1.15      | 1.61 | 2.51  | 3.64  | 5.52  | dB/m  |              |
| FMCA9967-6  | 6 inch                   | Insertion Loss (Typ.) | 0.38      | 0.49 | 1.16  | 0.96  | 1.37  | dB    | 0.01         |
| FMCA9967-12 | 12 inch                  | Insertion Loss (Typ.) | 0.55      | 0.74 | 1.54  | 1.51  | 2.21  | dB    | 0.012        |
| FMCA9967-18 | 18 inch                  | Insertion Loss (Typ.) | 0.73      | 0.98 | 1.92  | 2.07  | 3.05  | dB    | 0.014        |

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:                | 0.012 pounds      |
| Additional Weight per Inch: | 0.00033 pounds    |

### Mechanical Specifications

#### Cable Assembly

Weight 0.00861 lbs [3.91 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
- SMA Female
- FM-P047HF

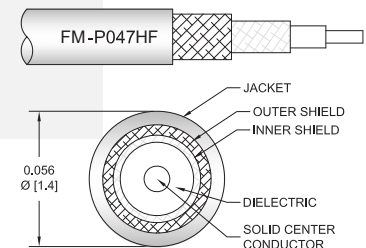
### Features:

- 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:



Fairview Microwave  
 301 Leora Ln., Suite 100  
 Lewisville, TX 75056  
 Tel: 1-800-715-4396 / (972) 649-6678  
 Fax: (972) 649-6689  
[www.fairviewmicrowave.com](http://www.fairviewmicrowave.com)  
[sales@fairviewmicrowave.com](mailto:sales@fairviewmicrowave.com)

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    | SMA Female Threaded    |
| Specification                 |                        | MIL-STD-348            |
| 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 | Brass, Gold            |
| Outer Cond Plating Spec.      | 50 µin minimum         | MIL-G-45204            |
| Body Material & Plating       | Beryllium Copper, Gold | Brass, Gold            |
| Body Plating Spec.            | 30 µin minimum         | MIL-G-45204            |

**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:

**FMCA9967 - xx uu**

cm = Centimeters  
<blank> = Inches  
Length

Example: FMCA9967-12 = 12 inches long cable  
FMCA9967-100cm = 100 cm long cable

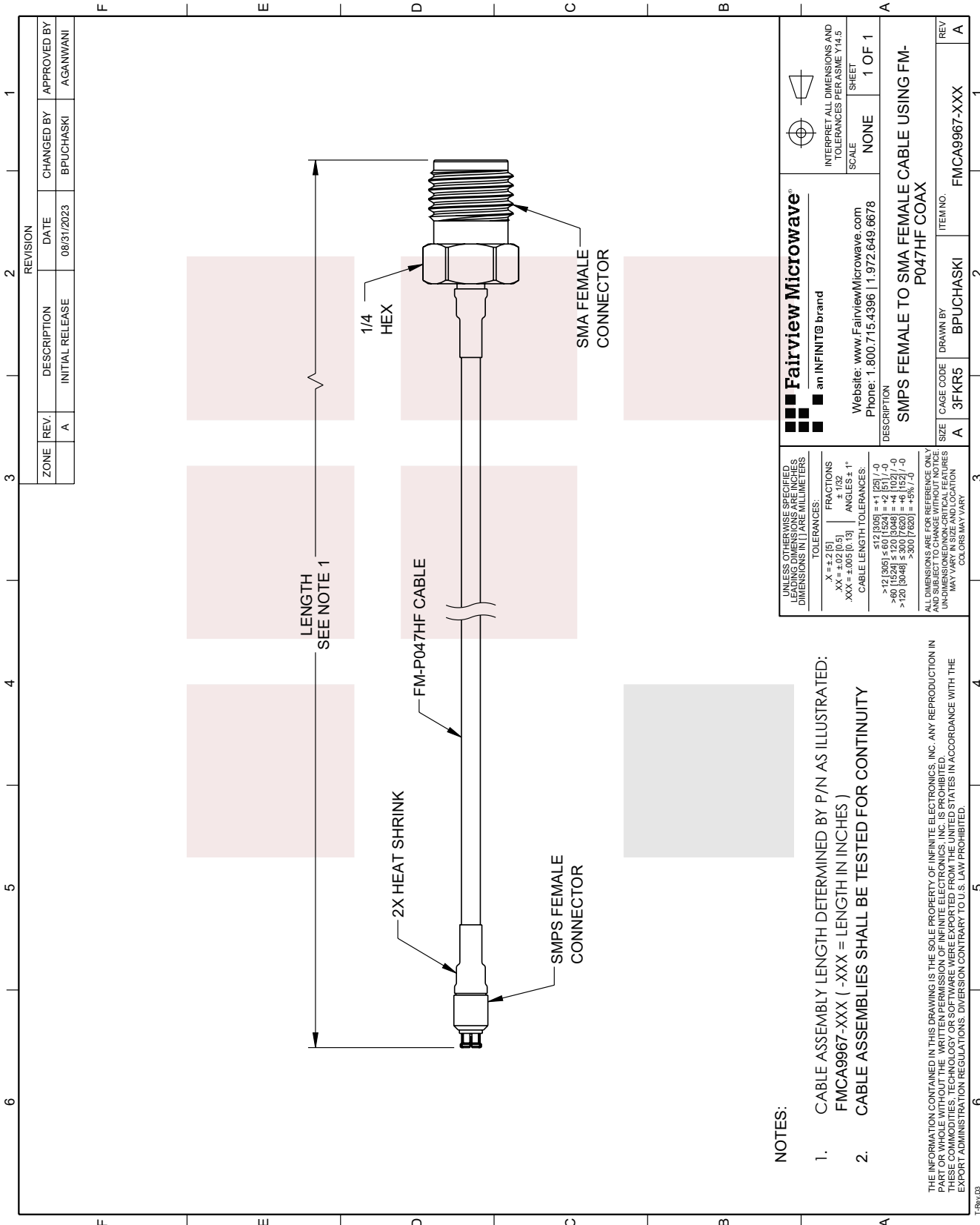
SMPS Female to SMA Female Cable FM-P047HF Coax from Fairview Microwave has same day shipment for domestic and International orders. Our RF, microwave and millimeter wave products maintain a 99% availability and are part of the broadest selection in the industry.

Click the following link to obtain additional part information: [SMPS Female to SMA Female Cable FM-P047HF Coax FMCA9967](#)

URL: <https://www.fairviewmicrowave.com/smps-female-to-sma-female-cable-fm-p047hf-coax-fmca9967-p.aspx>

The information contained in this document is accurate to the best of our knowledge and representative of the part described herein. It may be necessary to make modifications to the part and/or the documentation of the part, in order to implement improvements. Fairview Microwave reserves the right to make such changes as required. Unless otherwise stated, all specifications are nominal. Fairview Microwave does not make any representation or warranty regarding the suitability of the part described herein for any particular purpose, and Fairview Microwave does not assume any liability arising out of the use of any part or documentation.





|   |   |
|---|---|
| <p><b>Fairview Microwave</b><br/>an INFINIT<sup>®</sup> brand</p> <p>Website: <a href="http://www.FairviewMicrowave.com">www.FairviewMicrowave.com</a><br/>Phone: 1.800.715.4396   1.972.649.6678</p> | <p>INTERPRET ALL DIMENSIONS AND TOLERANCES PER ASME Y14.5</p> <p>SCALE: NONE</p> <p>SHEET: 1 OF 1</p> |
|---|---|

|   |  |
|---|--|
| <p>UNLESS OTHERWISE SPECIFIED, LEADING DIMENSIONS ARE IN INCHES DIMENSIONS IN [ ] ARE MILLIMETERS</p> <p>FRACTIONS: X = ±.2 [5] ±.132 XX = ±.02 [0.5] ANGLES ± 1° XXX = ±.005 [0.13]</p> <p>CABLE LENGTH TOLERANCES:<br/>         &gt;12 [305] ≤ 60 [1524] = ±.2 [5] / -0<br/>         &gt;60 [1524] ≤ 120 [3048] = ±.300 [7620] = +.6 [152] / -0<br/>         &gt;120 [3048] ≤ 300 [7620] = +.6 [152] / -0<br/>         &gt;300 [7620] = +.5% / -0</p> <p>ALL DIMENSIONS ARE FOR REFERENCE ONLY AND SUBJECT TO CHANGE WITHOUT NOTICE. UN-DIMENSIONED CRITICAL FEATURES MAY VARY IN COLOR. COLORS MAY VARY.</p> | <p>DESCRIPTION: SMPS FEMALE TO SMA FEMALE CABLE USING FM-P047HF COAX</p> <p>ITEM NO.: FMCA9967-XXX</p> |
|---|--|

|  |   |
|--|---|
| <p>REV: A</p> <p>DATE: 08/31/2023</p> <p>INITIAL RELEASE: BPUCHASKI</p> <p>APPROVED BY: AGANWANI</p> | <p>REVISION</p> <p>DATE: 08/31/2023</p> <p>CHANGED BY: BPUCHASKI</p> <p>APPROVED BY: AGANWANI</p> |
|--|---|

|   |   |
|---|---|
| <p>SIZE: A</p> <p>CAGE CODE: 3FKR5</p> <p>DRAWN BY: BPUCHASKI</p> | <p>ITEM NO.: FMCA9967-XXX</p> <p>REV: A</p> |
|---|---|

**NOTES:**

- CABLE ASSEMBLY LENGTH DETERMINED BY P/N AS ILLUSTRATED:  
FMCA9967-XXX ( -XXX = LENGTH IN INCHES )
- CABLE ASSEMBLIES SHALL BE TESTED FOR CONTINUITY

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