

## Low PIM 4.3-10 Male to RA N Male Cable TFT-402 Coax in 50 CM Using Times Microwave Components

The 4.3-10 male to RA type N male 50 cm cable using TFT-402 coax, part number FMCA2445-50CM, from Fairview Microwave is in-stock and ships same day. This Fairview 4.3-10 to type N cable assembly has a male to male gender configuration with 50 ohm flexible TFT-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 FMCA2445-50CM 4.3-10 male to type N male cable assembly operates to 5.8 GHz. The right angle type N interface on the TFT-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                   | Min | Typ         | Max   | Units                            |
|-------------------------------|-----|-------------|-------|----------------------------------|
| Frequency Range               | DC  |             | 5.8   | GHz                              |
| VSWR                          |     |             | 1.4:1 |                                  |
| Velocity of Propagation       |     | 76          |       | %                                |
| RF Shielding                  | -80 |             |       | dB                               |
| Passive Intermodulation       |     |             | -160  | dBc                              |
| Capacitance                   |     | 26.7 [87.6] |       | pF/ft [pF/m]                     |
| DC Resistance Inner Conductor |     | 8.5 [27.89] |       | $\Omega$ /1000ft [ $\Omega$ /Km] |
| DC Resistance Outer Conductor |     | 5.6 [18.37] |       | $\Omega$ /1000ft [ $\Omega$ /Km] |

### Performance by Frequency

| Description           | F1   | F2  | F3   | F4   | F5   | Units |
|-----------------------|------|-----|------|------|------|-------|
| Frequency             | 0.25 | 0.5 | 1    | 2.5  | 5.8  | GHz   |
| Insertion Loss (Typ.) | 0.24 | 0.3 | 0.38 | 0.55 | 0.78 | 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  $0.1 \cdot \text{SQRT}(\text{F GHz})$  dB for the straight connector and 0.1 dB for the right angle connector.

### Mechanical Specifications

#### Cable Assembly

Length\* 19.68 in [499.87 mm]  
 Diameter 0.866 in [22 mm]



### Configuration:

- 4.3-10 Male
- N Male Right Angle
- TFT-402

### 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

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[sales@fairviewmicrowave.com](mailto:sales@fairviewmicrowave.com)

**Cable**

Cable Type TFT-402  
 Impedance 50 Ohms  
 Inner Conductor Type Solid  
 Inner Conductor Material and Plating Copper, Silver  
 Dielectric Type PTFE  
 Number of Shields 2  
 Shield Layer 1 Silver Plated Copper Braid  
 Shield Layer 2 Tinned Copper Braid  
 Jacket Material FEP, Blue  
 Jacket Diameter 0.16 in [4.06 mm]

One Time Minimum Bend Radius 0.75 in [19.05 mm]

**Connectors**

| Description                     | Connector 1       | Connector 2       |
|---------------------------------|-------------------|-------------------|
| Type                            | 4.3-10 Male       | N Male            |
| Impedance                       | 50 Ohms           | 50 Ohms           |
| Mating Cycles                   | 500               |                   |
| Contact Material & Plating      | Brass, Silver     | Brass, Silver     |
| Contact Plating Spec.           | 200 µin           | 5 µm              |
| Dielectric Type                 | PTFE              | PTFE              |
| Body Material & Plating         | Brass, Tri-Metal  | Brass, Tri-Metal  |
| Body Plating Spec.              | 80 µin            | 3 µm              |
| Coupling Nut Material & Plating | Brass, Tri-Metal  | Brass, Tri-Metal  |
| Coupling Nut Plating Spec.      | 80 µin            | 3 µm              |
| Torque                          | 44 in-lbs 4.97 Nm | 10 in-lbs 1.13 Nm |

**Environmental Specifications**
**Temperature**

Operating Range -55 to +85 deg C

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

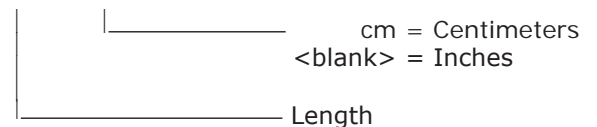
**Plotted and Other Data**

Notes:

**How to Order**

Part Number Configuration:

**FMCA2445 - xx uu**



Example: FMCA2445-12 = 12 inches long cable  
 FMCA2445-100cm = 100 cm long cable

Low PIM 4.3-10 Male to RA N Male Cable TFT-402 Coax in 50 CM Using Times Microwave Components from Fairview Microwave has same day shipment for domestic and International orders. Our RF, microwave and millimeter wave products maintain a 99% availability and are part of the broadest selection in the industry.

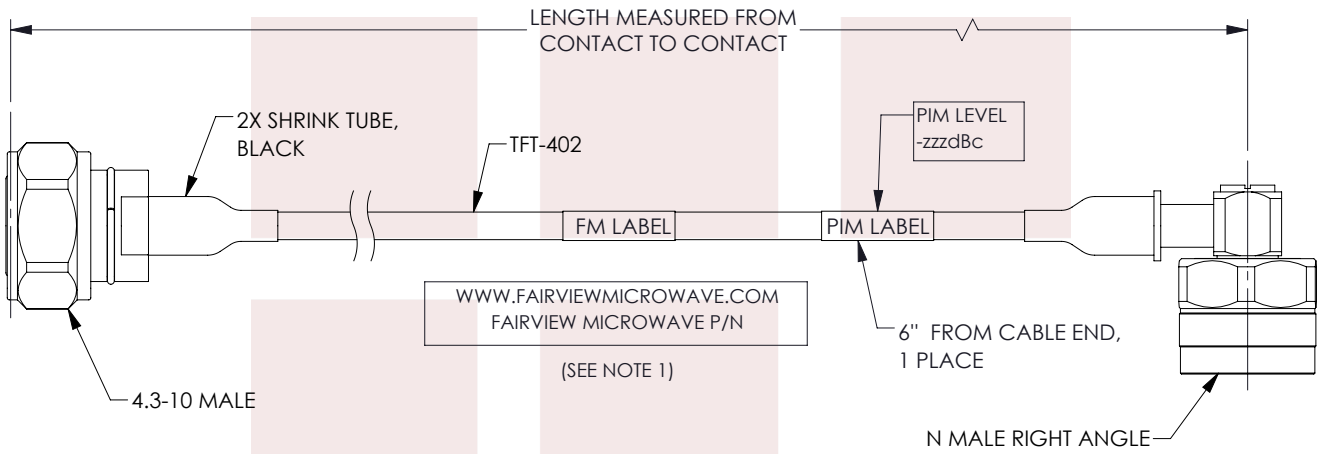
Click the following link to obtain additional part information: [Low PIM 4.3-10 Male to RA N Male Cable TFT-402 Coax in 50 CM Using Times Microwave Components FMCA2445-50CM](https://www.fairviewmicrowave.com/low-pim-4.3-10-male-ra-n-male-cable-tft-402-coax-fmca2445-50cm-p.aspx)

URL: <https://www.fairviewmicrowave.com/low-pim-4.3-10-male-ra-n-male-cable-tft-402-coax-fmca2445-50cm-p.aspx>

The information contained in 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 any liability arising out of the use of any part or documentation.



| REVISIONS |                 |            |          |
|-----------|-----------------|------------|----------|
| REV.      | DESCRIPTION     | DATE       | APPROVED |
| A         | INITIAL RELEASE | 06/04/2021 | AGANWANI |



**NOTES:**

1. CABLES 84" AND UNDER HAVE 1 LABEL CENTERED. CABLES OVER 84" HAVE 2 LABELS, ONE AT EACH END 12.0" FROM THE FRONT OF THE CONNECTOR.

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|   |  |   |                                       |                  |                             |                   |  |   |                     |             |  |  |  |   |  |  |                            |  |
|---|--|---|---------------------------------------|------------------|-----------------------------|-------------------|--|---|---------------------|-------------|--|--|--|---|--|--|----------------------------|--|
| <p><b>Fairview Microwave</b><br/>an INFINIT<sup>®</sup> brand</p>   | <p>UNLESS OTHERWISE SPECIFIED LEADING DIMENSIONS ARE INCHES<br/>DIMENSIONS IN [ ] ARE MILLIMETERS</p> <p>TOLERANCES: CABLE LENGTH (L) TOLERANCES:</p> <table border="0"> <tr> <td>.X = ±.2 [ .508]</td> <td>FRACTIONS ± 1/32</td> <td>L ≤ 12 [305] = +1 [25] / -0</td> </tr> <tr> <td>.XX = ±.02 [ .51]</td> <td></td> <td>12 [305] &lt; L ≤ 60 [1524] = +2 [51] / -0</td> </tr> <tr> <td>.XXX = ±.005 [ .13]</td> <td>ANGLES ± 1°</td> <td>60 [1524] &lt; L ≤ 120 [3048] = +4 [102] / -0</td> </tr> <tr> <td></td> <td></td> <td>120 [3048] &lt; L ≤ 300 [7620] = +6 [152] / -0</td> </tr> <tr> <td></td> <td></td> <td>300 [7620] &lt; L = +5%L / -0</td> </tr> </table> |   | .X = ±.2 [ .508]                      | FRACTIONS ± 1/32 | L ≤ 12 [305] = +1 [25] / -0 | .XX = ±.02 [ .51] |  | 12 [305] < L ≤ 60 [1524] = +2 [51] / -0 | .XXX = ±.005 [ .13] | ANGLES ± 1° | 60 [1524] < L ≤ 120 [3048] = +4 [102] / -0 |  |  | 120 [3048] < L ≤ 300 [7620] = +6 [152] / -0 |  |  | 300 [7620] < L = +5%L / -0 | <p>THIRD-ANGLE PROJECTION</p> <p>THE INFORMATION AND DESIGN IN THIS DOCUMENT IS THE PROPERTY OF FAIRVIEW MICROWAVE CORPORATION. ALL RIGHTS RESERVED.</p> |
|   | .X = ±.2 [ .508]   | FRACTIONS ± 1/32                            | L ≤ 12 [305] = +1 [25] / -0           |                  |                             |                   |  |   |                     |             |  |  |  |   |  |  |                            |  |
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| <p>TITLE</p> <p>Low PIM 4.3-10 Male to RA N Male Cable TFT-402 Coax in 50 CM Using Times Microwave Components</p> | <p>ALL DIMENSIONS SHOWN ARE FOR REFERENCE ONLY.</p>  |   | <p>SHEET 1 OF 1</p> <p>SCALE N/A</p>  |                  |                             |                   |  |   |                     |             |  |  |  |   |  |  |                            |  |
| <p>SIZE A</p>   | <p>CAGE CODE 3FKR5</p>   | <p>DRAWN BY MVEERAPPAN</p>                  | <p>ITEM NO. FMCA2445</p> <p>REV A</p> |                  |                             |                   |  |   |                     |             |  |  |  |   |  |  |                            |  |

T-Rev.D