

RP SMA Male (Plug) to RP SMA Female (Jack)  
Bulkhead Mount Adapter, VSWR 1.2 up to 6 GHz



**FMAD1731**

**Configuration**

- SMA Male Reverse Polarity Connector 1
- SMA Female Reverse Polarity Connector 2
- 50 Ohms Impedance
- Bulkhead Mount Method

**Features**

- VSWR of 1.2:1 max up to 6 GHz
- Gold over Nickel over Copper Plated Beryllium Copper Contact

**Applications**

- General Purpose Test
- Rack Mounted Equipment

**Description**

RP SMA male to RP SMA female bulkhead adapter part number FMAD1731 from Fairview Microwave is in-stock and ships same day. This Fairview Reverse Polarity SMA to Reverse Polarity SMA adapter has a male to female gender configuration. FMAD1731 Reverse Polarity SMA male to Reverse Polarity SMA female adapter operates to 6 GHz. The Fairview Microwave RF adapter provides excellent VSWR of 1.2:1 maximum. This SMA adapter allows for easier connections in tight spaces. Our RF RP SMA to RP SMA bulkhead adapter allows designers to create external connections on their product enclosures, and can be used in a variety of other rack mount and panel mount applications.

RF adapters can be used to enable connections between two connector types that would otherwise not mate. Certain RF adapter configurations can also be used to protect connectors on expensive equipment where the number of connect and disconnect cycles is high. An RF, microwave, or millimeter wave adapter is connected to the equipment and the commonly changed connection is made with the adapter which can be easily replaced when it wears out after high usage; such adapters are referred to as connector savers. Fairview Microwave also offers bulkhead, panel mount, hermetically sealed, Reverse Polarity, and isolated ground adapter varieties to serve all of your RF, microwave and millimeter wave needs.

**Electrical Specifications**

Description	Minimum	Typical	Maximum	Units
Frequency Range	DC		6	GHz
Impedance		50		Ohms
VSWR			1.2:1	
Insertion Loss			0.098	dB
Operating Voltage (AC)			500	Vrms
Dielectric Withstanding Voltage (AC)			1,500	Vrms
Insulation Resistance	5,000			MOhms

**Mechanical Specifications**

**Size**

Length	1.06 in [27.00 mm]
Width	0.67 in [17.12 mm]
Height	0.67 in [17.12 mm]
Weight	0.01 lbs [4.54 g]

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Description	Connector 1	Connector 2
Polarity	Reverse Polarity	Reverse Polarity
Mating Cycles, Min	100	100
Contact Retention Force, Min	60.7 lbs [27.53 kg]	60.7 lbs [27.53 kg]
Contact Captivation Axial Force, Min	6.1 lbs [2.77 kg]	6.1 lbs [2.77 kg]
Coupling Proof Torque	5.3 in-lbs [0.6 Nm]	5.3 in-lbs [0.6 Nm]

**Material Specifications**

Description	Connector 1		Connector 2	
	Material	Plating	Material	Plating
Type	SMA Male Reverse Polarity		SMA Female Reverse Polarity	
Contact	Beryllium Copper	Gold over Nickel over Copper	Beryllium Copper	Gold over Nickel over Copper
Body	Brass	Gold over Nickel over Copper	Brass	Gold over Nickel over Copper
Gasket	Silicone		Silicone	

**Environmental Specifications**

**Temperature**

Operating Range	-65 to +165 °C
Humidity	MIL-STD-202, Method 206
Thermal Shock	MIL-STD-202, Method 107, Condition B
Salt Spray	MIL-STD-202, Method 101, Condition B

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

**Plotted and Other Data**

RP SMA Male (Plug) to RP SMA Female (Jack) Bulkhead Mount Adapter, VSWR 1.2 up to 6 GHz 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.

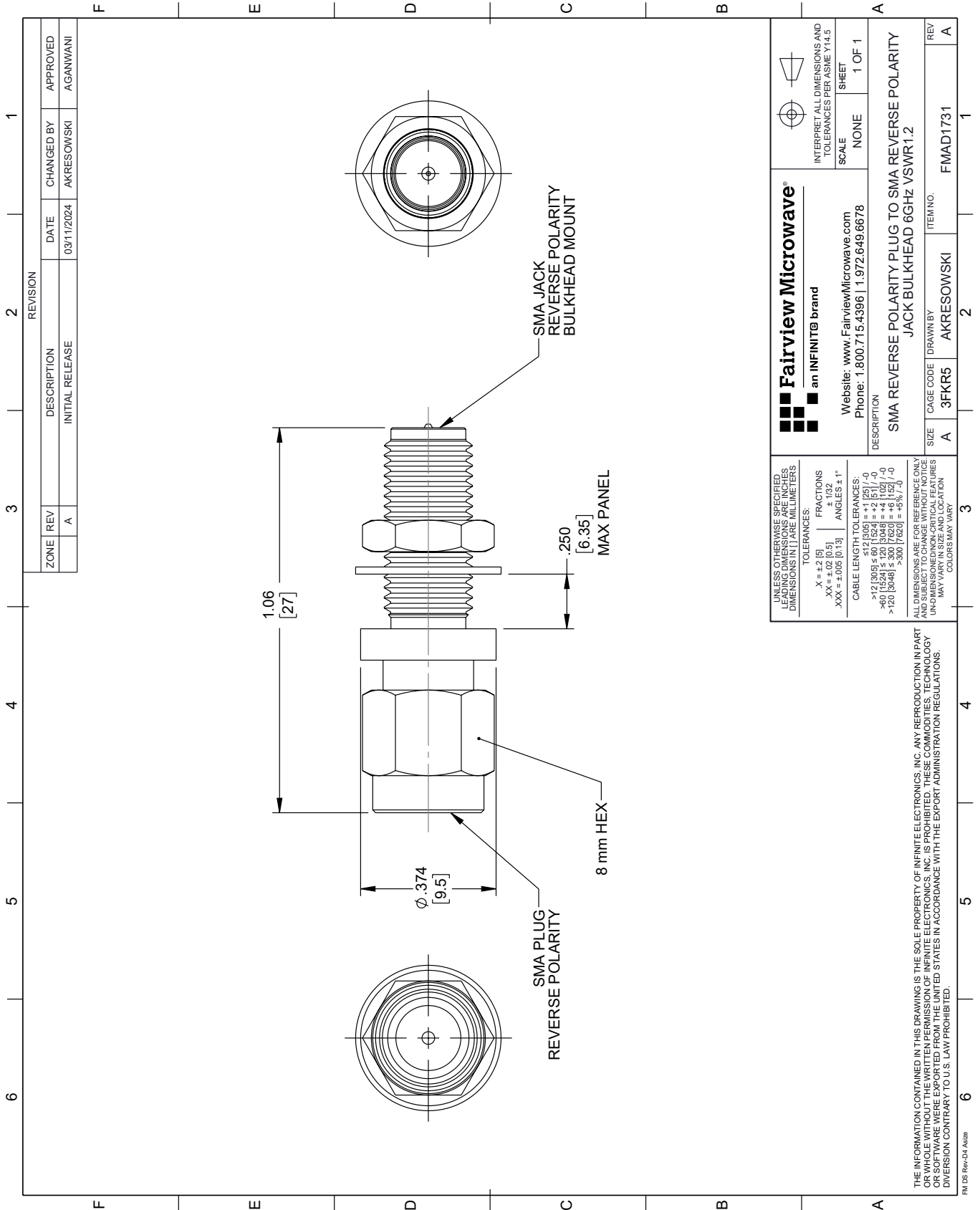
For additional information on this product, please click the following link: [RP SMA Male \(Plug\) to RP SMA Female \(Jack\) Bulkhead Mount Adapter, VSWR 1.2 up to 6 GHz FMAD1731](#)

URL: <https://www.fairviewmicrowave.com/rp-sma-male-to-rp-sma-female-bulkhead-adapter-mil-std-202-method-206-fmad1731-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.

# FMAD1731 CAD Drawing

RP SMA Male (Plug) to RP SMA Female (Jack) Bulkhead Mount Adapter, VSWR 1.2 up to 6 GHz



REVISION		DATE	CHANGED BY	APPROVED
ZONE	REV	DESCRIPTION	AKRESOWSKI	AGANWANI
	A	INITIAL RELEASE		

**Fairview Microwave®**  
an INFINIT® brand

Website: [www.FairviewMicrowave.com](http://www.FairviewMicrowave.com)  
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: SMA REVERSE POLARITY PLUG TO SMA REVERSE POLARITY JACK BULKHEAD 6GHz VSWR1.2

SIZE	CAGE CODE	DRAWN BY	ITEM NO.
A	3FKR5	AKRESOWSKI	FMAD1731

REV: A

UNLESS OTHERWISE SPECIFIED, LEADING DIMENSIONS ARE IN INCHES AND TRAILING DIMENSIONS ARE IN MILLIMETERS

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

CABLE LENGTH TOLERANCES:  
 >12 [305] ≤ 60 [1524] = ±.1 [25] / -0  
 >60 [1524] ≤ 120 [3048] = ±.4 [102] / -0  
 >120 [3048] ≤ 300 [7620] = ±.8 [20] / -0

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

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