

Isolator SMA Female With 15 dB Isolation From 4 GHz to 18 GHz Rated to 10 Watts

The SFI0418 is a single junction isolator offering a forward and reverse power rating of 10 Watts CW over an operational frequency band of 4 to 18 GHz. This coaxial isolator uses SMA female connectors on all ports 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	4		18	GHz
Impedance		50		Ohms
Insertion Loss			1.75	dB
Isolation	15			dB
VSWR			1.6:1	
Forward Power, CW			10	Watts
Reverse Power, CW			10	Watts

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

Mechanical Specifications

Size	
Length	2.6 in [66.04 mm]
Width	1 in [25.4 mm]
Height	0.53 in [13.46 mm]
Weight	0.2155 lbs [97.75 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	-54 to +85 deg C

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

Plotted and Other Data

Notes:



Features:

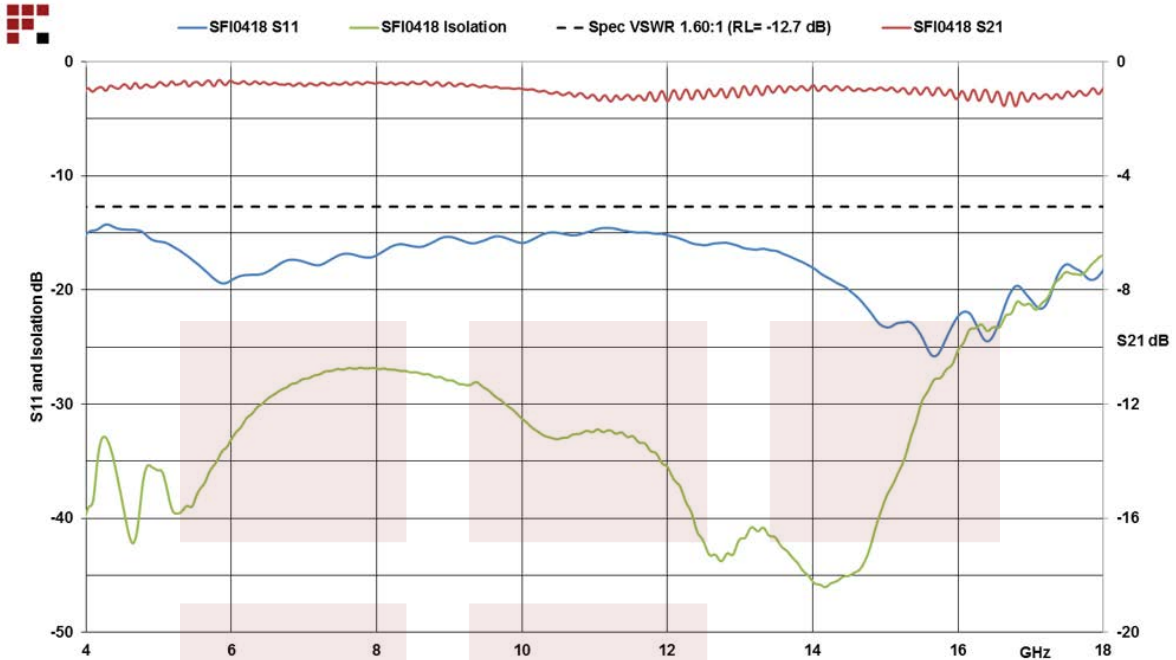
- 4 to 18 GHz Frequency Range
- Max Forward and Reverse Power 10 Watts CW
- Insertion Loss < 1.75 dB
- VSWR < 1.6:1
- Isolation > 15 dB
- SMA Female Connectors

Applications:

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

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Typical Performance Data

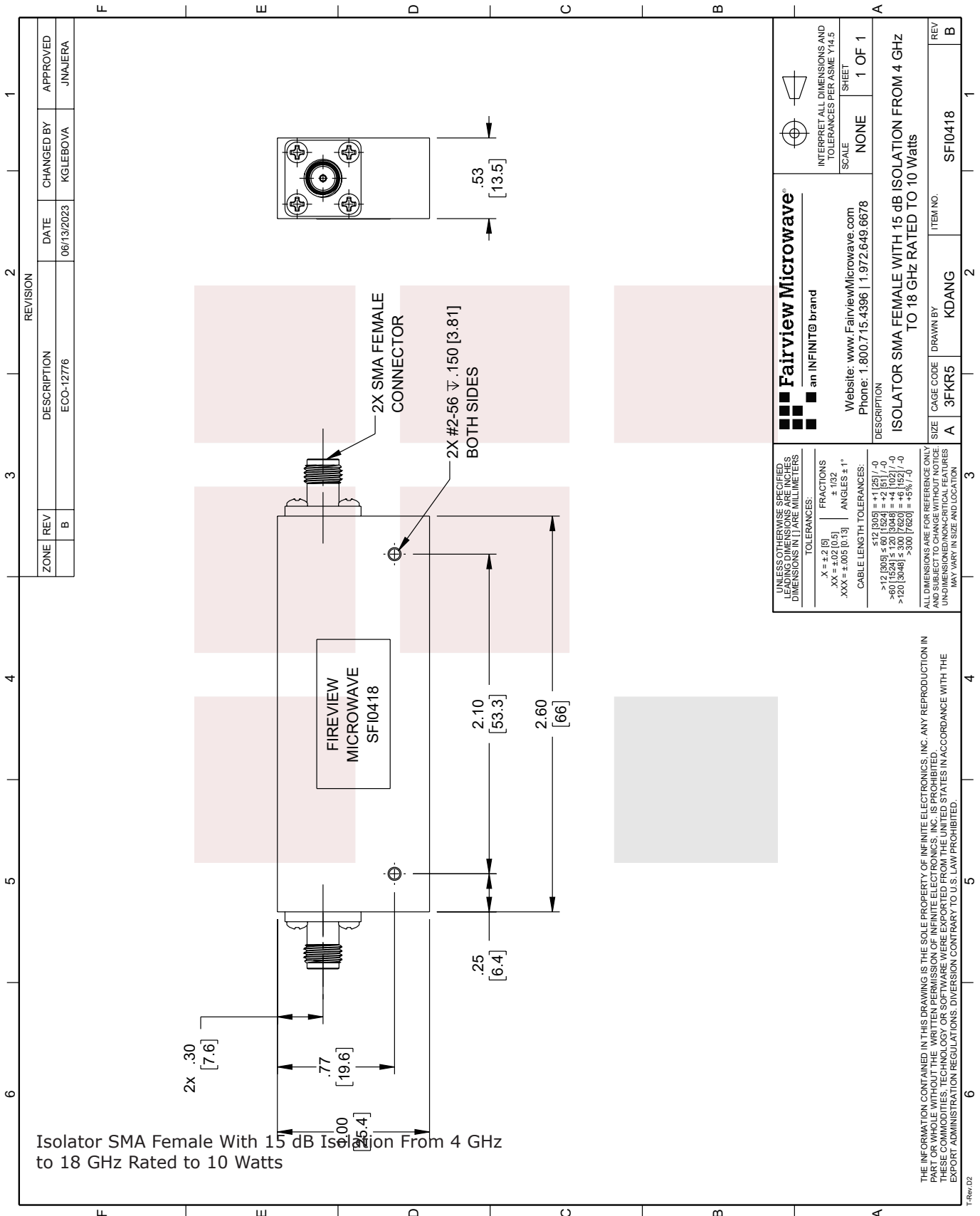


Isolator SMA Female With 15 dB Isolation From 4 GHz to 18 GHz Rated to 10 Watts from Fairview Microwave is in-stock and available to ship same-day. All of our RF/microwave products are available off-the-shelf from our ISO 9001:2008 certified facilities in Lewisville, Texas. Fairview Microwave is RF on-demand.

For additional information on this product, please click the following link: [Isolator SMA Female With 15 dB Isolation From 4 GHz to 18 GHz Rated to 10 Watts SFI0418](https://www.fairviewmicrowave.com/sma-isolator-15-db-isolation-4-18-ghz-10-watts-sfi0418-p.aspx)

URL: <https://www.fairviewmicrowave.com/sma-isolator-15-db-isolation-4-18-ghz-10-watts-sfi0418-p.aspx>

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ZONE		REVISION		DATE		APPROVED	
B		ECO-12776		06/13/2023	KGLEBOVA	JNAJERA	

<p>Fairview Microwave an INFINIT[®] brand</p> <p>Website: www.FairviewMicrowave.com Phone: 1.800.715.4396 1.972.649.6678</p>		<p>INTERPRET ALL DIMENSIONS AND TOLERANCES PER ASME Y14.5 SHEET</p> <p>SCALE NONE</p> <p>SHEET 1 OF 1</p>	
<p>DESCRIPTION</p> <p>ISOLATOR SMA FEMALE WITH 15 dB ISOLATION FROM 4 GHz TO 18 GHz RATED TO 10 Watts</p>			
SIZE	CAGE CODE	DRAWN BY	ITEM NO.
A	3FKR5	KDANG	SFI0418
REV	REV		B

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

TOLERANCES:

X = ±.2 [5] FRACTIONS ± 1/32
 .XX = ±.02 [0.5] ANGLES ± 1°
 .XXX = ±.005 [0.13]

CABLE LENGTH TOLERANCES:

≤12 [305] ≤ ±.125 [-0
 60 [1524] ≤ ±.125 [-0
 >60 [1524] ≤ ±.120 [3048] = +.4 [102] / -0
 >120 [3048] ≤ ±.300 [7620] = +.6 [152] / -0
 >300 [7620] = +.6% / -0

ALL DIMENSIONS ARE FOR REFERENCE ONLY AND SUBJECT TO CHANGE WITHOUT NOTICE. UNDIMENSIONED/NON-CRITICAL FEATURES MAY VARY IN SIZE AND LOCATION.

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