



### FMCA2496-100CM

#### Configuration

Connector 1: 4.3-10 Male
Connector 2: N Female
Cable Type: TFT-5G-402
Coax Flex Type: Flexible

#### **Features**

- Max Frequency 5.8 GHz
- Low PIM: -160 dBc Max
- Shielding Effectivity > 80 dB
- 76% Phase Velocity
- · Double Shielded
- FEP Jacket
- · 500 Mating Cycles

#### **Applications**

- · General Purpose
- · Laboratory Use

- Low PIM Applications
- Indoor and Outdoor Use

Plenum Rated Applications

#### **Description**

The 4.3-10 male to type N female 100 cm cable using TFT-5G-402 coax, part number FMCA2496-100CM, from Fairview Microwave is in-stock and ships same day. This Fairview 4.3-10 to type N cable assembly has a male to female gender configuration with 50 ohm flexible TFT-5G-402 coax. Fairview Microwave's flexible RF cable assemblies are ideal for applications where tight bends and continual flexure are required. Our low PIM design offers excellent passive intermodulation performance with PIM levels better than -160 dBc. The FMCA2496-100CM 4.3-10 male to type N female cable assembly operates to 5.8 GHz. The double shielding of this Fairview cable assembly provides excellent shielding effectiveness of better than 80 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                                | Minimum | Typical | Maximum | Units |
|--|---------|---------|---------|-------|
| Frequency Range                            | DC      |         | 5.8     | GHz   |
| VSWR                                       |         |         | 1.4:1   |       |
| Velocity of Propagation                    |         | 76      |         | %     |
| RF Shielding                               | 80      |         |         | dB    |
| Passive Intermodulation                    |         |         | -160    | dBc   |
| IM3 (2x43dBm Tones) at 850 MHz or 1900 MHz |         |         |         |       |





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### **Electrical Specifications**

| Description | Minimum | Typical     | Maximum | Units        |
|-------------|---------|-------------|---------|--------------|
| Capacitance |         | 26.7 [87.6] |         | pF/ft [pF/m] |

#### **Specifications by Frequency**

| Description           | F1   | F2   | F3   | F4   | F5   | Units |
|-----------------------|------|------|------|------|------|-------|
| Frequency             | 0.25 | 0.5  | 1    | 2.5  | 5.8  | GHz   |
| Insertion Loss (Typ.) | 0.34 | 0.45 | 0.59 | 0.89 | 1.31 | dB    |

**Electrical Specification Notes:** 

The Insertion Loss data above is based on the performance specifications of the coax and connectors used in this assembly. The Insertion Loss includes an estimated insertion loss of 0.1\*SQRT(FGHz) dB for the male connector and 0.1 dB for the female connector.

#### **Mechanical Specifications**

**Cable Assembly** 

 Length
 39.37 in [100 cm]

 Width/Diameter
 0.866 in [22 mm]

Cable

Cable TypeTFT-5G-402Impedance50 OhmsInner Conductor TypeSolidInner Conductor Material and PlatingCopperDielectric TypePTFENumber of Shields2

Jacket Material FEP, Blue

Jacket Diameter0.16 in [4.06 mm]One Time Minimum Bend Radius0.75 in [19.05 mm]





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#### **Connectors**

| Description                           | Connector 1       | Connector 2             |
|---------------------------------------|-------------------|-------------------------|
| Туре                                  | 4.3-10 Male       | N Female                |
| Impedance                             | 50 Ohms           | 50 Ohms                 |
| Configuration                         | Straight          | Straight                |
| Mating Cycles                         | 500               | 500                     |
| Contact Material and Plating          | Brass, Silver     | Phosphor Bronze, Silver |
| Contact Plating Specification         | 200 μin           | 5 μm                    |
| Dielectric Type                       | PTFE              | PTFE                    |
| Outer Conductor Material and Plating  |                   | Brass, Tri-Metal        |
| Outer Conductor Plating Specification |                   | 3 µm                    |
| Body Material and Plating             | Brass, Tri-Metal  | Brass, Tri-Metal        |
| Body Plating Specification            | 80 μin            | 3 µm                    |
| Coupling Nut Material and Plating     | Brass, Tri-Metal  |                         |
| Coupling Nut Plating Specification    | 80 μin            |                         |
| Torque                                | 44 in-lbs 4.97 Nm | 10 in-lbs 1.13 Nm       |

### **Environmental Specifications**

**Operating Range Temperature** 

-55 to +85 deg C

Compliance Certifications (see product page for current document)

### **Plotted and Other Data**

Notes:





### FMCA2496-100CM

### **Typical Performance Data**

#### **How to Order**



Example: FMCA2496-12 = 12 inches long cable

FMCA2496-100cm = 100 cm long cable

Low PIM 4.3-10 Male to N Female Cable TFT-5G-402 Coax in 100 CM Using Times Microwave Components from Fairview Microwave is instock 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: Low PIM 4.3-10 Male to N Female Cable TFT-5G-402 Coax in 100 CM Using Times Microwave Components FMCA2496-100CM

URL: https://www.fairviewmicrowave.com/low-pim-4.3-10-male-to-n-female-cable-tft-5g-402-coax-in-100-cm-using-times-microwave-components-fmca2496-100cm-p.aspx

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