

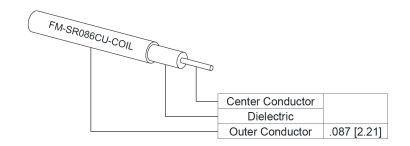
#### FMCA100196

#### Configuration

Connector 1: 2.92mm Male
Connector 2: 1.85mm Female
Cable Type: FM-SR086CU-COIL
Coax Flex Type: Semi-Rigid

#### **Features**

Max Frequency 40 GHz



#### **Applications**

· General Purpose

· Laboratory Use

#### **Description**

The 2.92mm male to 1.85mm female cable using RG405 type .086 coax, part number FMCA100196, from Fairview Microwave is in-stock and ships same day. This Fairview 2.92mm to 1.85mm cable assembly has a male to female gender configuration with 50 ohm semi-rigid FM-SR086CU-COIL 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 FMCA100196 2.92mm male to 1.85mm female cable assembly operates to 40 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                          | Minimum | Typical | Maximum | Units |
|--------------------------------------|---------|---------|---------|-------|
| Frequency Range                      | DC      |         | 40      | GHz   |
| VSWR                                 |         |         | 1.4:1   |       |
| Dielectric Withstanding Voltage (AC) |         |         | 1,000   | Vrms  |

#### Specifications by Frequency



### FMCA100196

| Part Number   | Length         | Description              | F1    | F2    | F3    | F4    | Units | Weight (lbs) |
|---------------|----------------|--------------------------|-------|-------|-------|-------|-------|--------------|
|               |                | Frequency                | 2500  | 5000  | 10000 | 20000 | MHz   |              |
| FMCA100196    | Custom Lengths | Insertion Loss (Typ.)    | 0.316 | 0.477 | 0.8   | 1.2   | dB/ft |              |
| TWEATOOTSO    | Available      | 1113C111011 2033 (1 yp.) | 1.04  | 1.57  | 2.63  | 3.94  | dB/m  |              |
| FMCA100196-6  | 6 Inch         | Insertion Loss (Typ.)    | 0.36  | 0.44  | 0.6   | 0.8   | dB    | 0.029        |
| FMCA100196-12 | 12 Inch        | Insertion Loss (Typ.)    | 0.52  | 0.68  | 1     | 1.4   | dB    | 0.035        |
| FMCA100196-18 | 18 Inch        | Insertion Loss (Typ.)    | 0.68  | 0.92  | 1.4   | 2     | dB    | 0.042        |
| FMCA100196-24 | 24 Inch        | Insertion Loss (Typ.)    | 0.84  | 1.16  | 1.8   | 2.6   | dB    | 0.049        |
| FMCA100196-36 | 36 Inch        | Insertion Loss (Typ.)    | 1.15  | 1.64  | 2.6   | 3.8   | dB    | 0.062        |

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 dB
Loss due to Connector 2: 0.1 dB
Base Weight: 0.035 pounds
Additional Weight per Inch: 0.00109 pounds

#### **Mechanical Specifications**

Cable Assembly

 Width/Diameter
 0.5 in [12.7 mm]

 Weight
 0.035 lbs [15.88 g]

Cable

Cable Type FM-SR086CU-COIL

Impedance 50 Ohms Inner Conductor Type Solid

Inner Conductor Material and Plating Copper Clad Steel, Silver

Dielectric Type PTFE
Number of Shields 1
Outer Conductor 1 Material and Plating Copper
Jacket Material Tan

Repeated Minimum Bend Radius 0.05 in [1.27 mm]



# 

## FMCA100196

#### **Connectors**

| Description                       | Connector 1                        | Connector 2                             |  |  |
|-----------------------------------|------------------------------------|---|--|--|
| Туре                              | 2.92mm Male                        | 1.85mm Female                           |  |  |
| Impedance                         | 50 Ohms                            | 50 Ohms                                 |  |  |
| Configuration                     | Straight                           | Straight                                |  |  |
| Mating Cycles                     |                                    | 500                                     |  |  |
| Contact Material and Plating      | Beryllium Copper, Gold over Nickel | Beryllium Copper, Gold over Nickel over |  |  |
|                                   |                                    | Copper                                  |  |  |
| Contact Plating Specification     | 50 μin minimum                     |   |  |  |
| Dielectric Type                   | PCTFE                              | PPO                                     |  |  |
| Body Material and Plating         | Beryllium Copper, Gold over Nickel | Stainless Steel, Passivated             |  |  |
| Body Plating Specification        | 50 μin minimum                     |   |  |  |
| Coupling Nut Material and Plating | Passivated Stainless Steel         |   |  |  |
| Hex Size                          | 5/16 inch                          |   |  |  |
| Torque                            | 8 in-lbs 0.9 Nm                    |   |  |  |

#### **Environmental Specifications**

Compliance Certifications (see product page for current document)

#### **Plotted and Other Data**

Notes:





#### FMCA100196

#### **Typical Performance Data**

#### **How to Order**

Part Number Configuration:

FMCA100196
- xx uu

Unit of Measure:
cm = Centimeters
<br/>
<br/>
<br/>
<br/>
Length
Base Number

Example: FMCA100196-12 = 12 inches long cable FMCA100196-100cm = 100 cm long cable

2.92mm Male to 1.85mm Female Cable RG405 Type .086 Semi-Rigid 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: 2.92mm Male to 1.85mm Female Cable RG405 Type .086 Semi-Rigid Coax FMCA100196

URL: https://www.fairviewmicrowave.com/2.92mm-male-to-1.85mm-female-cable-rg405-type-.086-coax-fmca100196-p. aspx

The information contained within 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 impliment 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 liability arising out of the use of any part or document.

