

## N Male to SMA Female Cable in 150 CM Length Using RG223 Coax

The type N male to SMA female cable using RG223 coax, part number FMCA2745-150CM, from Fairview Microwave is in-stock and ships same day. This Fairview type N to SMA cable assembly has a male to female 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 FMCA2745-150CM type N male to SMA female cable assembly operates to 11 GHz. 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   |          | 11    | 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             | 0.5  | 1    | 2.5  | 5    | 11   | GHz   |
| Insertion Loss (Typ.) | 0.65 | 0.86 | 1.28 | 1.85 | 2.87 | dB/ft |
|                       | 2.13 | 2.82 | 4.2  | 6.07 | 9.42 | dB/m  |

#### 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 dB per connector.

### Mechanical Specifications

#### Cable Assembly

Length\* 59.06 in [150.01 cm]  
 Weight 0.2316 lbs [105.05 g]

#### Cable

Cable Type RG223  
 Impedance 50 Ohms  
 Inner Conductor Type Solid  
 Inner Conductor Material and Plating Copper, Silver  
 Dielectric Type PE  
 Number of Shields 2  
 Shield Layer 1 Silver Plated Copper Braid



### Configuration:

- N Male
- SMA Female
- RG223

### Features:

- Max Frequency 11 GHz
- 66% Phase Velocity
- Double Shielded
- PVC Jacket

### Applications:

- General Purpose
- Laboratory Use

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|                              |                            |
|------------------------------|----------------------------|
| 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                            | N Male           | SMA Female             |
| Specification                   | MIL-STD-348A     | MIL-STD-348A           |
| Impedance                       | 50 Ohms          | 50 Ohms                |
| Contact Material & Plating      | Brass, Gold      | Beryllium Copper, Gold |
| Contact Plating Spec.           |                  | 50 µin minimum         |
| Dielectric Type                 | Teflon           | PTFE                   |
| Body Material & Plating         | Brass, Tri-Metal | Brass, Nickel          |
| Body Plating Spec.              |                  | 100 µin minimum        |
| Coupling Nut Material & Plating | Brass, Tri-Metal |                        |
| Hex Size                        | 18 mm            |                        |
| Torque                          | 9 in-lbs 1.02 Nm |                        |

**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:

**FMCA2745 - xx uu**

 cm = Centimeters  
 <blank> = Inches  
 Length

 Example: FMCA2745-12 = 12 inches long cable  
 FMCA2745-100cm = 100 cm long cable

N Male to SMA Female Cable in 150 CM 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.

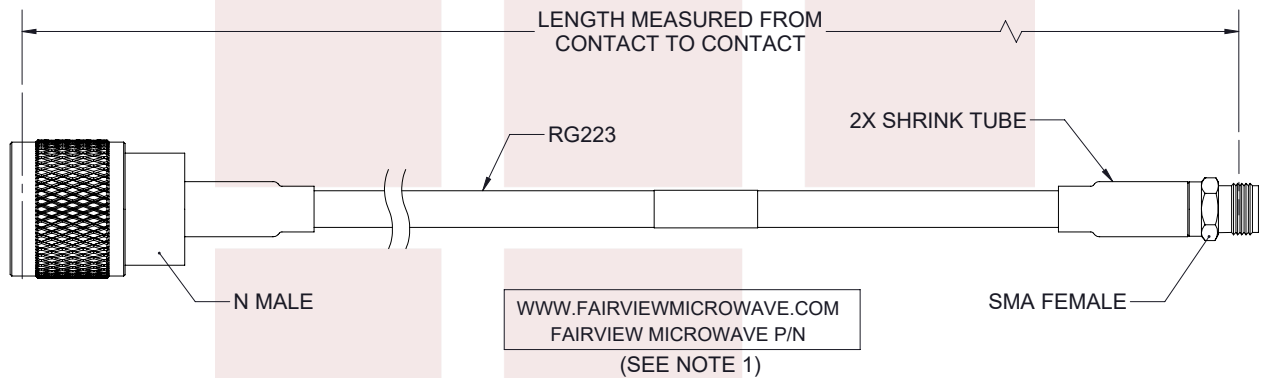
Click the following link to obtain additional part information: [N Male to SMA Female Cable in 150 CM Length Using RG223 Coax FMCA2745-150CM](#)

URL: <https://www.fairviewmicrowave.com/n-male-to-sma-female-cable-rg223-coax-in-150-cm-and-rohs-fmca2745-150cm-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 | 2/21/2022 | 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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|--|--|--|--|
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|  | TITLE<br><b>N Male to SMA Female Cable in 150 CM Length Using RG223 Coax</b>   |  | SHEET 1 OF 1<br>SCALE N/A  |
| ALL DIMENSIONS SHOWN ARE FOR REFERENCE ONLY.   | SIZE A<br>CAGE CODE 3FKR5<br>DRAWN BY MVEERAPPAN<br>ITEM NO. FMCA2745<br>REV A   |  |  |

T-Rev.D