

## VITA 67.3 Smooth Bore Mini SMP Male to SMPS Female Cable FM-SR047CU Coax



### FMCA100368

#### Configuration

- Connector 1: Smooth Bore Mini SMP Male
- Connector 2: SMPS Female
- Cable Type: FM-SR047CU-COIL
- Coax Flex Type: Semi-Rigid

#### Features

- Max Frequency 40 GHz

#### Applications

- General Purpose
- Laboratory Use

#### Description

The Mini SMP male smooth bore to SMPS female cable using FM-SR047CU coax, part number FMCA100368, from Fairview Microwave is in-stock and ships same day. This Fairview Mini SMP to SMPS cable assembly has a male to female gender configuration with 50 ohm semi-rigid FM-SR047CU-COIL coax. Fairview Microwave's semi-rigid RF cable assemblies are ideal for high performance applications and can be formed, using proper tooling, to the routing pattern required. The FMCA100368 Mini SMP male to SMPS female 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	Minimum	Typical	Maximum	Units
Frequency Range	DC		40	GHz
VSWR			1.4:1	

#### Specifications by Frequency

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**FMCA100368**

Part Number	Length	Description	F1	F2	F3	F4	Units	Weight (lbs)
			Frequency	2500	5000	10000	20000	
FMCA100368	Custom Lengths Available	Insertion Loss (Typ.)	0.55	0.8	1.3	1.9	dB/ft	
			1.81	2.63	4.27	6.24	dB/m	
FMCA100368-6	6 In	Insertion Loss (Typ.)	0.48	0.6	0.85	1.15	dB	0.005
FMCA100368-9	9 In	Insertion Loss (Typ.)	0.62	0.8	1.18	1.63	dB	0.006
FMCA100368-12	12 In	Insertion Loss (Typ.)	0.75	1	1.5	2.1	dB	0.007
FMCA100368-18	18 In	Insertion Loss (Typ.)	1.03	1.4	2.15	3.05	dB	0.009
FMCA100368-24	24 In	Insertion Loss (Typ.)	1.3	1.8	2.8	4	dB	0.011

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:	0.0065 pounds
Additional Weight per Inch:	0.00034 pounds

**Mechanical Specifications**

**Cable Assembly**

Width/Diameter	0.5 in [12.7 mm]
Weight	0.007 lbs [3.18 g]

**Cable**

Cable Type	FM-SR047CU-COIL
Impedance	50 Ohms
Inner Conductor Type	Solid
Inner Conductor Material and Plating	Copper Clad Steel, Silver
Dielectric Type	PTFE
Number of Shields	1
Outer Conductor 1 Material and Plating	Copper
Jacket Material	Tan
Repeated Minimum Bend Radius	0.05 in [1.27 mm]

**Connectors**

Description	Connector 1	Connector 2
Type	Mini SMP Male	SMPS Female
Impedance	50 Ohms	50 Ohms
Configuration	Straight	Straight
Connection Method	Smooth Bore	
Contact Material and Plating	Beryllium Copper, Gold	Beryllium Copper, Gold
Dielectric Type	PTFE	PTFE
Outer Conductor Material and Plating	Passivated Stainless Steel	Beryllium Copper, Gold
Body Material and Plating	Passivated Stainless Steel	Passivated Stainless Steel

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### FMCA100368

#### Environmental Specifications

Operating Range Temperature -55 to +100 deg C

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

#### Plotted and Other Data

Notes:

#### Typical Performance Data

#### How to Order

Part Number Configuration: **FMCA100368 - xx uu**

FMCA100368: Base Number  
 - xx: Length  
 uu: Unit of Measure:  
 cm = Centimeters  
 <blank> = Inches

Example: FMCA100368-12 = 12 inches long cable  
 FMCA100368-100cm = 100 cm long cable

VITA 67.3 Smooth Bore Mini SMP Male to SMPS Female Cable FM-SR047CU 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.

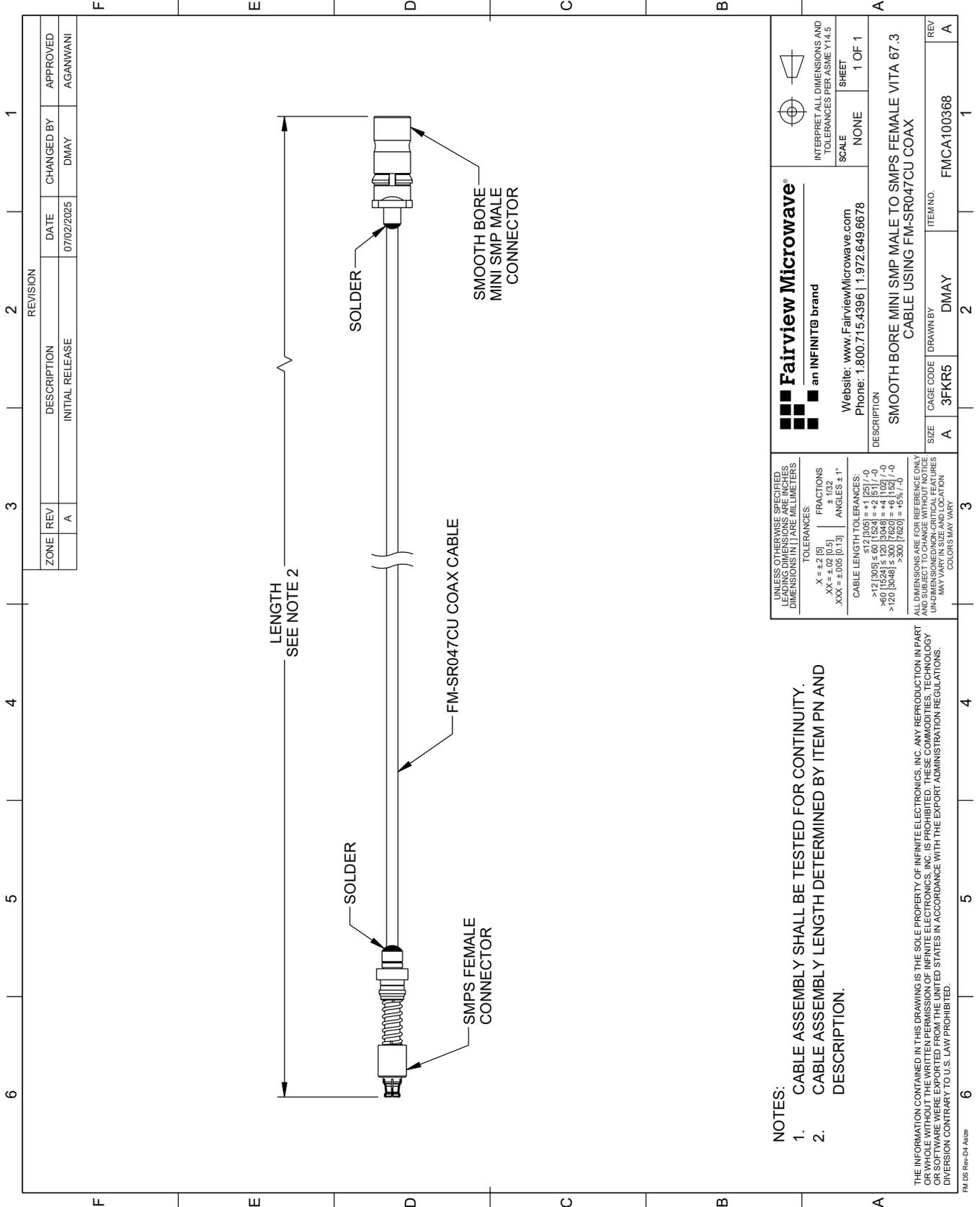
For additional information on this product, please click the following link: [VITA 67.3 Smooth Bore Mini SMP Male to SMPS Female Cable FM-SR047CU Coax FMCA100368](#)

URL: <https://www.fairviewmicrowave.com/vita-67.3-smooth-bore-mini-smp-male-to-smps-female-cable-fm-sr047cu-coax-fmca100368-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.

# FMCA100368 CAD Drawing

VITA 67.3 Smooth Bore Mini SMP Male to SMPS Female Cable FM-SR047CU Coax



**NOTES:**  
 1. CABLE ASSEMBLY SHALL BE TESTED FOR CONTINUITY.  
 2. CABLE ASSEMBLY LENGTH DETERMINED BY ITEM PN AND DESCRIPTION.

<b>Fairview Microwave®</b> an INFINIT® brand Website: <a href="http://www.FairviewMicrowave.com">www.FairviewMicrowave.com</a> 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: SMOOTH BORE MINI SMP MALE TO SMPS FEMALE VITA 67.3 CABLE USING FM-SR047CU COAX		
SIZE: A CAGE CODE: 3FKR5 DRAWN BY: DMAY	ITEM NO.: FMCA100368	REV: A

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

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

CABLE LENGTH TOLERANCES:  
 <12 [305] ≤ 60 [1524] = +1 [25] / -0  
 >60 [1524] ≤ 120 [3048] = +4 [102] / -0  
 >120 [3048] ≤ 300 [7620] = +5% / -0

ALL DIMENSIONS ARE FOR REFERENCE ONLY. UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE IN INCHES. DIMENSIONS IN [ ] ARE IN MILLIMETERS. COLORS MAY VARY.

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FM DS Rev-D4 Alt2