

## Isolator SMA Female with 10 dB Isolation from 6 GHz to 18 GHz Rated to 10 Watts



### FMIR1029

#### Features

- Forward Power 10 watts
- Wide-Band Operating of 6 to 18 GHz
- Female SMA Connectors
- Low VSWR of 1.60:1 Max
- Low Insertion Loss of 1.5 dB Max
- Good Isolation Performance of 10 dB Minimum

#### Applications

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

#### Description

The FMIR1029 is an RF isolator offering a forward power rating of 10 watts over an operational frequency band of 6 to 18 GHz. This coaxial part uses SMA female connectors on all ports and has a minimum of 10 dB of 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's isolators feature excellent insertion loss, high isolation and reliability.

#### Electrical Specifications

Description	Min	Typ	Max	Units
Frequency Range	6		18	GHz
Impedance		50		Ohms
Insertion Loss			1.5	dB
Isolation	10			dB
VSWR			1.6:1	
Forward Power, CW			10	Watts

#### Mechanical Specifications

##### Size

Length	0.78 in [19.81 mm]
Width	0.49 in [12.45 mm]
Height	0.35 in [8.89 mm]
Weight	0.025 lbs [11.34 g]
Body Material and Plating	Aluminum, Nickel

##### Configuration

Design	Single Junction
Direction	Clockwise
Connector 1	SMA Female
Connector 2	SMA Female

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### Environmental Specifications

#### Temperature

Operating Range

-40 to +70 deg C

Storage Range

-40 to +85 deg C

Humidity

100% RH at 35°C, 95%RH at 40°C

Shock

20G for 11msec half sine wave, 3 axis both directions

Vibration

25gRMS (15 degrees 2KHz) endurance, 1 hour per axis

Altitude

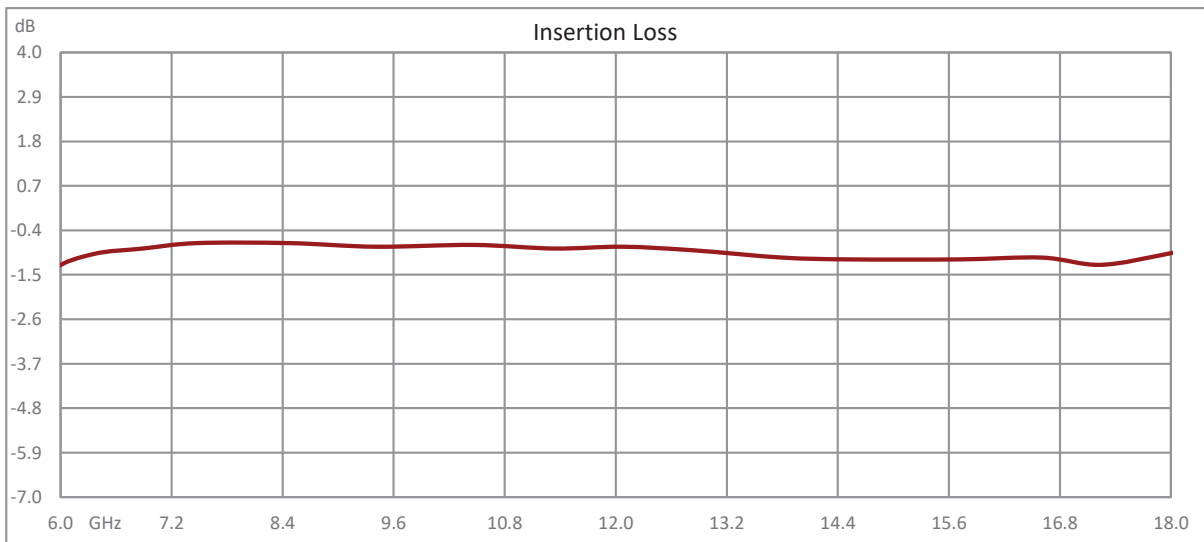
30,000 ft. (Epoxy Sealed Controlled environment)

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

### Plotted and Other Data

Notes:

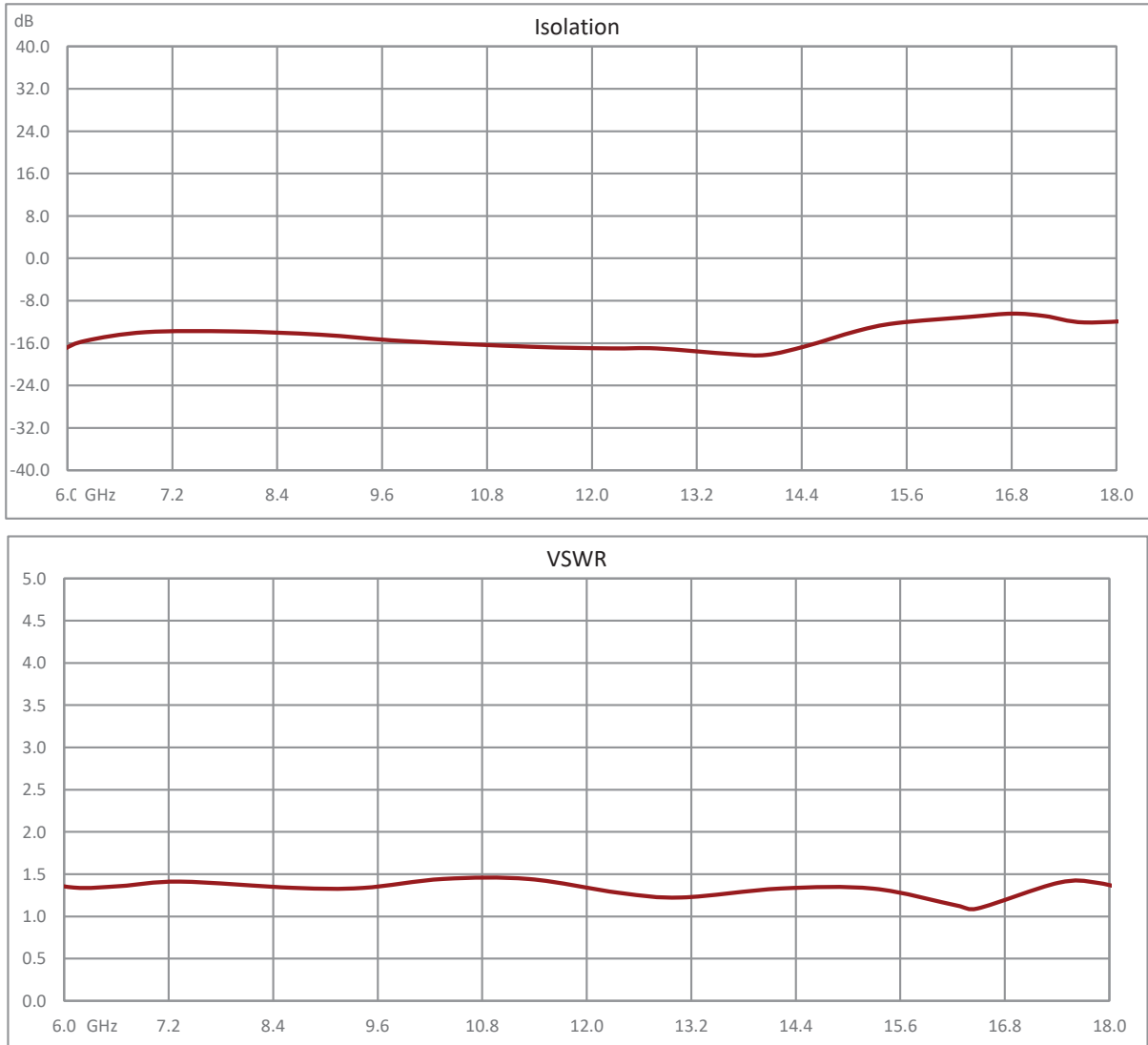
### Typical Performance Data



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### FMIR1029

Isolator SMA Female with 10 dB Isolation from 6 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 10 dB Isolation from 6 GHz to 18 GHz Rated to 10 Watts FMIR1029](https://www.fairviewmicrowave.com/isolator-sma-female-10db-isolation-18-ghz-10-watts-fmir1029-p.aspx)

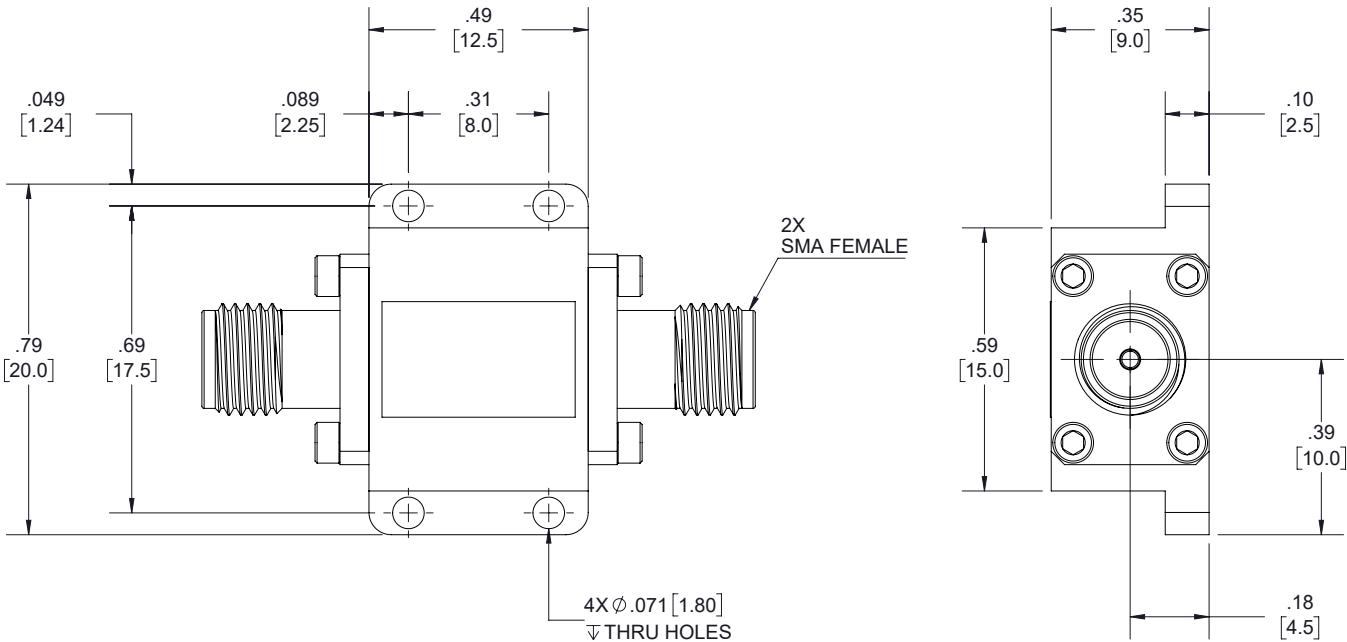
URL: <https://www.fairviewmicrowave.com/isolator-sma-female-10db-isolation-18-ghz-10-watts-fmir1029-p.aspx>

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FMIR1029 CAD Drawing

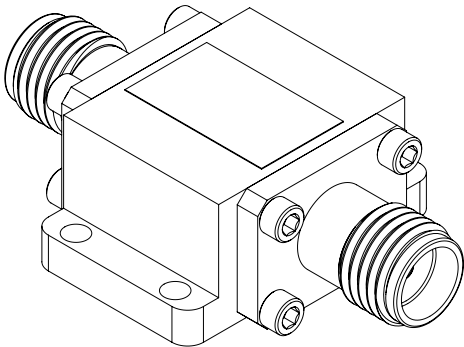
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REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
A	INITIAL RELEASE	3/13/2020	S.PONG



LABEL

FAIRVIEW MICROWAVE		
FMIR1029		
1	D/C: WWYY	2



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TITLE

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]	± 1/32	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



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SHEET 1 OF 1

SCALE N/A

ALL DIMENSIONS SHOWN ARE FOR REFERENCE ONLY.

SIZE	CAGE CODE	DRAWN BY	ITEM NO.	REV
A	3FKR5	K.DANG	FMIR1029	A