



STRANDED CENTER

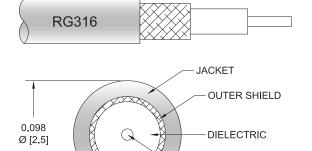
#### **FMCA10013**

#### Configuration

- · Connector 1: BNC Male Right Angle
- · Connector 2: BNC Female
- Cable Type: RG-316
- · Coax Cable Group: 8
- · Coax Flex Type: Flexible

#### **Features**

- Max Frequency 1 GHz
- · 69% Phase Velocity
- · FEP Jacket



#### **Applications**

· General Purpose

· Laboratory Use

#### Description

The RA BNC male to BNC female cable using RG-316 coax, part number FMCA10013, from Fairview Microwave is in-stock and ships same day. This Fairview BNC to BNC cable assembly has a male to female gender configuration with 50 ohm flexible RG-316 coax. Fairview Microwave's flexible RF cable assemblies are ideal for applications where tight bends and continual flexure are required. The FMCA10013 BNC male to BNC female cable assembly operates to 1 GHz. The right angle BNC interface on the RG-316 cable allows for easier connections in tight spaces.

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      |              | 1,000   | MHz          |
| VSWR                    |         |              | 1.4:1   |              |
| Velocity of Propagation |         | 69           |         | %            |
| Capacitance             |         | 29.4 [96.46] |         | pF/ft [pF/m] |
| Operating Voltage (AC)  |         |              | 335     | Vrms         |
| Jacket Spark            |         |              | 2,000   | Vrms         |

### Specifications by Frequency





## **FMCA10013**

| Part Number  | Length         | Description           | F1   | F2   | F3   | F4    | F5   | Units | Weight (lbs) |
|--------------|----------------|-----------------------|------|------|------|-------|------|-------|--------------|
|              |                | Frequency             | 50   | 100  | 250  | 500   | 1000 | MHz   |              |
| FMCA10013    | Custom Lengths | Insertion Loss (Typ.) | 0.08 | 0.11 | 0.16 | 0.238 | 0.38 | dB/ft |              |
| TWEAT0013    | Available      |                       | 0.25 | 0.37 | 0.53 | 0.79  | 1.25 | dB/m  |              |
| FMCA10013-12 | 12 inch        | Insertion Loss (Typ.) | 0.38 | 0.41 | 0.46 | 0.54  | 0.68 | dB    | 0.082        |
| FMCA10013-24 | 24 inch        | Insertion Loss (Typ.) | 0.45 | 0.52 | 0.62 | 0.78  | 1.06 | dB    | 0.093        |
| FMCA10013-36 | 36 inch        | Insertion Loss (Typ.) | 0.53 | 0.63 | 0.78 | 1.02  | 1.44 | dB    | 0.103        |
| FMCA10013-48 | 48 inch        | Insertion Loss (Typ.) | 0.6  | 0.74 | 0.94 | 1.26  | 1.82 | dB    | 0.113        |
| FMCA10013-72 | 72 inch        | Insertion Loss (Typ.) | 0.75 | 0.96 | 1.26 | 1.73  | 2.58 | dB    | 0.133        |

The insertion loss data for the base model does not include loss due to the connectors. Each length includes insertion loss due to the connectors.

Loss due to Connector 1: 0.1 dB Loss due to Connector 2: 0.2 dB Base Weight: 0.082 pounds 0.00084 pounds Additional Weight per Inch:

#### **Mechanical Specifications**

**Cable Assembly** 

Weight 0.082 lbs [37.19 g]

Cable

Cable Type RG-316 Impedance 50 Ohms Inner Conductor Type Stranded

Copper Clad Steel, Silver Inner Conductor Material and Plating

Dielectric Type **PTFE** Number of Shields

Shield Layer 1 Silver Plated Copper Braid

Jacket Material FEP, Tan

Jacket Diameter 0.102 in [2.59 mm]





# **FMCA10013**

#### **Connectors**

| Description                        | Connector 1          | Connector 2     |
|------------------------------------|----------------------|-----------------|
| Туре                               | BNC Male Right Angle | BNC Female      |
| Specification                      |                      | MIL-STD-348A    |
| Impedance                          | 50 Ohms              | 50 Ohms         |
| Configuration                      | Right Angle          | Straight        |
| Contact Material and Plating       | Brass, Gold          | Brass, Gold     |
| Contact Plating Specification      | 30 μin minimum       | 30 μin minimum  |
| Dielectric Type                    | PTFE                 | PTFE            |
| Body Material and Plating          | Brass, Nickel        | Brass, Nickel   |
| Body Plating Specification         | 100 µin minimum      | 100 µin minimum |
| Coupling Nut Material and Plating  | Brass, Nickel        |                 |
| Coupling Nut Plating Specification | 100 µin minimum      |                 |

## **Environmental Specifications**

Operating Range Temperature

-55 to +165 deg C

Compliance Certifications (see product page for current document)

#### **Plotted and Other Data**

Notes:

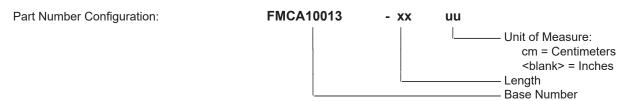




## **FMCA10013**

#### **Typical Performance Data**

#### **How to Order**



Example: FMCA10013-12 = 12 inches long cable

FMCA10013-100cm = 100 cm long cable

RA BNC Male to BNC Female Cable RG-316 Coax 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 ondemand.

For additional information on this product, please click the following link: RA BNC Male to BNC Female Cable RG-316 Coax FMCA10013

URL: https://www.fairviewmicrowave.com/ra-bnc-male-to-bnc-female-cable-rg-316-coax-fmca10013-p.aspx

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