

Isolator SMA Female With 15 dB Isolation From 8 GHz to 20 GHz Rated to 10 Watts

The SFI0820M is a single junction isolator offering a forward power rating of 10 Watts CW over an operational frequency band of 8 to 20 GHz. This coaxial isolator uses SMA female connector for input port, SMA male for output port and has a minimum of 15 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		20	GHz
Impedance		50		Ohms
Insertion Loss			1	dB
Isolation	15			dB
VSWR			1.45:1	
Forward Power, CW			10	Watts

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

Mechanical Specifications

Size	
Length	0.5 in [12.7 mm]
Width	0.57 in [14.48 mm]
Height	0.39 in [9.91 mm]
Weight	0.032 lbs [14.51 g]
Body Material and Plating	Aluminum

Configuration

Design	Single Junction
Package Style	Connectorized
Connector 1	SMA Female
Connector 2	SMA Male

Environmental Specifications

Temperature	
Operating Range	-40 to +70 deg C

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

Plotted and Other Data

Notes:



Features:

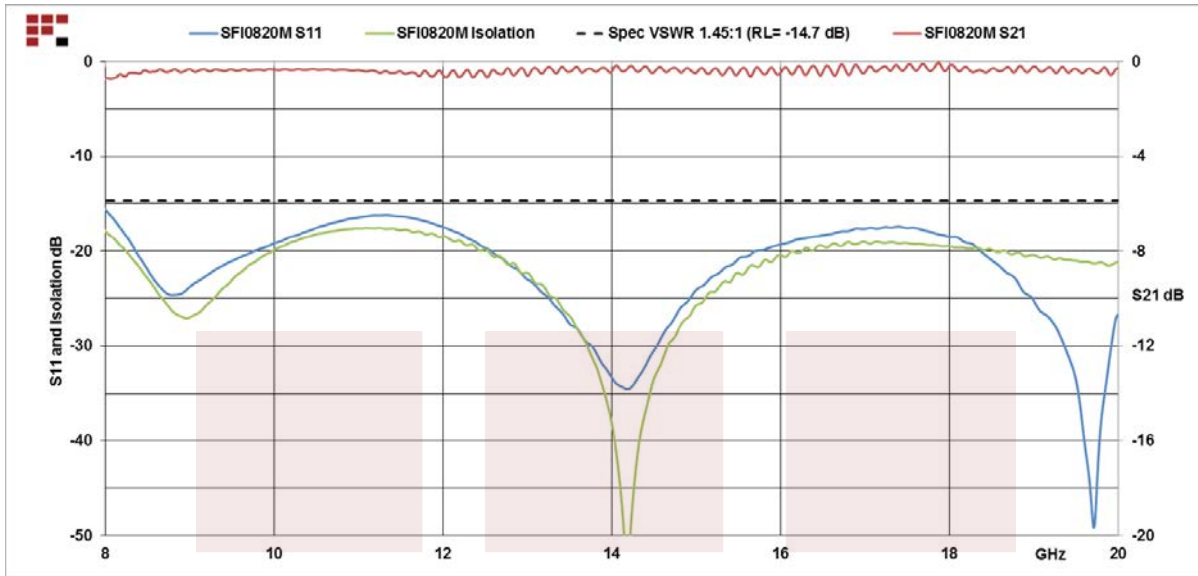
- 8 to 20 GHz Frequency Range
- Max Forward Power 10 Watts CW
- Insertion Loss < 1 dB
- VSWR < 1.45:1
- Isolation > 15 dB
- SMA Female Input
- SMA Male Output

Applications:

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

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Typical Performance Data

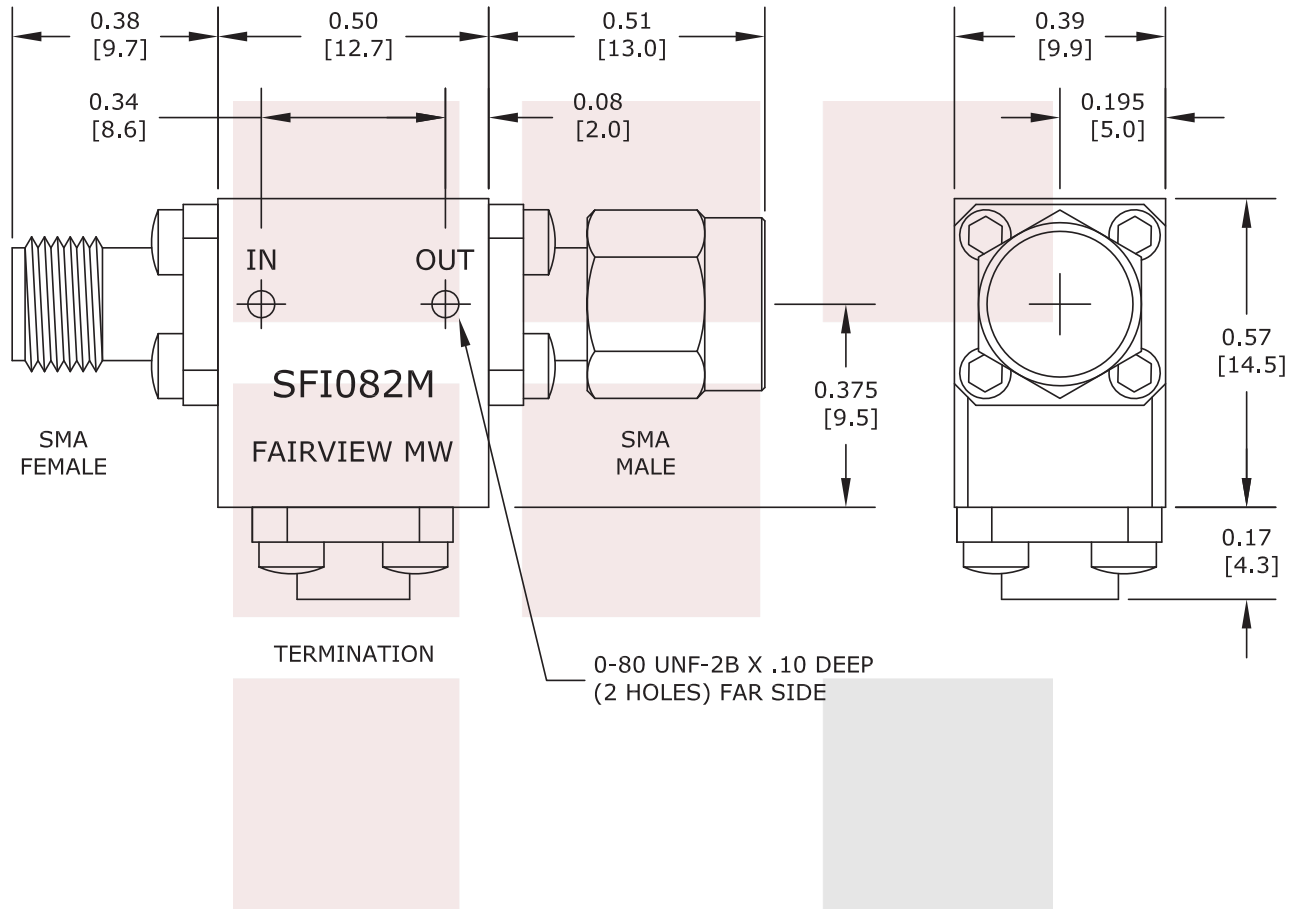


Isolator SMA Female With 15 dB Isolation From 8 GHz to 20 GHz Rated to 10 Watts from Fairview Microwave is in-stock and available to ship same-day. All of our RF/microwave products are available off-the-shelf from our ISO 9001:2008 certified facilities in Allen, Texas. Fairview Microwave is RF on-demand.

For additional information on this product, please click the following link: [Isolator SMA Female With 15 dB Isolation From 8 GHz to 20 GHz Rated to 10 Watts SFI0820M](#)

URL: <https://www.fairviewmicrowave.com/sma-isolator-15-db-isolation-8-20-ghz-0-watts-sfi0820m-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 15 dB Isolation From 8 GHz to 20 GHz Rated to 10 Watts		DWG NO SFI0820M		CAGE CODE 3FKR5	
CAD FILE	080816	SHEET	SCALE	N/A	SIZE A 2233