

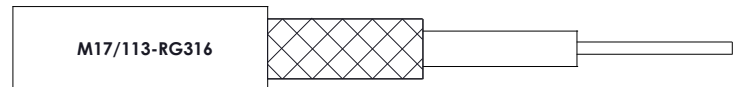
SMB Plug to SMB Plug Cable M17/113-RG316 Coax



FMC00003

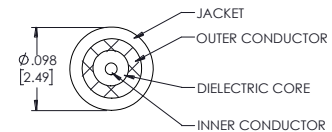
Configuration

- Connector 1: SMB Plug
- Connector 2: SMB Plug
- Cable Type: M17/113-RG316
- Coax Flex Type: Flexible



Features

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



Applications

- General Purpose
- Laboratory Use

Description

The SMB plug to SMB plug cable using M17/113-RG316 coax, part number FMC00003, from Fairview Microwave is in-stock and ships same day. This Fairview SMB to SMB cable assembly has a plug to plug 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 FMC00003 SMB plug to SMB 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		69.5		%
Capacitance		29.4 [96.46]		pF/ft [pF/m]
Operating Voltage (AC)			335	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	
FMC00003	Custom Lengths Available	Insertion Loss (Typ.)	0.11	0.16	0.238	0.38	0.58	dB/ft	
			0.37	0.53	0.79	1.25	1.91	dB/m	
FMC00003-12	12 inch	Insertion Loss (Typ.)	0.31	0.36	0.44	0.58	0.78	dB	0.029
FMC00003-24	24 inch	Insertion Loss (Typ.)	0.42	0.52	0.68	0.96	1.36	dB	0.041
FMC00003-36	36 inch	Insertion Loss (Typ.)	0.53	0.68	0.92	1.34	1.94	dB	0.052
FMC00003-48	48 inch	Insertion Loss (Typ.)	0.64	0.84	1.16	1.72	2.52	dB	0.063
FMC00003-72	72 inch	Insertion Loss (Typ.)	0.86	1.16	1.63	2.48	3.68	dB	0.085

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:	0.029 pounds
Additional Weight per Inch:	0.00092 pounds

Mechanical Specifications

Cable Assembly

Weight 0.029 lbs [13.15 g]

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]

Connectors

Description	Connector 1	Connector 2
Type	SMB Plug	SMB Plug
Specification	MIL-STD-348A	MIL-STD-348A
Impedance	50 Ohms	50 Ohms
Configuration	Straight	Straight
Contact Material and Plating	Beryllium Copper, Gold	Beryllium Copper, Gold
Contact Plating Specification	30 µin minimum	30 µin minimum
Dielectric Type	PTFE	PTFE
Body Material and Plating	Brass, Gold	Brass, Gold
Body Plating Specification	3 µin minimum	3 µin minimum

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Environmental Specifications

Operating Range Temperature -55 to +165 deg C

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

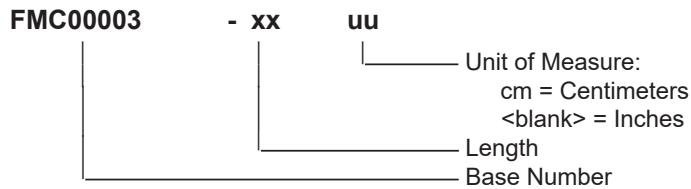
Plotted and Other Data

Notes:

Typical Performance Data

How to Order

Part Number Configuration:



Example: FMC00003-12 = 12 inches long cable
FMC00003-100cm = 100 cm long cable

SMB Plug to SMB Plug Cable M17/113-RG316 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.

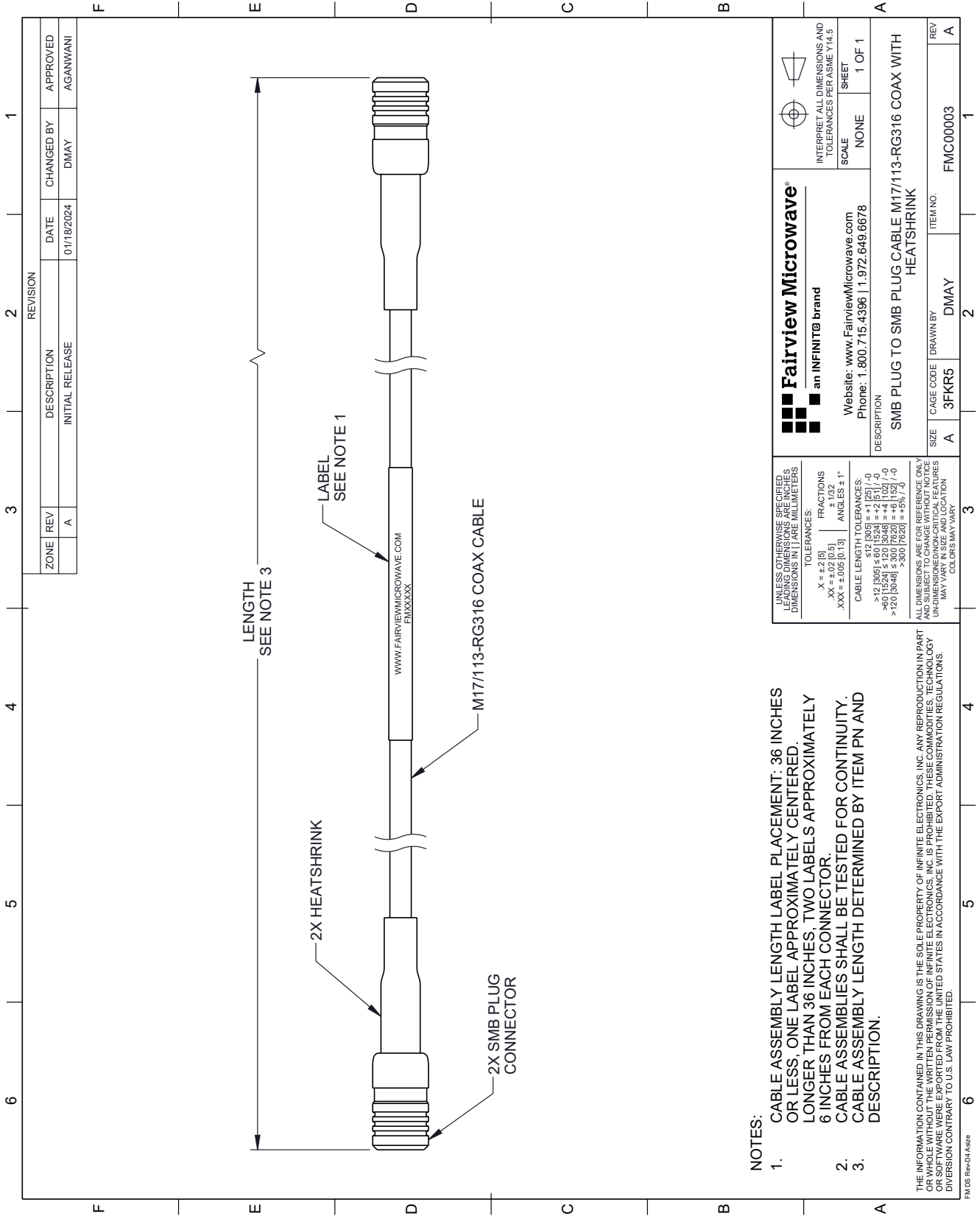
For additional information on this product, please click the following link: [SMB Plug to SMB Plug Cable M17/113-RG316 Coax FMC00003](#)

URL: <https://www.fairviewmicrowave.com/smb-plug-to-smb-plug-cable-m17-113-rg316-coax-fmc00003-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.

FMC0003 CAD Drawing

SMB Plug to SMB Plug Cable M17/113-RG316 Coax



NOTES:

1. 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.
2. CABLE ASSEMBLIES SHALL BE TESTED FOR CONTINUITY.
3. CABLE ASSEMBLY LENGTH DETERMINED BY ITEM PN AND DESCRIPTION.

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UNLESS OTHERWISE SPECIFIED, LEADING DIMENSIONS ARE IN INCHES. DIMENSIONS IN PARENTHESES ARE IN MILLIMETERS.

TOLERANCES:
 X = ±.2 (5)
 XX = ±.005 (0.13)
 XXX = ±.002 (0.05)

FRACTIONS
 ANGLES ± 1°

CABLE LENGTH TOLERANCES:
 >12 (305) ±.60 (15.24) = ±.6 (15.24) / -0
 >60 (1524) ±.120 (30.48) = ±.4 (102) / -0
 >120 (3048) ±.300 (76.20) = ±.6 (152) / -0
 >300 (7620) ±.9 (228) = ±.9 (228) / -0

Fairview Microwave® an INFINIT [®] brand		INTERPRET ALL DIMENSIONS AND TOLERANCES PER ASME Y14.5
Website: www.FairviewMicrowave.com Phone: 1.800.715.4396 1.972.649.6678		SCALE NONE SHEET 1 OF 1
DESCRIPTION SMB PLUG TO SMB PLUG CABLE M17/113-RG316 COAX WITH HEATSHRINK		
SIZE A	CAGE CODE 3FKR5	DRAWN BY DMAY
ITEM NO. FMC00003		REV. A