

# FMCA2745-50CM DATA SHEET

# N Male to SMA Female Cable in 50 CM Length Using RG223 Coax

The type N male to SMA female cable using RG223 coax, part number FMCA2745-50CM, 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 FMCA2745-50CM 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 | Т      | ур     | Max   | U     | nits   |
|-------------------------|-----|--------|--------|-------|-------|--------|
| Frequency Range         | DC  |        |        | 11    | (     | GHz    |
| VSWR                    |     |        |        | 1.4:1 |       |        |
| Velocity of Propagation |     | (      | 66     |       |       | %      |
| Capacitance             |     | 30.8 [ | 101.05 | 5]    | pF/ft | [pF/m] |
| Operating Voltage (AC)  |     |        |        | 500   | V     | rms    |

#### **Performance by Frequency**

| F1   | F2   | F3                            | F4   | F5  | Units   |
|------|------|-------------------------------|--|---|---|
| 0.5  | 1    | 2.5                           | 5  | 11  | GHz   |
| 0.35 | 0.42 | 0.56                          | 0.75   | 1.09  | dB/ft   |
| 1.15 | 1.38 | 1.84                          | 2.46   | 3.58  | dB/m  |
|      | 0.5  | 0.5     1       0.35     0.42 | 0.5     1     2.5       0.35     0.42     0.56 | 0.5     1     2.5     5       0.35     0.42     0.56     0.75 | 0.5     1     2.5     5     11       0.35     0.42     0.56     0.75     1.09 |

#### **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\* 19.68 in [499.87 mm] Weight 0.1299 lbs [58.92 q]

#### **Cable**

Cable Type
Impedance
Inner Conductor Type
Inner Conductor Material and Plating
Dielectric Type
Number of Shields
Shield Layer 1

RG223 50 Ohms Solid Copper, Silver

PE 2

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            |  |  |  |  |
|-----------------------------|------------------------|------------------------|--|--|--|--|
| Туре                        | 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 & Pla | nting Brass, Tri-Metal |                        |  |  |  |  |
| Hex Size                    | 18 mm                  |                        |  |  |  |  |
| Torque                      | 9 in-lbs 1.02 Nm       |                        |  |  |  |  |
| -                           |                        |                        |  |  |  |  |

# **Environmental Specifications**

**Temperature** 

Operating Range -40 to +80 deg C

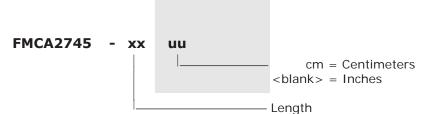
**Compliance Certifications** (see product page for current document)

## **Plotted and Other Data**

Notes:

**How to Order** 

Part Number Configuration:



Example: FMCA2745-12 = 12 inches long cable

FMCA2745-100cm = 100 cm long cable

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N Male to SMA Female Cable in 50 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 50 CM Length Using RG223 Coax FMCA2745-50CM

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

URL: https://www.fairviewmicrowave.com/n-male-to-sma-female-cable-rg223-coax-in-50-cm-and-rohs-fmca2745-50cm-p.aspx

| to implem   | ient improvement   | s. Fairview  | / Microwa | ave reserve | es the righ | nt to mak | ce such | changes  | as requir | ed. Unle | ss oti | herwise   |
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| arising ou  | t of the use of an | y part or do | ocument   | ation.      |             |           |         |          |           |          |        |           |
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