

## Push-On RA SMP Female to RA MCX Plug Cable RG-316 Coax

The RA SMP female push-on to RA MCX plug cable using RG-316 coax, part number FMC00349, from Fairview Microwave is in-stock and ships same day. This Fairview SMP to MCX cable assembly has a female to plug 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 FMC00349 SMP female to MCX plug cable assembly operates to 3 GHz. The right angle SMP and right angle MCX interfaces on the RG316 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	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]
Operating Voltage (AC)			250	Vrms
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 (Max.)	0.11	0.13	0.17	0.38	0.58	dB/ft
	0.36	0.43	0.56	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 per connector.

### Mechanical Specifications

#### Cable Assembly

##### Cable

Cable Type	RG316
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
- MCX Plug Right Angle
- RG316

### Features:

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

### Applications:

- General Purpose
- Laboratory Use

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[sales@fairviewmicrowave.com](mailto:sales@fairviewmicrowave.com)

**Connectors**

Description	Connector 1	Connector 2
Type	SMP Female	MCX Plug
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.	30µ in. minimum	30 µin minimum
Dielectric Type	PTFE	PTFE
Outer Cond Material & Plating	Beryllium Copper, Gold	
Outer Cond Plating Spec.	3µ in. minimum	
Body Material & Plating	Brass, Gold	Brass, Gold
Body Plating Spec.	3µ in. minimum	3 µin minimum

**Environmental Specifications**

**Temperature**

Operating Range -40 to +60 deg C

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

**Plotted and Other Data**

Notes:

- Values at 25°C, sea level.

**How to Order**

Part Number Configuration:

**FMC00349 - xx uu**

cm = Centimeters  
<blank> = Inches

Length

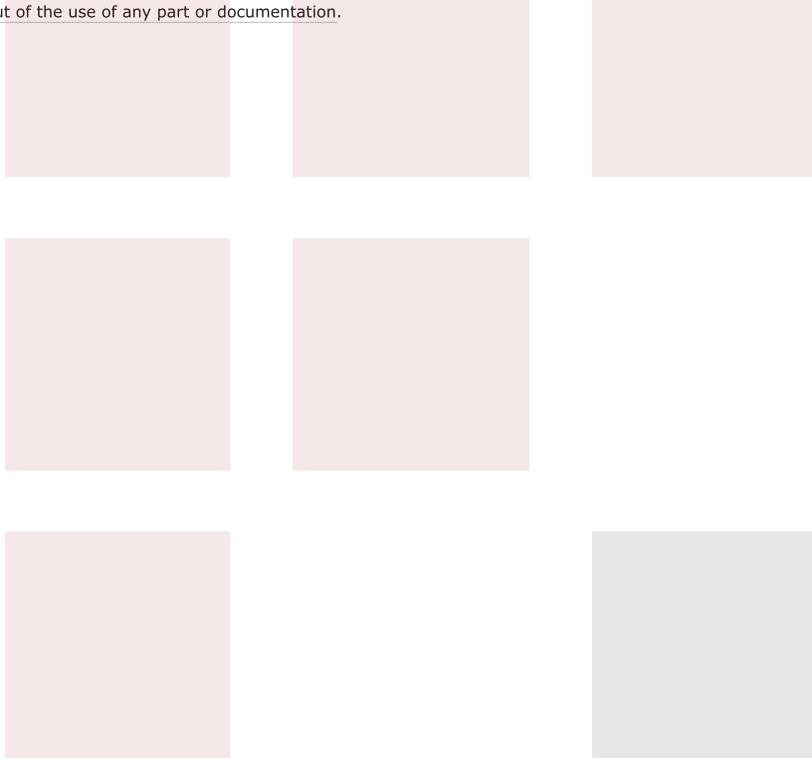
Example: FMC00349-12 = 12 inches long cable  
FMC00349-100cm = 100 cm long cable

Push-On RA SMP Female to RA MCX Plug Cable RG-316 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.

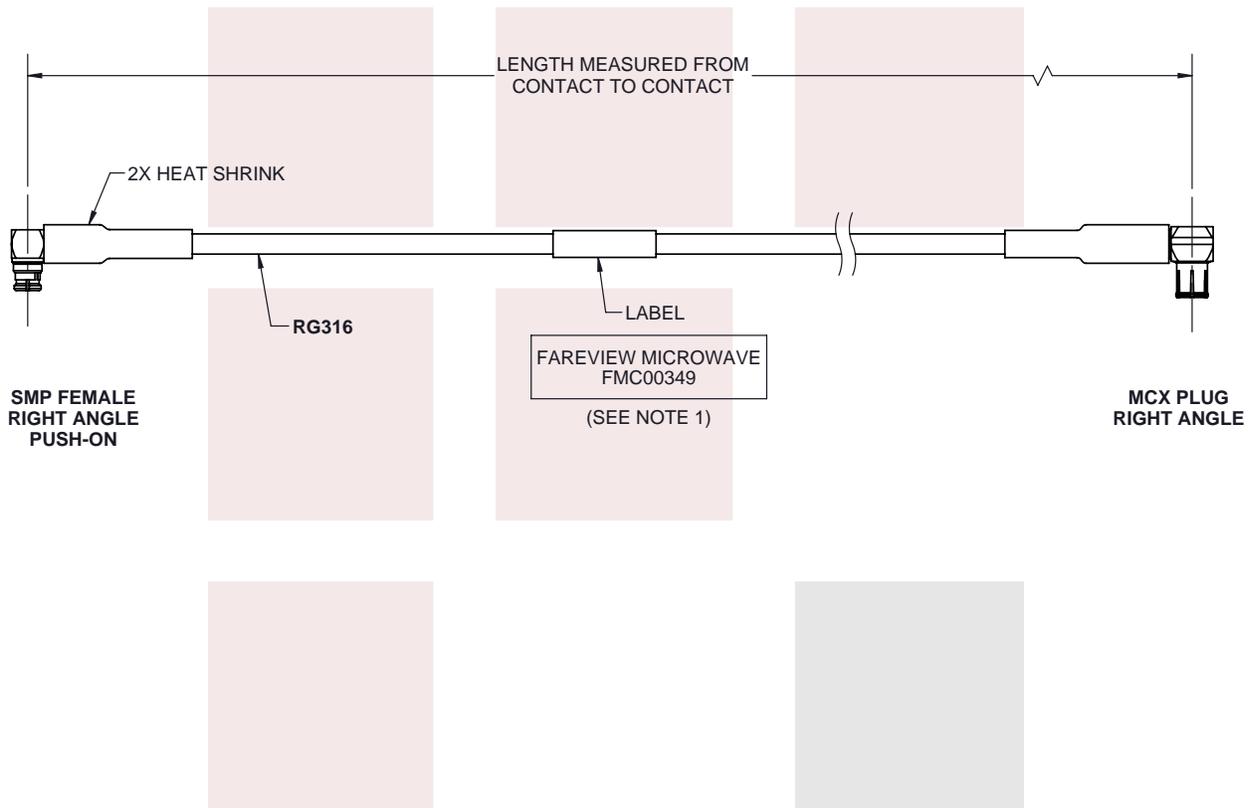
Click the following link to obtain additional part information: [Push-On RA SMP Female to RA MCX Plug Cable RG-316 Coax FMC00349](#)

URL: <https://www.fairviewmicrowave.com/ra-smp-female-ra-mcx-plug-cable-rg316-coax-fmc00349-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	09/01/20	S.ELLIS



**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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<p><b>Fairview Microwave</b> an INFINIT<sup>®</sup> brand</p>	<p>UNLESS OTHERWISE SPECIFIED LEADING DIMENSIONS ARE INCHES DIMENSIONS IN [ ] ARE MILLIMETERS</p> <p>TOLERANCES:                      CABLE LENGTH (L) TOLERANCES:</p> <table border="0"> <tr> <td>.X = ±.2 [ .508 ]</td> <td>FRACTIONS</td> <td>L ≤ 12 [305] = +1 [25] / -0</td> </tr> <tr> <td>.XX = ±.02 [ .51 ]</td> <td>± 1/32</td> <td>12 [305] &lt; L ≤ 60 [1524] = +2 [51] / -0</td> </tr> <tr> <td>.XXX = ±.005 [ .13 ]</td> <td>ANGLES ± 1°</td> <td>60 [1524] &lt; L ≤ 120 [3048] = +4 [102] / -0</td> </tr> <tr> <td></td> <td></td> <td>120 [3048] &lt; L ≤ 300 [7620] = +6 [152] / -0</td> </tr> <tr> <td></td> <td></td> <td>300 [7620] &lt; L = +5%L / -0</td> </tr> </table>	.X = ±.2 [ .508 ]	FRACTIONS	L ≤ 12 [305] = +1 [25] / -0	.XX = ±.02 [ .51 ]	± 1/32	12 [305] < L ≤ 60 [1524] = +2 [51] / -0	.XXX = ±.005 [ .13 ]	ANGLES ± 1°	60 [1524] < L ≤ 120 [3048] = +4 [102] / -0			120 [3048] < L ≤ 300 [7620] = +6 [152] / -0			300 [7620] < L = +5%L / -0	<p>THIRD-ANGLE PROJECTION</p> <p>THE INFORMATION AND DESIGN IN THIS DOCUMENT IS THE PROPERTY OF FAIRVIEW MICROWAVE CORPORATION. ALL RIGHTS RESERVED.</p>
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<p>SIZE A</p>	<p>CAGE CODE 3FKR5</p>	<p>DRAWN BY BPUCHASKI</p>	<p>ITEM NO. FMC00349</p>	<p>REV A</p>													

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