

## SMA Female Bulkhead to TNC Male Right Angle Cable in 24 Inch Length Using RG223 Coax

The SMA female bulkhead to RA TNC male cable using RG223 coax, part number FMCA2750-24, from Fairview Microwave is in-stock and ships same day. This Fairview SMA to TNC cable assembly has a female to male gender configuration with 50 ohm flexible RG223 coax. Fairview Microwave's flexible RF cable assemblies are ideal for applications where tight bends and continual flexure are required. The FMCA2750-24 SMA female to TNC male cable assembly operates to 3 GHz. The right angle TNC interface on the RG223 cable allows for easier connections in tight spaces. Our RF cable assembly with SMA 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.

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  |               | 3     | GHz          |
| VSWR                    |     |               | 1.4:1 |              |
| Velocity of Propagation |     | 66            |       | %            |
| Capacitance             |     | 30.8 [101.05] |       | pF/ft [pF/m] |
| Operating Voltage (AC)  |     |               | 500   | Vrms         |

### Performance by Frequency

| Description           | F1   | F2   | F3   | F4   | F5   | Units |
|-----------------------|------|------|------|------|------|-------|
| Frequency             | 0.1  | 0.25 | 0.5  | 1    | 3    | GHz   |
| Insertion Loss (Typ.) | 0.38 | 0.43 | 0.48 | 0.57 | 0.8  | dB/ft |
|                       | 1.25 | 1.41 | 1.57 | 1.87 | 2.62 | dB/m  |

#### Electrical Specification Notes:

The Insertion Loss data above is based on the performance specifications of the coax cable and connectors used in this assembly. The Insertion Loss includes an estimated insertion loss of 0.1 dB for the straight connector and 0.2 dB for the right angle connector.

### Mechanical Specifications

#### Cable Assembly

Length\* 24 in [609.6 mm]  
 Weight 0.106 lbs [48.08 g]

#### Cable

Cable Type RG223  
 Impedance 50 Ohms  
 Inner Conductor Type Solid



### Configuration:

- SMA Female Bulkhead
- TNC Male Right Angle
- RG223

### Features:

- Max Frequency 3 GHz
- 66% Phase Velocity
- Double Shielded
- PVC Jacket

### Applications:

- General Purpose
- Laboratory Use

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|                                      |                            |
|--------------------------------------|----------------------------|
| Inner Conductor Material and Plating | Copper, Silver             |
| Dielectric Type                      | PE                         |
| Number of Shields                    | 2                          |
| Shield Layer 1                       | Silver Plated Copper Braid |
| Shield Layer 2                       | Silver Plated Copper Braid |
| Jacket Material                      | PVC, Black                 |
| Jacket Diameter                      | 0.209 in [5.31 mm]         |
| Repeated Minimum Bend Radius         | 1 in [25.4 mm]             |

**Connectors**

| Description                     | Connector 1            | Connector 2     |
|---------------------------------|------------------------|-----------------|
| Type                            | SMA Female             | TNC Male        |
| Mount Method                    | Bulkhead               |                 |
| Specification                   | MIL-STD-348A           | MIL-STD-348A    |
| Impedance                       | 50 Ohms                | 50 Ohms         |
| Contact Material & Plating      | Beryllium Copper, Gold | Brass, Gold     |
| Contact Plating Spec.           | 50 µin minimum         | 30 µin minimum  |
| Dielectric Type                 | PTFE                   | PTFE            |
| Body Material & Plating         | Brass, Nickel          | Brass, Nickel   |
| Body Plating Spec.              | 100 µin minimum        | 100 µin minimum |
| Coupling Nut Material & Plating |                        | Brass, Nickel   |
| Coupling Nut Plating Spec.      |                        | 100 µin minimum |

**Environmental Specifications**

**Temperature**

Operating Range -40 to +80 deg C

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

**Plotted and Other Data**

Notes:

**How to Order**

Part Number Configuration:

**FMCA2750 - xx uu**

cm = Centimeters  
<blank> = Inches  
Length

Example: FMCA2750-12 = 12 inches long cable  
FMCA2750-100cm = 100 cm long cable

SMA Female Bulkhead to TNC Male Right Angle Cable in 24 Inch Length Using RG223 Coax 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.

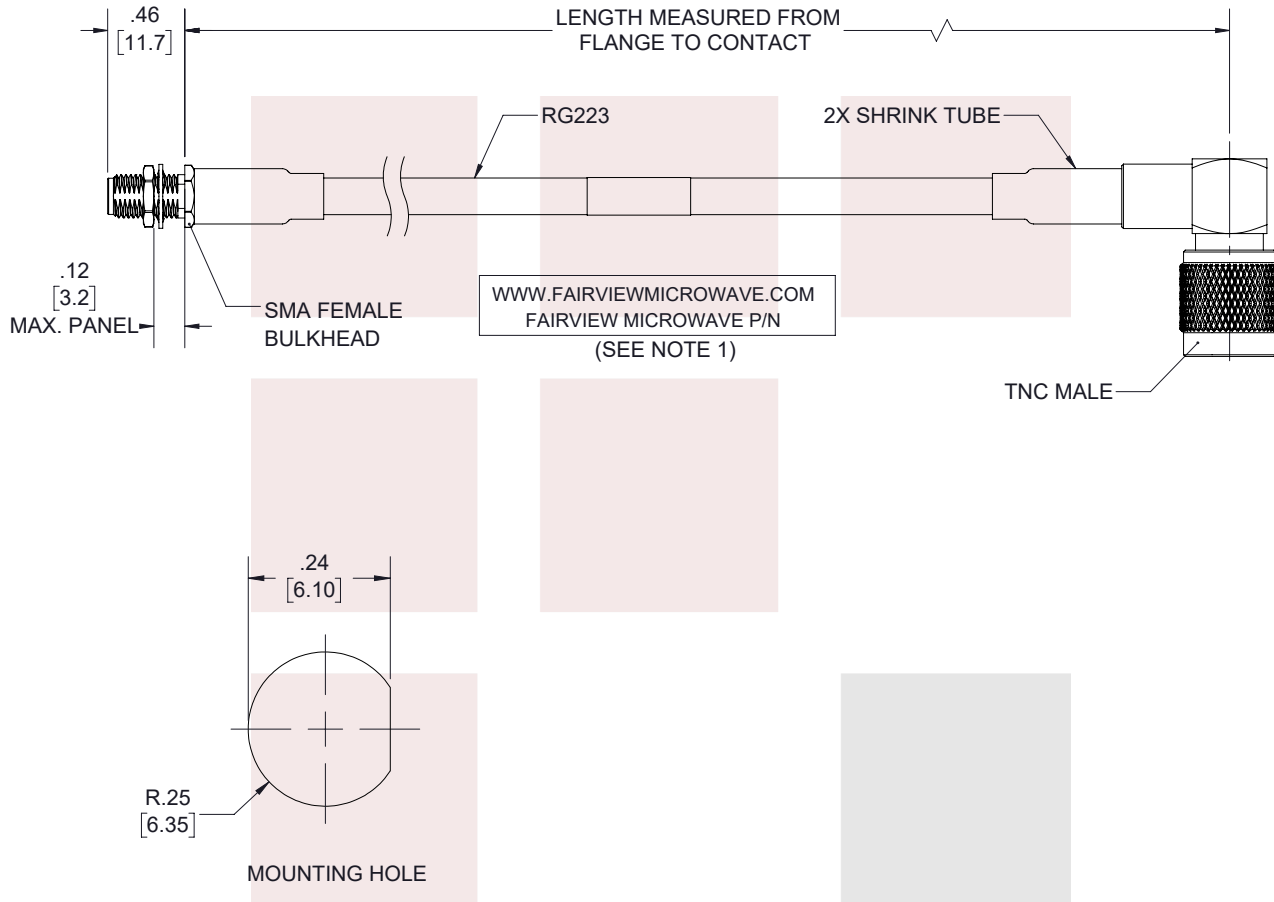
Click the following link to obtain additional part information: [SMA Female Bulkhead to TNC Male Right Angle Cable in 24 Inch Length Using RG223 Coax FMCA2750-24](#)

URL: <https://www.fairviewmicrowave.com/sma-female-bulkhead-to-ra-tnc-male-cable-rg223-coax-in-24-inch-fmca2750-24-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 | 02/21/2022 | AGANWANI |



**NOTES:**

1. CABLES 36" AND UNDER HAVE 1 LABEL CENTERED. CABLES OVER 36" HAVE 2 LABELS, ONE AT EACH END 6.0" FROM THE FRONT OF THE CONNECTOR.

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|  |   |   |                                       |                  |                             |                  |             |   |                    |  |  |  |  |   |  |  |                            |  |
|--|---|---|---------------------------------------|------------------|-----------------------------|------------------|-------------|---|--------------------|--|--|--|--|---|--|--|----------------------------|--|
| <p><b>Fairview Microwave</b><br/>an INFINIT® 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 [5.08]</td> <td>FRACTIONS ± 1/32</td> <td>L ≤ 12 [305] = +1 [25] / -0</td> </tr> <tr> <td>.XX = ±.02 [.51]</td> <td>ANGLES ± 1°</td> <td>12 [305] &lt; L ≤ 60 [1524] = +2 [51] / -0</td> </tr> <tr> <td>.XXX = ±.005 [.13]</td> <td></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 [5.08]                       | FRACTIONS ± 1/32 | L ≤ 12 [305] = +1 [25] / -0 | .XX = ±.02 [.51] | ANGLES ± 1° | 12 [305] < L ≤ 60 [1524] = +2 [51] / -0 | .XXX = ±.005 [.13] |  | 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 [5.08]   | FRACTIONS ± 1/32                            | L ≤ 12 [305] = +1 [25] / -0           |                  |                             |                  |             |   |                    |  |  |  |  |   |  |  |                            |  |
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|  |   | 300 [7620] < L = +5%L / -0                  |                                       |                  |                             |                  |             |   |                    |  |  |  |  |   |  |  |                            |  |
| <p>TITLE</p> <p>SMA Female Bulkhead to TNC Male Right Angle Cable in 24 Inch Length Using RG223 Coax</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. FMCA2750</p> <p>REV A</p> |                  |                             |                  |             |   |                    |  |  |  |  |   |  |  |                            |  |

T-Rev.D