

# SFI2040 DATA SHEET

# Isolator SMA Female With 18 dB Isolation From 2 GHz to 4 GHz Rated to 10 Watts

The SFI2040 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 2 to 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	Тур	Max	Units	
Frequency Range	2		4	GHz	
Impedance		50		Ohms	
Insertion Loss			0.75	dB	
Isolation	18			dB	
VSWR			1.4:1		
Forward Power, CW			10	Watts	
Reverse Power, CW			1	Watts	

**Electrical Specification Notes:** 

Values at 25°C, sea level.

### **Mechanical Specifications**

Size

 Length
 1.26 in [32 mm]

 Width
 1.34 in [34.04 mm]

 Height
 0.71 in [18.03 mm]

 Weight
 0.1993 lbs [90.4 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:

- 2 to 4 GHz Frequency Range
- Max Forward Power 10 Watts CW
- Max Reverse Power 1 Watt CW
- Insertion Loss < 0.75 dB</li>
- VSWR < 1.4:1
- Isolation > 18 dB
- SMA Female Connectors

## **Applications:**

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

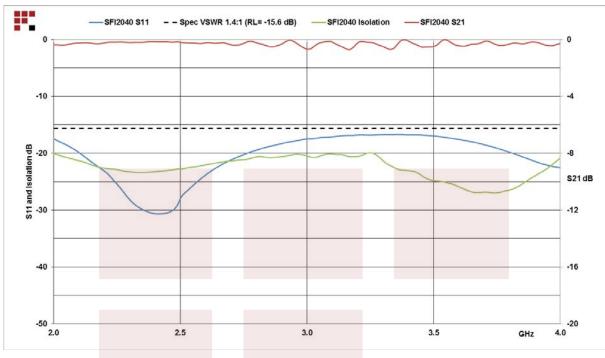
Fairview Microwave 1130 Junction Dr. #100 Allen, TX 75013 Tel: 1-800-715-4396 / (972) 649-6678

Fax: (972) 649-6689 www.fairviewmicrowave.com sales@fairviewmicrowave.com





#### **Typical Performance Data**



Isolator SMA Female With 18 dB Isolation From 2 GHz to 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.

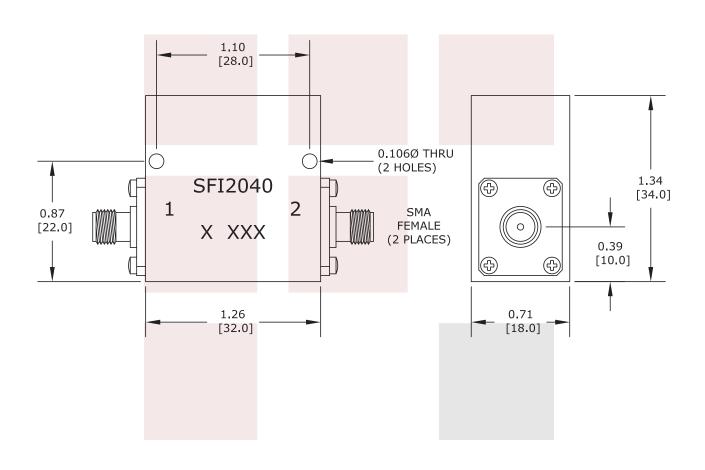
For additional information on this product, please click the following link: Isolator SMA Female With 18 dB Isolation From 2 GHz to 4 GHz Rated to 10 Watts SFI2040

URL: https://www.fairviewmicrowave.com/sma-isolator-18-db-isolation-2-4-ghz-0-watts-sfi2040-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].						
Isolator SMA Female With 18 dB Isolation From 2 GHz to 4 GHz Rated to 10 Watts	DWG NO SFI2040			CAGE CODE 3FKR5			
	CAD FILE 080816	SHEET	SCALE N/A		SIZE A	2233	