

**RA SSMC Plug to RA SSMC Plug Cable RG-316-DS
Coax**

Fairview Microwave's SSMC cable assemblies are part of our full line of RF interconnects available for same-day 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.

Electrical Specifications

Description	Min	Typ	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
						dB/m
Insertion Loss (Typ.)	0.08	0.16	0.26	0.47		dB/ft
	0.26	0.52	0.85	1.54		dB/m

Electrical Specification Notes:

Insertion Loss does not include the loss of the connectors. Insertion Loss is estimated as 0.1 dB per connector.

Mechanical Specifications

Cable Assembly

Diameter 0.156 in [3.96 mm]

Cable

Cable Type RG316DS
 Impedance 50 Ohms
 Inner Conductor Type Stranded
 Inner Conductor Material and Plating Copper Clad Steel, Silver
 Dielectric Type PTFE
 Number of Shields 2



Configuration:

- SSMC Plug Right Angle
- SSMC Plug Right Angle
- RG316DS

Features:

- 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:

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

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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
Type	SSMC Plug	SSMC Plug
Impedance	50 Ohms	50 Ohms
Mating Cycles	500	500
Contact Material & Plating	Beryllium Copper, Gold	Beryllium Copper, Gold
Contact Plating Spec.	MIL-G-45204	MIL-G-45204
Dielectric Type	Teflon	Teflon
Body Material & Plating	Brass, Gold	Brass, Gold
Body Plating Spec.	MIL-G-45204	MIL-G-45204
Coupling Nut Material & Plating	Beryllium Copper, Gold	Beryllium Copper, Gold
Coupling Nut Plating Spec.	MIL-G-45204	MIL-G-45204
Torque	1.75 in-lbs [0.2 Nm]	1.75 in-lbs [0.2 Nm]

Mechanical Specification Notes:

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

Environmental Specifications

Temperature

Operating Range -55 to +165 deg C

Compliance Certifications (see [product page](#) for current document)

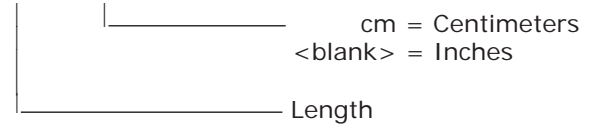
Plotted and Other Data

Notes:

How to Order

Part Number Configuration:

FMCA1497 - xx uu



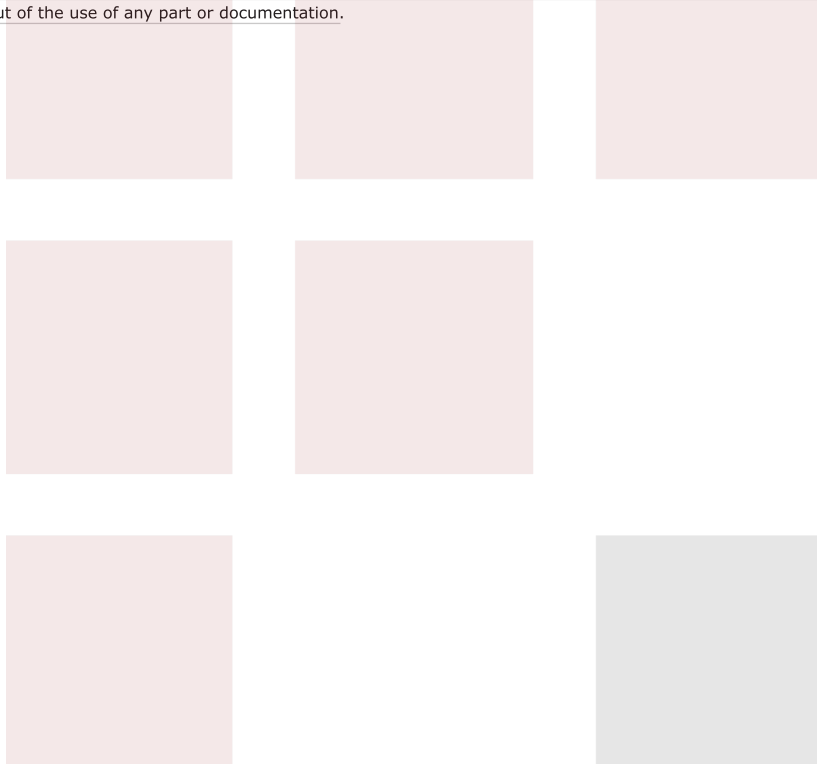
Example: FMCA1497-12 = 12 inches long cable
 FMCA1497-100cm = 100 cm long cable

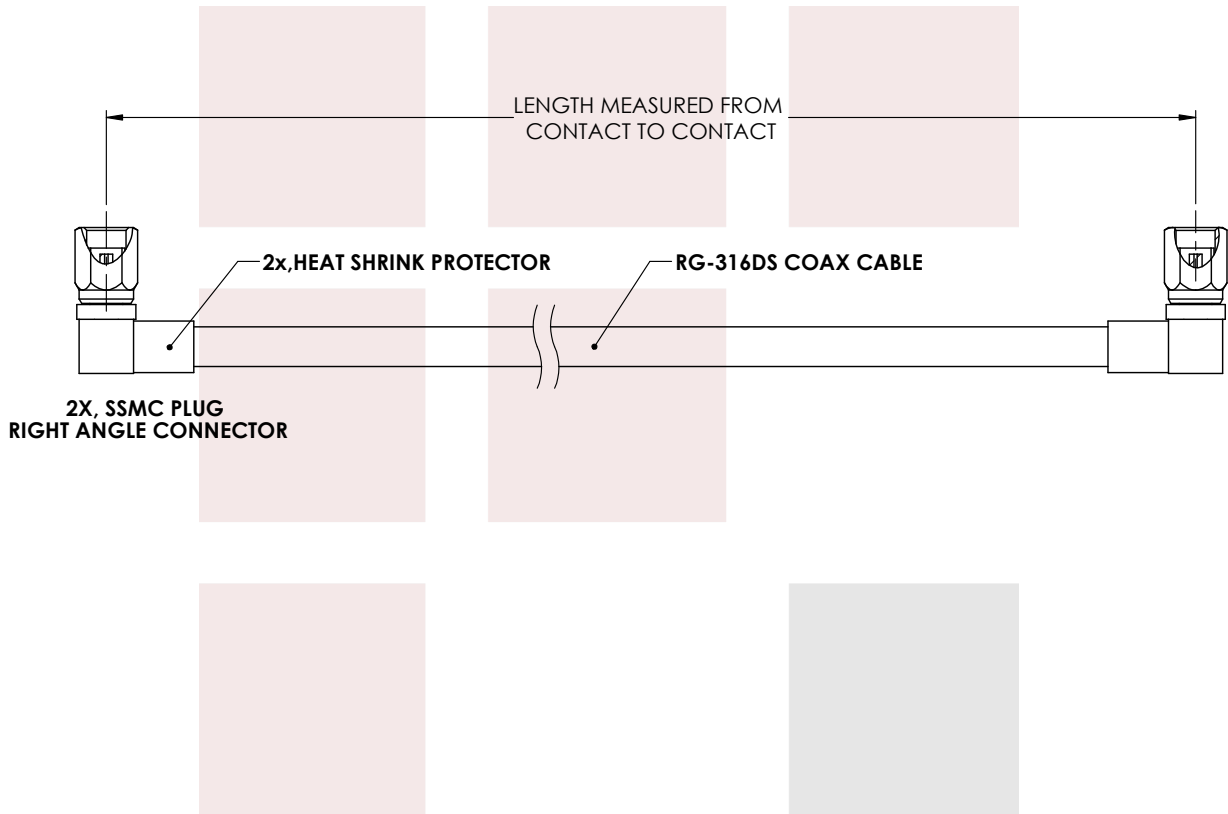
RA SSMC Plug to RA SSMC Plug Cable RG-316-DS Coax from Fairview Microwave has same day shipment for domestic and International orders. Our RF, microwave and fiber optic products maintain a 99% availability and are part of the broadest selection in the industry.

Click the following link to obtain additional part information: [RA SSMC Plug to RA SSMC Plug Cable RG-316-DS Coax FMCA1497](#)

URL: <https://www.fairviewmicrowave.com/ra-ssmc-plug-ra-ssmc-plug-cable-rg316ds-coax-fmca1497-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.





STANDARD TOLERANCES	
.X	±0.2
.XX	±0.01
.XXX	±0.005

*STANDARD TOLERANCES APPLY ONLY TO DIMENSIONS IN INCHES

FAIRVIEW MICROWAVE INC. ALLEN, TX 75013 WWW.FAIRVIEWMICROWAVE.COM		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].			
TITLE RA SSMC Plug to RA SSMC Plug Cable RG-316-DS Coax		DWG NO FMCA1497		CAGE CODE 3FKR5	
CAD FILE	11/08/2017	SHEET		SCALE	N/A
		SIZE	A	CN2245	