

Low PIM RA 4.3-10 Male to N Female Bulkhead Cable TFT-5G-402 Coax in 200 CM Using Times Microwave Components



FMCA2501-200CM

Configuration

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

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 200 cm cable using TFT-5G-402 coax, part number FMCA2501-200CM, 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 FMCA2501-200CM 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				

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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.)	0.53	0.72	0.97	1.51	2.28	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 $0.1 \cdot \sqrt{F(\text{GHz})}$ dB for the right angle connector and 0.1 dB for the straight connector.

Mechanical Specifications

Cable Assembly

Length	78.74 in [200 cm]
Width/Diameter	0.86 in [21.84 mm]

Cable

Cable Type	TFT-5G-402
Impedance	50 Ohms
Inner Conductor Type	Solid
Inner Conductor Material and Plating	Copper
Dielectric Type	PTFE
Number of Shields	2
Jacket Material	FEP, Blue
Jacket Diameter	0.16 in [4.06 mm]
One Time Minimum Bend Radius	0.75 in [19.05 mm]

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Connectors

Description	Connector 1	Connector 2
Type	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:

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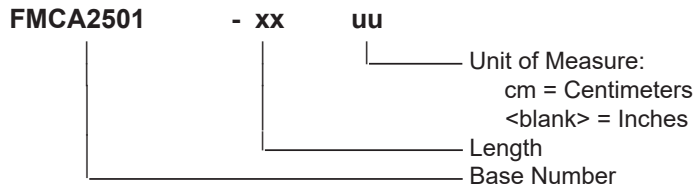


FMCA2501-200CM

Typical Performance Data

How to Order

Part Number Configuration:



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 200 CM 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.

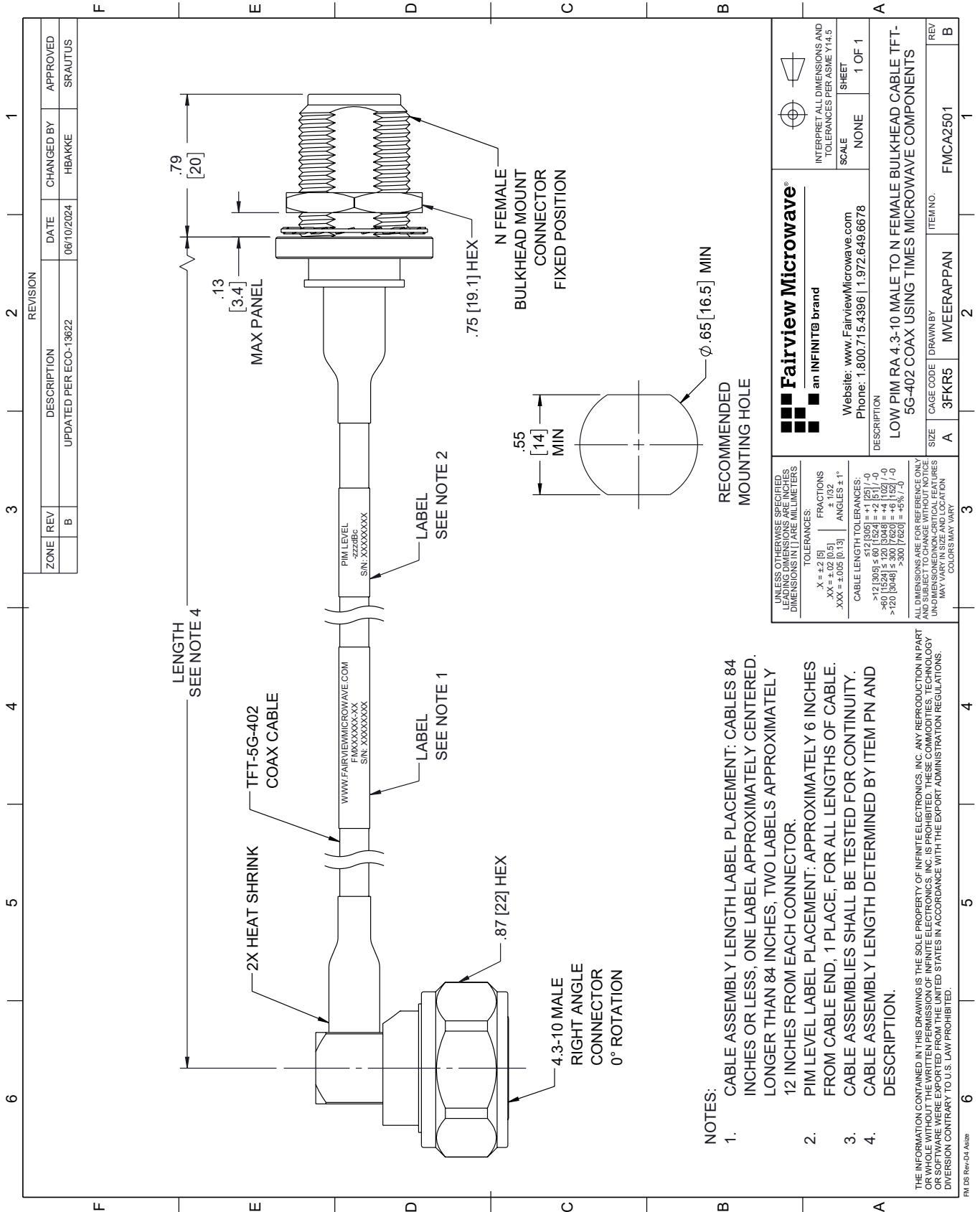
For additional information on this product, please click the following link: [Low PIM RA 4.3-10 Male to N Female Bulkhead Cable TFT-5G-402 Coax in 200 CM Using Times Microwave Components FMCA2501-200CM](https://www.fairviewmicrowave.com/low-pim-ra-4.3-10-male-to-n-female-bulkhead-cable-tft-5g-402-coax-in-200-cm-using-times-microwave-components-fmca2501-200cm)

URL: <https://www.fairviewmicrowave.com/low-pim-ra-4.3-10-male-to-n-female-bulkhead-cable-tft-5g-402-coax-in-200-cm-using-times-microwave-components-fmca2501-200cm-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.

FMCA2501-200CM CAD Drawing

Low PIM RA 4.3-10 Male to N Female Bulkhead Cable TFT-5G-402 Coax in 200 CM Using Times Microwave Components



ZONE	REV	DESCRIPTION	DATE	CHANGED BY	APPROVED
B		UPDATED PER ECO-13622	06/10/2024	HBAKKE	SRAUTUS

 Website: www.FairviewMicrowave.com Phone: 1.800.715.4396 1.972.649.6678		INTERPRET ALL DIMENSIONS AND TOLERANCES PER ASME Y14.5 SCALE: NONE SHEET: 1 OF 1
DESCRIPTION: LOW PIM RA 4.3-10 MALE TO N FEMALE BULKHEAD CABLE TFT-5G-402 COAX USING TIMES MICROWAVE COMPONENTS		
SIZE: A	CAGE CODE: 3FKR5	DRAWN BY: MVEERAPPAN
ITEM NO.: FMCA2501		REV: B

- NOTES:**
- CABLE ASSEMBLY LENGTH LABEL PLACEMENT: CABLES 84 INCHES OR LESS, ONE LABEL APPROXIMATELY CENTERED. LONGER THAN 84 INCHES, TWO LABELS APPROXIMATELY 12 INCHES FROM EACH CONNECTOR.
 - PIM LEVEL LABEL PLACEMENT: APPROXIMATELY 6 INCHES FROM CABLE END, 1 PLACE, FOR ALL LENGTHS OF CABLE.
 - CABLE ASSEMBLIES SHALL BE TESTED FOR CONTINUITY.
 - CABLE ASSEMBLY LENGTH DETERMINED BY ITEM PN AND DESCRIPTION.

ALL DIMENSIONS ARE FOR REFERENCE ONLY. UNLESS OTHERWISE SPECIFIED, LEADING DIMENSIONS ARE IN INCHES. UNLESS OTHERWISE SPECIFIED, DIMENSIONS IN [] ARE IN MILLIMETERS.

TOLERANCES:
 .X = ±.2 [5]
 .XX = ±.02 [0.5]
 .XXX = ±.005 [0.13]
 FRACTIONS: ± 1/32
 ANGLES: ± 1°

CABLE LENGTH TOLERANCES:
 <12 [305] ≤ 60 [1524] = ±.1 [2.5] / -0
 >60 [1524] ≤ 120 [3048] = ±.4 [10.2] / -0
 >120 [3048] ≤ 300 [7620] = ±.6 [15.2] / -0
 >300 [7620] = ±.8 [20.3] / -0

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