

# FMCA3157-48 DATA SHEET

# SHV Jack to SHV Jack Bulkhead Cable RG-142 Coax in 48 Inch

The SHV jack to SHV jack bulkhead 48 inch cable using RG-142 coax, part number FMCA3157-48, 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 RG142 coax. Fairview Microwave's flexible RF cable assemblies are ideal for applications where tight bends and continual flexure are required. The FMCA3157-48 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	Тур	Max	Units
Frequency Range	DC		300	MHz
Velocity of Propagation		70		%
Capacitance		29.4 [96.4	6]	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	0.42	0.44			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  $0.1~\mathrm{dB}$  per connector.

## **Mechanical Specifications**

### **Cable Assembly**

Dielectric Type

Length\* 48 in [121.92 cm] Weight 0.499 lbs [226.34 g]

#### Cable

Cable Type RG142
Impedance 50 Ohms
Inner Conductor Type Solid
Inner Conductor Material and Plating Copper Cl

Copper Clad Steel, Silver

PTFE



## **Configuration:**

- SHV Jack
- SHV Jack Bulkhead
- RG142

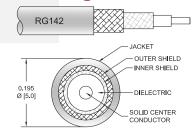
## **Features:**

- Max Frequency 300 MHz
- 70% Phase Velocity
- Double Shielded
- FEP 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

## **Cable Diagram:**



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

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Number of Shields

Shield Layer 1 Silver Plated Copper Braid Silver Plated Copper Braid Silver Plated Copper Braid

Jacket Material FEP, Tan

Jacket Diameter 0.195 in [4.95 mm]

Repeated Minimum Bend Radius 1 in [25.4 mm]

#### **Connectors**

Description	Connector 1		Connector 2	2
Туре	SHV Jack		SHV Jack	
Mount Method			Bulkhead	
Specification	MIL-STD-	348B	MIL-STD-348	ВВ
Impedance	50 Ohr	ns	50 Ohms	
Contact Material & Plating	Brass, Gold over Nic	kel ov	er copperBrass, Gold over	Nick
Dielectric Type	Teflor	1	Teflon	
Body Material & Plating	Brass, Tinned	Copp	per Brass, Tinned Cop	pper
Coupling Nut Material & Pla	ating	g Brass, Tinned Copper		
Hex Size			7/16 Inch	

## **Environmental Specifications**

**Temperature** 

Operating Range -55 to +165 deg C

Ingress Protection (IP) Rating IP67 Rated

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



Notes:

## **How to Order**

Part Number Configuration:

Example: FMCA3157-12 = 12 inches long cable

FMCA3157-100cm = 100 cm long cable

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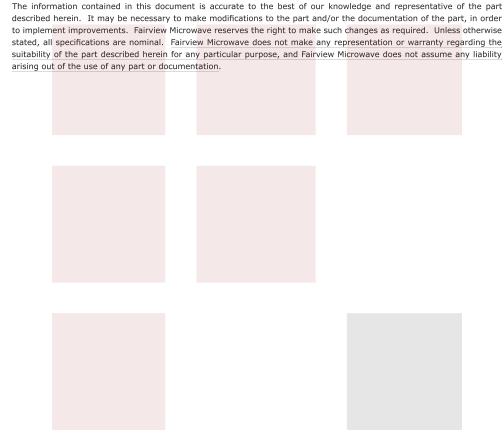




SHV Jack to SHV Jack Bulkhead Cable RG-142 Coax in 48 Inch from Fairview Microwave has same day shipment for domestic and International orders. Our RF, microwave and millimeter wave products maintain a 99% availability and are part of the broadest selection in the industry.

Click the following link to obtain additional part information: SHV Jack to SHV Jack Bulkhead Cable RG-142 Coax in 48 Inch FMCA3157-48

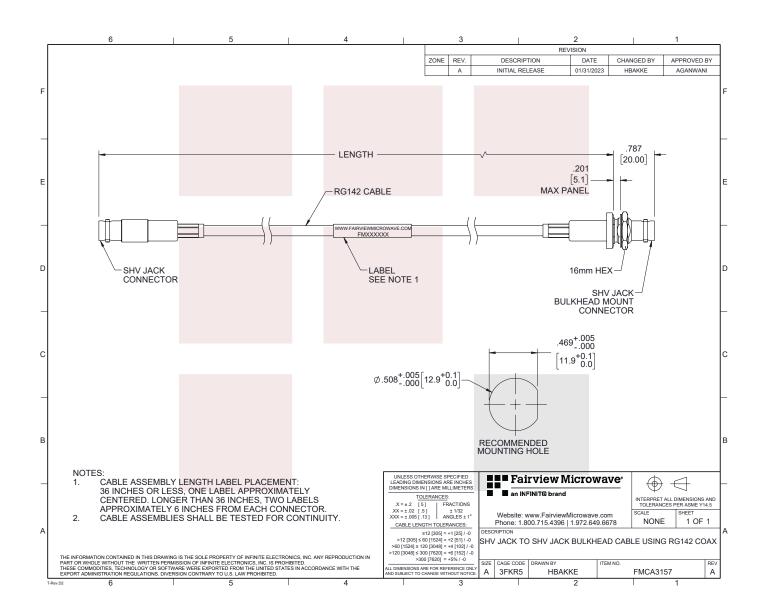
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