

## 10KV Male to MHV Female Bulkhead Cable RG303HV Coax in 48 Inch



### FMCA9796-48

#### Configuration

- Connector 1: 10KV Male
- Connector 2: MHV Female Bulkhead
- Cable Type: RG303HV

#### Features

- 69% Phase Velocity
- FEP Jacket

#### Applications

- General Purpose
- Laboratory Use

#### Description

The 10KV male to MHV female bulkhead 48 inch cable using RG303HV coax, part number FMCA9796-48, from Fairview Microwave is in-stock and ships same day. This Fairview 10KV to MHV cable assembly has a male to female gender configuration with 50 ohm RG303HV coax. Our RF cable assembly with MHV 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. Our 10kV high voltage RF cable assemblies are designed to handle higher voltages and minimize the risk of electric shock. Both the connectors used in this cable assemblies have recessed contact design to withstand unmated higher voltage. These cable assemblies are commonly used in applications where high voltage transmission and RF signal integrity are critical. These cable assemblies are constructed with high-quality insulation materials capable of withstanding higher voltages, ensuring safety and preventing electrical breakdown. Our cable assemblies are built with durable and flexible materials to withstand harsh environmental conditions and repetitive movements, ensuring reliable performance over extended periods.

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 |
|-------------------------|---------|---------|---------|-------|
| Velocity of Propagation |         | 69      |         | %     |

Electrical Specification Notes:  
Values at 25°C, sea level.

#### Mechanical Specifications

##### Cable Assembly

|                |                    |
|----------------|--------------------|
| Length         | 48 in [121.92 cm]  |
| Width/Diameter | 0.5 in [12.7 mm]   |
| Weight         | 0.39 lbs [176.9 g] |

##### Cable

|            |         |
|------------|---------|
| Cable Type | RG303HV |
| Impedance  | 50 Ohms |

10KV Male to MHV Female Bulkhead  
Cable RG303HV Coax in 48 Inch



**FMCA9796-48**

|                                      |                              |
|--------------------------------------|------------------------------|
| Inner Conductor Material and Plating | Silver, Copper Clad Aluminum |
| Dielectric Type                      | FEP                          |
| Number of Shields                    | 1                            |
| Jacket Material                      | FEP                          |
| Jacket Diameter                      | 0.169 in [4.29 mm]           |
| Repeated Minimum Bend Radius         | 0.788 in [20.02 mm]          |

**Connectors**

| Description                       | Connector 1                      | Connector 2         |
|-----------------------------------|----------------------------------|---------------------|
| Type                              | 10KV Male                        | MHV Female Bulkhead |
| Specification                     | MIL-STD-202                      | MIL-STD-348         |
| Impedance                         | 50 Ohms                          | 50 Ohms             |
| Configuration                     | Straight                         | Straight            |
| Contact Material and Plating      | Beryllium Copper, Gold/Tri-Metal | Silver              |
| Contact Plating Specification     |                                  | QQ-S-365            |
| Dielectric Type                   | PE (HD)                          | PTFE                |
| Body Material and Plating         | Brass, Nickel Over Copper        | Brass, Nickel       |
| Body Plating Specification        |                                  | QQ-N-290            |
| Coupling Nut Material and Plating | Brass, Nickel Over Copper        |                     |

**Environmental Specifications**

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

**Plotted and Other Data**

Notes:  
Values at 25°C, sea level.

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**FMCA9796-48**

**Typical Performance Data**

**How to Order**

Part Number Configuration:

**FMCA9796**

**- xx**

**uu**



Example: FMCA9796-12 = 12 inches long cable  
FMCA9796-100cm = 100 cm long cable

10KV Male to MHV Female Bulkhead Cable RG303HV Coax in 48 Inch 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.

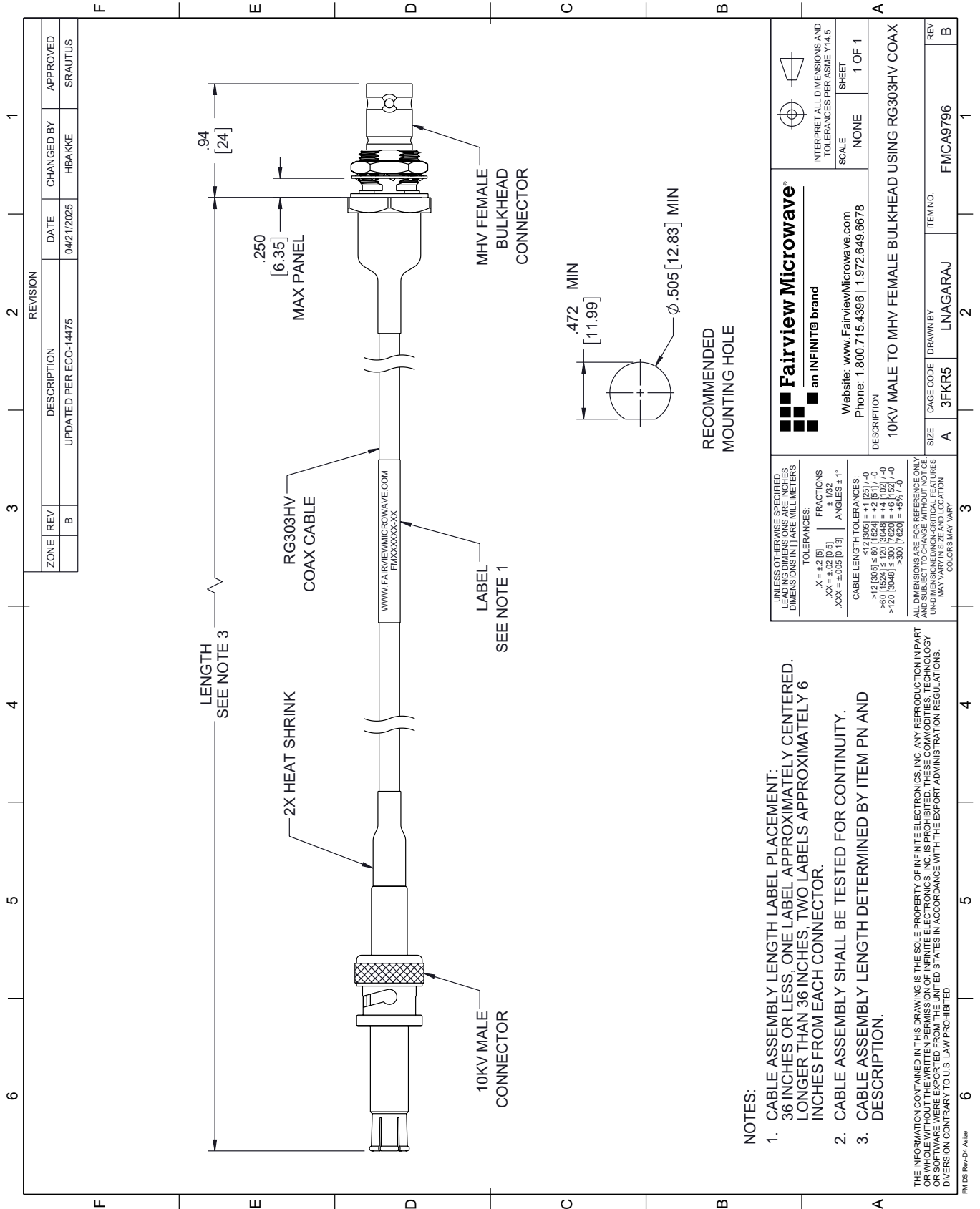
For additional information on this product, please click the following link: [10KV Male to MHV Female Bulkhead Cable RG303HV Coax in 48 Inch FMCA9796-48](#)

URL: <https://www.fairviewmicrowave.com/10kv-male-to-mhv-female-bulkhead-cable-rg303hv-coax-in-48-inch-fmca9796-48-p.aspx>

The information contained within 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 liability arising out of the use of any part or document.

# FMCA9796-48 CAD Drawing

10KV Male to MHV Female Bulkhead Cable RG303HV Coax in 48 Inch



**NOTES:**

1. CABLE ASSEMBLY LENGTH LABEL PLACEMENT: 36 INCHES OR LESS, ONE LABEL APPROXIMATELY CENTERED, LONGER THAN 36 INCHES, TWO LABELS APPROXIMATELY 6 INCHES FROM EACH CONNECTOR.
2. CABLE ASSEMBLY SHALL BE TESTED FOR CONTINUITY.
3. CABLE ASSEMBLY LENGTH DETERMINED BY ITEM PN AND DESCRIPTION.

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UNLESS OTHERWISE SPECIFIED, LEADING DIMENSIONS ARE IN INCHES. DIMENSIONS IN [ ] ARE MILLIMETERS.

TOLERANCES:  
 .X = ±.2 [5]  
 .XX = ±.02 [0.5]  
 .XXX = ±.005 [0.13]  
 ±.132  
 ANGLES ± 1°

FRACTIONS  
 ± 1/32

CABLE LENGTH TOLERANCES:  
 <12 [305] ≤ 60 [1524] = ±.1 [2.5] / -0  
 >60 [1524] ≤ 120 [3048] = ±.4 [102] / -0  
 >120 [3048] ≤ 300 [7620] = ±.8 [20] / -0  
 >300 [7620] = ±.8 [20] / -0

ALL DIMENSIONS ARE FOR REFERENCE ONLY. UNDIMENSIONED/NON-CRITICAL FEATURES MAY VARY IN SIZE AND LOCATION. COLORS MAY VARY.

**Fairview Microwave®**  
 an INFINITIB brand

Website: [www.FairviewMicrowave.com](http://www.FairviewMicrowave.com)  
 Phone: 1.800.715.4396 | 1.972.649.6678

INTERPRET ALL DIMENSIONS AND TOLERANCES PER ASME Y14.5

SCALE: NONE  
 SHEET: 1 OF 1

DESCRIPTION: 10KV MALE TO MHV FEMALE BULKHEAD USING RG303HV COAX

|      |           |          |          |
|------|-----------|----------|----------|
| SIZE | CAGE CODE | DRAWN BY | ITEM NO. |
| A    | 3FKR5     | LNAGARAJ | FMCA9796 |

| ZONE | REV | DESCRIPTION           | DATE       | CHANGED BY | APPROVED |
|------|-----|-----------------------|------------|------------|----------|
| B    |     | UPDATED PER ECO-14475 | 04/21/2025 | HBAKKE     | SRAUTUS  |