

Isolator SMA Female With 17 dB Isolation From 3.5 GHz to 12.8 GHz Rated to 2 Watts

The SFI3512 is a single junction isolator offering a forward and reverse power rating of 2 Watts CW over an operational frequency band of 3.5 to 12.8 GHz. This coaxial isolator uses SMA female connectors on all ports and has a minimum of 17 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	3.5		12.8	GHz
Impedance		50		Ohms
Insertion Loss			2.2	dB
Isolation	17			dB
VSWR			1.5:1	
Forward Power, CW			2	Watts
Reverse Power, CW			2	Watts

Electrical Specification Notes:

Values at 25°C, sea level.

Mechanical Specifications

Size

Length	2 in [50.8 mm]
Width	1.2 in [30.48 mm]
Height	0.53 in [13.46 mm]
Weight	0.1896 lbs [86 g]
Body Material and Plating	Aluminum

Configuration

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

Environmental Specifications

Temperature

Operating Range	-55 to +65 deg C
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Compliance Certifications (see [product page](#) for current document)

Plotted and Other Data

Notes:



Features:

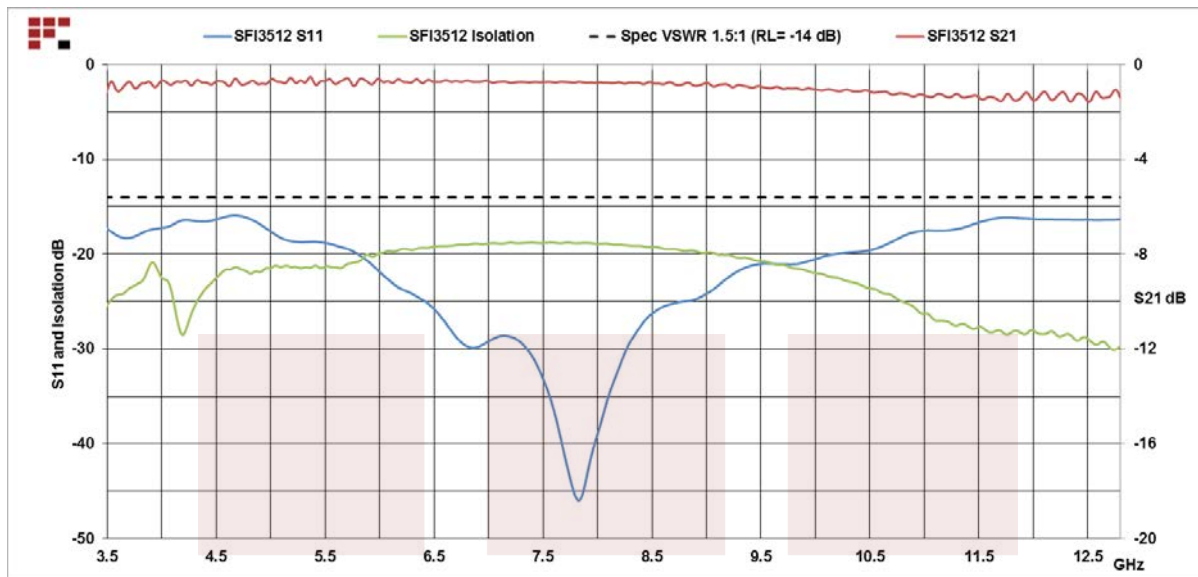
- 3.5 to 12.8 GHz Frequency Range
- Max Forward and Reverse Power 2 Watts CW
- Insertion Loss < 2.2 dB
- VSWR < 1.5:1
- Isolation > 17 dB
- SMA Female Connectors

Applications:

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

Fairview Microwave
1130 Junction Dr. #100
Allen, TX 75013
Tel: 1-800-715-4396 / (972) 649-6678
Fax: (972) 649-6689
www.fairviewmicrowave.com
sales@fairviewmicrowave.com

Typical Performance Data

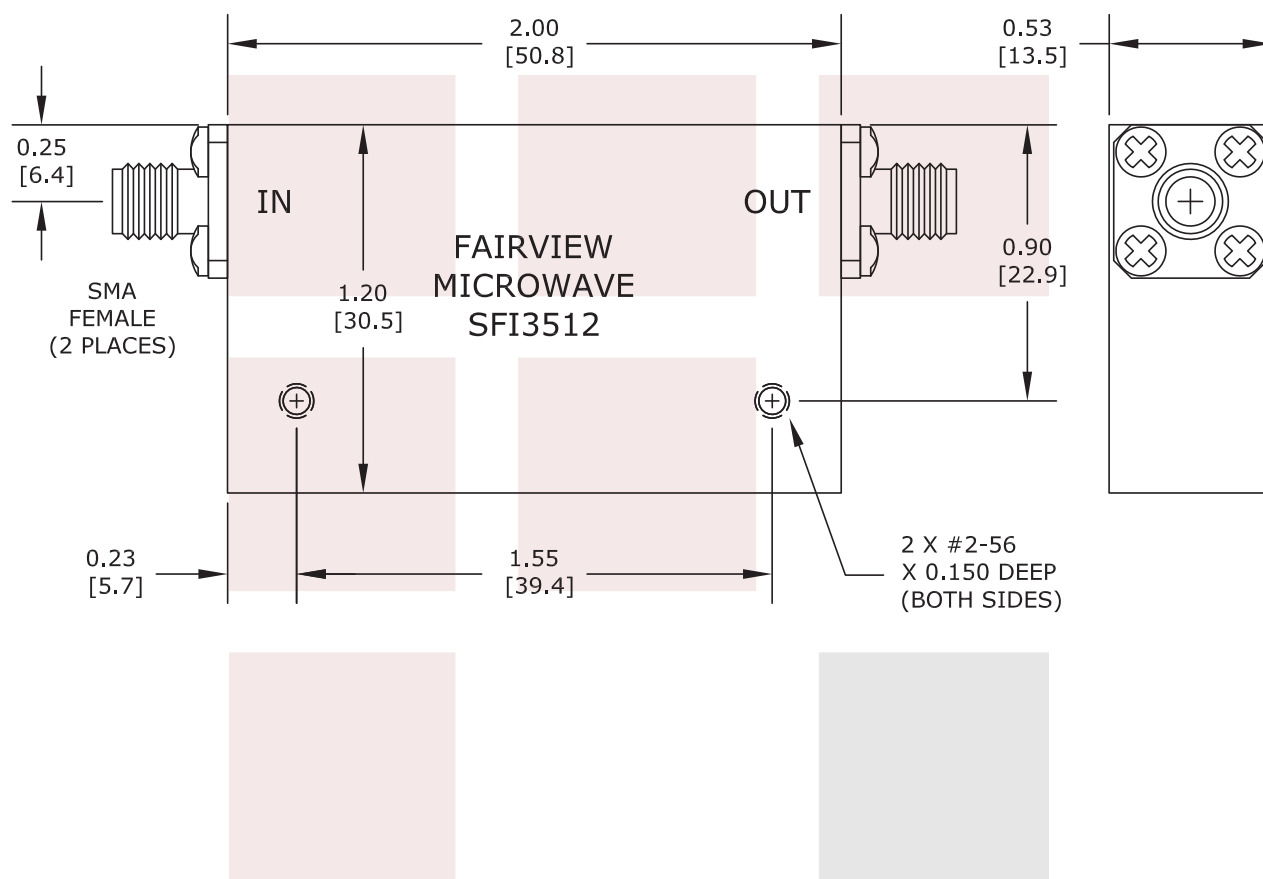


Isolator SMA Female With 17 dB Isolation From 3.5 GHz to 12.8 GHz Rated to 2 Watts from Fairview Microwave is in-stock and available to ship same-day. All of our RF/microwave products are available off-the-shelf from our ISO 9001:2008 certified facilities in Allen, Texas. Fairview Microwave is RF on-demand.

For additional information on this product, please click the following link: [Isolator SMA Female With 17 dB Isolation From 3.5 GHz to 12.8 GHz Rated to 2 Watts SFI3512](https://www.fairviewmicrowave.com/sma-isolator-17-db-isolation-3.5-12.8-ghz-2-watts-sfi3512-p.aspx)

URL: <https://www.fairviewmicrowave.com/sma-isolator-17-db-isolation-3.5-12.8-ghz-2-watts-sfi3512-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

FAIRVIEW MICROWAVE INC.
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].

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DWG NO	SFI3512	CAGE CODE	3FKR5
CAD FILE	080816	SHEET	SCALE N/A SIZE A 2233