

High Power Isolator SMA Female with 20 dB Isolation from 2 GHz to 4 GHz Rated to 100 Watts

The FMIR1004 is a high power isolator offering a forward power rating of 100 Watts and reverse power rating of 50 Watts over an operational frequency band of 2 to 4 GHz. This coaxial part uses SMA female connectors on all ports and has a minimum of 20 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 Microwave's isolators feature excellent insertion loss, high isolation and reliability, low VSWR, and a wide dynamic temperature range.

Electrical Specifications

Description	Min	Typ	Max	Units
Frequency Range	2		4	GHz
Impedance		50		Ohms
Insertion Loss			0.6	dB
Isolation	20			dB
VSWR			1.3:1	
Forward Power, CW			100	Watts
Reverse Power, CW			50	Watts

Electrical Specification Notes:

To meet the 50 watt reverse power specification, a heat sink will be required.

Mechanical Specifications

Size

Length	1.6 in [40.64 mm]
Width	0.6 in [15.24 mm]
Height	1.6 in [40.64 mm]
Weight	0.2145 lbs [97.3 g]

Configuration

Design	Single Junction
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:

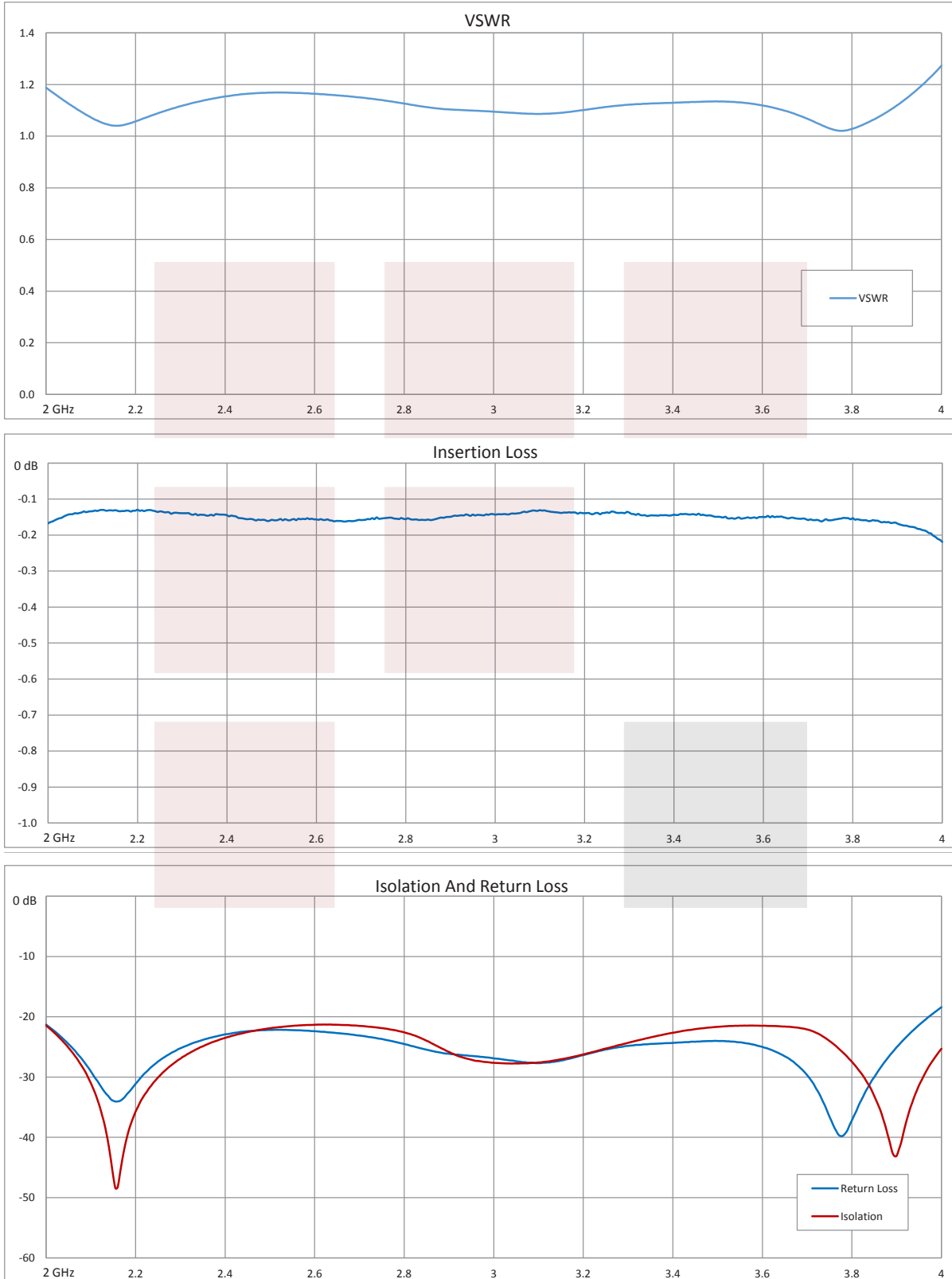
- Forward Power 100 Watts
- Reverse Power 50 Watts
- Frequency Range of 2 to 4 GHz
- Female SMA Connectors
- VSWR 1.3:1
- Isolation 20 dB

Applications:

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

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Typical Performance Data



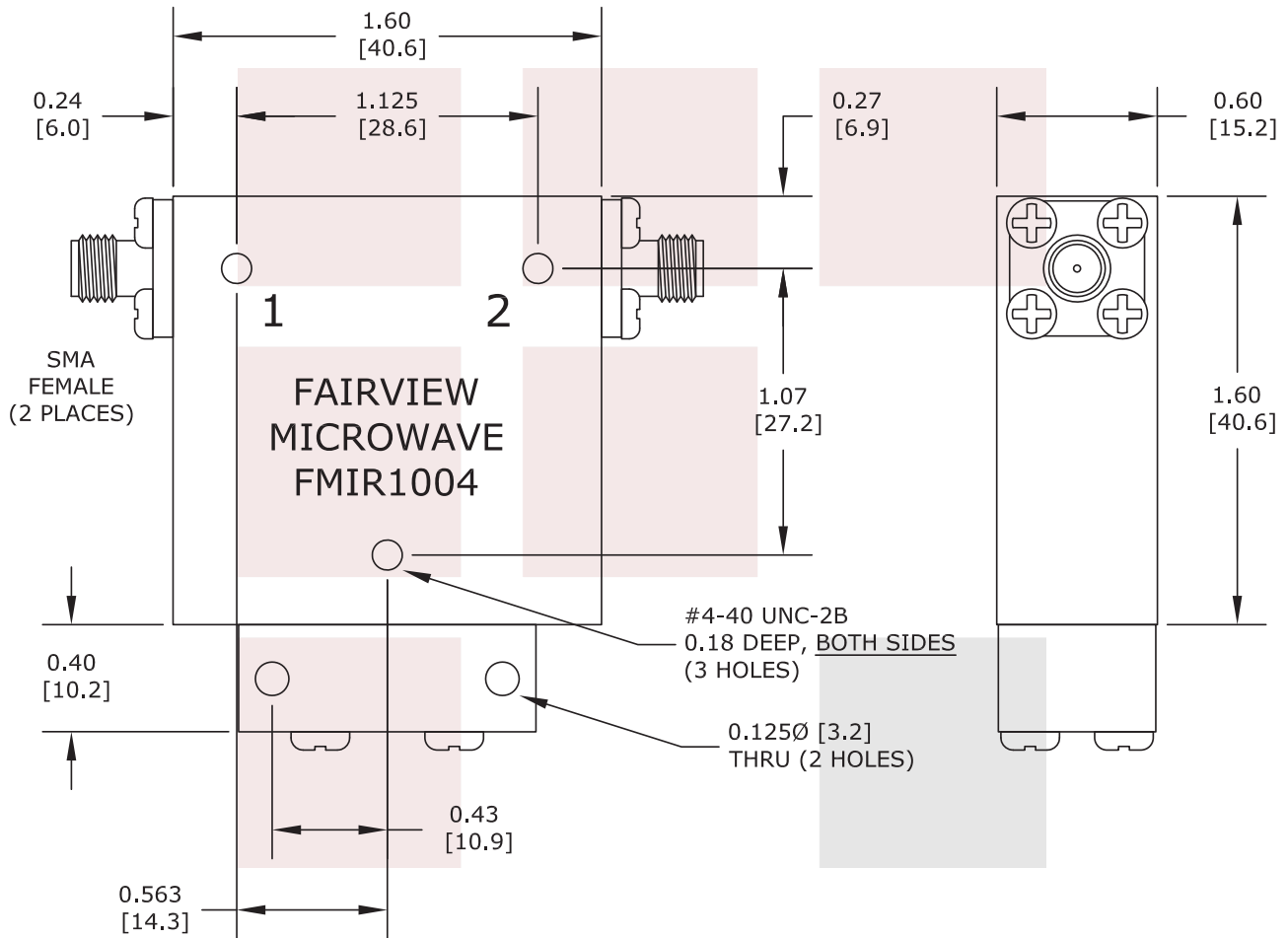
High Power Isolator SMA Female with 20 dB Isolation from 2 GHz to 4 GHz Rated to 100 Watts from Fairview Microwave is in-stock and available to ship same-day. All of our RF/microwave products are available off-the-shelf from our ISO 9001:2008 certified facilities in Lewisville, Texas. Fairview Microwave is RF on-demand.

For additional information on this product, please click the following link: [High Power Isolator SMA Female with 20 dB Isolation from 2 GHz to 4 GHz Rated to 100 Watts FMIR1004](#)

URL: <https://www.fairviewmicrowave.com/high-power-isolator-sma-female-20db-isolation-4-ghz-100-watts-fmir1004-p.aspx>

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TITLE High Power Isolator SMA Female with 20 dB Isolation from 2 GHz to 4 GHz Rated to 100 Watts		DWG NO FMIR1004		CAGE CODE 3FKR5	
CAD FILE 012616 SHEET		SCALE N/A		SIZE A 2233	