

RA SMA Male to RA SSMC Plug Cable RG316-DS Coax in 12 inch length

The RA SMA male to RA SSMC plug 12 inch cable using RG316-DS coax, part number FMCA1501-12, from Fairview Microwave is in-stock and ships same day. This Fairview SMA to SSMC cable assembly has a male 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 FMCA1501-12 SMA male to SSMC plug cable assembly operates to 3 GHz. The right angle SMA and right angle SSMC interfaces on the RG316-DS cable allow for easier connections in tight spaces. The double shielding of this Fairview cable assembly provides excellent shielding effectiveness.

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	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	0.25	0.5	1	3	GHz
Insertion Loss (Typ.)	0.15	0.23	0.34	0.49	0.89	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 $0.1 * \sqrt{\text{FGHz}}$ dB per connector.

Mechanical Specifications

Cable Assembly

Length*	12 in [304.8 mm]
Weight	0.037 lbs [16.78 g]

Cable

Cable Type	RG316-DS
Impedance	50 Ohms
Inner Conductor Type	Stranded
Inner Conductor Material and Plating	Copper Clad Steel, Silver
Dielectric Type	PTFE
Number of Shields	2
Shield Layer 1	Silver Plated Copper Braid



Configuration:

- SMA Male Right Angle
- SSMC Plug Right Angle
- RG316-DS

Features:

- Max Frequency 3 GHz
- 70% Phase Velocity
- Double Shielded
- FEP Jacket

Applications:

- General Purpose
- Laboratory Use

Fairview Microwave
301 Leora Ln., Suite 100
Lewisville, TX 75056
Tel: 1-800-715-4396 / (972) 649-6678
Fax: (972) 649-6689
www.fairviewmicrowave.com
sales@fairviewmicrowave.com

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]
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Connectors

Description	Connector 1	Connector 2
Type	SMA Male	SSMC Plug
Specification	MIL-STD-348A	
Impedance	50 Ohms	50 Ohms
Mating Cycles		500
Contact Material & Plating	Brass, Gold	Beryllium Copper, Gold
Contact Plating Spec.	50 µin minimum	MIL-G-45204
Dielectric Type	PTFE	Teflon
Body Material & Plating	Brass, Nickel	Brass, Gold
Body Plating Spec.	100 µin minimum	MIL-G-45204
Coupling Nut Material & Plating	Brass, Nickel	Beryllium Copper, Gold
Coupling Nut Plating Spec.	100 µin minimum	MIL-G-45204
Hex Size	5/16 inch	
Torque	3 in-lbs 0.34 Nm	1.75 in-lbs 0.2 Nm

Environmental Specifications

Temperature

Operating Range	-55 to +165 deg C
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Compliance Certifications (see [product page](#) for current document)

Plotted and Other Data

Notes:

How to Order

Part Number Configuration:

FMCA1501 - xx uu

cm = Centimeters
 <blank> = Inches
 Length

Example: FMCA1501-12 = 12 inches long cable
 FMCA1501-100cm = 100 cm long cable

RA SMA Male to RA SSMC Plug Cable RG316-DS Coax in 12 inch length 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.

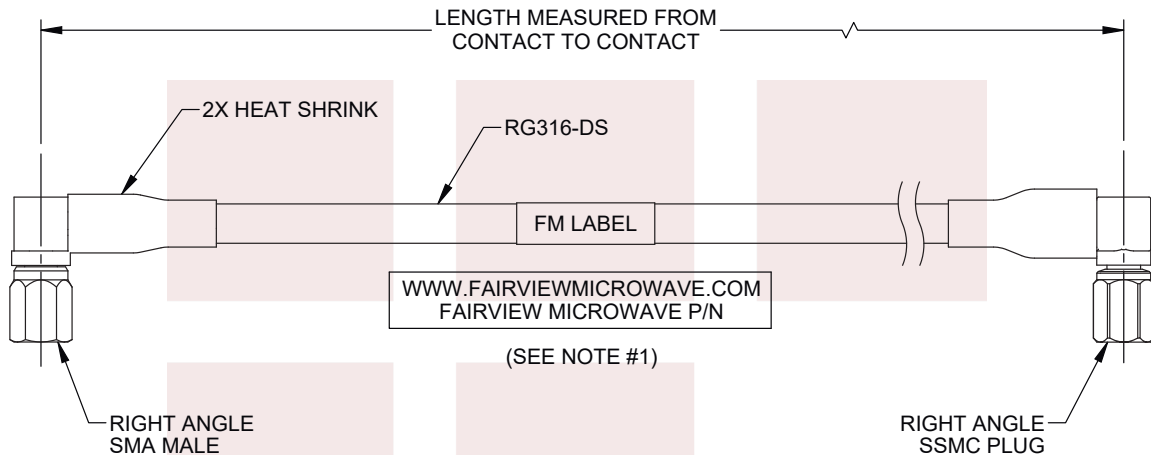
Click the following link to obtain additional part information: [RA SMA Male to RA SSMC Plug Cable RG316-DS Coax in 12 inch length FMCA1501-12](https://www.fairviewmicrowave.com/ra-sma-male-to-ra-ssmc-plug-cable-rg316-ds-coax-in-12-inch-fmca1501-12-p.aspx)

URL: <https://www.fairviewmicrowave.com/ra-sma-male-to-ra-ssmc-plug-cable-rg316-ds-coax-in-12-inch-fmca1501-12-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.



REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
A	INITIAL RELEASE	11/11/2021	SRAUTUS



- NOTES:
1. CABLES 36" AND UNDER HAVE 1 LABEL CENTERED.
CABLES OVER 36" HAVE 2 LABELS, ONE AT EACH END
6.0" FROM THE END OF THE CONNECTOR.

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TITLE

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in 12 inch length

UNLESS OTHERWISE SPECIFIED LEADING DIMENSIONS ARE INCHES
DIMENSIONS IN [] ARE MILLIMETERS

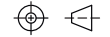
TOLERANCES:

.X = ±.2 [5.08] FRACTIONS
.XX = ±.02 [.51] ± 1/32
.XXX = ±.005 [.13] ANGLES ± 1°

CABLE LENGTH (L) TOLERANCES:

L ≤ 12 [305] = +1 [25] / -0
12 [305] < L ≤ 60 [1524] = +2 [51] / -0
60 [1524] < L ≤ 120 [3048] = +4 [102] / -0
120 [3048] < L ≤ 300 [7620] = +6 [152] / -0
300 [7620] < L = +5%L / -0

THIRD-ANGLE PROJECTION



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SHEET 1 OF 1

SCALE N/A

ALL DIMENSIONS SHOWN ARE FOR REFERENCE ONLY.

SIZE	CAGE CODE	DRAWN BY	ITEM NO.	REV
A	3FKR5	DMAY	FMCA1501	A

T-Rev.D