

## BNC Male to BNC Male Cable TCOM-195 Coax

### FMCA21062

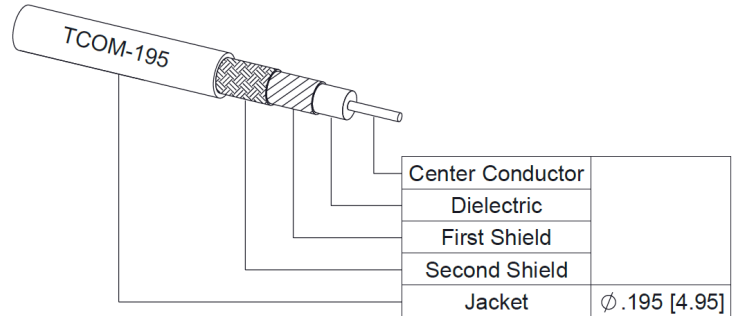


#### Configuration

- Connector 1: BNC Male
- Connector 2: BNC Male
- Cable Type: TCOM-195
- Coax Flex Type: Flexible

#### Features

- Max Frequency 4 GHz
- 80% Phase Velocity
- Triple Shielded
- PE Jacket



#### Applications

- General Purpose
- Laboratory Use

#### Description

The BNC male to BNC male cable using TCOM-195 coax, part number FMCA21062, from Fairview Microwave is in-stock and ships same day. This Fairview BNC to BNC cable assembly has a male to male gender configuration with 50 ohm flexible TCOM-195 coax. Fairview Microwave's flexible RF cable assemblies are ideal for applications where tight bends and continual flexure are required. The FMCA21062 BNC male to BNC male cable assembly operates to 4 GHz. The triple 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                   | Minimum | Typical      | Maximum | Units                 |
|-------------------------------|---------|--------------|---------|-----------------------|
| Frequency Range               | DC      |              | 4       | GHz                   |
| VSWR                          |         |              | 1.4:1   |                       |
| Velocity of Propagation       |         | 80           |         | %                     |
| Group Delay                   |         | 1.27 [4.17]  |         | ns/ft [ns/m]          |
| Capacitance                   |         | 25.4 [83.33] |         | pF/ft [pF/m]          |
| Inductance                    |         | 0.064 [0.21] |         | uH/ft [uH/m]          |
| DC Resistance Inner Conductor |         | 7.16 [23.49] |         | Ohms/1000ft [Ohms/Km] |
| DC Resistance Outer Conductor |         | 3.42 [11.22] |         | Ohms/1000ft [Ohms/Km] |
| Jacket Spark                  |         |              | 3,000   | Vrms                  |

#### Specifications by Frequency

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### FMCA21062



| Part Number  | Length                   | Description           | F1    | F2    | F3    | F4    | F5    | Units | Weight (lbs) |
|--------------|--------------------------|-----------------------|-------|-------|-------|-------|-------|-------|--------------|
|              |                          | Frequency             | 150   | 250   | 500   | 1000  | 4000  | MHz   |              |
| FMCA21062    | Custom Lengths Available | Insertion Loss (Typ.) | 0.045 | 0.056 | 0.083 | 0.115 | 0.236 | dB/ft |              |
|              |                          |                       | 0.15  | 0.19  | 0.28  | 0.38  | 0.78  | dB/m  |              |
| FMCA21062-6  | 6 inch                   | Insertion Loss (Typ.) | 0.23  | 0.23  | 0.25  | 0.26  | 0.32  | dB    | 0.0715       |
| FMCA21062-9  | 9 inch                   | Insertion Loss (Typ.) | 0.24  | 0.25  | 0.27  | 0.29  | 0.38  | dB    | 0.082        |
| FMCA21062-12 | 12 inch                  | Insertion Loss (Typ.) | 0.25  | 0.26  | 0.29  | 0.32  | 0.44  | dB    | 0.089        |
| FMCA21062-18 | 18 inch                  | Insertion Loss (Typ.) | 0.27  | 0.29  | 0.33  | 0.38  | 0.56  | dB    | 0.106        |
| FMCA21062-24 | 24 inch                  | Insertion Loss (Typ.) | 0.29  | 0.32  | 0.37  | 0.43  | 0.68  | dB    | 0.124        |

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:    | 0.1 dB        |
| Base Weight:                | 0.089 pounds  |
| Additional Weight per Inch: | 0.0029 pounds |

## Mechanical Specifications

### Cable Assembly

|                |                     |
|----------------|---------------------|
| Width/Diameter | 0.571 in [14.5 mm]  |
| Weight         | 0.089 lbs [40.37 g] |

### Cable

|                                      |                                        |
|--------------------------------------|----------------------------------------|
| Cable Type                           | TCOM-195                               |
| Impedance                            | 50 Ohms                                |
| Inner Conductor Type                 | Solid                                  |
| Inner Conductor Material and Plating | Copper                                 |
| Dielectric Type                      | PE (F)                                 |
| Number of Shields                    | 3                                      |
| Shield Layer 1                       | Silver Plated Copper Braid             |
| Shield Layer 2                       | Tinned Copper Braid over Aluminum Tape |
| Jacket Material                      | PE, Black                              |
| Jacket Diameter                      | 0.195 in [4.95 mm]                     |
| One Time Minimum Bend Radius         | 0.5 in [12.7 mm]                       |
| Repeated Minimum Bend Radius         | 2 in [50.8 mm]                         |
| Bending Moment                       | 0.2 lbs-ft [0.27 N-m]                  |
| Flat Plate Crush                     | 15 lbs/in [0.27 Kg/mm]                 |

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FMCA21062



Connectors

| Description                       | Connector 1    | Connector 2    |
|-----------------------------------|----------------|----------------|
| Type                              | BNC Male       | BNC Male       |
| Specification                     | MIL-STD-348A   | MIL-STD-348A   |
| Impedance                         | 50 Ohms        | 50 Ohms        |
| Configuration                     | Straight       | 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        | 90 µin minimum | 90 µin minimum |
| Coupling Nut Material and Plating | Brass, Nickel  | Brass, Nickel  |

Environmental Specifications

Operating Range Temperature -40 to +85 deg C

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

Plotted and Other Data

Notes:

## BNC Male to BNC Male Cable TCOM-195 Coax



### FMCA21062

#### Typical Performance Data

#### How to Order

Part Number Configuration: **FMCA21062**    **- xx**    **uu**

Unit of Measure:  
cm = Centimeters  
<blank> = Inches

Length  
Base Number

Example: FMCA21062-12 = 12 inches long cable  
FMCA21062-100cm = 100 cm long cable

BNC Male to BNC Male Cable TCOM-195 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 on-demand.

For additional information on this product, please click the following link: [BNC Male to BNC Male Cable TCOM-195 Coax FMCA21062](#)

URL: <https://www.fairviewmicrowave.com/bnc-male-to-bnc-male-cable-tcom-195-coax-fmca21062-p.aspx>

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FMCA21062 CAD Drawing
BNC Male to BNC Male Cable TCOM-195 Coax

