

Isolator SMA Female with 12 dB Isolation from 2 GHz to 6 GHz Rated to 10 Watts



FMIR1039

Features

- Forward Power 10 watts
- Wide-Band Operating of 2 to 6 GHz
- Female SMA Connectors
- Low VSWR of 1.80:1 Max
- Low Insertion Loss of 1.8 dB Max
- Good Isolation Performance of 12 dB Minimum

Applications

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

Description

The FMIR1039 is an RF isolator offering a forward power rating of 10 watts over an operational frequency band of 2 to 6 GHz. This coaxial part uses SMA female connectors on all ports and has a minimum of 12 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	2		6	GHz
Impedance		50		Ohms
Insertion Loss			1.8	dB
Isolation	12			dB
VSWR			1.8:1	
Forward Power, CW			10	Watts

Mechanical Specifications

Size

Length	1.57 in [39.88 mm]
Width	0.91 in [23.11 mm]
Height	0.51 in [12.95 mm]
Weight	0.11 lbs [49.9 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

-20 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

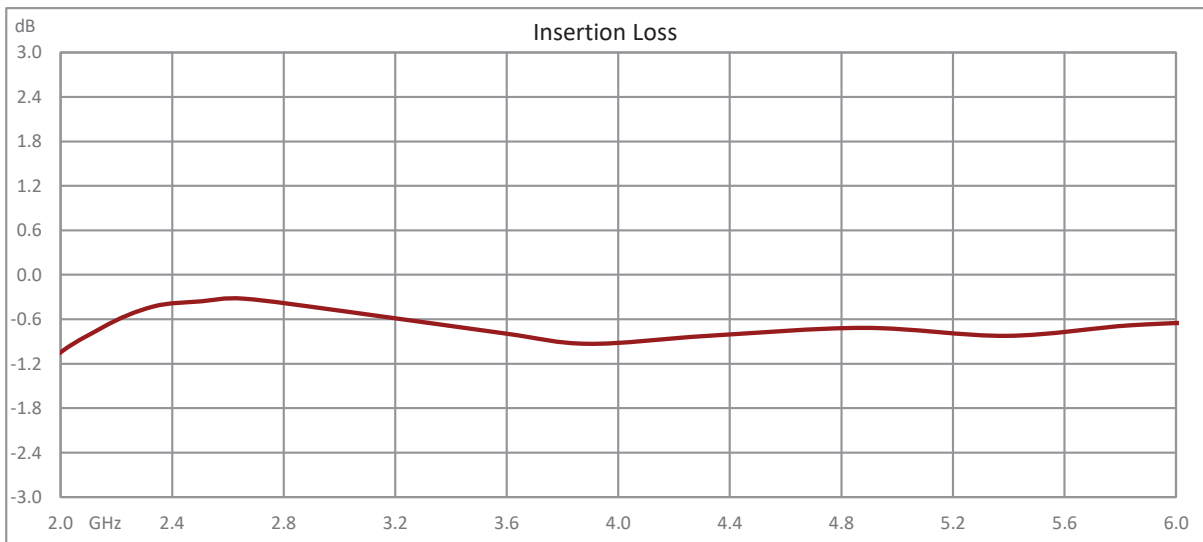
30,000 ft. (Epoxy Sealed Controlled environment)

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

Plotted and Other Data

Notes:

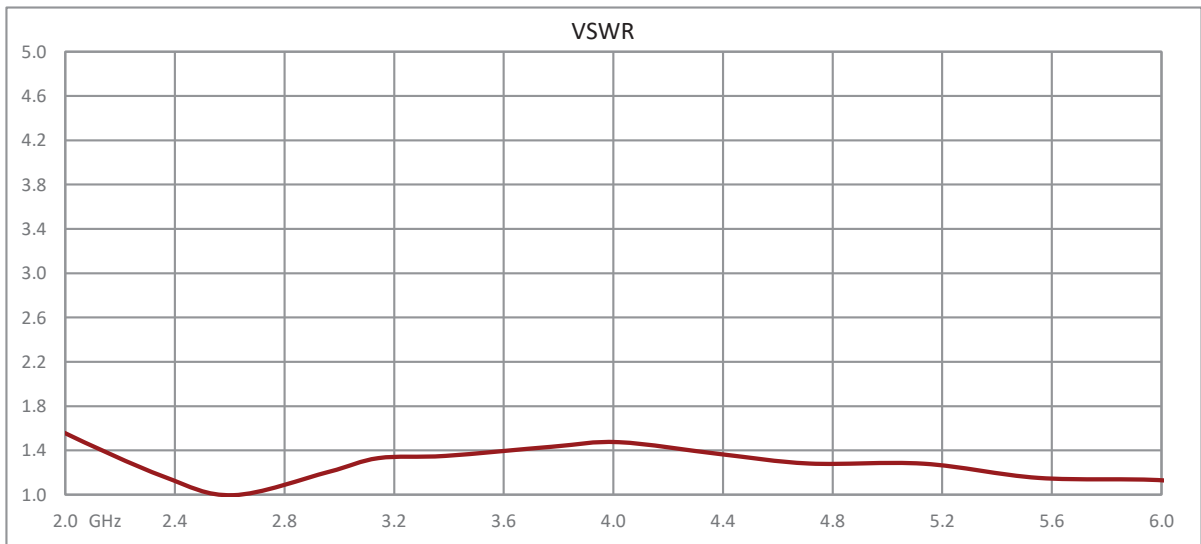
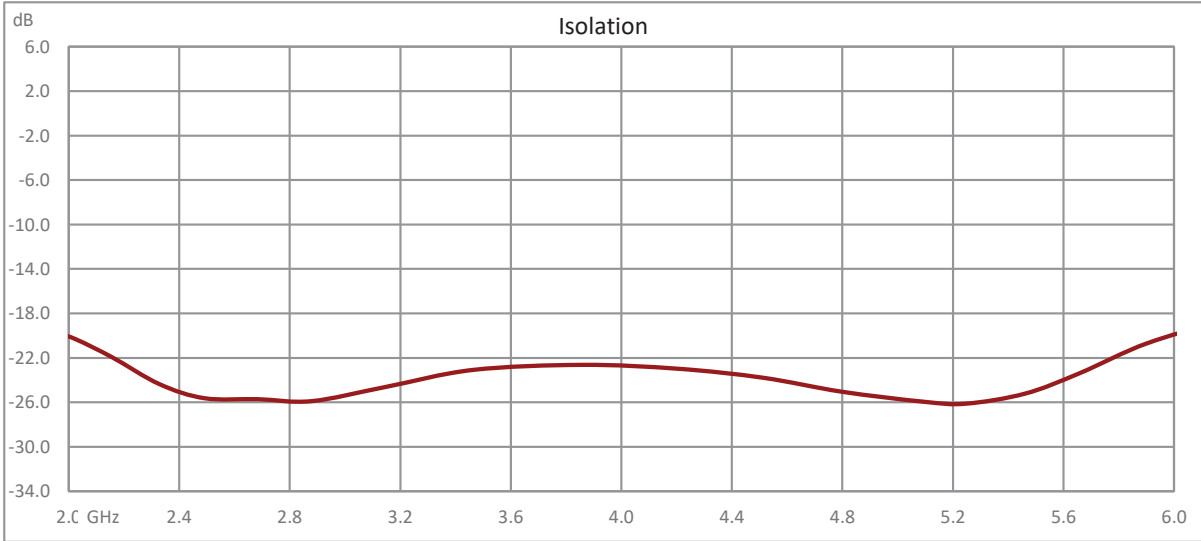
Typical Performance Data



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Isolator SMA Female with 12 dB Isolation from 2 GHz to 6 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 12 dB Isolation from 2 GHz to 6 GHz Rated to 10 Watts FMIR1039](https://www.fairviewmicrowave.com/isolator-sma-female-12db-isolation-6-ghz-10-watts-fmir1039-p.aspx)

URL: <https://www.fairviewmicrowave.com/isolator-sma-female-12db-isolation-6-ghz-10-watts-fmir1039-p.aspx>

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FMIR1039 CAD Drawing

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