

# FMCA1496-48 DATA SHEET

# SSMC Plug to RA SSMC Plug Cable RG316-DS Coax in 48 Inch

The SSMC plug to RA SSMC plug 48 inch cable using RG316-DS coax, part number FMCA1496-48, from Fairview Microwave is in-stock and ships same day. This Fairview SSMC to SSMC cable assembly has a plug to plug gender configuration with 50 ohm flexible RG316-DS coax. Fairview Microwave's flexible RF cable assemblies are ideal for applications where tight bends and continual flexure are required. The FMCA1496-48 SSMC plug to SSMC plug cable assembly operates to 3 GHz. The right angle SSMC interface on the RG316-DS cable allows for easier connections in tight spaces. The double shielding of this Fairview cable assembly provides excellent shielding effectiveness. Fairview Microwave's SSMC cable assemblies are part of our full line of RF interconnects available for sameday shipping. These SSMC cable assemblies are designed for test applications or connection of your SSMC system components. With a high frequency range up to 12.4 GHz, this family of SSMC cables can also be used to connect your data acquisition system or SSMC connections on your A/D converters. There are hundreds of possible cable assembly configurations to choose from, all available same day.

This SSMC cable assembly datasheet PDF contains specifications, CAD drawing and dimensions that are shown below. Fairview Microwave not only has many SSMC cable assembly options, but also a wide selection of RF, microwave and millimeter wave cable assemblies which allows RF designers to customize their configurations to whatever is required. Whether the need is to provide low loss SSMC I/O for digital receivers or simply create a custom cable assembly configuration, Fairview Microwave has the right cable assemblies for the job. Fairview can also expertly build your custom RF cable assemblies for you and ship same day.

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		3	GHz
VSWR			1.6:1	
Velocity of Propagation		70		%
Capacitance		29.4 [96.46]		pF/ft [pF/m]
Operating Voltage (AC)			250	Vrms

#### **Performance by Frequency**

Description	F1	F2	F3	F4	F5	Units
Frequency	0.1	0.4	1	3		GHz
Insertion Loss (Typ.)	0.52	0.85	1.25	2.07		dB



## **Configuration:**

- SSMC Plug
- SSMC Plug Right Angle
- RG316-DS

## Features:

- Max Frequency 3 GHz
- 70% Phase Velocity
- Double Shielded
- FEP Jacket
- 500 Mating Cycles
- Reliable threaded SSMC cable connection
- Max. Operating Frequency of 3 GHz
- Small form factor (SSMC connection is 50% smaller than SMA)
- In stock and ready to ship

## **Applications:**

- General Purpose
- Laboratory Use
- Software Defined Radio (SDR)
- Data acquisition systems with SSMC connections
- Digital Wideband Receivers
- SSMC patch panels
- A/D Conversion

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## **Mechanical Specifications**

**Cable Assembly** 

Length\* 48 in [121.92 cm]
Diameter 0.156 in [3.96 mm]

Cable

Cable Type RG316-DS Impedance 50 Ohms Inner Conductor Type Stranded

Inner Conductor Material and Plating Copper Clad Steel, Silver Dielectric Type PTFE

Dielectric Type PT Number of Shields 2

Shield Layer 1 Silver Plated Copper Braid Shield Layer 2 Silver Plated Copper Braid

Jacket Material FEP, Tan
Jacket Diameter 0.114 in [2.9 mm]

Repeated Minimum Bend Radius 0.6 in [15.24 mm]

#### **Connectors**

Description	Connector 1	Connector 2
Туре	SSMC Plug	SSMC Plug
Impedance	50 Ohms	50 Ohms
Mating Cycles	500	500
Contact Material & Plating	Beryllium Copper, Go	old Beryllium Copper, Gold
Contact Plating Spec.	MIL-G-45204	MIL-G-45204
Dielectric Type	Teflon	Teflon
Body Material & Plating	Beryllium Copper, Go	old Brass, Gold
Body Plating Spec.	MIL-G-45204	MIL-G-45204
Coupling Nut Material & Plat	ing Beryllium Copper, Go	old Beryllium Copper, Gold
Coupling Nut Plating Spec.	MIL-G-45207	MIL-G-45204
Torque	1.75 in-lbs 0.2 Nr	m 1.75 in-lbs 0.2 Nm

Mechanical Specification Notes:

## **Environmental Specifications**

Temperature

Operating Range -55 to +165 deg C

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

**Plotted and Other Data** 

Notes:

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<sup>\*</sup>All cable assemblies have a length tolerance of 1.5% or  $\pm$  3/8", whichever is greater.





#### **How to Order**

Part Number Configuration:	FMCA1496	- xx	uu	
				cm = Centimeters <blank> = Inches Length</blank>

Example: FMCA1496-12 = 12 inches long cable

FMCA1496-100cm = 100 cm long cable

SSMC Plug to RA SSMC Plug Cable RG316-DS Coax in 48 Inch from Fairview Microwave has same day shipment for domestic and International orders. Our RF, microwave and fiber optic products maintain a 99% availability and are part of the broadest selection in the industry.

Click the following link to obtain additional part information: SSMC Plug to RA SSMC Plug Cable RG316-DS Coax in 48 Inch FMCA1496-48

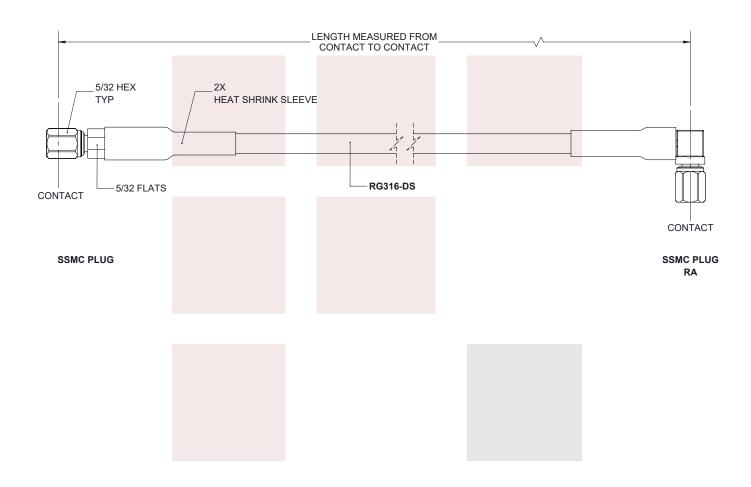
URL: https://www.fairviewmicrowave.com/ssmc-plug-ra-ssmc-plug-cable-rg316ds-coax-fmca1496-48-p.aspx

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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STANDARD TOLERANCES

.X ±0.2 .XX ±0.01 .XXX ±0.005

\*STANDARD TOLERANCES APPLY ONLY TO DIMENSIONS IN INCHES

Fairview Microwave	NOTES:  1. UNLESS OTHERWISE SPECIFIED ALL DIMENSIONS ARE NOMINAL.  2. ALL SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE AT ANY TIME.  3. DIMENSIONS ARE IN INCHES [mm].					
SSMC Plug to RA SSMC Plug Cable RG316-DS Coax in	DWG NO FMCA1496			CAGE CODE 3FKR5		
48 Inch	CAD FILE 09/25/19	SHEET 1 OF 1	SCAL	E N/A	SIZE A	7361