

## Isolator SMA Female With 16 dB Isolation From 8 GHz to 18 GHz Rated to 10 Watts

The SFI0818 is a single junction isolator offering a forward power rating of 10 Watts CW and reverse power rating of 1 Watt CW over an operational frequency band of 8 to 18 GHz. This coaxial isolator uses SMA female connectors on all ports and has a minimum of 16 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	8		18	GHz
Impedance		50		Ohms
Insertion Loss			1.25	dB
Isolation	16			dB
VSWR			1.5:1	
Forward Power, CW			10	Watts
Reverse Power, CW			1	Watts

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

### Mechanical Specifications

Size	
Length	0.47 in [11.94 mm]
Width	0.67 in [17.02 mm]
Height	0.47 in [11.94 mm]
Weight	0.03527 lbs [16 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

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

### Plotted and Other Data

Notes:



### Features:

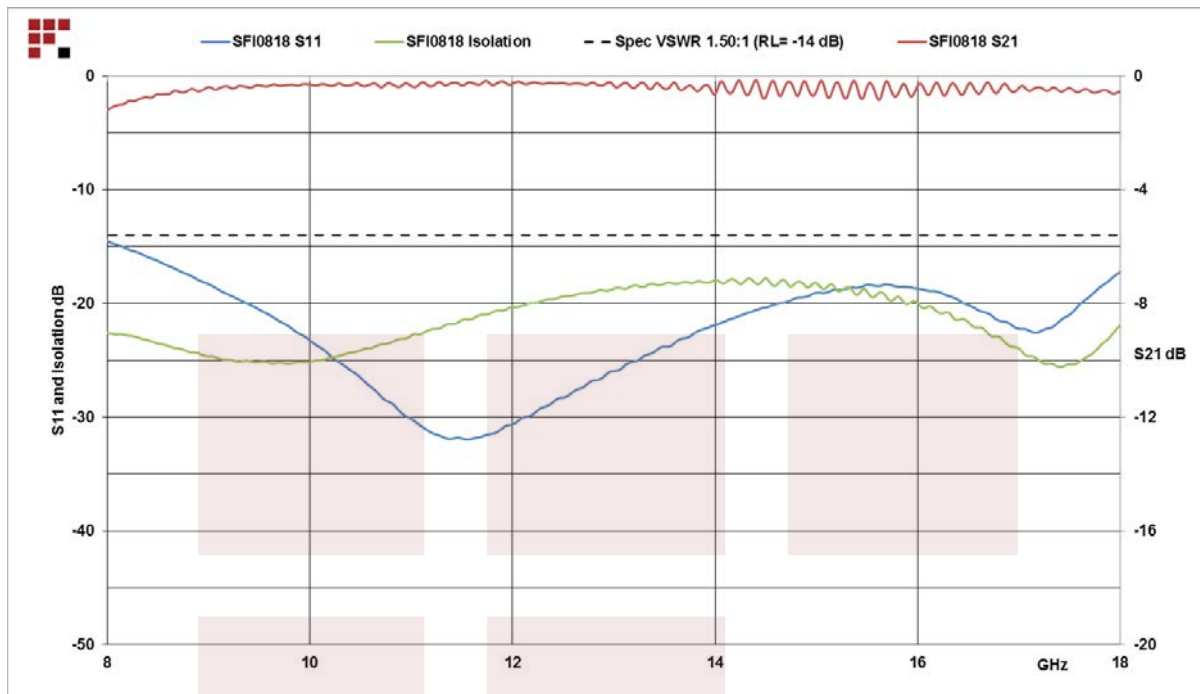
- 8 to 18 GHz Frequency Range
- Max Forward Power 10 Watts CW
- Max Reverse Power 1 Watt CW
- Insertion Loss < 1.25 dB
- VSWR < 1.5:1
- Isolation > 16 dB
- SMA Female Connectors

### Applications:

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

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**Typical Performance Data**

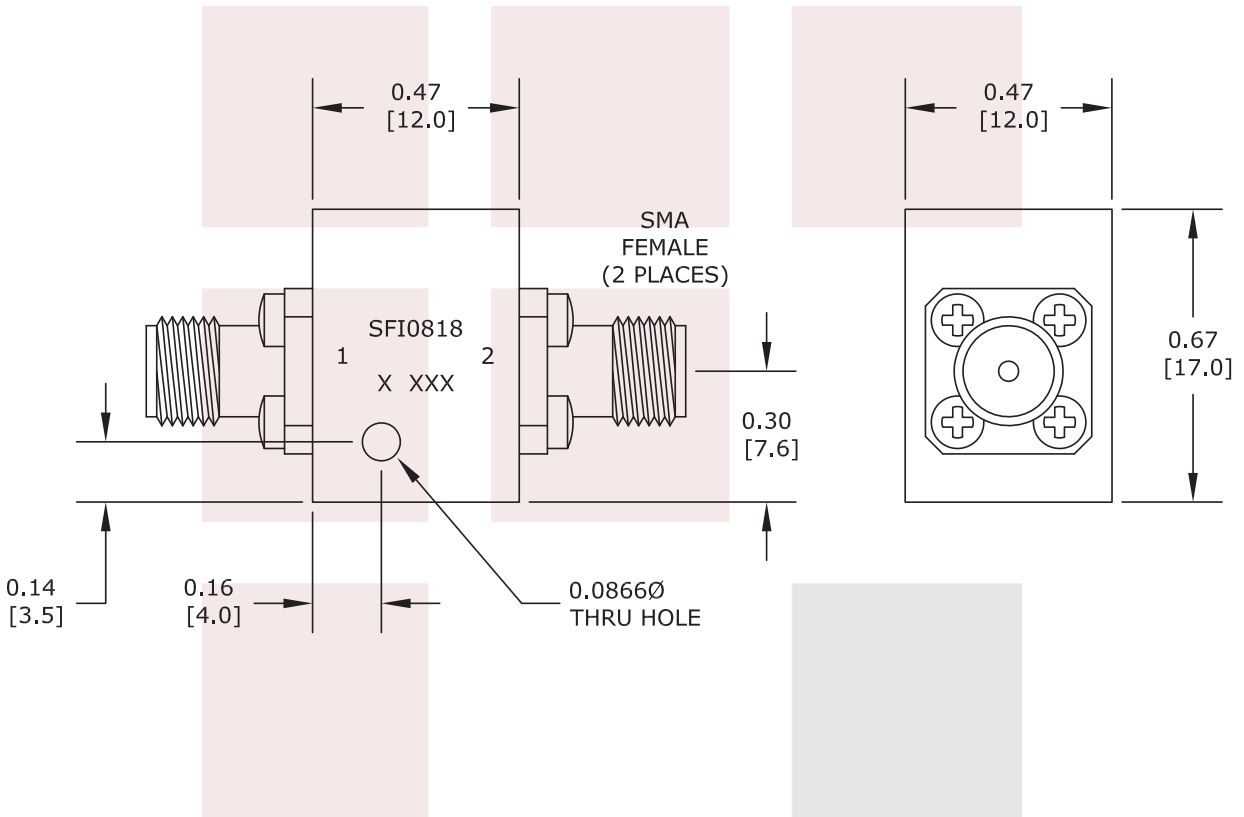


Isolator SMA Female With 16 dB Isolation From 8 GHz to 18 GHz Rated to 10 Watts from Fairview Microwave is in-stock and available to ship same-day. All of our RF/microwave products are available off-the-shelf from our ISO 9001:2008 certified facilities in Allen, Texas. Fairview Microwave is RF on-demand.

For additional information on this product, please click the following link: [Isolator SMA Female With 16 dB Isolation From 8 GHz to 18 GHz Rated to 10 Watts SFI0818](https://www.fairviewmicrowave.com/sma-isolator-16-db-isolation-8-18-ghz-0-watts-sfi0818-p.aspx)

URL: <https://www.fairviewmicrowave.com/sma-isolator-16-db-isolation-8-18-ghz-0-watts-sfi0818-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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TITLE Isolator SMA Female With 16 dB Isolation From 8 GHz to 18 GHz Rated to 10 Watts	DWG NO SFI0818	CAGE CODE 3FKR5			
CAD FILE 080416	SHEET	SCALE N/A	SIZE A	2233	