

## 4.3-10 Plug to 4.3-10 Plug Non-Magnetic Cable using 0.141 Semi Rigid Coax

### FMCA9852



#### Configuration

- Connector 1: 4.3-10 Plug
- Connector 2: 4.3-10 Plug
- Coax Flex Type: Semi-Rigid

#### Features

- Max Frequency 6 GHz
- 69.5% Phase Velocity
- Magnetic Susceptibility  $10^{-5}$
- VSWR of 1.4:1

#### Applications

- General Purpose
- Laboratory Use
- Medical
- Quantum Computing
- Military
- Aerospace

#### Description

The 4.3-10 plug to 4.3-10 plug cable using INVALID ALIAS LOOKUP FOR \*0.141\*, part number FMCA9852, from Fairview Microwave is in-stock and ships same day. This Fairview 4.3-10 to 4.3-10 cable assembly has a plug to plug gender configuration with 50 ohm semi-rigid. 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 FMCA9852 4.3-10 plug to 4.3-10 plug cable assembly operates to 6 GHz. Fairview Microwave Non Magnetic connectors are manufactured with materials that are especially adapted to non magnetism. Our non-magnetic connectors have a higher magnetic susceptibility than existing standard connectors made of brass/nickel materials. As a result, our non-magnetic connectors are transparent to the magnetic field, which means no field distortion and a higher Signal-to-Noise Ratio (SNR).

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      |              | 6       | GHz          |
| VSWR                    |         |              | 1.4:1   |              |
| Velocity of Propagation |         | 69.5         |         | %            |
| Capacitance             |         | 29.4 [96.46] |         | pF/ft [pF/m] |

#### Specifications by Frequency

| Description           | F1   | F2   | F3   | F4   | F5 | Units |
|-----------------------|------|------|------|------|----|-------|
| Frequency             | 0.5  | 1    | 2.5  | 6    |    | GHz   |
| Insertion Loss (Typ.) | 0.07 | 0.11 | 0.17 | 0.31 |    | dB/ft |
|                       | 0.23 | 0.36 | 0.56 | 1.02 |    | dB/m  |

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#### Electrical Specification Notes:

Insertion Loss does not include the loss of the connectors. Insertion Loss is estimated as 0.2 dB per connector

#### Mechanical Specifications

##### Cable Assembly

|                |                    |
|----------------|--------------------|
| Width/Diameter | 0.5 in [12.7 mm]   |
| Weight         | 0.028 lbs [12.7 g] |

##### Cable

|                                      |         |
|--------------------------------------|---------|
| Impedance                            | 50 Ohms |
| Inner Conductor Material and Plating | SPC     |
| Dielectric Type                      | PTFE    |

#### Connectors

| Description                  | Connector 1                  | Connector 2                  |
|------------------------------|------------------------------|------------------------------|
| Type                         | 4.3-10 Plug                  | 4.3-10 Plug                  |
| Impedance                    | 50 Ohms                      | 50 Ohms                      |
| Configuration                | Straight                     | Straight                     |
| Contact Material and Plating | Brass, Silver                | Brass, Silver                |
| Body Material and Plating    | Brass, Copper-Tin-Zinc Alloy | Brass, Copper-Tin-Zinc Alloy |

#### Environmental Specifications

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

#### Plotted and Other Data

##### Notes:

Values at 25°C, sea level.

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#### Typical Performance Data

#### How to Order

Part Number Configuration:

**FMCA9852**

**- xx**

**uu**

Unit of Measure:  
cm = Centimeters  
<blank> = Inches  
Length  
Base Number

Example: FMCA9852-12 = 12 inches long cable  
FMCA9852-100cm = 100 cm long cable

4.3-10 Plug to 4.3-10 Plug Non-Magnetic Cable using 0.141 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: [4.3-10 Plug to 4.3-10 Plug Non-Magnetic Cable using 0.141 Semi Rigid Coax FMCA9852](#)

URL: <https://www.fairviewmicrowave.com/non-magnetic-4.3-10-plug-to-4.3-10-plug-cable-fm-sr141-nm-coax-fm-ca9852-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 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 liability arising out of the use of any part or document.

