

## Mini SMP (SMPM) Female VITA 67.3 Connector Solder Attachment for FM-F086, FM-F086HF, FM-F086LL, FM-F086FLX

Fairview Microwave's FMCN49816 Mini SMP female VITA 67.3 connector with solder attachment for FM-F086, FM-F086HF, FM-F086LL, and FM-F086FLX is part of our full line of RF components available for same-day shipping. Our Mini SMP female VITA 67.3 connector operates up to a maximum frequency of 40 GHz and offers excellent VSWR of 1.4:1. The Fairview Microwave blind mate connector is ideal for applications where direct visual or tactile access to the connection point is not possible, for example, when two circuit boards need to be mated.

Our Mini SMP female VITA 67.3 connector FMCN49816 datasheet specifications and drawing with dimensions are shown below in this PDF. Fairview Microwave's broad catalog of RF, microwave and millimeter wave connectors allows designers to configure and customize their signal connections however they like. Whether the need is to provide an I/O for a board design, or simply create a custom cable assembly configuration, Fairview Microwave has the right connector for the job. Fairview Microwave can also expertly build your custom cable assemblies for you and ship same-day.



### Configuration:

- Mini SMP Female Connector
- 50 Ohms
- Straight Body Geometry
- FM-F086, FM-F086HF, FM-F086LL, FM-F086FLX Interface Type
- Solder Attachment
- VITA 67.3 Design

### Electrical Specifications

Description	Min	Typ	Max	Units
Frequency Range	DC		40	GHz
VSWR			1.4:1	
Insertion Loss			0.8	dB

### Features:

- Operating Frequency of 40 GHz Max.
- Good VSWR of 1.4:1
- Blind Mate Connector
- Gold Plated Beryllium Copper Contact

### Mechanical Specifications

<b>Size</b>	
Length	0.59 in [14.99 mm]
Width/Dia.	0.2 in [5.08 mm]
Height	0.2 in [5.08 mm]
Weight	0.0019 lbs [0.86 g]

### Material Specifications

Description	Material	Plating
Contact	Beryllium Copper	Gold
Insulation	PTFE	
Outer Conductor	Beryllium Copper	Gold
Body	Passivated Stainless Steel	

Mechanical Specification Notes:  
500 mating cycles when mated with a Smooth Bore connector (100 when mated with a Full Detent connector)

### Environmental Specifications

<b>Temperature</b>	
Operating Range	-65 to +165 deg C
Humidity	MIL-STD-202, Method 106, Less Step 7B

### Applications:

- General Purpose Test
- Custom Cable Assemblies
- VITA 67.3 Backplane
- High Density Applications

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Shock  
Vibration  
Thermal Shock

MIL-STD-202, Method 213, Condition I  
MIL-STD-202, Method 204, Condition D  
MIL-STD-202, Method 107, Condition B

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

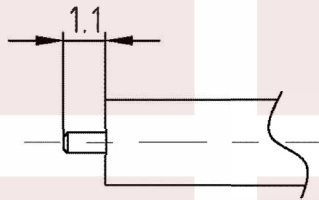
**Plotted and Other Data**

Notes:

- FMCN49816 works with FMCN49822 Mini SMP VITA 67.3 10 Port Backplane Module C and FMCN49824 Mini SMP VITA 67.3 14 Port Backplane Module C

**Assembly Instruction**

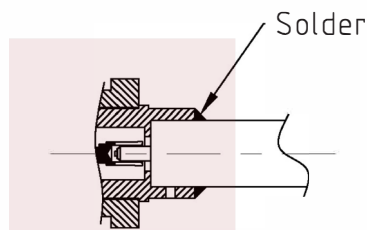
**Cable Assembly Instructions**



Trim insulator and outer conductor to dimensions shown.  
Be careful not to nick the center conductor.

**NOTE:**

To minimize cable dielectric growth during soldering operation, normalize cable thermal cycle per MIL-DTL-17 prior to final trim.



Insert cable into body, until outer conductor flush with body.  
Solder outer conductor to body

**NOTE:**

For FMCN49816 and FMCN49820

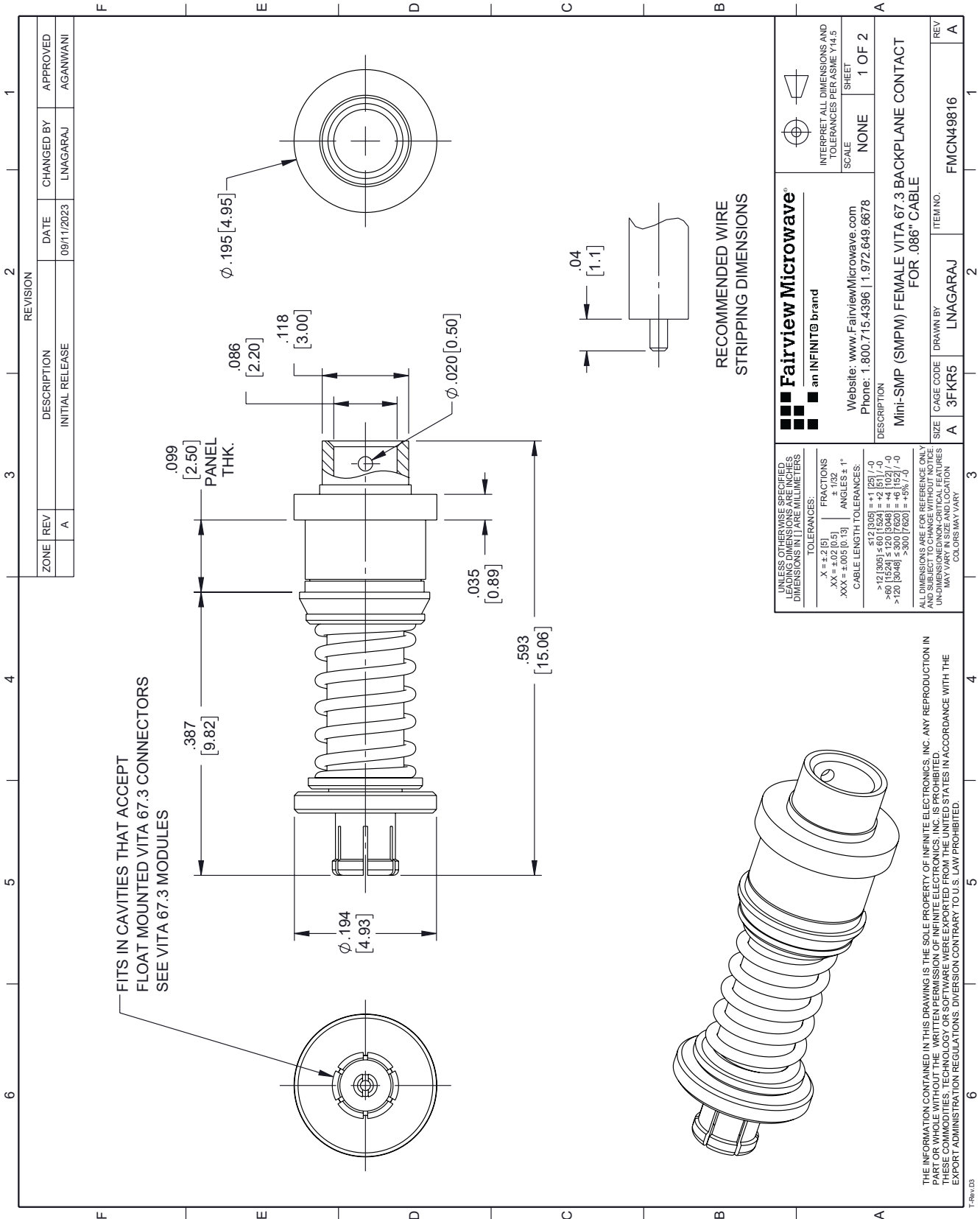
Mini SMP (SMPM) Female VITA 67.3 Connector Solder Attachment for FM-F086, FM-F086HF, FM-F086LL, FM-F086FLX from Fairview Microwave is in-stock and available to ship same-day. All of our RF/microwave products are available off-the-shelf from our ISO 9001:2008 certified facilities in Lewisville, Texas. Fairview Microwave is RF on-demand.

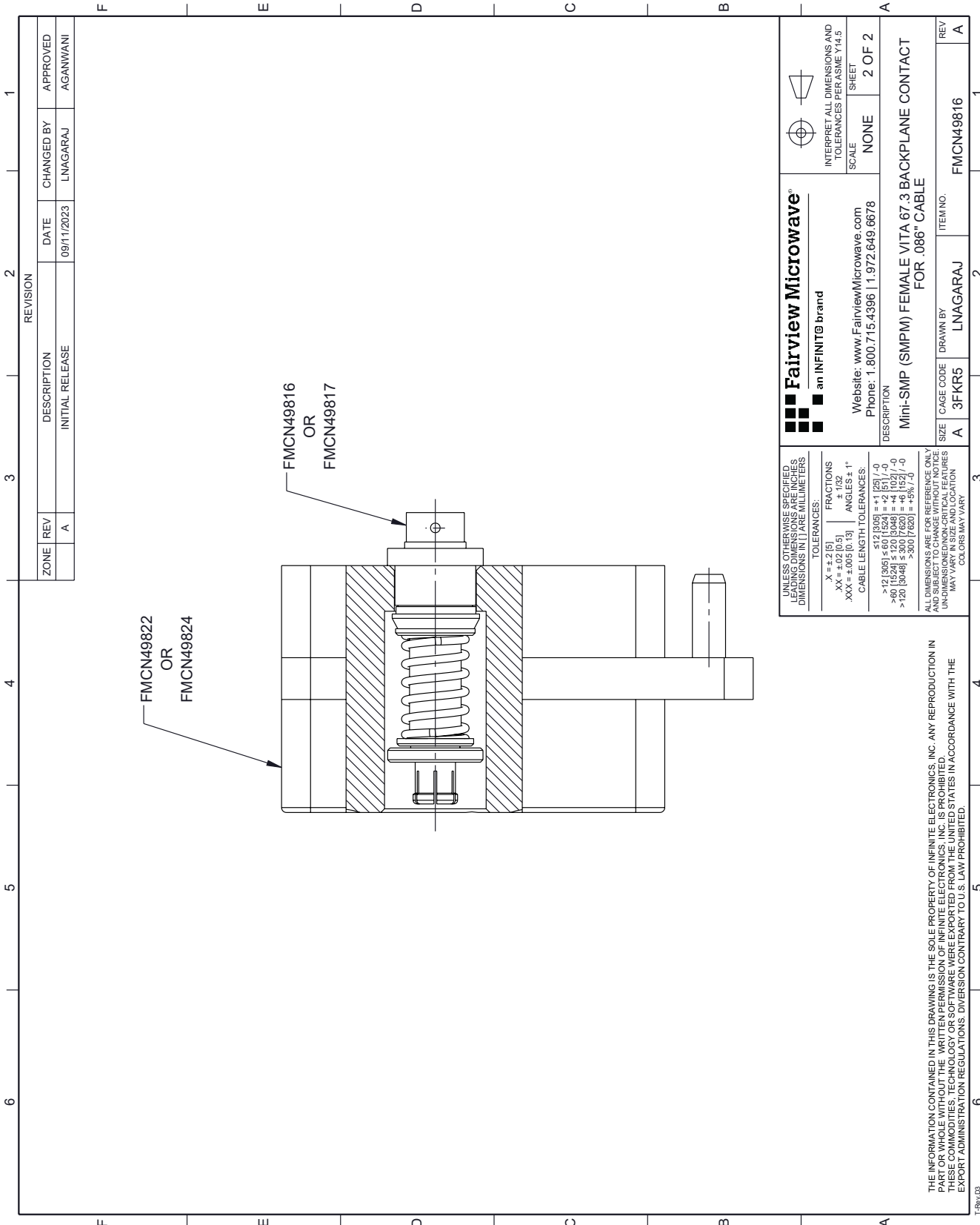
For additional information on this product, please click the following link: [Mini SMP \(SMPM\) Female VITA 67.3 Connector Solder Attachment for FM-F086, FM-F086HF, FM-F086LL, FM-F086FLX FMCN49816](#)

URL: <https://www.fairviewmicrowave.com/mini-smp-female-fm-f086-fm-f086hf-fm-f086ll-fm-f086flx-connector-fmcn49816-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
ZONE	REV			
	A	09/11/2023	LNAGARAJ	AGANWANI
DESCRIPTION				
INITIAL RELEASE				

 an INFINIT <sup>®</sup> brand		 INTERPRET ALL DIMENSIONS AND TOLERANCES PER ASME Y14.5	
Website: <a href="http://www.FairviewMicrowave.com">www.FairviewMicrowave.com</a> Phone: 1.800.715.4396   1.972.649.6678		SCALE	SHEET
DESCRIPTION		NONE	2 OF 2
Mini-SMP (SMPM) FEMALE VITA 67.3 BACKPLANE CONTACT FOR .086" CABLE			
SIZE	CAGE CODE	DRAWN BY	ITEM NO.
A	3FKR5	LNAGARAJ	FMCN49816
UNLESS OTHERWISE SPECIFIED, LEADING DIMENSIONS ARE IN INCHES DIMENSIONS IN [ ] ARE MILLIMETERS		TOLERANCES: .X = ±.2 [5]      FRACTIONS      ANGLES ± 1° .XX = ±.02 [0.5]      ± 1/32 .XXX = ±.005 [0.13]      ± .132	
CABLE LENGTH TOLERANCES: >12 [305] ≤ 60 [1524] = ±.2 [5] / -0 >6 [152] ≤ 30 [762] = ±.1 [2.5] / -0 >120 [3048] ≤ 300 [7620] = ±.6 [152] / -0 >300 [7620] = ±.5% / -0		ALL DIMENSIONS ARE FOR REFERENCE ONLY AND SUBJECT TO CHANGE WITHOUT NOTICE. UNDIMENSIONED CRITICAL FEATURES MAY VARY. COLORS MAY VARY.	
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