

# FMCA3142-48 DATA SHEET

# RA SHV Plug to RA SHV Plug Cable RG-58 Coax in 48 Inch

The RA SHV plug to RA SHV plug 48 inch cable using RG-58 coax, part number FMCA3142-48, from Fairview Microwave is in-stock and ships same day. This Fairview SHV to SHV cable assembly has a plug to plug gender configuration with 50 ohm flexible RG58 coax. Fairview Microwave's flexible RF cable assemblies are ideal for applications where tight bends and continual flexure are required. The FMCA3142-48 SHV plug to SHV plug cable assembly operates to 300 MHz. The right angle SHV interfaces on the RG58 cable allow for easier connections in tight spaces. 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		65	5.9		%
Capacitance		30.8 [	101.0	5]	pF/ft [pF/m]
Operating Voltage (AC)				1,900	Vrms

## **Performance by Frequency**

Description	F1	F2	F3	F4	F5	Units
Frequency	50	100	250	300		MHz
Insertion Loss (Typ.)	0.52	0.6	0.7	0.73		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 0.2 dB per connector.

## **Mechanical Specifications**

## **Cable Assembly**

Length\* 48 in [121.92 cm] Weight 0.111 lbs [50.35 g]

#### Cable

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

RG58 50 Ohms Stranded Copper, Tin PE

Tinned Copper Braid PVC (NC), Black



# **Configuration:**

- SHV Plug Right Angle
- SHV Plug Right Angle
- RG58

## **Features:**

- Max Frequency 300 MHz
- 65.9% Phase Velocity
- PVC (NC) 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

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Jacket Diameter 0.195 in [4.95 mm]

One Time Minimum Bend Radius 0.98 in [24.89 mm] Repeated Minimum Bend Radius 1.96 in [49.78 mm]

#### **Connectors**

Description	Connector 1		Connector 2	
Туре	SHV Plu	ug	SHV Plug	
Specification	MIL-STD-	348B	MIL-STD-348B	
Impedance	50 Ohr	ns	50 Ohms	
Contact Material & Plating	Brass, Gold over Nic	kel ove	er copperBrass, Gold ov	er Nicke
Dielectric Type	Teflor	1	Teflon	
Body Material & Plating	Brass, Tinned	Coppe	er Brass, Tinned (	Copper
Coupling Nut Material & Pla	ting Brass, Tinned	Coppe	er Brass, Tinned (	Copper
Hex Size	7/16 In	ch	7/16 Inc	h

## **Environmental Specifications**

**Temperature** 

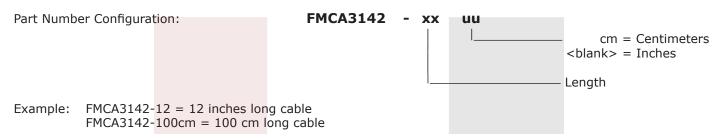
Operating Range -40 to +80 deg C

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

#### Plotted and Other Data

Notes:

## **How to Order**



RA SHV Plug to RA SHV Plug Cable RG-58 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: RA SHV Plug to RA SHV Plug Cable RG-58 Coax in 48 Inch FMCA3142-48

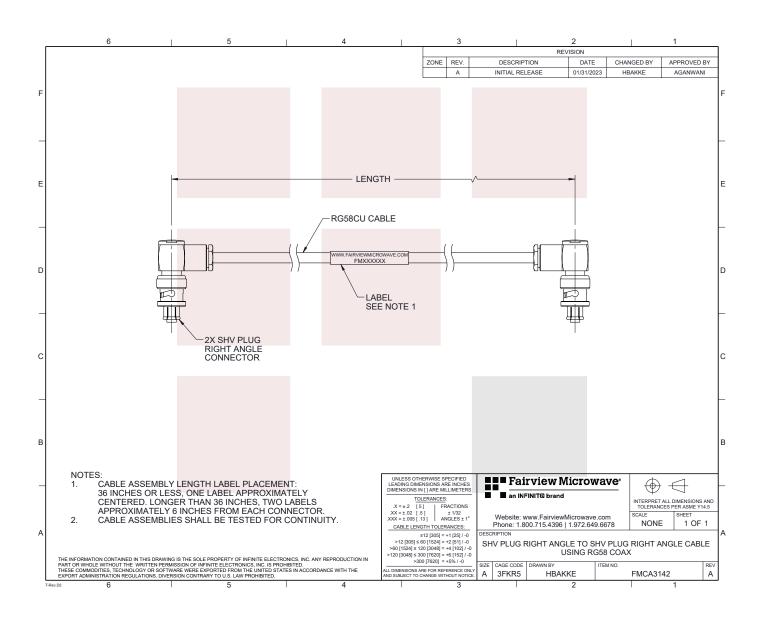
URL: https://www.fairviewmicrowave.com/ra-shv-plug-to-ra-shv-plug-cable-rg58-coax-in-48-inch-fmca3142-48-p.aspx

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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