

## Low Loss 1.85mm Male to 1.85mm Male Cable 047 Coax in 12 Inch

The 1.85mm male to 1.85mm male 12 inch cable using 047 coax, part number FMCA2084-12, from Fairview Microwave is in-stock and ships same day. This Fairview 1.85mm to 1.85mm cable assembly has a male to male gender configuration with 50 ohm semi-rigid FM-SR047CULL 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 FMCA2084-12 1.85mm male to 1.85mm male cable assembly operates to 70 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             | Min | Typ  | Max   | Units |
|-------------------------|-----|------|-------|-------|
| Frequency Range         | DC  |      | 70    | GHz   |
| VSWR                    |     |      | 1.4:1 |       |
| Velocity of Propagation |     | 76.5 |       | %     |

### Performance by Frequency

| Description           | F1   | F2   | F3   | F4   | F5   | Units |
|-----------------------|------|------|------|------|------|-------|
| Frequency             | 0.5  | 5    | 10   | 18   | 26.5 | GHz   |
| Insertion Loss (Typ.) | 0.27 | 0.86 | 1.22 | 1.64 | 2.02 | dB    |

#### Electrical Specification Notes:

The Insertion Loss data above is based on the performance specifications of the coax cable used in this assembly. The Insertion Loss includes an estimated insertion loss of  $0.04 \times \text{SQRT}(\text{FGHz})$  dB maximum per connector.

### Mechanical Specifications

#### Cable Assembly

|          |                   |
|----------|-------------------|
| Length*  | 12 in [304.8 mm]  |
| Diameter | 0.35 in [8.89 mm] |

#### Cable

|                                      |                    |
|--------------------------------------|--------------------|
| Cable Type                           | FM-SR047CULL       |
| Impedance                            | 50 Ohms            |
| Inner Conductor Type                 | Solid              |
| Inner Conductor Material and Plating | Copper, Silver     |
| Dielectric Type                      | Microporous PTFE   |
| Number of Shields                    | 1                  |
| Outer Conductor Material and Plating | Copper             |
| One Time Minimum Bend Radius         | 0.125 in [3.18 mm] |



### Configuration:

- 1.85mm Male
- 1.85mm Male
- FM-SR047CULL

### Features:

- Max Frequency 70 GHz
- 76.5% Phase Velocity
- 500 Mating Cycles
- Maximum Cable Assembly Length of 5 Feet

### Applications:

- General Purpose
- Laboratory Use

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## Connectors

| Description                     | Connector 1            | Connector 2            |
|---------------------------------|------------------------|------------------------|
| Type                            | 1.85mm Male            | 1.85mm Male            |
| Impedance                       | 50 Ohms                | 50 Ohms                |
| Mating Cycles                   | 500                    | 500                    |
| Contact Material & Plating      | Beryllium Copper, Gold | Beryllium Copper, Gold |
| Contact Plating Spec.           | ASTM-B488              | ASTM-B488              |
| Dielectric Type                 | PTFE                   | PTFE                   |
| Body Material & Plating         | Beryllium Copper, Gold | Beryllium Copper, Gold |
| Body Plating Spec.              | ASTM-B488              | ASTM-B488              |
| Coupling Nut Material & Plating | Steel                  | Steel                  |
| Torque                          | 8 in-lbs 0.9 Nm        | 8 in-lbs 0.9 Nm        |

## Environmental Specifications

### Temperature

Operating Range -65 to +150 deg C

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

## Plotted and Other Data

Notes:

## How to Order

Part Number Configuration:

**FMCA2084 - xx uu**

cm = Centimeters  
 <blank> = Inches

Length

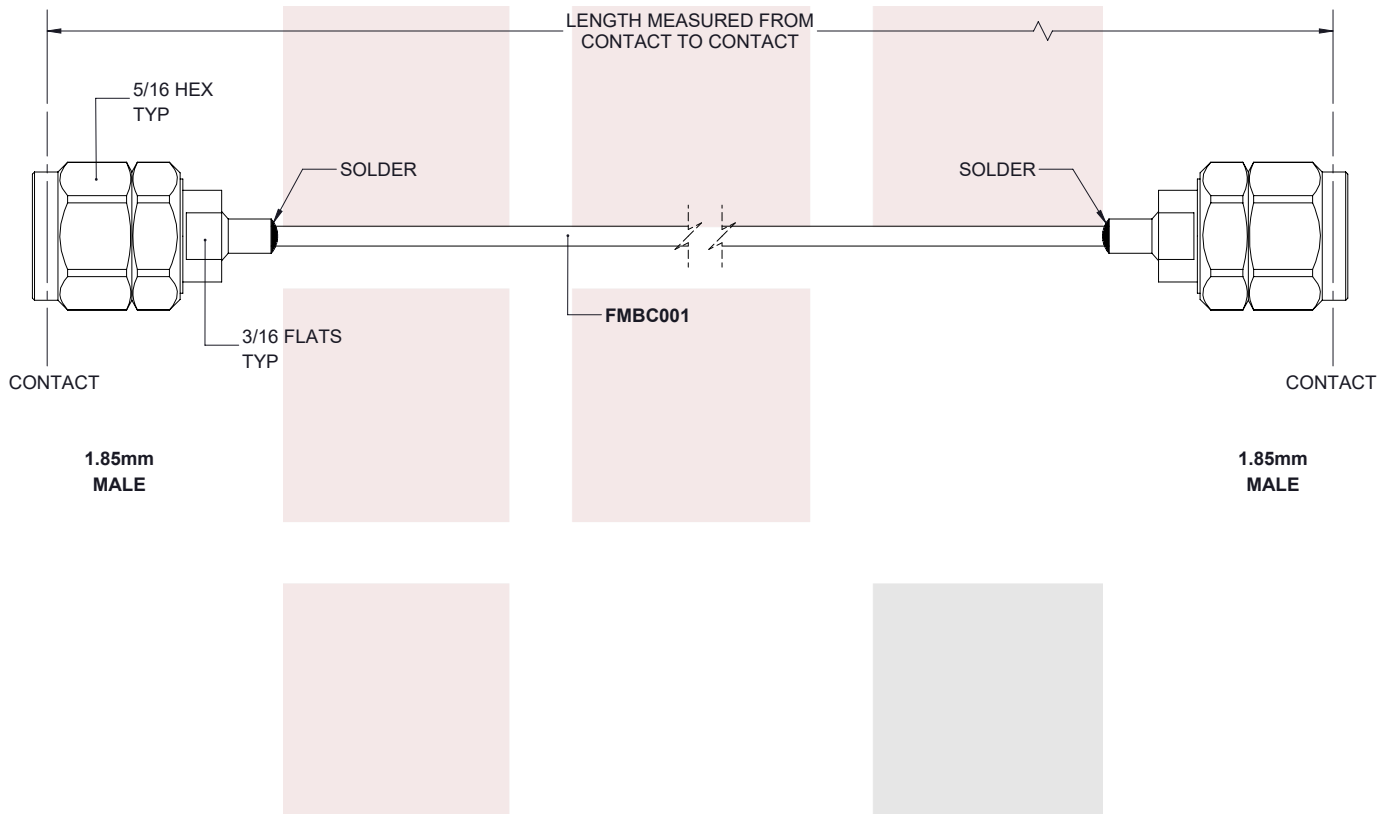
Example: FMCA2084-12 = 12 inches long cable  
 FMCA2084-100cm = 100 cm long cable

Low Loss 1.85mm Male to 1.85mm Male Cable 047 Coax in 12 Inch from Fairview Microwave has same day shipment for domestic and International orders. Our RF, microwave and fiber optic products maintain a 99% availability and are part of the broadest selection in the industry.

Click the following link to obtain additional part information: [Low Loss 1.85mm Male to 1.85mm Male Cable 047 Coax in 12 Inch FMCA2084-12](#)

URL: <https://www.fairviewmicrowave.com/low-loss-1.85mm-male-1.85mm-male-cable-047-coax-fmca2084-12-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.



**STANDARD TOLERANCES**

.X      $\pm 0.2$   
.XX     $\pm 0.01$   
.XXX    $\pm 0.005$

\*STANDARD TOLERANCES APPLY  
ONLY TO DIMENSIONS IN INCHES

|                                                                                       |                                 |                                                                                                                                                                                               |                               |                      |             |  |
|---------------------------------------------------------------------------------------|---------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------|----------------------|-------------|--|
| <p><b>Fairview Microwave</b><br/>an INFINIT<sup>®</sup> brand</p>                     |                                 | <p>NOTES:<br/>1. UNLESS OTHERWISE SPECIFIED ALL DIMENSIONS ARE NOMINAL.<br/>2. ALL SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE AT ANY TIME.<br/>3. DIMENSIONS ARE IN INCHES [mm].</p> |                               |                      |             |  |
| <p>TITLE</p> <p>Low Loss 1.85mm Male to 1.85mm Male Cable 047<br/>Coax in 12 Inch</p> | <p>DWG NO</p> <p>FMCA2084</p>   |                                                                                                                                                                                               | <p>CAGE CODE</p> <p>3FKR5</p> |                      |             |  |
|                                                                                       | <p>CAD FILE</p> <p>09/11/19</p> | <p>SHEET</p> <p>1 OF 1</p>                                                                                                                                                                    | <p>SCALE</p> <p>N/A</p>       | <p>SIZE</p> <p>A</p> | <p>7361</p> |  |