

## SHV Jack Bulkhead to SHV Jack Bulkhead Cable RG223 Coax in 48 Inch

The SHV jack bulkhead to SHV jack bulkhead 48 inch cable using RG223 coax, part number FMCA3163-48, from Fairview Microwave is in-stock and ships same day. This Fairview SHV to SHV cable assembly has a jack to jack 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 FMCA3163-48 SHV jack to SHV jack cable assembly operates to 300 MHz. Our RF cable assembly with SHV 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. The double shielding of this Fairview cable assembly provides excellent shielding effectiveness. Safety high voltage connectors are designed to allow signal transmission with high voltage ratings without safety risk for the operators. Both the pin and socket contacts are securely recessed inside the insulation to guard against potential electrical shock when live unmated connectors are handled.

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  |               | 300   | MHz          |
| Velocity of Propagation |     | 66            |       | %            |
| Capacitance             |     | 30.8 [101.05] |       | pF/ft [pF/m] |
| Operating Voltage (AC)  |     |               | 1,900 | Vrms         |

### Performance by Frequency

| Description           | F1   | F2   | F3   | F4 | F5 | Units |
|-----------------------|------|------|------|----|----|-------|
| Frequency             | 100  | 250  | 300  |    |    | MHz   |
| Insertion Loss (Typ.) | 0.36 | 0.45 | 0.48 |    |    | dB    |

#### 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* | 48 in [121.92 cm]   |
| Weight  | 0.152 lbs [68.95 g] |

#### Cable

|                                      |                |
|--------------------------------------|----------------|
| Cable Type                           | RG223          |
| Impedance                            | 50 Ohms        |
| Inner Conductor Type                 | Solid          |
| Inner Conductor Material and Plating | Copper, Silver |
| Dielectric Type                      | PE             |



### Configuration:

- SHV Jack Bulkhead
- SHV Jack Bulkhead
- RG223

### Features:

- Max Frequency 300 MHz
- 66% Phase Velocity
- Double Shielded
- PVC Jacket
- Dielectric withstanding of 5kV
- Shock, Moisture & Corrosion resistant
- Recessed contacts prevent shock hazards

### Applications:

- General Purpose
- Laboratory Use
- Nuclear Instrumentation
- High Voltage Electrical Transmission
- Semiconductor Test

Fairview Microwave  
301 Leora Ln., Suite 100  
Lewisville, TX 75056  
Tel: 1-800-715-4396 / (972) 649-6678  
Fax: (972) 649-6689  
[www.fairviewmicrowave.com](http://www.fairviewmicrowave.com)  
[sales@fairviewmicrowave.com](mailto:sales@fairviewmicrowave.com)

|                   |                            |
|-------------------|----------------------------|
| Number of Shields | 2                          |
| Shield Layer 1    | Silver Plated Copper Braid |
| 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                            | SHV Jack                            | SHV Jack                            |
| Mount Method                    | Bulkhead                            | Bulkhead                            |
| Specification                   | MIL-STD-348B                        | MIL-STD-348B                        |
| Impedance                       | 50 Ohms                             | 50 Ohms                             |
| Contact Material & Plating      | Brass, Gold over Nickel over copper | Brass, Gold over Nickel over copper |
| Dielectric Type                 | Teflon                              | Teflon                              |
| Body Material & Plating         | Brass, Tinned Copper                | Brass, Tinned Copper                |
| Coupling Nut Material & Plating | Brass, Tinned Copper                | Brass, Tinned Copper                |
| Hex Size                        | 7/16 Inch                           | 7/16 Inch                           |

### Environmental Specifications

#### Temperature

|                 |                  |
|-----------------|------------------|
| Operating Range | -40 to +80 deg C |
|-----------------|------------------|

|                                |            |
|--------------------------------|------------|
| Ingress Protection (IP) Rating | IP67 Rated |
|--------------------------------|------------|

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

### Plotted and Other Data

Notes:

### How to Order

Part Number Configuration:

**FMCA3163 - xx uu**

cm = Centimeters  
 <blank> = Inches  
 Length

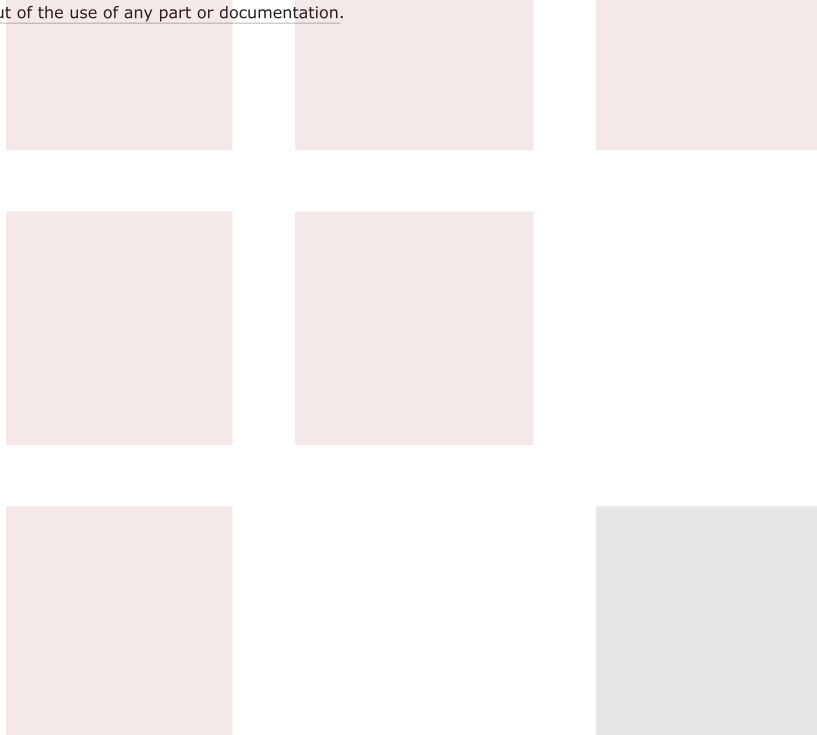
Example: FMCA3163-12 = 12 inches long cable  
 FMCA3163-100cm = 100 cm long cable

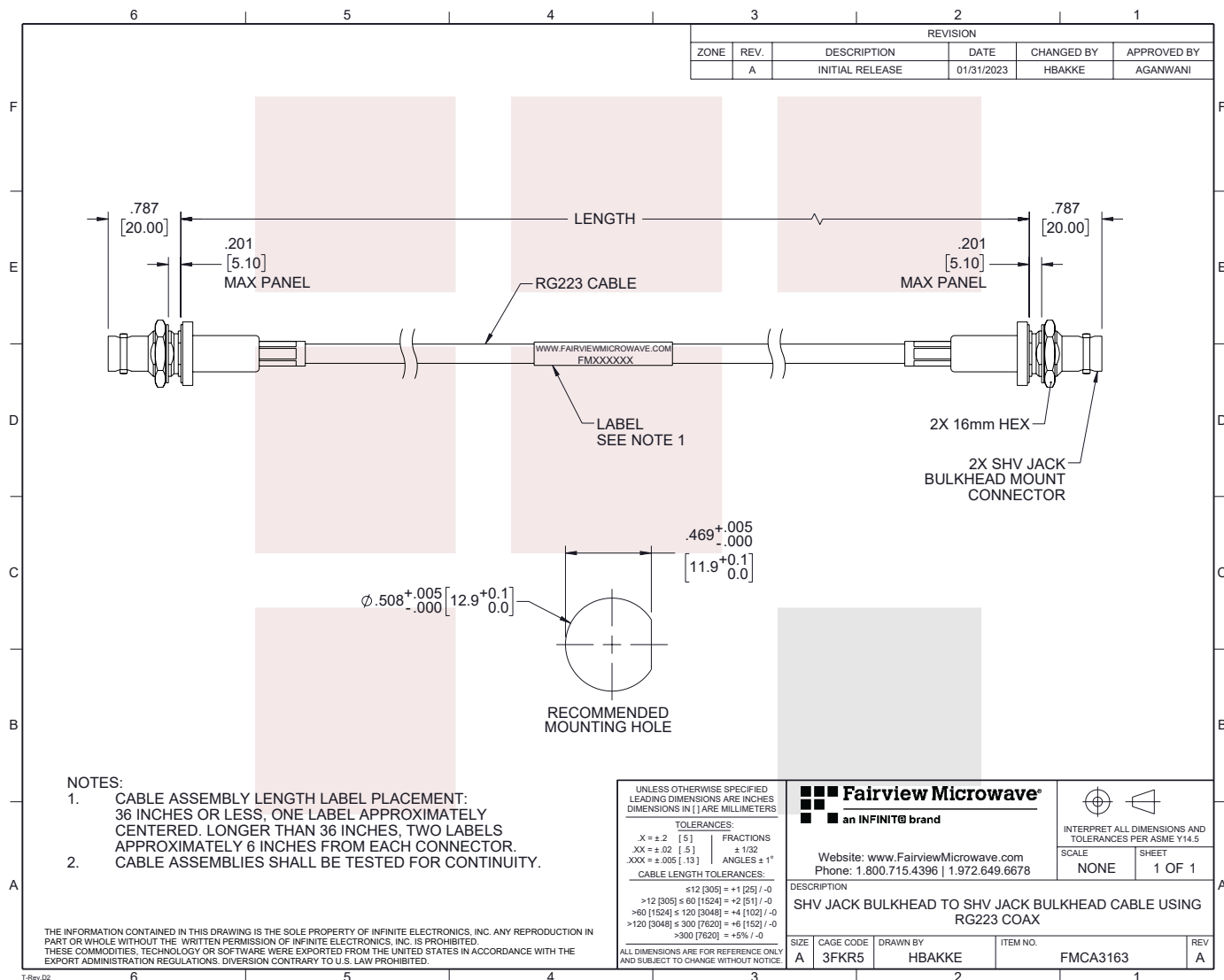
SHV Jack Bulkhead to SHV Jack Bulkhead Cable RG223 Coax in 48 Inch from Fairview Microwave has same day shipment for domestic and International orders. Our RF, microwave and millimeter wave products maintain a 99% availability and are part of the broadest selection in the industry.

Click the following link to obtain additional part information: [SHV Jack Bulkhead to SHV Jack Bulkhead Cable RG223 Coax in 48 Inch FMCA3163-48](#)

URL: <https://www.fairviewmicrowave.com/shv-jack-bulkhead-to-shv-jack-bulkhead-cable-rg223-coax-in-48-inch-fm-ca3163-48-p.aspx>

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