

# FMCA3156-48 DATA SHEET

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

The SHV jack to SHV jack 48 inch cable using RG-142 coax, part number FMCA3156-48, 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 FMCA3156-48 SHV jack to SHV jack cable assembly operates to 300 MHz. 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	T	ур	Max	Units
Frequency Range	DC			300	MHz
Velocity of Propagation		7	'0		%
Capacitance		29.4 [	96.46]		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.)	0.56	0.62	0.64			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 0.172 lbs [78.02 g

#### Cable

Cable Type
Impedance
Inner Conductor Type
Inner Conductor Material and Plating
Dielectric Type
Number of Shields
Shield Layer 1
Shield Layer 2

0.172 lbs [78.02 g]

RG142 50 Ohms Solid

Copper Clad Steel, Silver

PTFE 2

Silver Plated Copper Braid Silver Plated Copper Braid



## **Configuration:**

- SHV Jack
- SHV Jack
- RG142

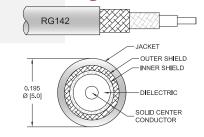
### **Features:**

- 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:**



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Jacket Material FEP, Tan

Jacket Diameter 0.195 in [4.95 mm]

Repeated Minimum Bend Radius 1 in [25.4 mm]

#### **Connectors**

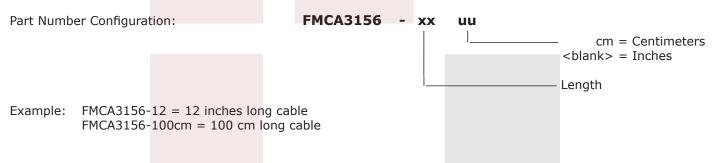
Description	Connector 1		Connecto		
Туре	SHV Jack		SHV Jack		
Specification	MIL-STD-348B		MIL-STD-348B		_
Impedance	50 Ohm	50 Ohms		50 Ohms	
Contact Material & Plating	Brass, Gold over Nickel over copperBrass, Gold over Nickel				over cop
Dielectric Type	Teflon		Teflon		
Body Material & Plating	Brass, Tinned	Coppe	er Brass, Tinned	Copper	_
					•
vironmental Specifi	cations				
Temperature	cations				
Operating Range	-55 to +165 deg C				

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

### **Plotted and Other Data**

Notes:

#### **How to Order**



SHV Jack to SHV Jack 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 Cable RG-142 Coax in 48 Inch FMCA3156-48

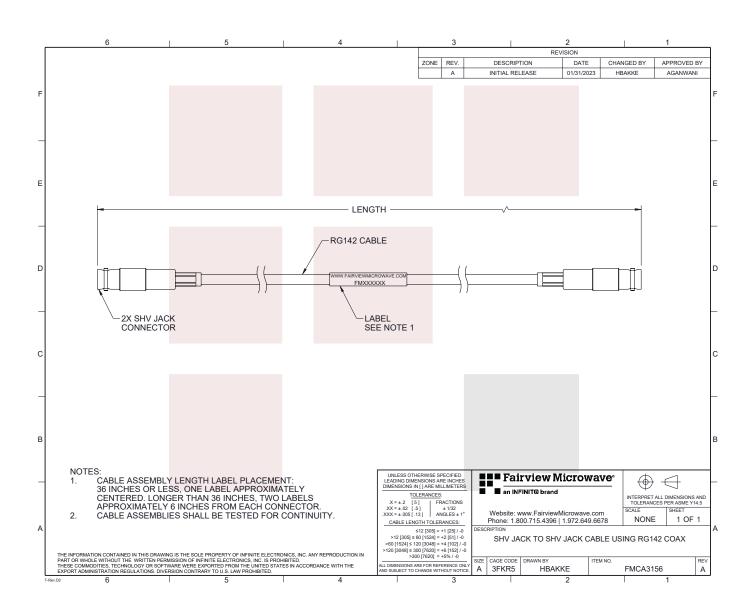
URL: https://www.fairviewmicrowave.com/shv-jack-to-shv-jack-cable-rg142-coax-in-48-inch-fmca3156-48-p.aspx

The information contained in 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 any liability arising out of the use of any part or documentation.

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