

SMA Male to SSMC Plug Cable RG-316 Coax



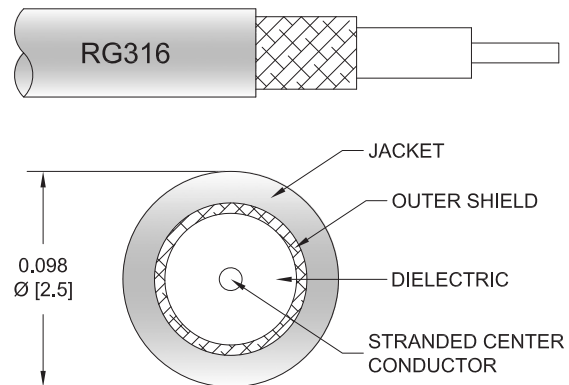
FMC00167

Configuration

- Connector 1: SMA Male
- Connector 2: SSMC Plug
- 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 SMA male to SSMC plug cable using RG-316 coax, part number FMC00167, from Fairview Microwave is in-stock and ships same day. This Fairview SMA to SSMC cable assembly has a male to plug 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 FMC00167 SMA male to SSMC plug cable assembly operates to 3 GHz.

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]
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	
FMC00167	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	
FMC00167-12	12 Inch	Insertion Loss (Typ.)	0.31	0.36	0.43	0.58	0.78	dB	0.028
FMC00167-24	24 Inch	Insertion Loss (Typ.)	0.42	0.52	0.66	0.96	1.36	dB	0.039
FMC00167-36	36 Inch	Insertion Loss (Typ.)	0.53	0.68	0.89	1.34	1.94	dB	0.049
FMC00167-48	48 Inch	Insertion Loss (Typ.)	0.64	0.84	1.12	1.72	2.52	dB	0.059
FMC00167-72	72 Inch	Insertion Loss (Typ.)	0.86	1.16	1.58	2.48	3.68	dB	0.079

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:	0.1 dB
Base Weight:	0.028 pounds
Additional Weight per Inch:	0.00084 pounds

Mechanical Specifications

Cable Assembly

Weight 0.028 lbs [12.7 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	SSMC Plug
Specification	MIL-STD-348A	
Impedance	50 Ohms	50 Ohms
Configuration	Straight	Straight
Mating Cycles		500
Contact Material and Plating	Brass, Gold	Beryllium Copper, Gold
Contact Plating Specification	50 µin minimum	
Dielectric Type	PTFE	PTFE
Body Material and Plating	Brass, Nickel	Beryllium Copper, Gold
Body Plating Specification	100 µin minimum	
Coupling Nut Material and Plating	Brass, Nickel	Brass, Gold
Coupling Nut Plating Specification	100 µin minimum	
Hex Size	5/16 inch	5/32 inch
Torque	3 in-lbs 0.34 Nm	

Environmental Specifications

Operating Range Temperature -45 to +120 deg C

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

Plotted and Other Data

Notes:

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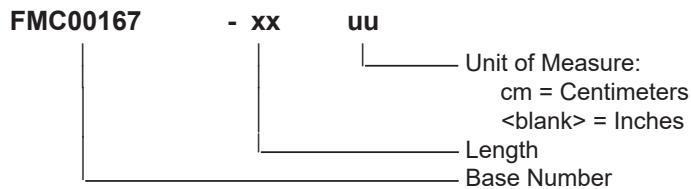


FMC00167

Typical Performance Data

How to Order

Part Number Configuration:



Example: FMC00167-12 = 12 inches long cable
 FMC00167-100cm = 100 cm long cable

SMA Male to SSMC Plug 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.

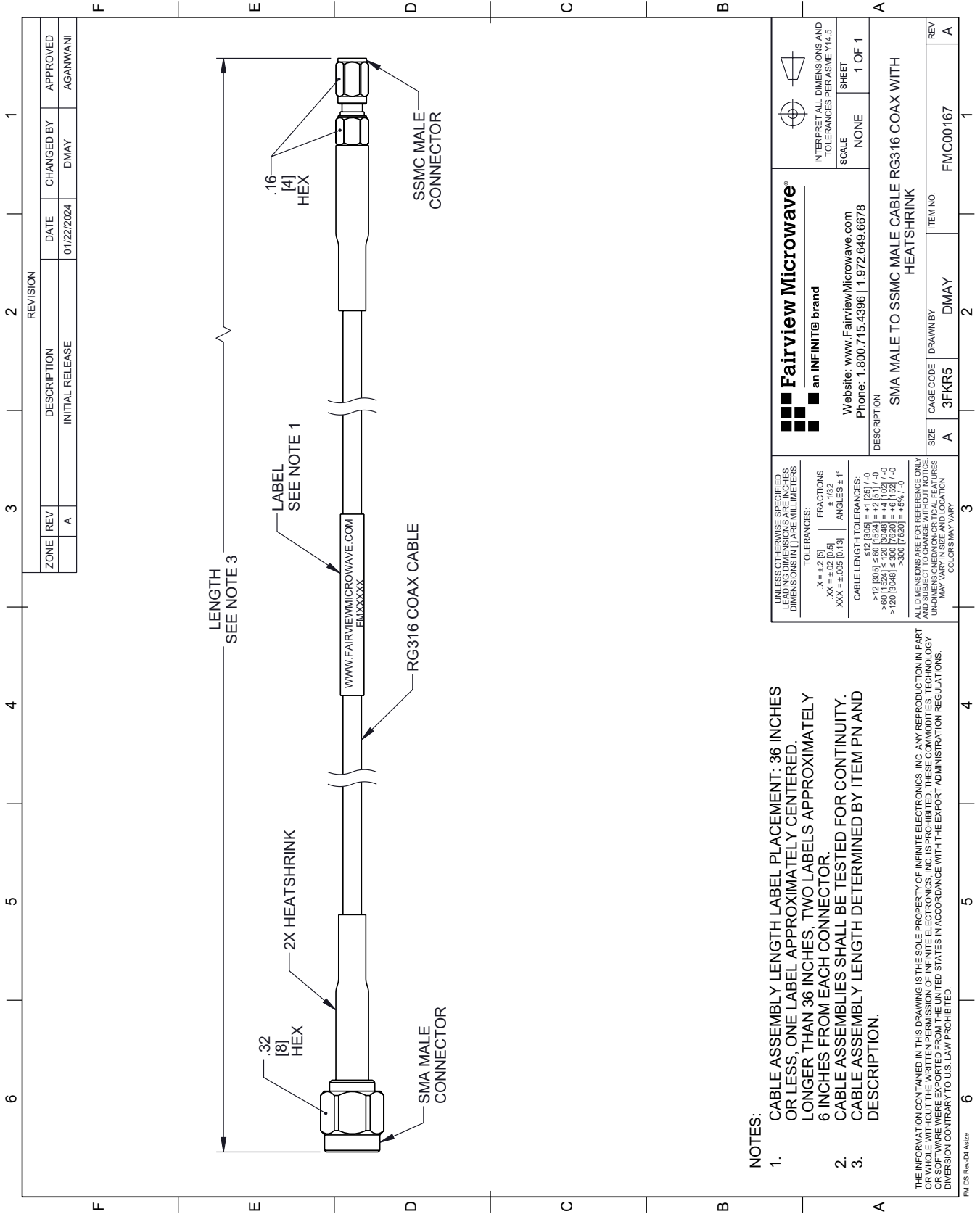
For additional information on this product, please click the following link: [SMA Male to SSMC Plug Cable RG-316 Coax FMC00167](#)

URL: <https://www.fairviewmicrowave.com/sma-male-to-ssmc-plug-cable-rg-316-coax-fmc00167-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.

FMC00167 CAD Drawing

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ZONE		REVISION		APPROVED	
1	A	INITIAL RELEASE	01/22/2024	DMAY	AGANIWANI

 Fairview Microwave® an INFINIT@ brand Website: www.FairviewMicrowave.com Phone: 1.800.715.4396 1.972.649.6678		INTERPRET ALL DIMENSIONS AND TOLERANCES PER ASME Y14.5 SCALE NONE SHEET 1 OF 1
DESCRIPTION SMA MALE TO SSMC MALE CABLE RG316 COAX WITH HEATSHRINK		
SIZE A	CAGE CODE 3FKR5	ITEM NO. FMC00167
DRAWN BY DMAY		REV A

UNLESS OTHERWISE SPECIFIED LEADING DIMENSIONS ARE INCHES DIMENSIONS IN [] ARE MILLIMETERS

TOLERANCES:
 .X = ±.2 [5] FRACTIONS ± 1/32
 .XX = ±.02 [0.5] ANGLES ± 1°
 .XXX = ±.005 [0.13]

CABLE LENGTH TOLERANCES:
 ≤ 12 [305] ± .60 [1524] = ± 2 [51] / -0
 > 12 [305] ≤ 60 [1524] = ± 2 [51] / -0
 > 60 [1524] ≤ 300 [7620] = ± 6 [152] / -0
 > 300 [7620] = ± 5% [7.6]

ALL DIMENSIONS ARE FOR REFERENCE ONLY AND SUBJECT TO CHANGE WITHOUT NOTICE. UNDIMENSIONED NON-CRITICAL FEATURES MAY VARY FROM DRAWING DIMENSION. COLORS MAY VARY.

- 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 ASSEMBLIES SHALL BE TESTED FOR CONTINUITY.
 - CABLE ASSEMBLY LENGTH DETERMINED BY ITEM PN AND DESCRIPTION.

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REV D5 Rev-D1 A32z