

## Low Loss SMA Male to RA Push-On SMP Female Cable RG-316 Coax in 60 Inch

The SMA male to RA SMP female push-on 60 inch cable using RG-316 coax, part number FMC00238-60, 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 RG316 coax. Fairview Microwave's flexible RF cable assemblies are ideal for applications where tight bends and continual flexure are required. The FMC00238-60 SMA male to SMP female cable assembly operates to 3 GHz. The right angle SMP interface on the RG316 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]
Operating Voltage (AC)			335	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 (Typ.)	0.85	1.1	1.49	2.2	3.19	dB

#### Electrical Specification Notes:

The Insertion Loss data above is based on the performance specifications of the coax cable and connectors used in this assembly. The Insertion Loss includes an estimated insertion loss of 0.1 dB for the straight connector and 0.2 dB for the right angle connector

### Mechanical Specifications

#### Cable Assembly

Length*	60 in [152.4 cm]
Diameter	0.312 in [7.92 mm]

#### 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



### Configuration:

- SMA Male
- Push-OnSMP Female Right Angle
- RG316

### Features:

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

### Applications:

- General Purpose
- Laboratory Use

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Shield Layer 1  
 Jacket Material  
 Jacket Diameter

Silver Plated Copper Braid  
 FEP, Tan  
 0.102 in [2.59 mm]

## Connectors

Description	Connector 1	Connector 2
Type	SMA Male	SMP Female
Specification	MIL-STD-348A	MIL-STD-348A
Impedance	50 Ohms	50 Ohms
Connection Method		Push-On
Contact Material & Plating	Brass, Gold	Beryllium Copper, Gold
Contact Plating Spec.	50 µin minimum	30µ in. minimum
Dielectric Type	PTFE	PTFE
Outer Cond Material & Plating		Beryllium Copper, Gold
Outer Cond Plating Spec.		3µ in. minimum
Body Material & Plating	Brass, Nickel	Brass, Gold
Body Plating Spec.	100 µin minimum	3µ in. minimum
Coupling Nut Material & Plating	Brass, Nickel	
Coupling Nut Plating Spec.	100 µin minimum	
Hex Size	5/16 inch	
Torque	3 in-lbs 0.34 Nm	

## Environmental Specifications

### Temperature

Operating Range -55 to +200 deg C

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

## Plotted and Other Data

Notes:

## How to Order

Part Number Configuration:

**FMC00238 - xx uu**

cm = Centimeters  
 <blank> = Inches  
 Length

Example: FMC00238-12 = 12 inches long cable  
 FMC00238-100cm = 100 cm long cable

Low Loss SMA Male to RA Push-On SMP Female Cable RG-316 Coax in 60 Inch 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.

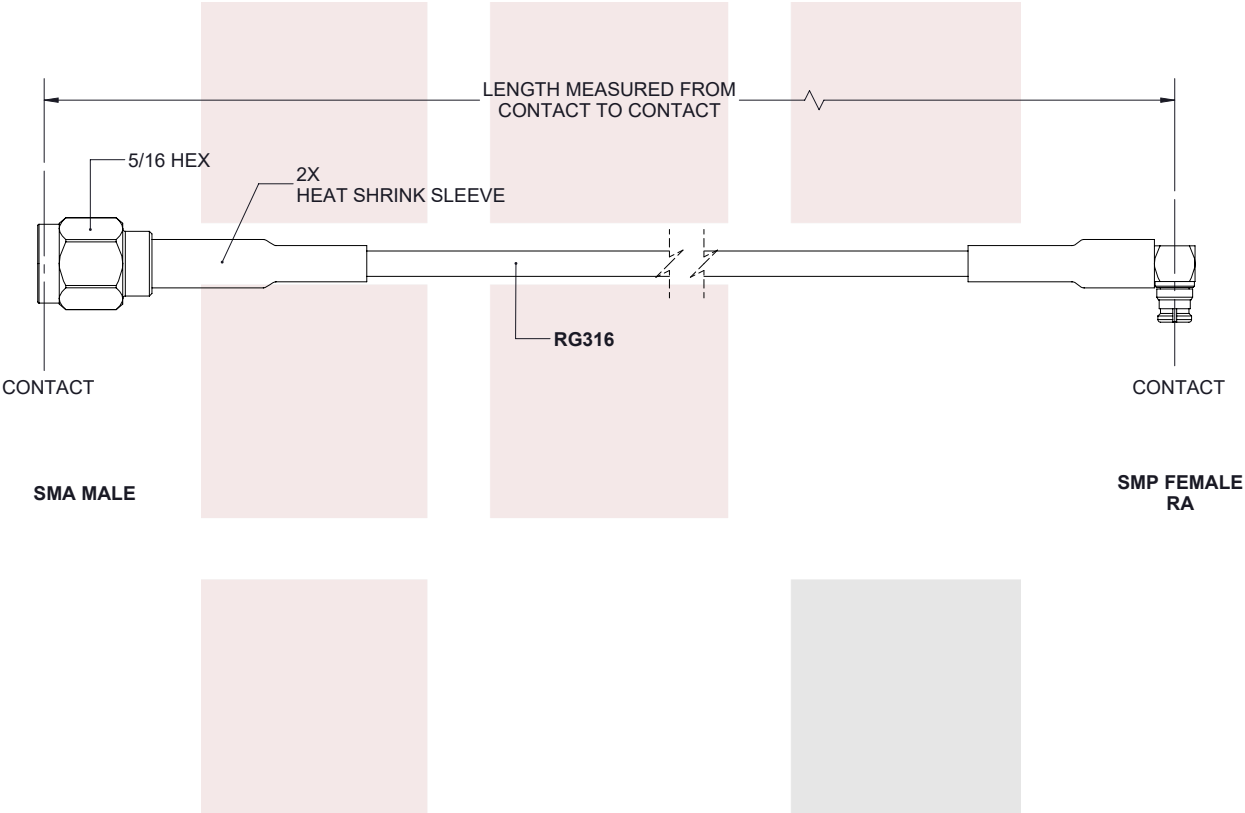
Click the following link to obtain additional part information: [Low Loss SMA Male to RA Push-On SMP Female Cable RG-316 Coax in 60 Inch FMC00238-60](#)

URL: <https://www.fairviewmicrowave.com/low-loss-sma-male-ra-smp-female-cable-rg316-coax-fmc00238-60-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	2/25/2020	S.ELLIS



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TITLE		TOLERANCES:		CABLE LENGTH (L) TOLERANCES:	
Low Loss SMA Male to RA Push-On SMP Female Cable RG-316 Coax in 60 Inch		.X = ±.2 [ .51 ]    FRACTIONS    L ≤ 12 [305] = +1 [25] / -0		12 [305] < L ≤ 60 [1524] = +2 [51] / -0	
		.XX = ±.02 [ .51 ]    ± 1/32    60 [1524] < L ≤ 120 [3048] = +4 [102] / -0		120 [3048] < L ≤ 300 [7620] = +6 [152] / -0	
		.XXX = ±.005 [ .13 ]    ANGLES ± 1°    300 [7620] < L = +5%L / -0			
		ALL DIMENSIONS SHOWN ARE FOR REFERENCE ONLY.		SCALE	
		SIZE A		N/A	
		CAGE CODE 3FKR5		DRAWN BY K.DANG	
				ITEM NO. FMC00238	
				REV A	

T-Rev.D