

Low PIM 4.3-10 Female to RA N Male Cable TFT-5G-402 Coax in 12 Inch Using Times Microwave Components



FMCA2493-12

Configuration

- Connector 1: 4.3-10 Female
- Connector 2: N Male Right Angle
- 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 4.3-10 female to RA type N male 12 inch cable using TFT-5G-402 coax, part number FMCA2493-12, from Fairview Microwave is in-stock and ships same day. This Fairview 4.3-10 to type N cable assembly has a female to male 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 FMCA2493-12 4.3-10 female to type N male cable assembly operates to 5.8 GHz. The right angle type N interface on the TFT-5G-402 cable allows for easier connections in tight spaces. 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.) | 0.21 | 0.26 | 0.32 | 0.45 | 0.64 | 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 straight connector and 0.1 dB for the right angle connector.

Mechanical Specifications

Cable Assembly

| | |
|----------------|---------------------|
| Length | 12 in [304.8 mm] |
| Width/Diameter | 0.728 in [18.49 mm] |
| Weight | lbs [0 g] |

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 Female | N Male Right Angle |
| Impedance | 50 Ohms | 50 Ohms |
| Configuration | Straight | Right Angle |
| Mating Cycles | 500 | |
| Contact Material and Plating | Bronze, 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 | 80 µin | |
| 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 | | 3 µm |
| Torque | | 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:

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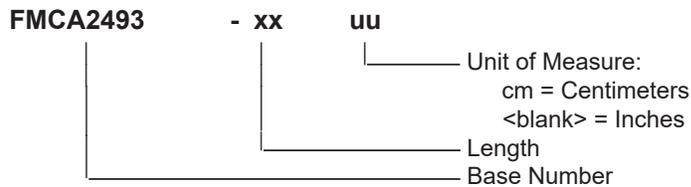


FMCA2493-12

Typical Performance Data

How to Order

Part Number Configuration:



Example: FMCA2493-12 = 12 inches long cable
FMCA2493-100cm = 100 cm long cable

Low PIM 4.3-10 Female to RA N Male Cable TFT-5G-402 Coax in 12 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.

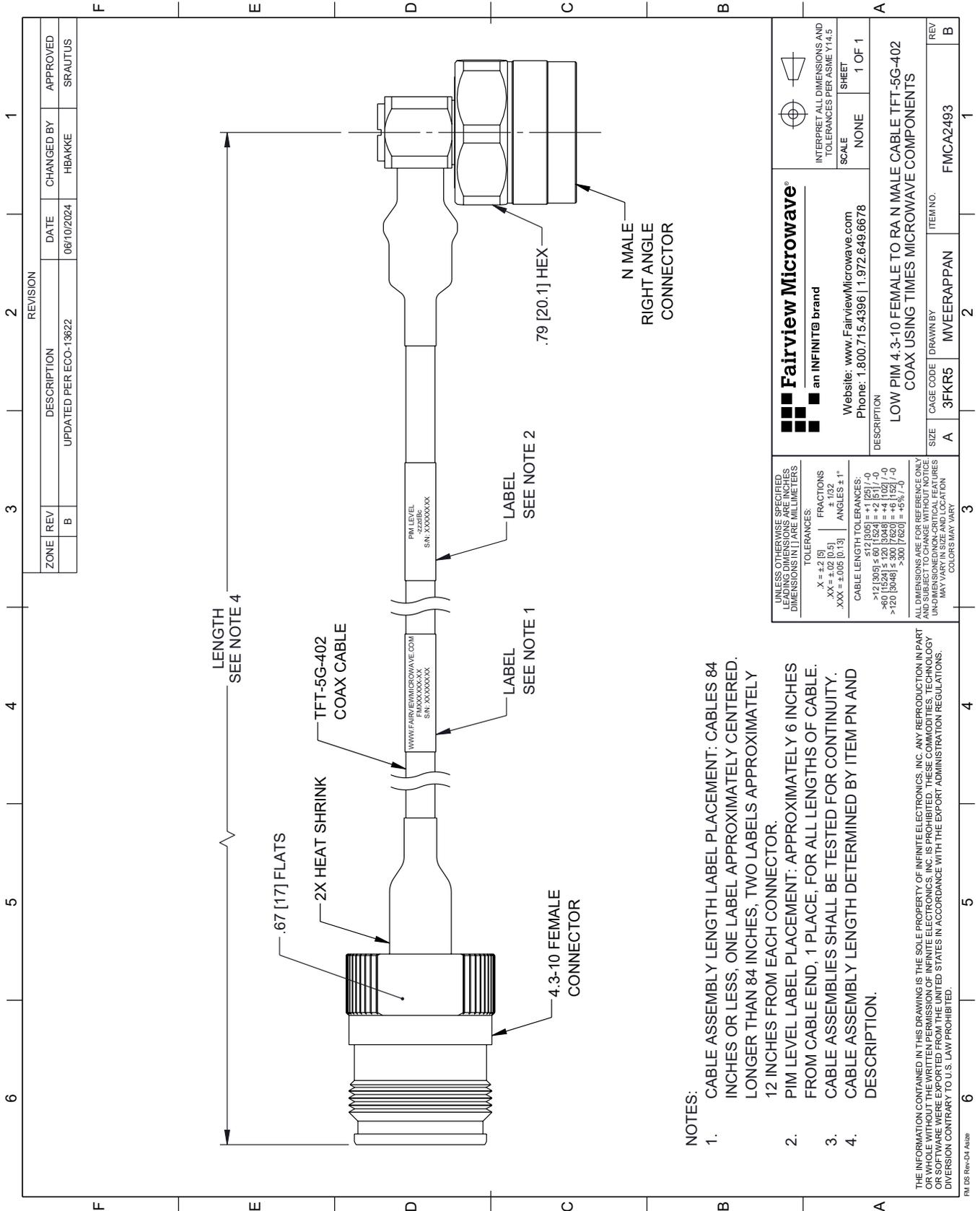
For additional information on this product, please click the following link: [Low PIM 4.3-10 Female to RA N Male Cable TFT-5G-402 Coax in 12 Inch Using Times Microwave Components FMCA2493-12](https://www.fairviewmicrowave.com/product/rf-cable-assemblies/low-pim-4.3-10-female-to-ra-n-male-cable-tft-5g-402-coax-in-12-inch-using-times-microwave-components-fmca2493-12)

URL: <https://www.fairviewmicrowave.com/product/rf-cable-assemblies/low-pim-4.3-10-female-to-ra-n-male-cable-tft-5g-402-coax-in-12-inch-using-times-microwave-components-fmca2493-12.html>

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.

FMCA2493-12 CAD Drawing

Low PIM 4.3-10 Female to RA N Male Cable TFT-5G-402 Coax in 12 Inch Using Times Microwave Components



| REVISION | | DATE | CHANGED BY | APPROVED |
|----------|-----|-----------------------|------------|----------|
| ZONE | REV | DESCRIPTION | | |
| | B | UPDATED PER ECO-13622 | HBAKKE | SRAUTUS |

| | | | |
|---|---|---|--|
| Fairview Microwave® an INFINIT® brand | | 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 |
| UNLESS OTHERWISE SPECIFIED, LEADING DIMENSIONS ARE IN INCHES, DIMENSIONS IN [] ARE 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 [25] / -0 >60 [1524] ≤ 120 [3048] = ±4 [102] / -0 >120 [3048] ≤ 300 [7620] = ±5% / -0 | | DESCRIPTION: LOW PIM 4.3-10 FEMALE TO RA N MALE CABLE TFT-5G-402 COAX USING TIMES MICROWAVE COMPONENTS | REV: B |
| ALL DIMENSIONS ARE FOR REFERENCE ONLY. DIMENSIONS OF UNDESIGNED/UNCHECKED FEATURES MAY VARY IN SIZE AND LOCATION. COLORS MAY VARY. | SIZE: A CAGE CODE: 3FKR5 DRAWN BY: MVEERAPPAN | ITEM NO.: FMCA2493 | 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.

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