

FMIR1050

Features

- · 18 to 26.5 GHz Frequency Range
- · Max Forward Power 10 Watt CW
- Max Reverse Power 1 Watt CW
- · Insertion Loss 1.5 dB

Applications

- · Radar Systems
- Military
- · Wireless Radio Systems
- · Telecom Infrastructure

- VSWR < 1.5:1
- Isolation > 15 dB
- SMA Female Connectors
- Communication Systems
- R&D Labs
- · Microwave Radio Systems

Description

The FMIR1050 is a single junction isolator offering a forward power rating of 10 Watt and reverse power rating of 1 Watt CW over an operational frequency band of 18 to 26.4 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	Тур	Max	Units
Frequency Range	18		26.5	GHz
Impedance		50		Ohms
Insertion Loss			1.5	dB
Isolation	15			dB
VSWR			1.5:1	
Forward Power, CW			10	Watts
Reverse Power, CW			1	Watt

Electrical Specification Notes:

Due to the magnetic components in the Isolators,

please keep it at least 0.2 inches away from magnetic materials during installation or placement.

Mechanical Specifications

Size

 Length
 0.94 in [23.88 mm]

 Width
 0.39 in [9.91 mm]

 Height
 0.35 in [8.89 mm]

 Weight
 0.03 lbs [13.61 g]

 Body Material and Plating
 Aluminum Alloy

Configuration

Design Single Junction



25,74

FMIR1050

DirectionClockwisePackage StyleConnectorizedConnector 1SMA FemaleConnector 2SMA Female

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 11msc half sin wave,3 axis both directions
Vibration 25g rms (15 degree 2KHz) endurance, 1 hour per axis
Altitude 30,000 ft. (Epoxy Seal Controlled environment)

Compliance Certifications (see product page for current document)

Plotted and Other Data

Notes:

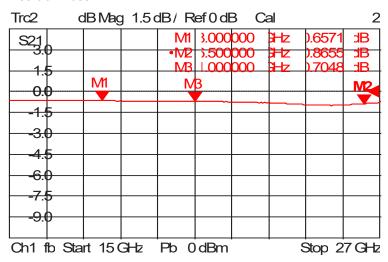


25,74

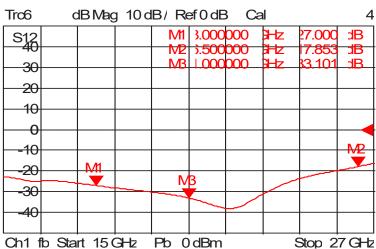
FMIR1050

Typical Performance Data

Insertion Loss



Isolation

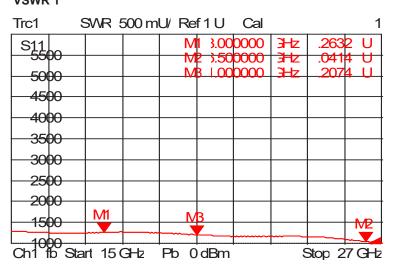




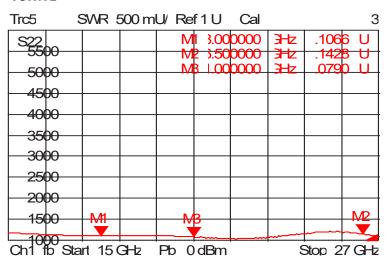
FMIR1050



VSWR 1



VSWR 2





25, 1050 1000

FMIR1050

Isolator SMA Female with 15 dB Isolation from 18 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 SMA Female with 15 dB Isolation from 18 to 26.5 GHz Rated to 10 Watts FMIR1050

URL: https://www.fairviewmicrowave.com/isolator-sma-female-15db-isolation-26.5-ghz-10-watts-fmir1050-p.aspx

The information contained within this document is accurate to the best of our knowledge and representative of the part described herein. It may be necessary to make modifications to the part and/or the documentation of the part in order to impliment improvements. Fairview Microwave reserves the right to make such changes as required. Unless otherwise stated, all specifications are nominal. Fairview Microwave does not make any representation or warranty regarding the suitability of the part described herein for any particular purpose, and Fairview Microwave does not assume liability arising out of the use of any part or document.

