

# FMCA3164 DATA SHEET

## RA SHV Plug to RA SHV Plug Cable RG-316 Coax

The RA SHV plug to RA SHV plug cable using RG-316 coax, part number FMCA3164, 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 RG316 coax. Fairview Microwave's flexible RF cable assemblies are ideal for applications where tight bends and continual flexure are required. The FMCA3164 SHV plug to SHV plug cable assembly operates to 300 MHz. The right angle SHV interfaces on the RG316 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**

Min	Тур	Max	Units
DC		300	MHz
	69		%
		900	Vrms
Dielectric Withstanding Voltage (AC)			
		2,000	Vrms
	DC	DC 69	DC 300 69 900 /oltage (AC) 2,000

#### **Performance by Frequency**

Description	F1	F2	F3	F4	F5	Units
Frequency	50	100	250	300		MHz
Insertion Loss (Typ.)	0.075	0.11	0.16	0.176		dB/ft
	0.25	0.36	0.52	0.58		dB/m

**Electrical Specification Notes:** 

Insertion Loss does not include the loss of the connectors. Insertion Loss is estimated as 0.2 dB per connector.

### **Mechanical Specifications**

#### **Cable Assembly**

Length\* 0 in [0 mm] Weight 0.31 lbs [140.61 g]

#### Cable

Cable Type
Impedance
Inner Conductor Type
Inner Conductor Material and Plating
Dielectric Type
Number of Shields

RG316 50 Ohms Stranded Copper Clad Steel, Silver PTFE 1



## **Configuration:**

- SHV Plug Right Angle
- SHV Plug Right Angle
- RG316

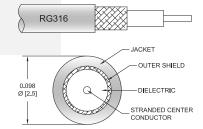
#### **Features:**

- Max Frequency 300 MHz
- 69% Phase Velocity
- 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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Shield Layer 1 Jacket Material Jacket Diameter Silver Plated Copper Braid FEP, Tan 0.102 in [2.59 mm]

#### **Connectors**

Description	Connector 1	Connector 2		
Туре	SHV Plug	SHV Plug		
Specification	MIL-STD-348B	MIL-STD-348B		
Impedance	50 Ohms	50 Ohms		
Contact Material & Plating	Brass, Tinned Copper	Brass, Tinned Copper		
Dielectric Type	Teflon	Teflon		
Body Material & Plating	Brass, Tinned Copper	Brass, Tinned Copper		
Coupling Nut Material & Plati	ing Brass, Tinned Copper	Brass, Tinned Copper		

#### **Environmental Specifications**

Temperature

Operating Range -55 to +165 deg C

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

FMCA3164-100cm = 100 cm long cable

#### **Plotted and Other Data**

Notes:

### **How to Order**

Part Number Configuration:

FMCA3164 - xx uu

cm = Centimeters
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RA SHV Plug to RA SHV Plug Cable RG-316 Coax 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-316 Coax FMCA3164

URL: https://www.fairviewmicrowave.com/ra-shv-plug-to-ra-shv-plug-cable-rg316-coax-fmca3164-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.

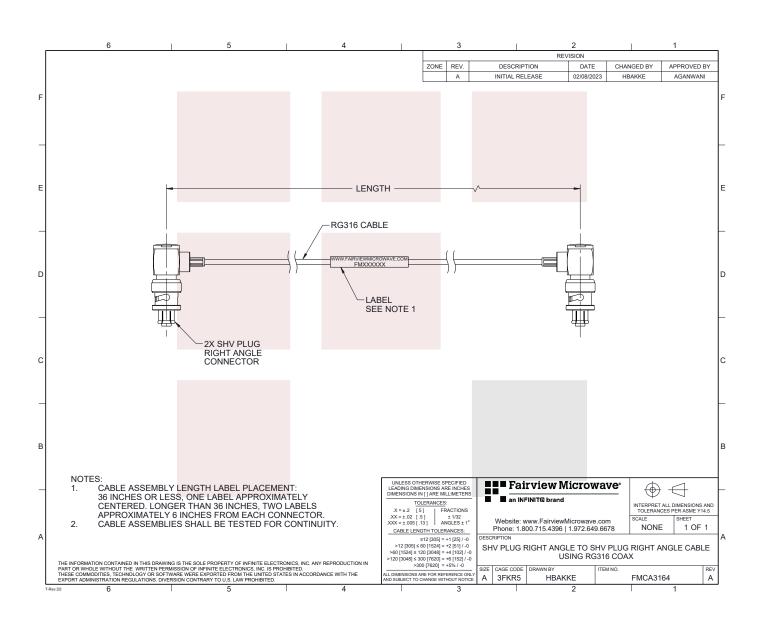
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