

## SMA Male to SMA Female Bulkhead Cable RG-316 Coax

The SMA male to SMA female bulkhead cable using RG-316 coax, part number SCA42316, from Fairview Microwave is in-stock and ships same day. This Fairview SMA to SMA cable assembly has a male to female gender configuration with 50 ohm flexible RG-316 coax. Fairview Microwave's flexible RF cable assemblies are ideal for applications where tight bends and continual flexure are required. The SCA42316 SMA male to SMA female cable assembly operates to 3 GHz. Our RF cable assembly with SMA bulkhead interface allows designers to create external connections on their product enclosures, and can be used in a variety of other rack mount and panel mount applications. The SMA male to SMA female bulkhead cable using RG-316 coax, part number SCA42316, from Fairview Microwave is in-stock and ships same day. This Fairview SMA to SMA cable assembly has a male to female 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 SCA42316 SMA male to SMA female cable assembly operates to 3 GHz. Our RF cable assembly with SMA bulkhead interface allows designers to create external connections on their product enclosures, and can be used in a variety of other rack mount and panel mount applications.

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.

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			1.2:1	
Velocity of Propagation		69		%
Group Delay		1.5 [4.92]		ns/ft [ns/m]
Capacitance		29.6 [97.11]		pF/ft [pF/m]

### Performance by Frequency

Description	F1	F2	F3	F4	F5	Units
Frequency	0.1	1	2	3		GHz
Insertion Loss (Typ.)	0.08	0.26	0.38	0.47		dB/ft
	0.26	0.85	1.25	1.54		dB/m

Electrical Specification Notes:

Shielding effectiveness > 38 dB (up to 1 GHz).

Insertion loss does not include the loss of the connectors.



### Configuration:

- SMA Male
- SMA Female Bulkhead
- RG-316

### Features:

- Max Frequency 3 GHz
- 69% Phase Velocity
- FEP Jacket
- Max Frequency 3 GHz
- 69% Phase Velocity
- FEP Jacket

### Applications:

- General Purpose
- Laboratory Use
- 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](http://www.fairviewmicrowave.com)  
[sales@fairviewmicrowave.com](mailto:sales@fairviewmicrowave.com)

Insertion loss is estimated as  $0.05 \times \sqrt{f(\text{GHz})}$  dB per connector.

## Mechanical Specifications

### Cable Assembly

Length\* 0 in [0 mm]

### Cable

Cable Type RG-316  
 Impedance 50 Ohms  
 Inner Conductor Type Stranded  
 Inner Conductor Material and Plating Copper Clad Steel, Silver  
 Dielectric Type PTFE  
 Number of Shields 1  
 Shield Layer 1 Silver Plated Copper Braid  
 Jacket Material FEP, Tan  
 Jacket Diameter 0.1 in [2.54 mm]

One Time Minimum Bend Radius 0.6 in [15.24 mm]  
 Repeated Minimum Bend Radius 1.48 in [37.59 mm]

### Connectors

Description	Connector 1	Connector 2
Type	SMA Male	SMA Female
Mount Method		Bulkhead
Impedance	50 Ohms	50 Ohms
Contact Material & Plating	Brass, Gold	Beryllium Copper, Gold
Dielectric Type	PTFE	PTFE
Hex Size	5/16 inch	
Torque	5 in-lbs 0.57 Nm	5 in-lbs 0.57 Nm

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

### Plotted and Other Data

Notes:

### How to Order

Part Number Configuration:

**SCA42316 - xx uu**

\_\_\_\_\_ cm = Centimeters  
 \_\_\_\_\_ <blank> = Inches  
 \_\_\_\_\_ Length

Example: SCA42316-12 = 12 inches long cable  
 SCA42316-100cm = 100 cm long cable

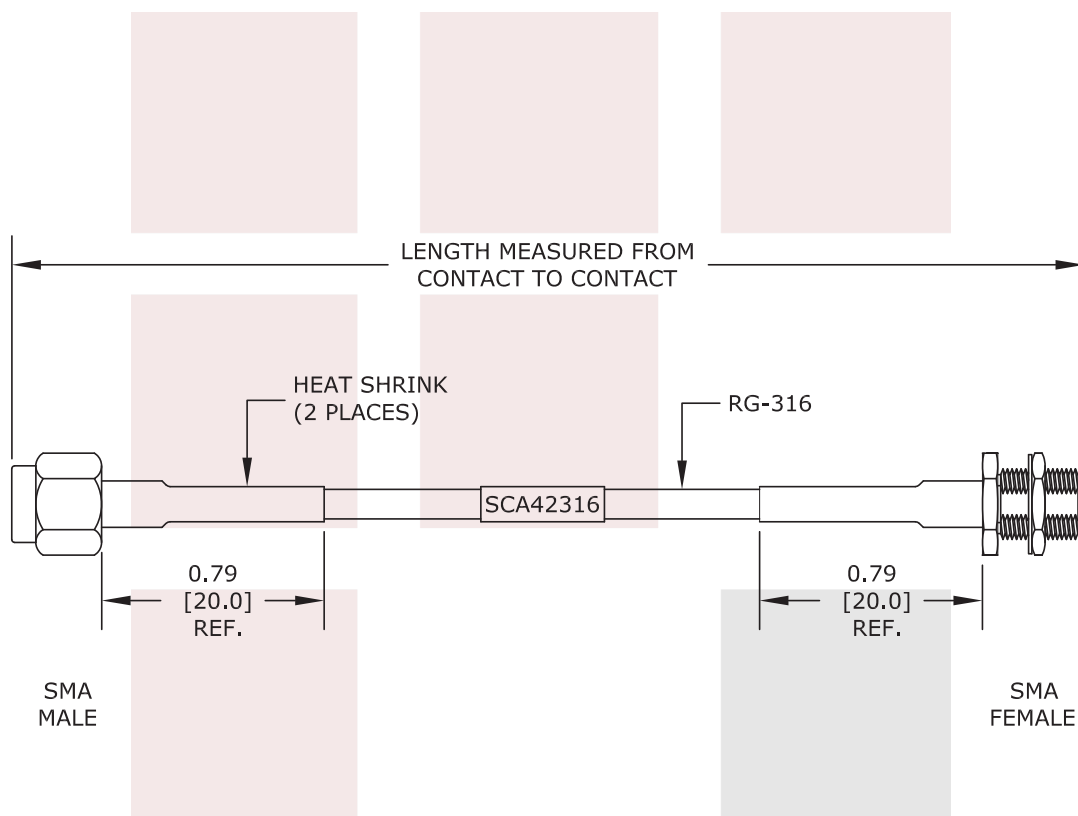
SMA Male to SMA Female Bulkhead Cable RG-316 Coax from Fairview Microwave has same day shipment for domestic and International orders. Our RF, microwave and millimeter wave products maintain a 99% availability and are part of the broadest selection in the industry.

Click the following link to obtain additional part information: [SMA Male to SMA Female Bulkhead Cable RG-316 Coax SCA42316](#)

URL: <https://www.fairviewmicrowave.com/sma-male-sma-female-cable-rg-316ds-coax-sca42316-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	±0.1
.XXX	±0.05

\*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].

<b>TITLE</b> SMA Male to SMA Female Bulkhead Cable RG-316 Coax	<b>DWG NO</b> SCA42316		<b>CAGE CODE</b> 3FKR5		
	CAD FILE 111616	SHEET	SCALE N/A	SIZE A	41742