

SMA Female Bulkhead Connector Solder Attachment for FM-SR047ALTN-COIL, FM-SR047CU-COIL, FM-SR047CUTN-COIL, .047 Semi-Rigid Cable

FMCN51271



Configuration

- SMA Female Connector
- 50 Ohms
- Straight Body Geometry
- Connector Interface Types: FM-SR047ALTN-COIL, FM-SR047CU-COIL, FM-SR047CUTN-COIL, .047 Semi-Rigid
- Bulkhead

Features

- Operating Frequency of 18 GHz Max.
- Excellent VSWR of 1.25:1
- Gold over Nickel Plated Beryllium Copper Contact

Applications

- General Purpose Test
- Rack and Panel Mount Applications
- Custom Cable Assemblies

Description

SMA Female Bulkhead Standard Bulkhead Connector Solder Attachment for FM-SR047ALTN-COIL, FM-SR047CU-COIL, FM-SR047CUTN-COIL and .047 Semi-Rigid Cable, part number FMCN51271, from Fairview Microwave is in-stock and ships same day. This SMA female connector operates up to a maximum frequency of 18 GHz and offers excellent VSWR of 1.25:1. Fairview's FMCN51271 bulkhead SMA connector enables designers to make external connections on product enclosures, and can be used in a variety of other rack mount and panel mount applications.

Fairview's SMA female bulkhead connector FMCN51271 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		18	GHz
VSWR			1.25:1	
Insertion Loss			0.17	dB
Operating Voltage (AC)			250	Vrms
Dielectric Withstanding Voltage (AC)			750	Vrms
Inner Conductor DC Resistance			3	mOhms
Outer Conductor DC Resistance			2	mOhms
Insulation Resistance	5,000			MOhms
Impedance		50		Ohms

Electrical Specification Notes:

Insertion loss is = $0.04 \cdot \sqrt{F(\text{GHz})}$ dB

Mechanical Specifications

Size

Length	0.433071 in [11 mm]
Width	0.433071 in [11 mm]

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Height	0.748031 in [19 mm]
Weight	0.015 lbs [6.8 g]
Mating Cycles	100 Cycles
Mating Torque	4 to 5.3 in-lbs [[0.45 to 0.60 Nm]]
Cable Retention Force	6.1 lbs [2.77 kg]

Material Specifications

Description	Material	Plating
Contact	Beryllium Copper	Gold over Nickel
Insulation	Teflon	
Body	Brass	Gold over Nickel
Coupling Nut	Brass	Gold over Nickel
Gasket	Silicone	
Washer	Brass	Gold over Nickel

Environmental Specifications

Temperature	
Operating Range	-40 to +165 deg C
Thermal Shock	MIL-STD-202, Method 107, Condition B

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

Plotted and Other Data

Notes:

SMA Female Bulkhead Connector 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: [SMA Female Bulkhead Connector Solder Attachment for FM-SR047ALTN-COIL, FM-SR047CU-COIL, FM-SR047CUTN-COIL, .047 Semi-Rigid Cable FMCN51271](#)

URL: <https://www.fairviewmicrowave.com/sma-female-fm-sr047altn-coil-fm-sr047cu-coil-fm-sr047cutn-coil-.047-semi-rigid-connector-fmcn51271-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.

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Environmental Specifications

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

Plotted and Other Data

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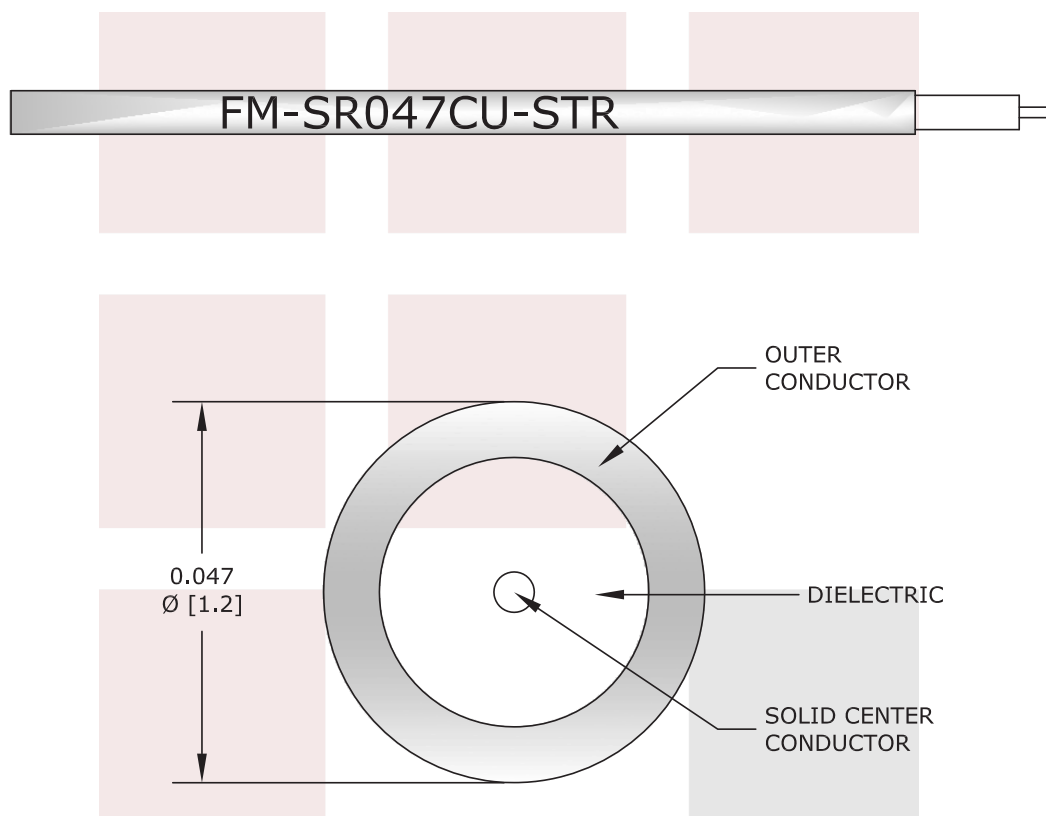
.047 Semi-Rigid Coax Cable with a Bare Copper Outer Conductor in Straight Sections from Fairview Microwave has same day shipment for domestic and International orders. Our RF, microwave and fiber optic products maintain a 99% availability and are part of the broadest selection in the industry.

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