

**Push-On RA SMP Female to SMA Male Cable  
RG-316 Coax**

The RA SMP female push-on to SMA male cable using RG-316 coax, part number FMCA3210, from Fairview Microwave is in-stock and ships same day. This Fairview SMP to SMA cable assembly has a female to male 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 FMCA3210 SMP female to SMA male cable assembly operates to 3 GHz. The right angle SMP interface on the RG-316 cable allows for easier connections in tight spaces.

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			1.4:1	
Velocity of Propagation		69		%
Capacitance		29.4 [96.46]		pF/ft [pF/m]
Jacket Spark			2,000	Vrms

**Performance by Frequency**

Description	F1	F2	F3	F4	F5	Units
Frequency	0.1	0.25	0.5	1	3	GHz
Insertion Loss (Typ.)	0.11	0.159	0.238	0.38	0.58	dB/ft
	0.36	0.52	0.78	1.25	1.9	dB/m

**Electrical Specification Notes:**

Insertion Loss does not include the loss of the connectors. Insertion Loss is estimated as 0.2 dB for the SMP connector and 0.1 dB for the SMA connector.

**Mechanical Specifications**

**Cable Assembly**

Weight 0.03 lbs [13.61 g]

**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 0.102 in [2.59 mm]



**Configuration:**

- Push-OnSMP Female Right Angle
- SMA Male
- RG-316

**Features:**

- Max Frequency 3 GHz
- 69% Phase Velocity
- 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](http://www.fairviewmicrowave.com)  
[sales@fairviewmicrowave.com](mailto:sales@fairviewmicrowave.com)

**Connectors**

Description	Connector 1	Connector 2
Type	SMP Female	SMA Male
Specification	MIL-STD-348A	MIL-STD-348A
Impedance	50 Ohms	50 Ohms
Connection Method	Push-On	
Contact Material & Plating	Beryllium Copper, Gold	Brass, Gold
Contact Plating Spec.	30 µin minimum	50 µin minimum
Dielectric Type	PTFE	PTFE
Outer Cond Material & Plating	Beryllium Copper, Gold	
Outer Cond Plating Spec.	3 µin minimum	
Body Material & Plating	Brass, Gold	Brass, Gold
Body Plating Spec.	3 µin minimum	3 µin minimum
Coupling Nut Material & Plating		Brass, Gold
Coupling Nut Plating Spec.		3 µin minimum
Hex Size		5/16 in

**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:

**FMCA3210 - xx uu**

 cm = Centimeters  
 <blank> = Inches

Length

 Example: FMCA3210-12 = 12 inches long cable  
 FMCA3210-100cm = 100 cm long cable

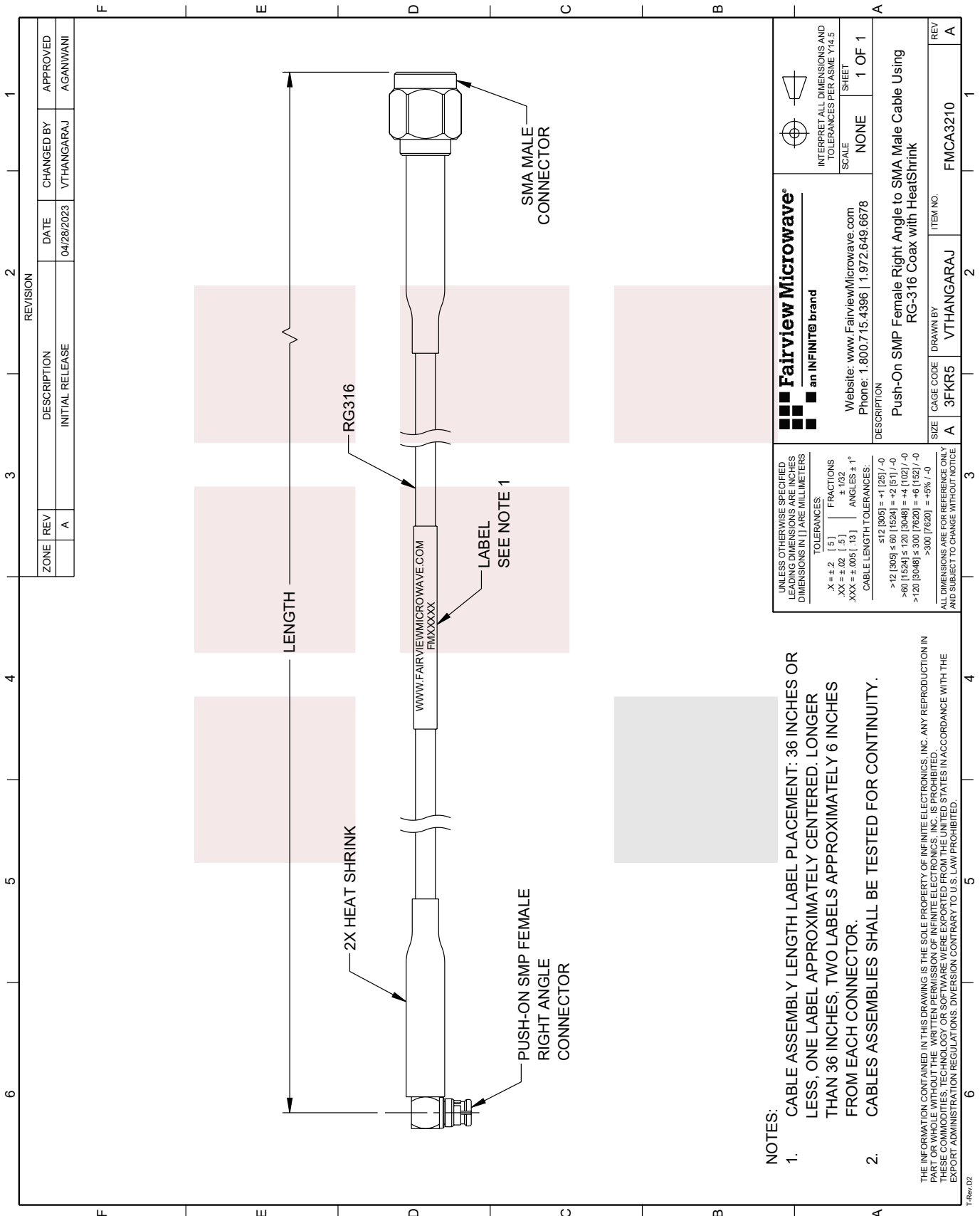
Push-On RA SMP Female to SMA Male Cable RG-316 Coax from Fairview Microwave has same day shipment for domestic and International orders. Our RF, microwave and millimeter wave products maintain a 99% availability and are part of the broadest selection in the industry.

Click the following link to obtain additional part information: [Push-On RA SMP Female to SMA Male Cable RG-316 Coax FMCA3210](#)

URL: <https://www.fairviewmicrowave.com/push-on-ra-smp-female-to-sma-male-cable-rg-316-coax-fmca3210-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.





**NOTES:**

1. CABLE ASSEMBLY LENGTH LABEL PLACEMENT: 36 INCHES OR LESS, ONE LABEL APPROXIMATELY CENTERED, LONGER THAN 36 INCHES, TWO LABELS APPROXIMATELY 6 INCHES FROM EACH CONNECTOR.
2. CABLES ASSEMBLIES SHALL BE TESTED FOR CONTINUITY.

THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF INFINITE ELECTRONICS, INC. ANY REPRODUCTION IN PART OR WHOLE WITHOUT THE WRITTEN PERMISSION OF INFINITE ELECTRONICS, INC. IS PROHIBITED. THESE COMMODITIES, TECHNOLOGY OR SOFTWARE WERE EXPORTED FROM THE UNITED STATES IN ACCORDANCE WITH THE EXPORT ADMINISTRATION REGULATIONS. DIVERSION CONTRARY TO U.S. LAW PROHIBITED.

<p><b>Fairview Microwave®</b> an INFINITE® brand</p> <p>Website: <a href="http://www.FairviewMicrowave.com">www.FairviewMicrowave.com</a> Phone: 1.800.715.4396   1.972.649.6678</p>		<p>INTERPRET ALL DIMENSIONS AND TOLERANCES PER ASME Y14.5</p> <p>SCALE: NONE</p> <p>SHEET: 1 OF 1</p>
<p>DESCRIPTION: Push-On SMP Female Right Angle to SMA Male Cable Using RG-316 Coax with HeatShrink</p>		
<p>UNLESS OTHERWISE SPECIFIED, LEADING DIMENSIONS ARE IN INCHES DIMENSIONS IN [ ] ARE MILLIMETERS</p> <p>TOLERANCES:                  .X ± .2 [ .5 ] FRACTIONS                  .XX ± .02 [ .5 ] ± .132                  .XXX ± .005 [ .13 ] ANGLES ± 1°</p> <p>CABLE LENGTH TOLERANCES:                  &gt;12 (305) ≤ 60 (1524) = +1 (25) / -0                  &gt;60 (1524) ≤ 120 (3048) = +4 (102) / -0                  &gt;120 (3048) ≤ 300 (7620) = +6 (152) / -0                  &gt;300 (7620) = +5% / -0</p>	<p>SIZE: A</p> <p>CAGE CODE: 3FKR5</p> <p>DRAWN BY: VTHANGARAJ</p> <p>ITEM NO.: FMCA3210</p>	<p>REV: A</p>