

VITA 67 Mini SMP Male to 1.85mm Male Cable FM-F086HF Coax

The Mini SMP male to 1.85mm male cable using FM-F086HF coax, part number FMCA9746, from Fairview Microwave is in-stock and ships same day. This Fairview Mini SMP to 1.85mm cable assembly has a male to male gender configuration with 50 ohm flexible coax. Fairview Microwave's VITA 67 assemblies are high-density, high-performance RF cable assemblies that fit into VITA 67 blocks and attach to the PCB board which makes it ideal for applications where tight bends and flexure is required. The FMCA9746 Mini SMP male to 1.85mm male cable assembly operates to 40 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		40	GHz
VSWR			1.33:1	
Velocity of Propagation		70		%
RF Shielding	110			dB
Capacitance		29.4 [96.46]		pF/ft [pF/m]

Performance by Frequency

Description	F1	F2	F3	F4	F5	Units
Frequency	2.5	5	10	20	40	GHz
Insertion Loss (Typ.)	0.344	0.503	0.743	1.048	1.703	dB/ft
	1.13	1.65	2.44	3.44	5.59	dB/m

Electrical Specification Notes:
 Values at 25°C, sea level.

Mechanical Specifications

Cable Assembly

Weight 0.075 lbs [34.02 g]

Cable

Cable Type FM-F086HF
 Impedance 50 Ohms
 Inner Conductor Type Solid
 Inner Conductor Material and Plating Copper Clad Steel, Silver
 Dielectric Type PTFE
 Shield Layer 1 Silver Plated Copper Tape



Configuration:

- Mini SMP Male
- 1.85mm Male
- FM-F086HF

Features:

- Max Frequency 40 GHz
- Shielding Effectivity > 110 dB
- 70% Phase Velocity
- Standard MIL-STD-348 SMPM interface
- Push-on/snap-on mating style for quick installation
- Mini SMP (SMPM) Female compatible with VITA 67 (4-port) and (8-port) blocks
- Mini SMP (SMPM) Male Compatible with VITA 67 (4-port) and (8-port) blocks

Applications:

- General Purpose
- Laboratory Use
- Scientific research
- High-reliability, high-density for aerospace & defense application
- Ground base station & communication systems, avionics, radar systems

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Connectors

Description	Connector 1	Connector 2
Type	Mini SMP Male	1.85mm Male
Impedance	50 Ohms	50 Ohms
Contact Material & Plating	Beryllium Copper, Gold	Beryllium Copper, Gold over Nickel
Contact Plating Spec.	ASTM B488	MIL-G-45204
Body Material & Plating	Beryllium Copper, Gold	Stainless Steel, Gold over Nickel
Body Plating Spec.	ASTM B488	MIL-G-45204

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:

FMCA9746 - xx uu

cm = Centimeters
<blank> = Inches

Length

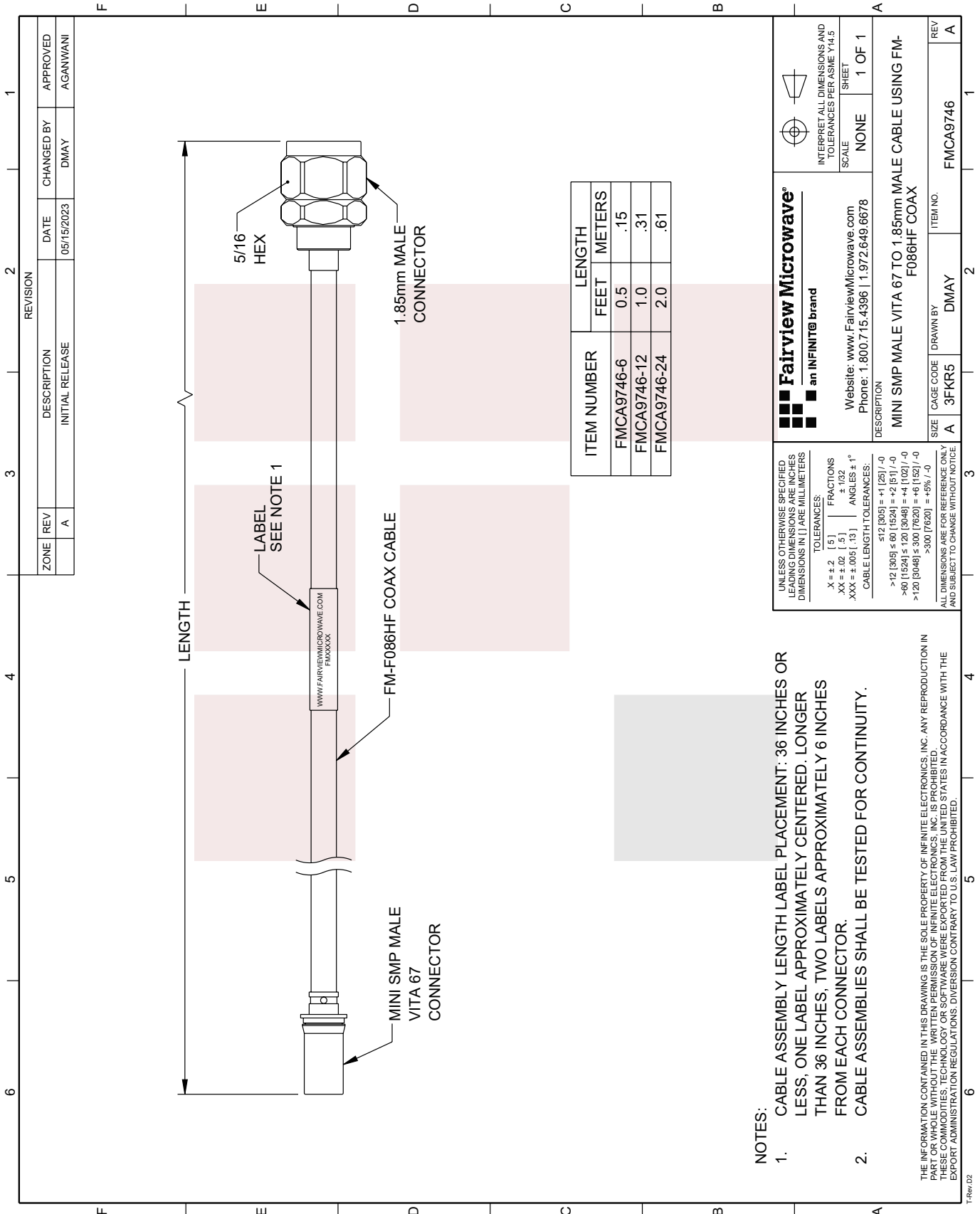
Example: FMCA9746-12 = 12 inches long cable
FMCA9746-100cm = 100 cm long cable

VITA 67 Mini SMP Male to 1.85mm Male Cable FM-F086HF 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: [VITA 67 Mini SMP Male to 1.85mm Male Cable FM-F086HF Coax FMCA9746](#)

URL: <https://www.fairviewmicrowave.com/vita-67-mini-smp-male-to-1.85mm-male-cable-fm-f086hf-coax-fmca9746-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.



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.

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

TOLERANCES:
 .X = ± .2 [.5] FRACTIONS
 .XX = ± .02 [.5] ± .132
 .XXX = ± .005 [.13] ANGLES ± 1°

CABLE LENGTH TOLERANCES:
 ≤ 12 [305] = ± 1 [25] / -0
 > 12 [305] ≤ 60 [1524] = ± 2 [51] / -0
 > 60 [1524] ≤ 120 [3048] = ± 4 [102] / -0
 > 120 [3048] ≤ 300 [7620] = ± 6 [152] / -0
 > 300 [7620] = ± 8% / -0

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

Fairview Microwave
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Website: www.FairviewMicrowave.com
Phone: 1.800.715.4396 | 1.972.649.6678

INTERPRET ALL DIMENSIONS AND TOLERANCES PER ASME Y14.5 SHEET

SCALE: NONE 1 OF 1

DESCRIPTION:
MINI SMP MALE VITA 67 TO 1.85mm MALE CABLE USING FM-F086HF COAX

SIZE: A CAGE CODE: 3FKR5 DRAWN BY: DMAY ITEM NO.: FMCA9746 REV: A