

SMA Male to SMA Female Cable M17/113-RG316 Coax

The SMA male to SMA female cable using M17/113-RG316 coax, part number FMC00016, from Fairview Microwave is in-stock and ships same day. This Fairview SMA to SMA cable assembly has a male to female gender configuration with 50 ohm flexible M17/113-RG316 coax. Fairview Microwave's flexible RF cable assemblies are ideal for applications where tight bends and continual flexure are required. The FMC00016 SMA male to SMA female 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	Min	Typ	Max	Units
Frequency Range	DC		3	GHz
VSWR			1.4:1	
Velocity of Propagation		69.5		%
Capacitance		29.4 [96.46]		pF/ft [pF/m]
Operating Voltage (AC)			335	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	0.16	0.187	0.38	0.58	dB/ft
	0.36	0.52	0.61	1.25	1.9	dB/m

Electrical Specification Notes:

Insertion Loss does not include the loss of the connectors. Insertion Loss is estimated as 0.1 dB per connector.

Mechanical Specifications

Cable Assembly

Cable

Cable Type	M17/113-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	0.098 in [2.49 mm]

Repeated Minimum Bend Radius 0.5 in [12.7 mm]



Configuration:

- SMA Male
- SMA Female
- M17/113-RG316

Features:

- Max Frequency 3 GHz
- 69.5% Phase Velocity
- FEP Jacket

Applications:

- General Purpose
- Laboratory Use

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Connectors

Description	Connector 1	Connector 2
Type	SMA Male	SMA Female
Specification	MIL-STD-348A	MIL-STD-348A
Impedance	50 Ohms	50 Ohms
Contact Material & Plating	Brass, Gold	Beryllium Copper, Gold
Contact Plating Spec.	50 µin minimum	50 µin minimum
Dielectric Type	PTFE	PTFE
Outer Cond Material & Plating		Brass, Gold
Outer Cond Plating Spec.		3 µin minimum
Body Material & Plating	Brass, Nickel	Brass, Gold
Body Plating Spec.	100 µin minimum	
Coupling Nut Material & Plating	Brass, Nickel	
Coupling Nut Plating Spec.	100 µin minimum	
Hex Size	5/16 inch	1/4 inch
Torque	3 in-lbs 0.34 Nm	

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:

FMC00016 - xx uu

 cm = Centimeters
 <blank> = Inches

Length

 Example: FMC00016-12 = 12 inches long cable
 FMC00016-100cm = 100 cm long cable

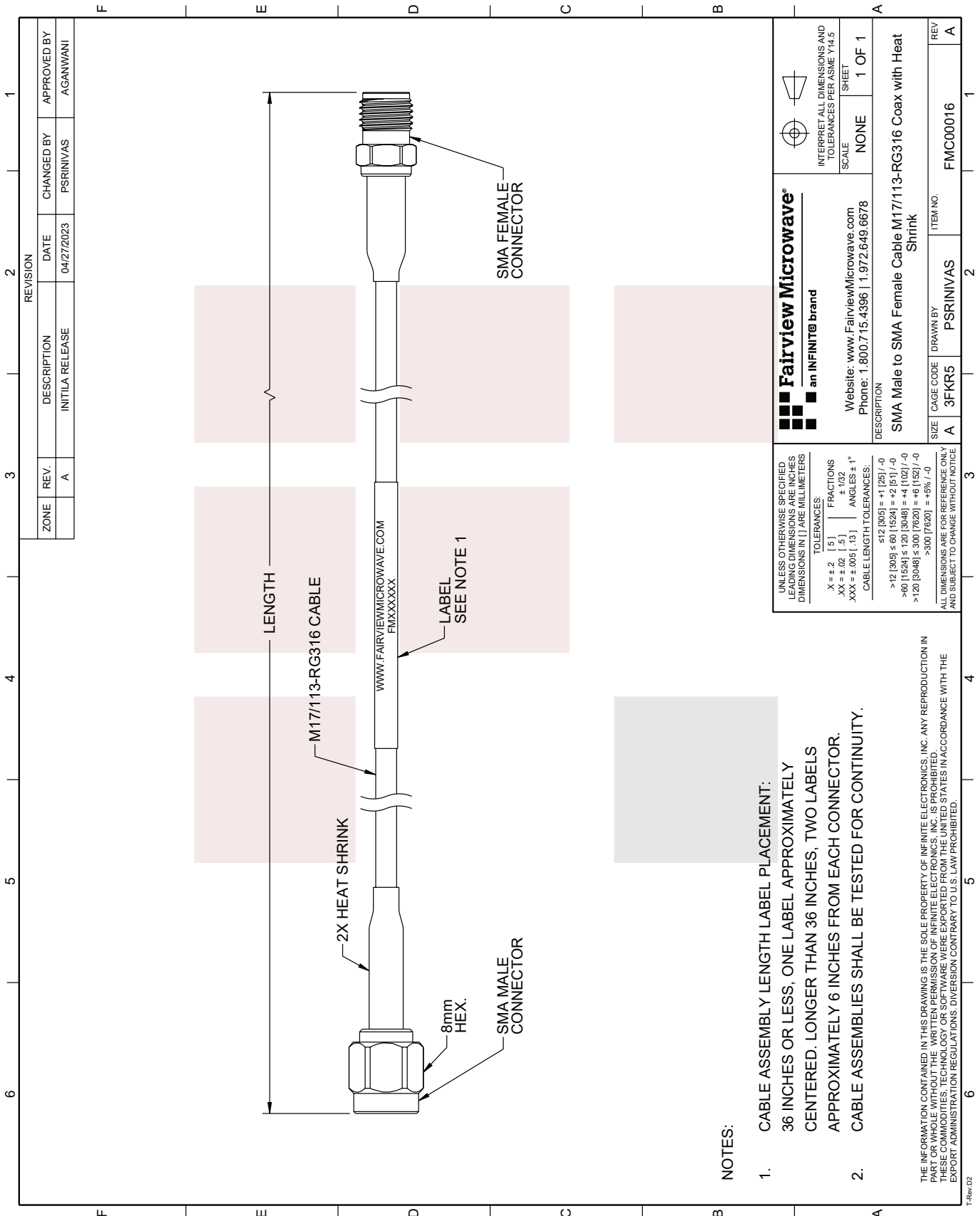
SMA Male to SMA Female Cable M17/113-RG316 Coax from Fairview Microwave has same day shipment for domestic and International orders. Our RF, microwave and millimeter wave products maintain a 99% availability and are part of the broadest selection in the industry.

Click the following link to obtain additional part information: [SMA Male to SMA Female Cable M17/113-RG316 Coax FMC00016](#)

URL: <https://www.fairviewmicrowave.com/sma-male-to-sma-female-cable-m17-113-rg316-coax-fmc00016-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.





REVISION		DATE	CHANGED BY	APPROVED BY
ZONE	REV.	DESCRIPTION	DATE	APPROVED BY
	A	INITIAL RELEASE	04/27/2023	PSRINIVAS
				AGANWANI

<p>Fairview Microwave an INFINIT[®] 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 SHEET</p>
	<p>SCALE: NONE</p> <p>SHEET: 1 OF 1</p>
<p>DESCRIPTION</p> <p>SMA Male to SMA Female Cable M17/113-RG316 Coax with Heat Shrink</p>	
<p>SIZE: A</p> <p>CAGE CODE: 3FKR5</p> <p>DRAWN BY: PSRINIVAS</p>	<p>ITEM NO.: FMC00016</p> <p>REV: A</p>

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

TOLERANCES:

.X ± .2	[.5]	FRACTIONS
.XX ± .02	[.1]	± 1/32
.XXX ± .005	[.1]	ANGLES ± 1°

CABLE LENGTH TOLERANCES:

≤ 12 [305]	± .125 [-0
> 12 [305] ≤ 60 [1524]	± .25 [-0
> 60 [1524] ≤ 120 [3048]	± .5 [-0
> 120 [3048] ≤ 300 [7620]	± 1.0 [-0
> 300 [7620]	± 2.0 [-0

ALL DIMENSIONS ARE FOR REFERENCE ONLY AND SUBJECT TO CHANGE WITHOUT NOTICE

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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 ASSEMBLIES SHALL BE TESTED FOR CONTINUITY.