

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	Typ	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	Watt

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	0.1985 lbs [90.04 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:

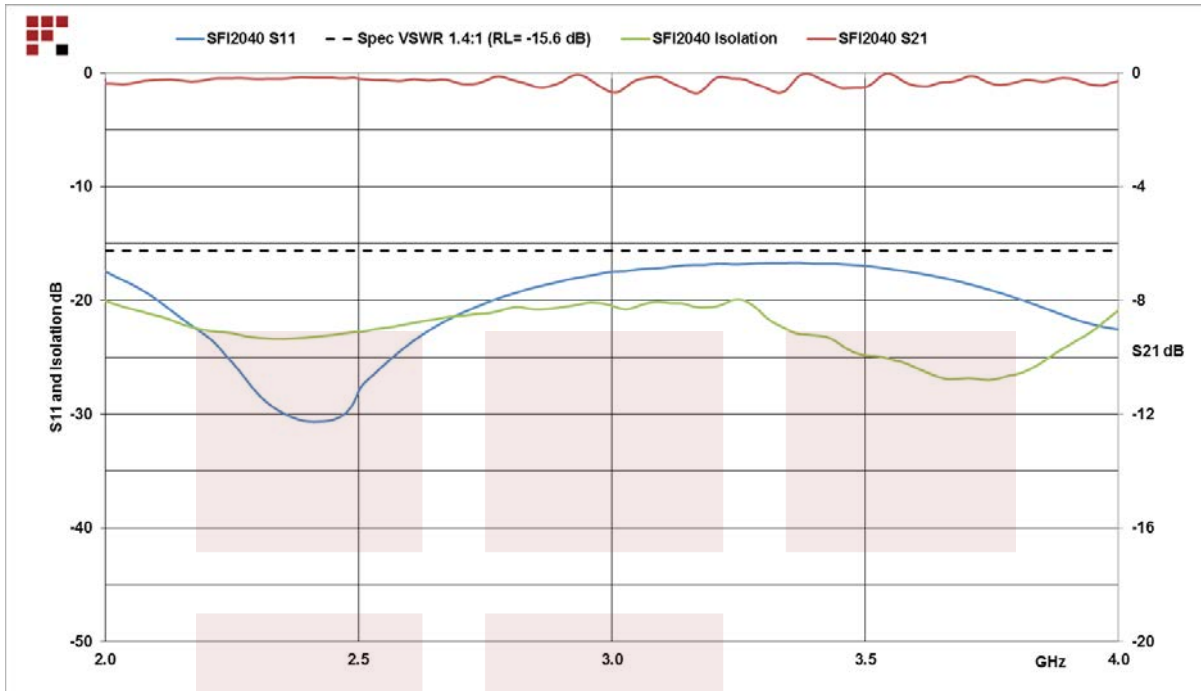
- 2 to 4 GHz Frequency Range
- Max Forward Power 10 Watts CW
- Max Reverse Power 1 Watt CW
- Insertion Loss < 0.75 dB
- VSWR < 1.4:1
- Isolation > 18 dB
- SMA Female Connectors

Applications:

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

Fairview Microwave
301 Leora Ln., Suite 100
Lewisville, TX 75056
Tel: 1-800-715-4396 / (972) 649-6678
Fax: (972) 649-6689
www.fairviewmicrowave.com
sales@fairviewmicrowave.com

Typical Performance Data



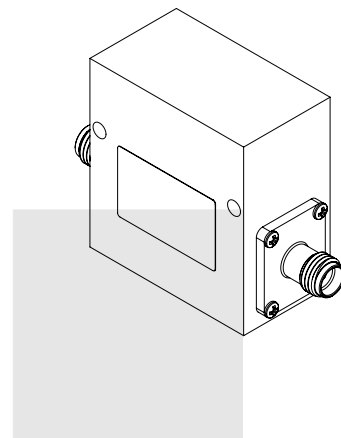
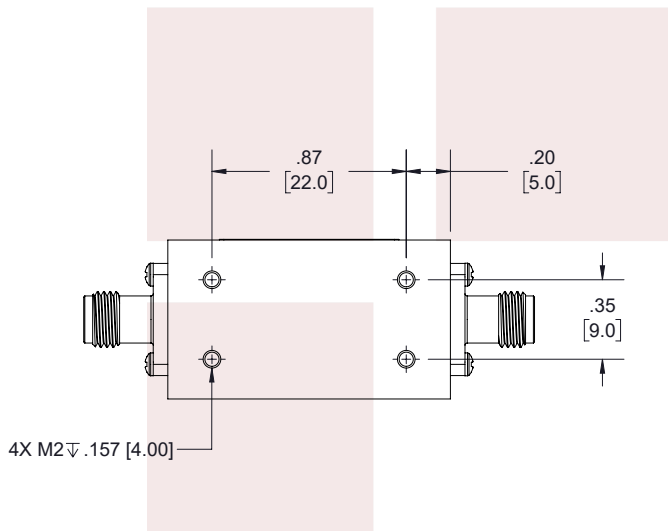
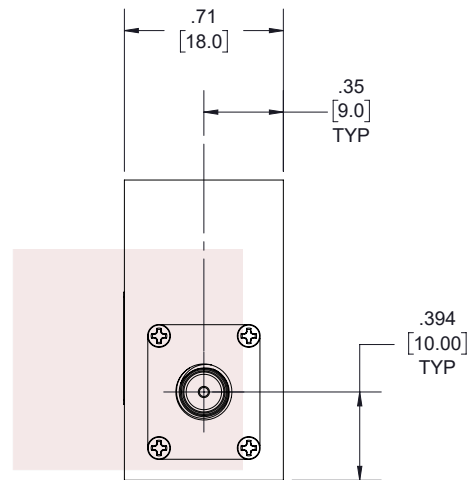
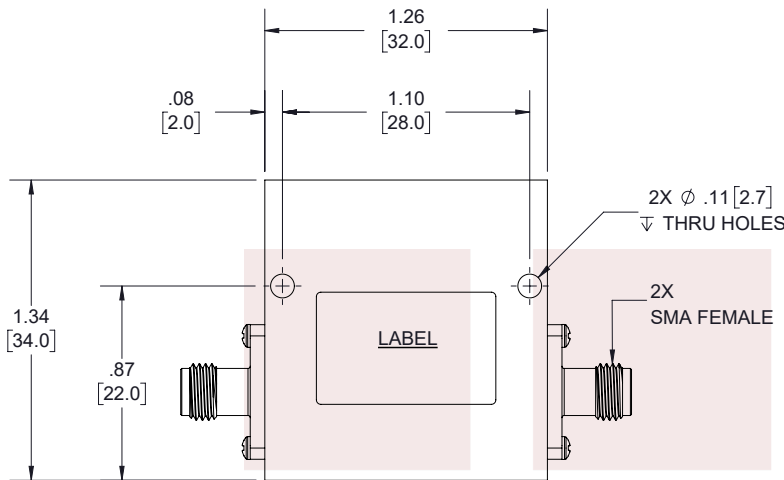
Isolator SMA Female with 18 dB Isolation from 2 GHz to 4 GHz Rated to 10 Watts from Fairview Microwave is in-stock and available to ship same-day. All of our RF/microwave products are available off-the-shelf from our ISO 9001:2008 certified facilities in Lewisville, Texas. Fairview Microwave is RF on-demand.

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>

The information contained in this document is accurate to the best of our knowledge and representative of the part described herein. It may be necessary to make modifications to the part and/or the documentation of the part, in order to implement improvements. Fairview Microwave reserves the right to make such changes as required. Unless otherwise stated, all specifications are nominal. Fairview Microwave does not make any representation or warranty regarding the suitability of the part described herein for any particular purpose, and Fairview Microwave does not assume any liability arising out of the use of any part or documentation.

REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
A	PCR PE83IR005 / SFI2040	12/18/2019	S.PONG



LABEL

SFI2040		
1	2 - 4 GHz	2
D/C: YYWW		

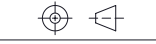
THESE COMMODITIES, TECHNOLOGY OR SOFTWARE WERE EXPORTED FROM THE UNITED STATES IN ACCORDANCE WITH THE EXPORT ADMINISTRATION REGULATIONS. DIVERSION CONTRARY TO U.S. LAW PROHIBITED.

TITLE
Isolator SMA Female with 18 dB Isolation from 2 GHz to 4 GHz Rated to 10 Watts

UNLESS OTHERWISE SPECIFIED LEADING DIMENSIONS ARE INCHES
DIMENSIONS IN [] ARE MILLIMETERS

TOLERANCES:		CABLE LENGTH (L) TOLERANCES:	
.X = ±.2 [5.08]	FRACTIONS ± 1/32	L ≤ 12 [305] = +1 [25] / -0	
.XX = ±.02 [.51]		12 [305] < L ≤ 60 [1524] = +2 [51] / -0	
.XXX = ±.005 [.13]	ANGLES ± 1°	60 [1524] < L ≤ 120 [3048] = +4 [102] / -0	
		120 [3048] < L ≤ 300 [7620] = +6 [152] / -0	
		300 [7620] < L = +5%L / -0	

THIRD-ANGLE PROJECTION



THE INFORMATION AND DESIGN IN THIS DOCUMENT IS THE PROPERTY OF FAIRVIEW MICROWAVE CORPORATION. ALL RIGHTS RESERVED.

SHEET	1	OF	1
-------	---	----	---

ALL DIMENSIONS SHOWN ARE FOR REFERENCE ONLY.

SCALE
N/A

SIZE A	CAGE CODE 3FKR5	DRAWN BY K.DANG	ITEM NO. SFI2040	REV A
-----------	--------------------	--------------------	---------------------	----------

T-Rev.D