

# FMIR1041 DATA SHEET

# Isolator 2.92mm Female, Hermetically Sealed with 14 dB Isolation from 18 GHz to 26.5 GHz Rated to 10 Watts

The FMIR1041 is an RF isolator offering a forward power rating of 10 watts over an operational frequency band of 18 to 26.5 GHz. This coaxial part uses 2.92mm female connectors on all ports and has a minimum of 14 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	Тур	Max	Units
Frequency Range	18		26.5	GHz
Impedance		50		Ohms
Insertion Loss			1.7	dB
Isolation	14			dB
VSWR			1.7:1	
Forward Power, CW			10	Watts

## **Mechanical Specifications**

 Size
 1.06 in [26.92 mm]

 Width
 0.67 in [17.02 mm]

 Height
 0.43 in [10.92 mm]

 Weight
 0.044 lbs [19.96 g]

 Body Material and Plating
 Aluminum

Configuration

Direction Clockwise
Connector 1 2.92mm Female
Connector 2 2.92mm Female

#### **Environmental Specifications**

**Temperature** 

Operating Range -40 to +80 deg C Storage Range -40 to +80 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 60,000 ft. 1.0psi min (Hermetically

Sealed Un-controlled environment)

Hermetic Seal IP68

**Compliance Certifications** (see product page for current document)

#### **Plotted and Other Data**

Notes:



#### Features:

- Forward Power 10 watts
- Wide-Band Operating of 18 to 26.5 GHz
- Female 2.92mm Connectors
- Low VSWR of 1.70:1 Max
- Low Insertion Loss of 1.7 dB Max
- Good Isolation Performance of 14 dB Minimum
- Hermetically Sealed

## **Applications:**

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

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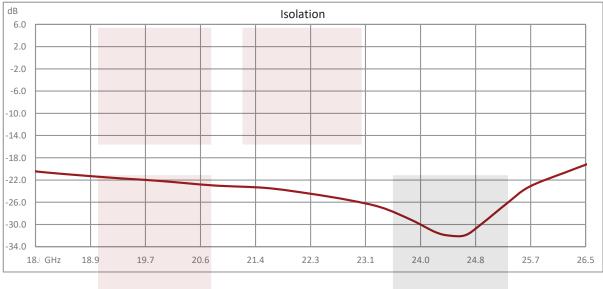
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#### **Typical Performance Data**











Isolator 2.92mm Female, Hermetically Sealed with 14 dB Isolation from 18 GHz to 26.5 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.

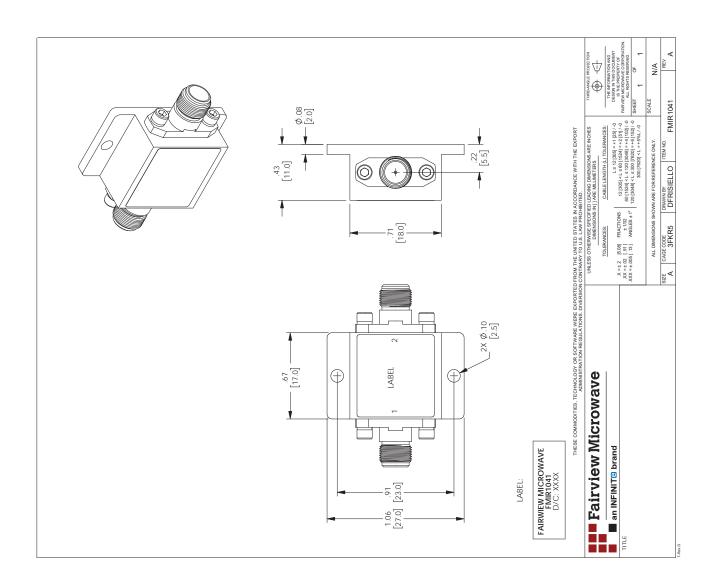
For additional information on this product, please click the following link: Isolator 2.92mm Female, Hermetically Sealed with 14 dB Isolation from 18 GHz to 26.5 GHz Rated to 10 Watts FMIR1041

URL: https://www.fairviewmicrowave.com/isolator-2.92mm-female-14db-isolation-26.5-ghz-10-watts-fmir1041-p.aspx

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