

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



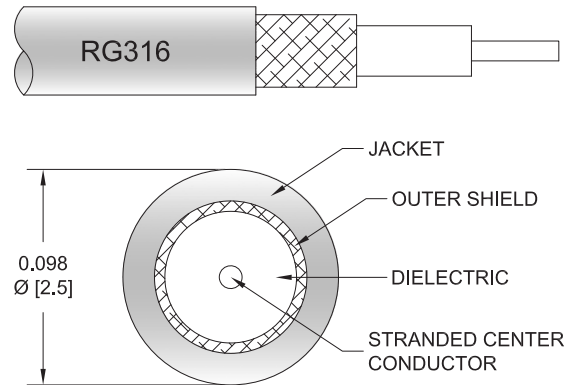
**FMC00055**

**Configuration**

- Connector 1: SMA Male Right Angle
- Connector 2: Push-On SMP Female Right Angle
- Cable Type: RG-316
- Coax Cable Group: 8
- Coax Flex Type: Flexible

**Features**

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



**Applications**

- General Purpose
- Laboratory Use

**Description**

The RA SMA male to RA SMP female push-on cable using RG-316 coax, part number FMC00055, from Fairview Microwave is in-stock and ships same day. This Fairview SMA to SMP 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 FMC00055 SMA male to SMP female cable assembly operates to 3 GHz. The right angle SMA and right angle SMP interfaces on the RG-316 cable allow 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	Minimum	Typical	Maximum	Units
Frequency Range	DC		3	GHz
VSWR			1.4:1	
Velocity of Propagation		69		%
Capacitance		29.4 [96.46]		pF/ft [pF/m]
Operating Voltage (AC)			335	Vrms
Jacket Spark			2,000	Vrms

**Specifications by Frequency**

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Part Number	Length	Description	F1	F2	F3	F4	F5	Units	Weight (lbs)
			Frequency	100	250	500	1000	3000	
FMC00055	Custom Lengths Available	Insertion Loss (Typ.)	0.11	0.16	0.23	0.38	0.58	dB/ft	
			0.37	0.53	0.76	1.25	1.91	dB/m	
FMC00055-12	12 Inch	Insertion Loss (Typ.)	0.41	0.46	0.53	0.68	0.88	dB	0.035
FMC00055-24	24 Inch	Insertion Loss (Typ.)	0.52	0.62	0.76	1.06	1.46	dB	0.046
FMC00055-36	36 Inch	Insertion Loss (Typ.)	0.63	0.78	0.99	1.44	2.04	dB	0.056
FMC00055-48	48 Inch	Insertion Loss (Typ.)	0.74	0.94	1.22	1.82	2.62	dB	0.066
FMC00055-72	72 Inch	Insertion Loss (Typ.)	0.96	1.26	1.68	2.58	3.78	dB	0.086

The insertion loss data for the base model does not include loss due to the connectors. Each length includes insertion loss due to the connectors.

Loss due to Connector 1: 0.1 dB  
 Loss due to Connector 2: 0.2 dB  
 Base Weight: 0.035 pounds  
 Additional Weight per Inch: 0.00084 pounds

**Mechanical Specifications**

**Cable Assembly**

Weight 0.035 lbs [15.88 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]

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**Connectors**

Description	Connector 1	Connector 2
Type	SMA Male Right Angle	SMP Female Right Angle
Specification	MIL-STD-348A	MIL-STD-348A
Impedance	50 Ohms	50 Ohms
Configuration	Right Angle	Right Angle
Connection Method		Push-On
Contact Material and Plating	Brass, Gold	Beryllium Copper, Gold
Contact Plating Specification	50 µin minimum	30 µin minimum
Dielectric Type	PTFE	PTFE
Outer Conductor Material and Plating		Beryllium Copper, Gold
Outer Conductor Plating Specification		3 µin minimum
Body Material and Plating	Brass, Nickel	Brass, Gold
Body Plating Specification	100 µin minimum	3 µin minimum
Coupling Nut Material and Plating	Brass, Nickel	
Coupling Nut Plating Specification	100 µin minimum	
Hex Size	5/16 inch	

**Environmental Specifications**

Operating Range Temperature -55 to +165 deg C

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

**Plotted and Other Data**

Notes:

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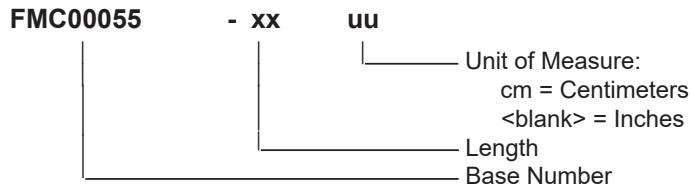


**FMC0055**

**Typical Performance Data**

**How to Order**

Part Number Configuration:



Example: FMC0055-12 = 12 inches long cable  
FMC0055-100cm = 100 cm long cable

RA SMA Male to RA Push-On SMP Female Cable RG-316 Coax from Fairview Microwave is in-stock and available to ship same-day. All of our RF/microwave products are available off-the-shelf from our ISO 9001:2008 certified facilities in Lewisville, Texas. Fairview Microwave is RF on-demand.

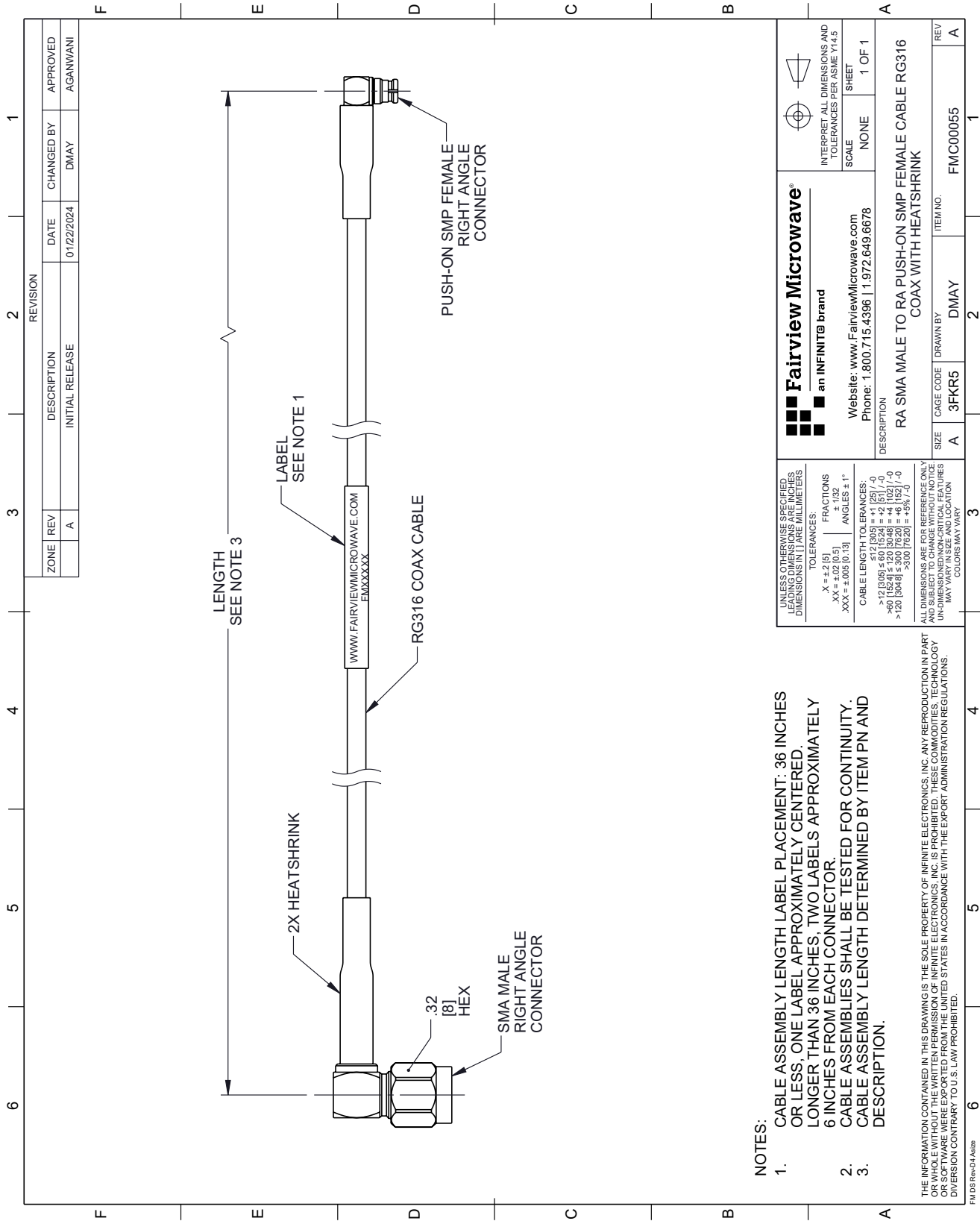
For additional information on this product, please click the following link: [RA SMA Male to RA Push-On SMP Female Cable RG-316 Coax FMC0055](#)

URL: <https://www.fairviewmicrowave.com/ra-sma-male-to-ra-push-on-smp-female-cable-rg-316-coax-fmc0055-p.aspx>

The information contained within 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 liability arising out of the use of any part or document.

# FMC00055 CAD Drawing

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



ZONE		REVISION		APPROVED	
REV	DESCRIPTION	DATE	CHANGED BY	DATE	APPROVED
A	INITIAL RELEASE	01/22/2024	DMAY		AGANWANI

<p>Fairview Microwave® an INFINITO brand</p> <p>Website: www.FairviewMicrowave.com 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: RA SMA MALE TO RA PUSH-ON SMP FEMALE CABLE RG316 COAX WITH HEATSHRINK</p>											
<p>UNLESS OTHERWISE SPECIFIED, DIMENSIONS IN PARENTHESES ARE IN MILLIMETERS</p> <p>TOLERANCES:</p> <table border="0"> <tr> <td>.X = ±.2 [5]</td> <td>FRACTIONS ± 1/32</td> </tr> <tr> <td>.XX = ±.02 [0.5]</td> <td>ANGLES ± 1°</td> </tr> <tr> <td>.XXX = ±.005 [0.13]</td> <td></td> </tr> </table> <p>CABLE LENGTH TOLERANCES:</p> <table border="0"> <tr> <td>&gt;12 [305] ≤ 60 [1524] = ±.125 [ / -0]</td> </tr> <tr> <td>&gt;60 [1524] ≤ 120 [3048] = ±.192 [ / -0]</td> </tr> <tr> <td>&gt;120 [3048] ≤ 300 [7620] = ±.31 [ / -0]</td> </tr> <tr> <td>&gt;300 [7620] = ±.5% [ / -0]</td> </tr> </table>	.X = ±.2 [5]	FRACTIONS ± 1/32	.XX = ±.02 [0.5]	ANGLES ± 1°	.XXX = ±.005 [0.13]		>12 [305] ≤ 60 [1524] = ±.125 [ / -0]	>60 [1524] ≤ 120 [3048] = ±.192 [ / -0]	>120 [3048] ≤ 300 [7620] = ±.31 [ / -0]	>300 [7620] = ±.5% [ / -0]	<p>ITEM NO. FMC00055</p> <p>REV A</p>
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- NOTES:
- 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. CABLE ASSEMBLY LENGTH DETERMINED BY ITEM PN AND DESCRIPTION.
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