

## High Power Isolator SMA Female With 18 dB Isolation From 698 MHz to 960 MHz Rated to 1000 Watts

The SFI6996S is a high power single junction isolator offering a forward power rating of 1,000 Watts CW and reverse power rating of 30 Watts CW over an operational frequency band of 698 to 960 MHz. This coaxial isolator uses SMA female connectors on all ports and has a minimum of 18 dB isolation.

Fairview Microwave offers a wide variety of isolators to fit your needs. These are two-port devices that transmit microwave or radio frequency power in one direction only and block the signal in the opposite direction. They can be thought of as a diode for RF energy. Isolators are used to isolate equipment from the effects of conditions outside of the equipment. For instance they are used to prevent a microwave source being detuned by a mismatched load. Fairview Microwave's isolators feature excellent insertion loss, high isolation and reliability.

### Electrical Specifications

Description	Min	Typ	Max	Units
Frequency Range	698		960	MHz
Impedance		50		Ohms
Insertion Loss			0.35	dB
Isolation	18			dB
VSWR			1.3:1	
Forward Power, CW			1	KWatts
Reverse Power, CW			30	Watts

Electrical Specification Notes:

Values at 25°C, sea level.

### Mechanical Specifications

#### Size

Length	2 in [50.8 mm]
Width	1.75 in [44.45 mm]
Height	1.02 in [25.91 mm]
Weight	0.4 lbs [181.44 g]
Body Material and Plating	Aluminum

#### Configuration

Design	Single Junction
Direction	1 to 2
Package Style	Connectorized
Connector 1	SMA Female
Connector 2	SMA Female

### Environmental Specifications

#### Temperature

Operating Range	-20 to +70 deg C
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### Compliance Certifications (see [product page](#) for current document)

### Plotted and Other Data

Notes:



### Features:

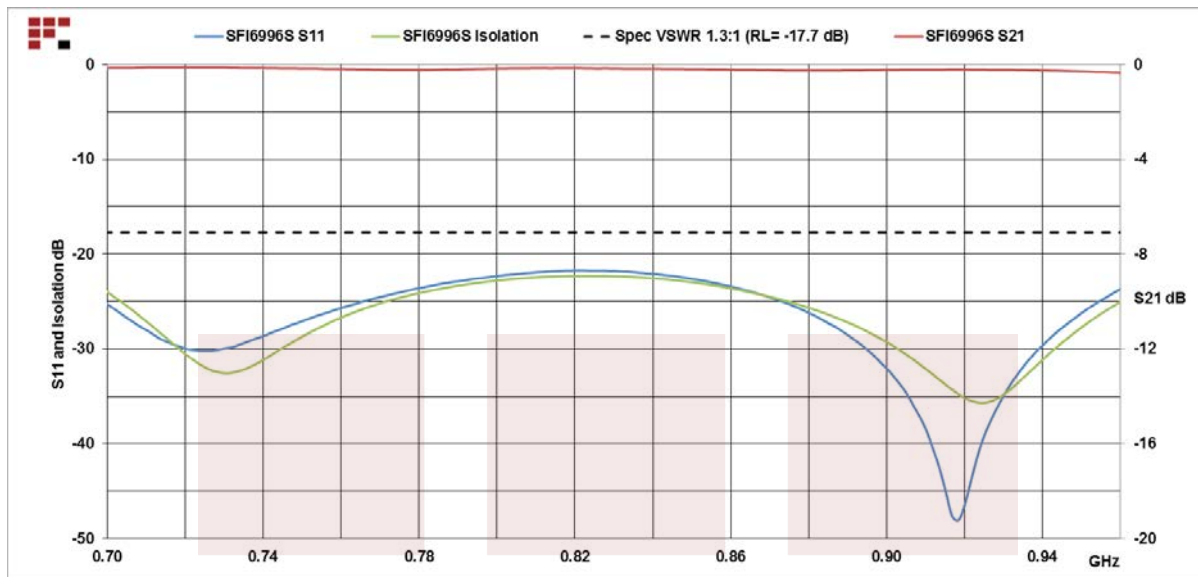
- High Power
- 698 to 960 MHz Frequency Range
- Max Forward Power 1,000 Watts CW
- Max Reverse Power 30 Watts CW
- Insertion Loss < 0.35 dB
- VSWR < 1.3:1
- Isolation > 18 dB
- SMA Female Connectors

### Applications:

- Radar Systems
- Military
- Wireless Radio Systems
- Telecom Infrastructure
- Communication Systems
- R&D Labs
- Microwave Radio Systems

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### Typical Performance Data

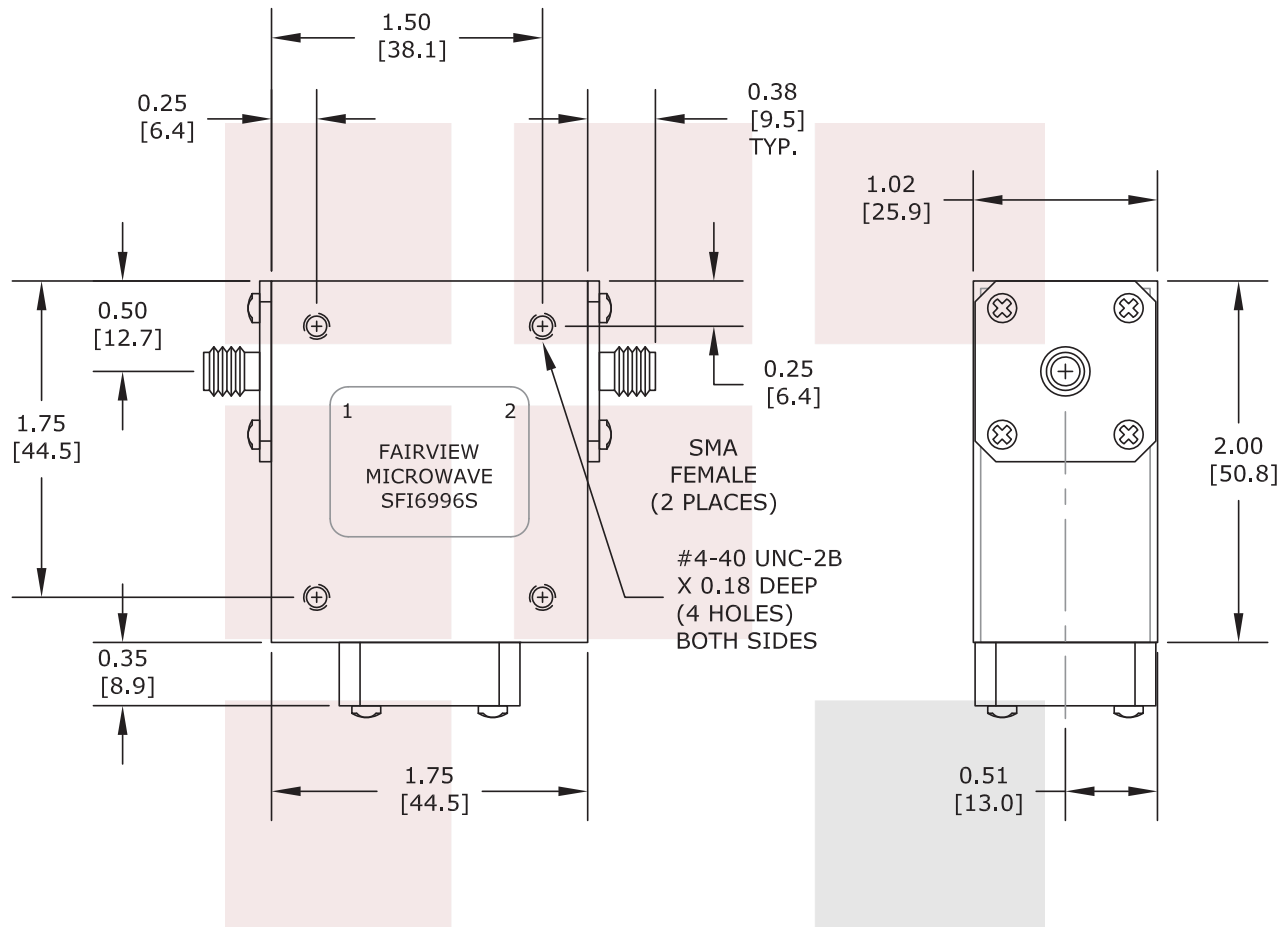


High Power Isolator SMA Female With 18 dB Isolation From 698 MHz to 960 MHz Rated to 1000 Watts from Fairview Microwave is in-stock and available to ship same-day. All of our RF/microwave products are available off-the-shelf from our ISO 9001:2008 certified facilities in Allen, Texas. Fairview Microwave is RF on-demand.

For additional information on this product, please click the following link: [High Power Isolator SMA Female With 18 dB Isolation From 698 MHz to 960 MHz Rated to 1000 Watts SFI6996S](https://www.fairviewmicrowave.com/sma-isolator-18-db-isolation-698-960-mhz-1000-watts-sfi6996s-p.aspx)

URL: <https://www.fairviewmicrowave.com/sma-isolator-18-db-isolation-698-960-mhz-1000-watts-sfi6996s-p.aspx>

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**STANDARD TOLERANCES**

.X ±0.2  
.XX ±0.1  
.XXX ±0.05

\*STANDARD TOLERANCES APPLY  
ONLY TO DIMENSIONS IN INCHES

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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  
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DWG NO	SFI6996S	CAGE CODE	3FKR5
CAD FILE	080216	SHEET	SCALE N/A SIZE A 2233