

## Hermetically Sealed SMA Female to SMA Female Bulkhead Adapter

Hermetically sealed SMA female to SMA female bulkhead adapter part number SM4918 from Fairview Microwave is in-stock and ships same day. This Fairview SMA to SMA adapter has a female to female gender configuration. SM4918 SMA female to SMA female adapter operates to 18 GHz. The SMA connector mates mechanically with commercially available 3.5mm and 2.92mm (K) connectors. Our RF SMA to 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. The Fairview Microwave hermetic SMA to SMA adapter prevents the leakage of gases, making it suitable for high pressure or vacuum applications or whenever an airtight seal is required. The Fairview Microwave RF adapter provides good VSWR of 1.35:1 maximum.

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	Min	Typ	Max	Units
Frequency Range	DC		18	GHz
VSWR			1.35:1	

Electrical Specification Notes:  
 Values at 25° C, sea level.

### Mechanical Specifications

<b>Size</b>	
Length	0.875 in [22.23 mm]
Width	0.5 in [12.7 mm]
Weight	0.017 lbs [7.71 g]

Description	Connector 1	Connector 2
Type	SMA Female	SMA Female
Polarity	Standard	Standard
Interface Specification	MIL-STD-348	MIL-STD-348
Connector Option	Hermetically Sealed	Hermetically Sealed
Mating Cycles	500	500

Mechanical Specification Notes:

The glass bead seal in the center of the adapter is sensitive to shock and axial pressure. If the adapter is subjected to shock and overtightening of the coupling nut, the glass bead interseal will shatter easily. Jam nut torque not to exceed 15 inch pounds.



### Configuration:

- SMA Female Connector 1
- SMA Female Connector 2
- 50 Ohms
- Straight Body Geometry
- Bulkhead Mount Method

### Features:

- VSWR of 1.35:1 max up to 18 GHz
- Hermetically Sealed
- SMA interface meets MIL-STD-348
- Contact plating according to MIL-G-45204
- Gold Plated Beryllium Copper Contact

### Applications:

- General Purpose Test
- Vacuum Test Environment
- Rack Mounted Equipment

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**Material Specifications**

Description	Connector 1	Connector 2
Type	SMA Female	SMA Female
Contact Material	Beryllium Copper	Beryllium Copper
Contact Plating	Gold	Gold
Contact Plating Spec.	MIL-G-45204	MIL-G-45204
Insulation Material	PTFE	PTFE
Outer Contact Material	Passivated Stainless Steel	Passivated Stainless Steel

**Environmental Specifications**

**Temperature**

Operating Range  
 Hermetic Seal

-55 to +125 deg C

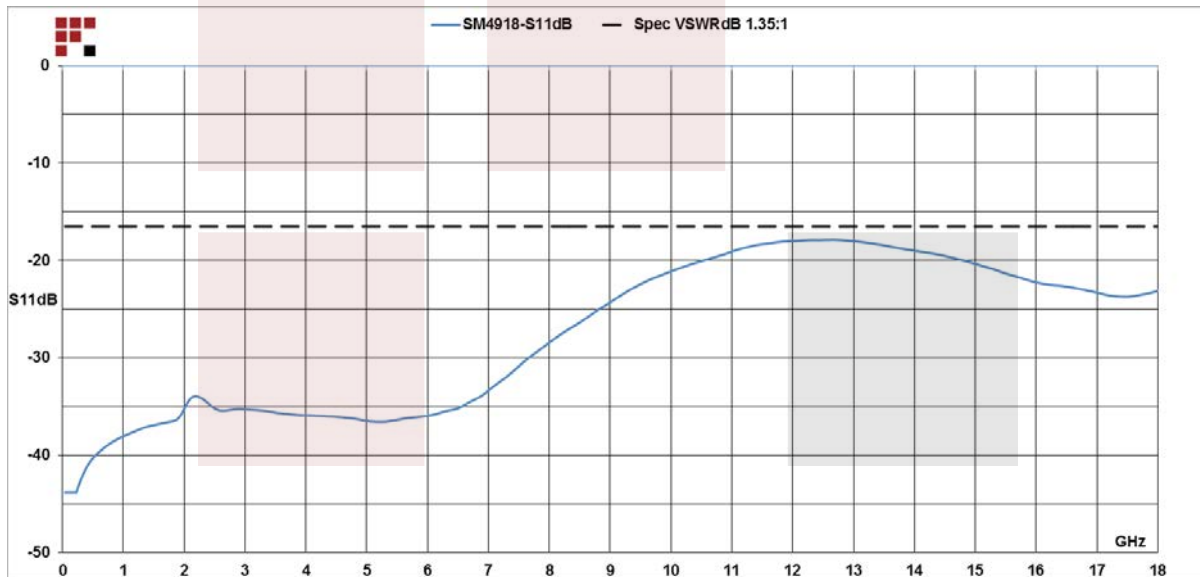
Leak rate not to exceed  $1 \times 10^{-7}$  cc/sec of helium at 1 atm differential

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

**Plotted and Other Data**

Notes:

**Typical Performance Data**



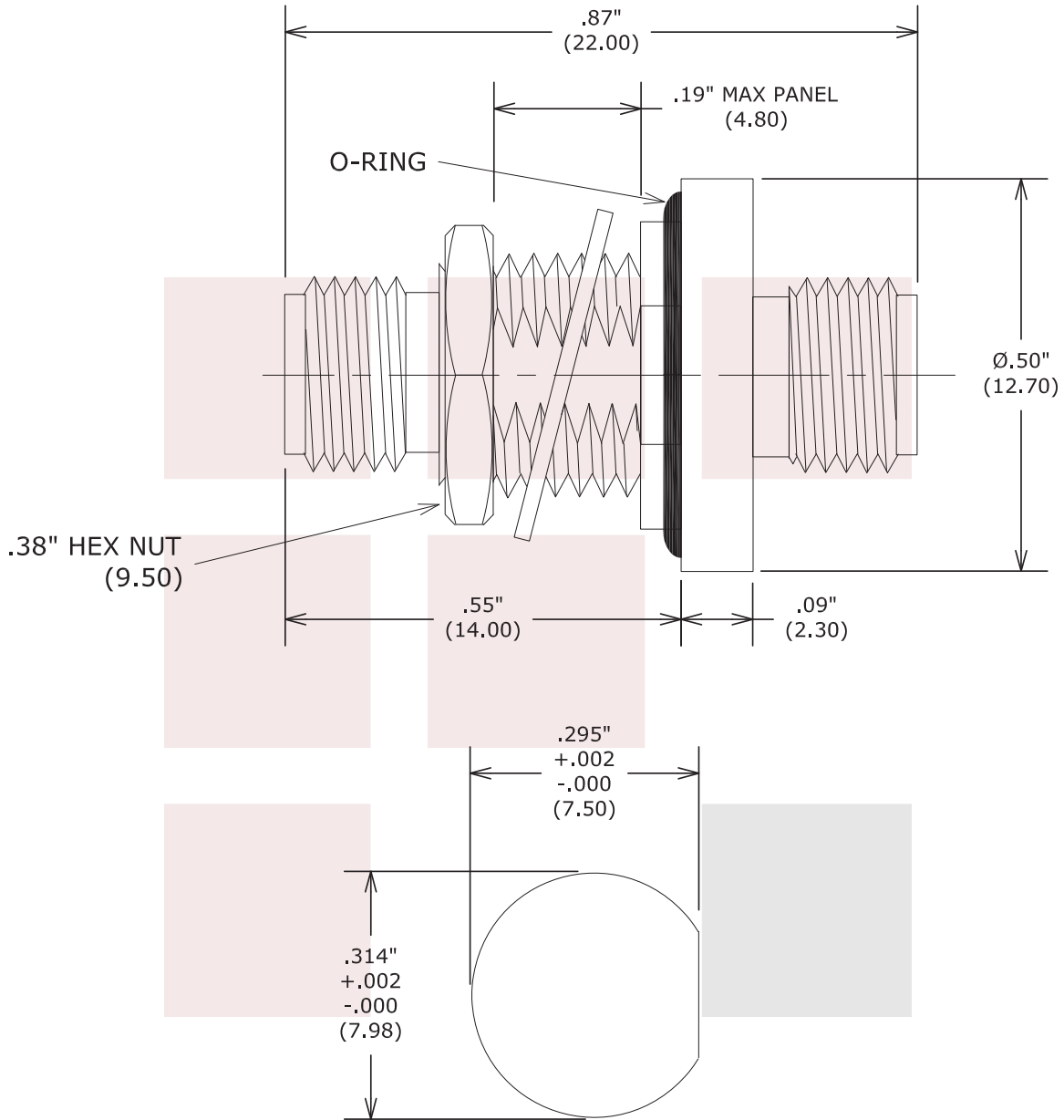
Hermetically Sealed SMA Female to SMA Female Bulkhead Adapter from Fairview Microwave is in-stock and available to ship same-day. All of our RF/microwave products are available off-the-shelf from our ISO 9001:2008 certified facilities in Allen, Texas. Fairview Microwave is RF on-demand.

For additional information on this product, please click the following link: [Hermetically Sealed SMA Female to SMA Female Bulkhead Adapter SM4918](#)

URL: <https://www.fairviewmicrowave.com/hermetically-sealed-sma-female-sma-female-bulkhead-adapter-sm4918-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.





RECOMMENDED PANEL CUTOUT

<b>FAIRVIEW MICROWAVE INC.</b> ALLEN, TX 75013 WWW.FAIRVIEWMICROWAVE.COM		NOTES: 1. UNLESS OTHERWISE SPECIFIED ALL DIMENSIONS ARE NOMINAL. 2. ALL SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE AT ANY TIME. 3. DIMENSIONS ARE IN INCHES [mm].			
TITLE Hermetically Sealed SMA Female to SMA Female Bulkhead Adapter		DWG NO SM4918		CAGE CODE 3FKR5	
CAD FILE	091914	SHEET	SCALE	N/A	SIZE A 2231