



# FMCA2501-24

### Configuration

Connector 1: 4.3-10 Male Right Angle
Connector 2: N Female Bulkhead

Cable Type: TFT-5G-402Coax 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

### **Applications**

- · General Purpose
- · Laboratory Use

- · Low PIM Applications
- · Indoor and Outdoor Use

Plenum Rated Applications

### **Description**

The RA 4.3-10 male to type N female bulkhead 24 inch cable using TFT-5G-402 coax, part number FMCA2501-24, 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 FMCA2501-24 4.3-10 male to type N female cable assembly operates to 5.8 GHz. The right angle 4.3-10 interface on the TFT-5G-402 cable allows for easier connections in tight spaces. Our RF cable assembly with type N bulkhead interface allows designers to create external connections on their product enclosures, and can be used in a variety of other rack mount and panel mount applications. 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				





# FMCA2501-24

# **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.)	0.27	0.34	0.44	0.64	0.94	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 right angle connector and 0.1 dB for the straight connector.

### **Mechanical Specifications**

Cable Assembly

Length 24 in [609.6 mm] Width/Diameter 0.86 in [21.84 mm]

Cable

Cable Type TFT-5G-402 Impedance 50 Ohms Inner Conductor Type Solid Copper

Inner Conductor Material and Plating Dielectric Type **PTFE** Number of Shields FEP, Blue Jacket Material

0.16 in [4.06 mm] Jacket Diameter

One Time Minimum Bend Radius 0.75 in [19.05 mm]





# FMCA2501-24

### **Connectors**

Description	Connector 1	Connector 2
Туре	4.3-10 Male Right Angle	N Female Bulkhead
Impedance	50 Ohms	50 Ohms
Configuration	Right Angle	Straight
Mating Cycles	500	
Contact Material and Plating	Brass, Silver	Brass, 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** 

-40 to +85 deg C

Compliance Certifications (see product page for current document)

### **Plotted and Other Data**

Notes:

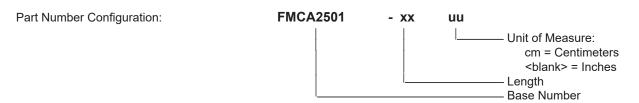




# FMCA2501-24

### **Typical Performance Data**

#### **How to Order**



Example: FMCA2501-12 = 12 inches long cable

FMCA2501-100cm = 100 cm long cable

Low PIM RA 4.3-10 Male to N Female Bulkhead Cable TFT-5G-402 Coax in 24 Inch Using Times Microwave Components 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: Low PIM RA 4.3-10 Male to N Female Bulkhead Cable TFT-5G-402 Coax in 24 Inch Using Times Microwave Components FMCA2501-24

URL: https://www.fairviewmicrowave.com/low-pim-ra-4.3-10-male-to-n-female-bulkhead-cable-tft-5g-402-coax-in-24-inch-using-times-microwave-components-fmca2501-24-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.

# FMCA2501-24 CAD Drawing

Low PIM RA 4.3-10 Male to N Female Bulkhead Cable TFT-5G-402 Coax in 24 Inch Using Times Microwave Components

