

## Isolator SMA Female With 18 dB Isolation From 7 GHz to 12.4 GHz Rated to 10 Watts

The SFI0712 is a single junction isolator offering a forward power rating of 10 Watts CW and reverse power rating of 2 Watts CW over an operational frequency band of 7 to 12.4 GHz. 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	7		12.4	GHz
Impedance		50		Ohms
Insertion Loss			0.5	dB
Isolation	18			dB
VSWR			1.3:1	
Forward Power, CW			10	Watts
Reverse Power, CW			2	Watts

Electrical Specification Notes:

Values at 25°C, sea level.

### Mechanical Specifications

#### Size

Length	0.5 in [12.7 mm]
Width	0.75 in [19.05 mm]
Height	0.5 in [12.7 mm]
Weight	0.03924 lbs [17.8 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 +60 deg C
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**Compliance Certifications** (see [product page](#) for current document)

### Plotted and Other Data

Notes:



### Features:

- 7 to 12.4 GHz Frequency Range
- Max Forward Power 10 Watts CW
- Max Reverse Power 2 Watts CW
- Insertion Loss < 0.5 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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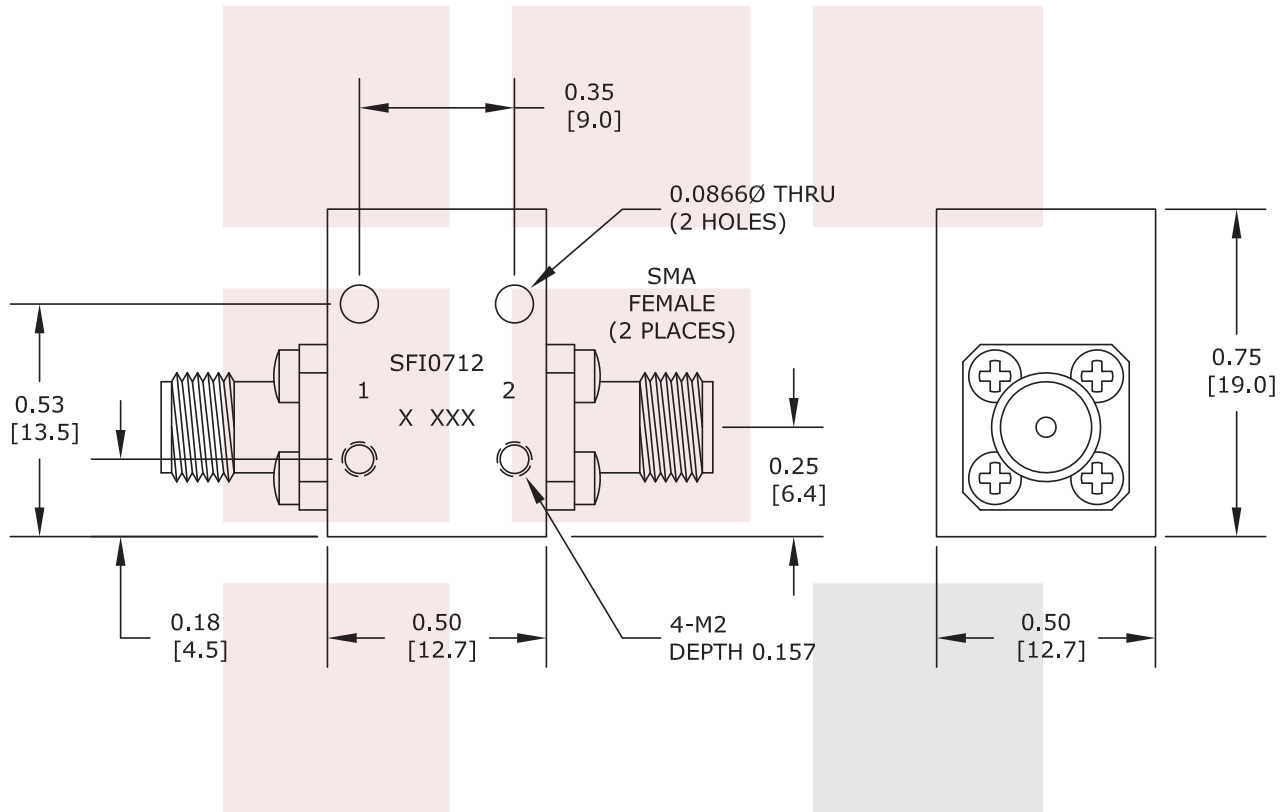
Isolator SMA Female With 18 dB Isolation From 7 GHz to 12.4 GHz Rated to 10 Watts from Fairview Microwave is in-stock and available to ship same-day. All of our RF/microwave products are available off-the-shelf from our ISO 9001:2008 certified facilities in Allen, Texas. Fairview Microwave is RF on-demand.

For additional information on this product, please click the following link: [Isolator SMA Female With 18 dB Isolation From 7 GHz to 12.4 GHz Rated to 10 Watts SFI0712](#)

URL: <https://www.fairviewmicrowave.com/sma-isolator-18-db-isolation-7-12.4-ghz-10-watts-sfi0712-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 18 dB Isolation From 7 GHz to 12.4 GHz Rated to 10 Watts		DWG NO SFI0712		CAGE CODE 3FKR5	
CAD FILE	080416	SHEET	SCALE	N/A	SIZE A 2233