

RA 3.5mm Male Connector Clamp/Solder Attachment for FM-SR047ALTN-COIL, FM-SR047CU-COIL, FM- SR047CUTN-COIL, .047 Semi-Rigid Cable



FMCN51277

Configuration

- 3.5mm Male Connector
- 50 Ohms
- Right Angle Body Geometry
- Connector Interface Types: FM-SR047ALTN-COIL, FM-SR047CU-COIL, FM-SR047CUTN-COIL, .047 Semi-Rigid

Features

- Operating Frequency of 26.5 MHz Max.
- Excellent VSWR of 1.25:1
- Gold over Nickel Plated Beryllium Copper Contact

Applications

- General Purpose Test
- Custom Cable Assemblies

Description

RA 3.5mm Male Standard Connector Clamp/Solder Attachment for FM-SR047ALTN-COIL, FM-SR047CU-COIL, FM-SR047CUTN-COIL and .047 Semi-Rigid Cable, part number FMCN51277, from Fairview Microwave is in-stock and ships same day. This 3.5mm male connector operates up to a maximum frequency of 26.5 MHz and offers excellent VSWR of 1.25:1. Its right angle body geometry facilitates connections in tight spaces.

Fairview's RA 3.5mm male connector FMCN51277 datasheet specifications and outline drawing are shown in this PDF below. Our extensive offering of RF, microwave and millimeter wave connectors allows designers to configure and customize their signal connections however they like. From providing an I/O for a board design to creating a custom cable assembly configuration, Fairview Microwave has a connector solution to meet your needs. Fairview Microwave also has the expertise to build your custom cable assemblies for you and ship them same-day.

Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	DC		26.5	MHz
VSWR			1.25:1	
Insertion Loss			0.154	dB
Operating Voltage (AC)			250	Vrms
Dielectric Withstanding Voltage (AC)			750	Vrms
Inner Conductor DC Resistance			3	mOhms
Outer Conductor DC Resistance			2	mOhms
RF Leakage	100			dB
Impedance		50		Ohms

Electrical Specification Notes:
Insertion loss is = $0.03 \cdot \sqrt{F(\text{GHz})}$ dB

Mechanical Specifications

Size

Length	0.704724 in [17.9 mm]
Width	0.291339 in [7.4 mm]
Height	0.80315 in [20.4 mm]
Weight	0.015 lbs [6.8 g]
Mating Cycles	500 Cycles

RA 3.5mm Male Connector Clamp/Solder Attachment for FM-SR047ALTN-COIL, FM-SR047CU-COIL, FM- SR047CUTN-COIL, .047 Semi-Rigid Cable



FMCN51277

Mating Torque	7.1 to 15 in-lbs [[0.80 to 1.70 Nm]]
Cable Retention Force	6.1 lbs [2.77 kg]

Material Specifications

Description	Material	Plating
Contact	Beryllium Copper	Gold over Nickel
Insulation	PPO	
Body	Stainless Steel	Passivated
Coupling Nut	Stainless Steel	Passivated
Retaining Ring	Beryllium Copper	Copper-Tin-Zinc Alloy
Gasket	Silicone	
Solder Sleeve	Stainless Steel	Passivated

Environmental Specifications

Temperature	
Operating Range	-55 to +105 deg C
Thermal Shock	MIL-STD-202, Method 107, Condition B

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

Plotted and Other Data

Notes:

RA 3.5mm Male Connector Clamp/Solder Attachment for FM-SR047ALTN-COIL, FM-SR047CU-COIL, FM-SR047CUTN-COIL, .047 Semi-Rigid Cable 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.

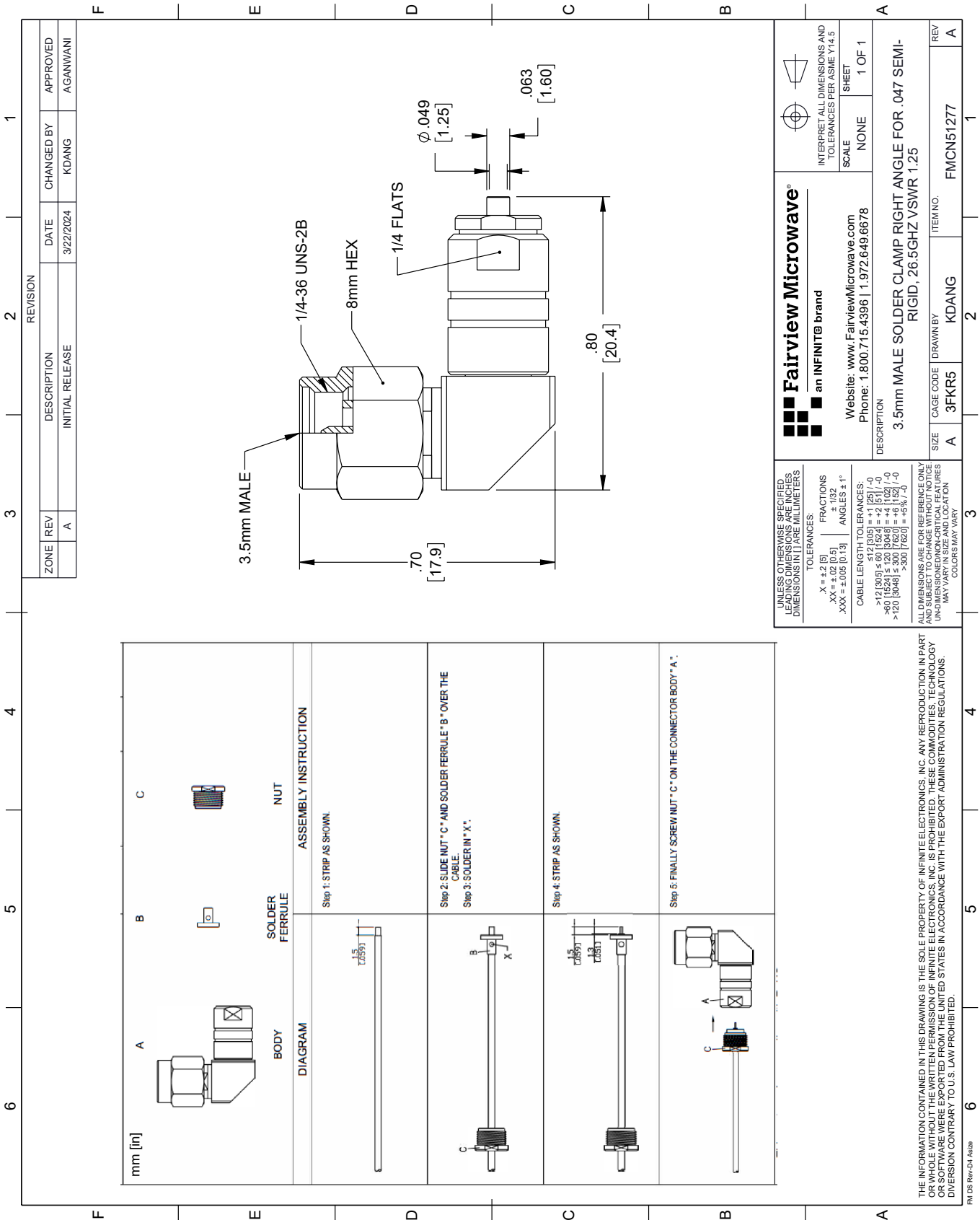
For additional information on this product, please click the following link: [RA 3.5mm Male Connector Clamp/Solder Attachment for FM-SR047ALTN-COIL, FM-SR047CU-COIL, FM-SR047CUTN-COIL, .047 Semi-Rigid Cable FMCN51277](#)

URL: <https://www.fairviewmicrowave.com/3.5mm-male-fm-sr047altn-coil-fm-sr047cu-coil-fm-sr047cutn-coil-.047-semi-rigid-connector-fmcn51277-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.

FMCN51277 CAD Drawing

RA 3.5mm Male Connector Clamp/Solder Attachment for FM-SR047ALTN-COIL, FM-SR047CU-COIL, FM-SR047CUTN-COIL, .047 Semi-Rigid Cable



SMPS Female VITA 67.3 Connector Solder Attachment for FM-F047, FM-F047HF, FM-F047LL, FM-F047FLX

Fairview Microwave's FMCN49829 SMPS 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 SMPS 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 SMPS female VITA 67.3 connector FMCN49829 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:

- SMPS Female Connector
- 50 Ohms
- Straight Body Geometry
- FM-F047, FM-F047HF, FM-F047LL, FM-F047FLX Interface Type
- Solder Attachment
- VITA 67.3 Design

Electrical Specifications

Description	Min	Typ	Max	Units
Frequency Range	DC		40	GHz
VSWR			1.4:1	

Mechanical Specifications

Size	
Length	0.6 in [15.24 mm]
Width/Dia.	0.13 in [3.30 mm]
Height	0.13 in [3.3 mm]
Weight	0.0009 lbs [0.41 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 to a Full Detent connector).

Environmental Specifications

Temperature	
Operating Range	-65 to +165 deg C
Humidity	MIL-STD-202, Method 106, Less Step 7B
Shock	MIL-STD-202, Method 213, Condition I

Features:

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

Applications:

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

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Vibration
Thermal Shock

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

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

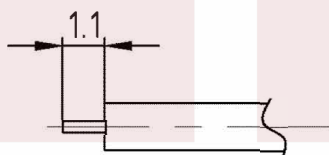
Plotted and Other Data

Notes:

- FMCN49829 works with FMCN49831 SMPS VITA 67.3 12 Port Backplane Module D and FMCN49833 SMPS VITA 67.3 14 Port Backplane Module C

Assembly Instruction

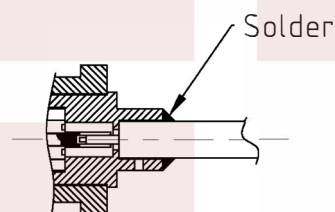
Cable Assembly Instructions



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:

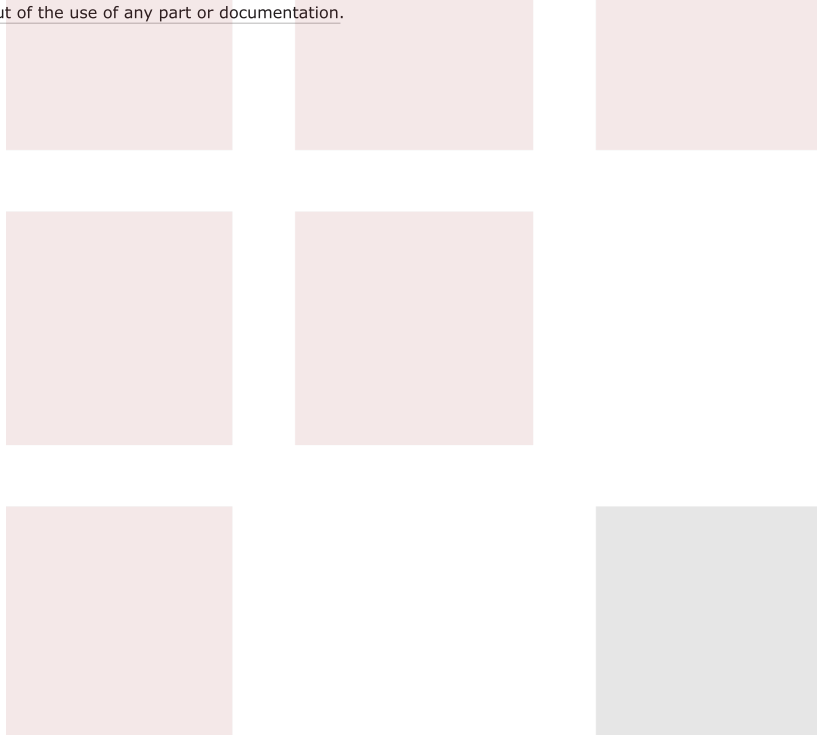
For FMCN49817, FMCN49819 and FMCN49829

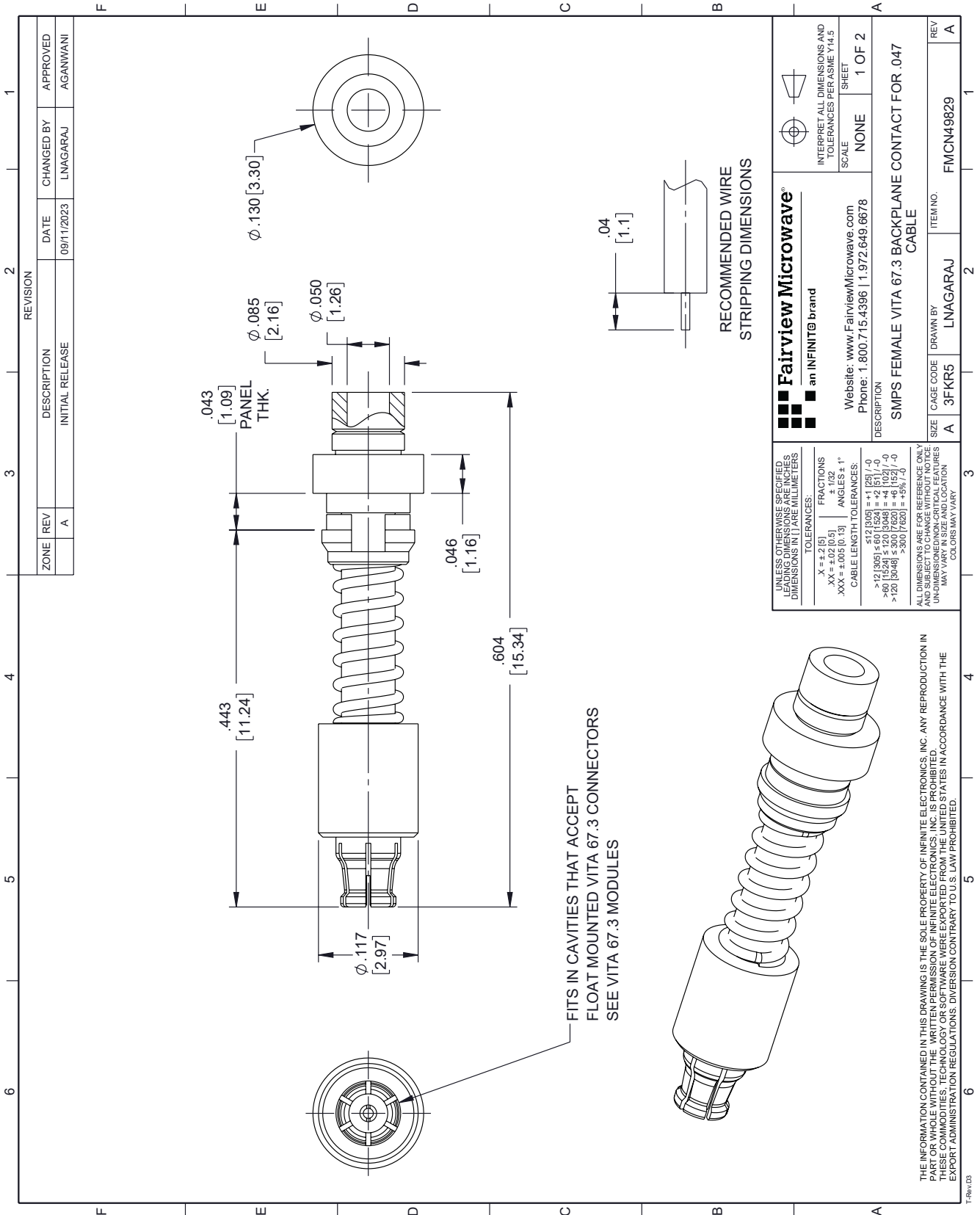
SMPS Female VITA 67.3 Connector Solder Attachment for FM-F047, FM-F047HF, FM-F047LL, FM-F047FLX from Fairview Microwave is in-stock and available to ship same-day. All of our RF/microwave products are available off-the-shelf from our ISO 9001:2008 certified facilities in Lewisville, Texas. Fairview Microwave is RF on-demand.

For additional information on this product, please click the following link: [SMPS Female VITA 67.3 Connector Solder Attachment for FM-F047, FM-F047HF, FM-F047LL, FM-F047FLX FMCN49829](#)

URL: <https://www.fairviewmicrowave.com/smps-female-fm-f047-fm-f047hf-fm-f047ll-fm-f047flx-connector-fmcn49829-p.aspx>

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.047 Semi-Rigid Coax Cable with a Bare Copper Outer Conductor in Straight Sections

.047 diameter semi-rigid coaxial cable is the cable of choice for many RF and Microwave engineers. This form factor is widely used in the RF industry and many connector series and configurations are available for this cable. Because of the solid copper wall design the cable can be formed using proper tooling with a minimum inside bend radius of .05 inches.

Electrical Specifications

Description	Min	Typ	Max	Units
Frequency Range	DC		40	GHz
Impedance		50		Ohms
DWV (AC)			2,000	Vrms

Performance by Frequency Band

Description	F1	F2	F3	F4	F5	Units
Frequency	1	10	20			GHz
Attenuation, Typ	40 131.23	130 426.51	190 623.36			dB/100ft dB/100m
Power In (CW), Max	32	9	6.5			Watts

Mechanical Specifications

Min. Bend Radius (Installation) 0.05 in [1.27 mm]

Construction Specifications

Description	Material and Plating	Diameter
Inner Conductor	Copper Clad Steel, Silver	0.011 in [0.28 mm]
Conductor Type	Solid	
Dielectric	PTFE	0.037 in [0.94 mm]
Outer Conductor	Copper, Bare	0.047 in [1.19 mm]

Environmental Specifications

Temperature

Operating Range -55 to +100 deg C

Compliance Certifications (visit www.FairviewMicrowave.com for current document)

RoHS Compliant Yes
 REACH Compliant 12/17/2014

Plotted and Other Data

Notes:

Configuration:

- Semi-Rigid Cable

Features:

- Silver Plated Copper Clad Steel center conductor
- PTFE dielectric material
- Bare Copper Outer Conductor
- Operating to 40 GHz
- Minimum inside bend radius of .05 inches
- ROHS compliant

Applications:

- RF and Microwave Cable Assemblies to 40 GHz
- Preformed cable assemblies to insure fit and layout
- Test Equipment port jumpers

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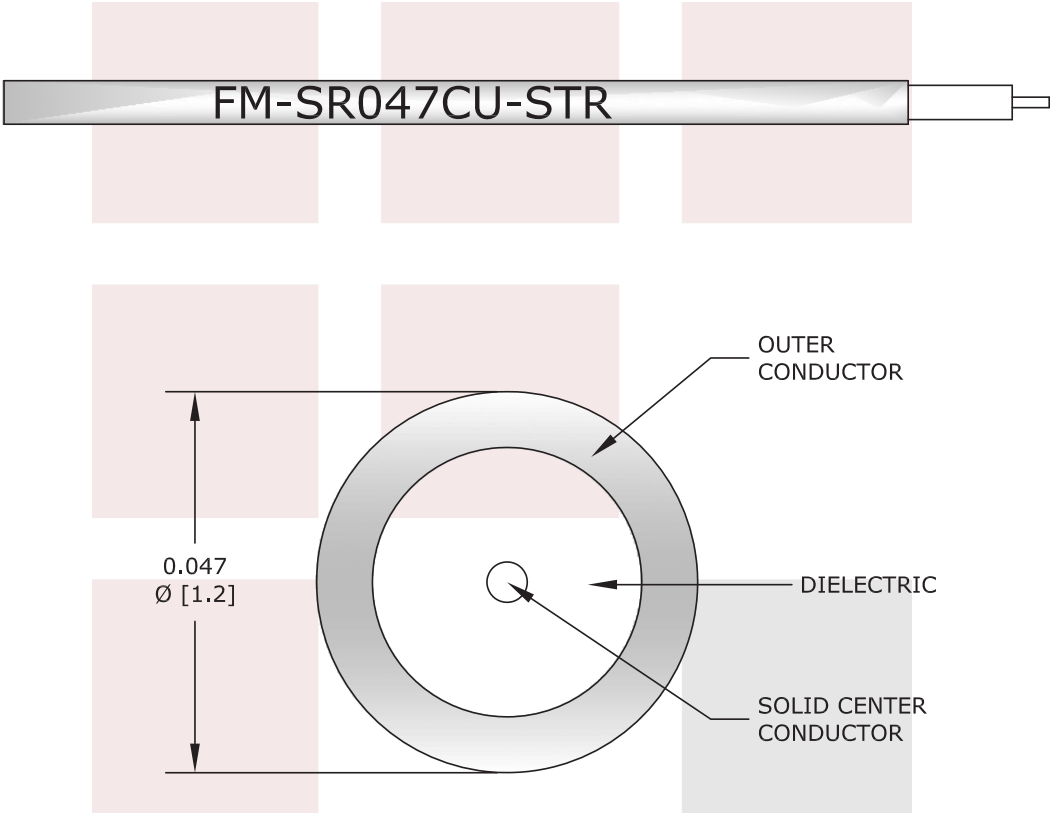
.047 Semi-Rigid Coax Cable with a Bare Copper Outer Conductor in Straight Sections from Fairview Microwave has same day shipment for domestic and International orders. Our RF, microwave and fiber optic products maintain a 99% availability and are part of the broadest selection in the industry.

Click the following link to obtain additional part information: [.047 Semi-Rigid Coax Cable with a Bare Copper Outer Conductor in Straight Sections FM-SR047CU-STR](#)

URL: <http://www.fairviewmicrowave.com/.047-semi-rigid-coax-cable-copper-fm-sr047cu-str-p.aspx>

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TITLE .047 Semi-Rigid Coax Cable with a Bare Copper Outer Conductor in Straight Sections	DWG NO FM-SR047CU-STR		CAGE CODE 3FKR5		
	CAD FILE 012716	SHEET	SCALE N/A	SIZE A	2233