

High Power Circulator SMA Female With 17 dB Isolation From 18 GHz to 26.5 GHz Rated to 50 Watts

The FMC1012 is a high power circulator offering a forward and reverse power rating of 50 watts over an operational frequency band of 18 to 26.5 GHz. This coaxial part uses SMA female connectors on all ports and has a minimum of 17 dB of isolation.

Fairview Microwave offers a wide variety of circulators to fit your needs. These unique devices enable two signals to use one channel. The classic use of this three port device is for the line/coax between an antenna and a transceiver, allowing the receive signal to come from the antenna (port 1) to the receiver (port 2) while the transmit signal goes from the transmitter (port 3) to the antenna (port 1). An isolator can be created by terminating one port into a matched load. These components can be used in antenna transmitting and receiving, radar, amplifier systems and anything that requires isolation from a signal reflection and the ability to send signals in opposite directions down a single channel. These circulators 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	18		26.5	GHz
Insertion Loss			0.6	dB
Isolation	17			dB
VSWR			1.4:1	
Forward Power, CW			50	Watts
Forward Power, Peak			60	Watts
Reverse Power, CW			50	Watts

Electrical Specification Notes:
Values at 25°C, sea level.

Mechanical Specifications

Size	
Length	0.5 in [12.7 mm]
Width	0.5 in [12.7 mm]
Height	0.67 in [17.02 mm]
Weight	0.0452 lbs [20.5 g]

Configuration

Design	Single Junction
Package Style	Connectorized
Connector 1	SMA Female
Connector 2	SMA Female
Connector 3	SMA Female

Environmental Specifications

Temperature	
Operating Range	0 to +70 deg C



Features:

- Forward Power of 50 watts
- Frequency Range of 18 to 26.5 GHz
- Female SMA Connectors
- VSWR of 1.4:1
- Isolation of 17 dB

Applications:

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

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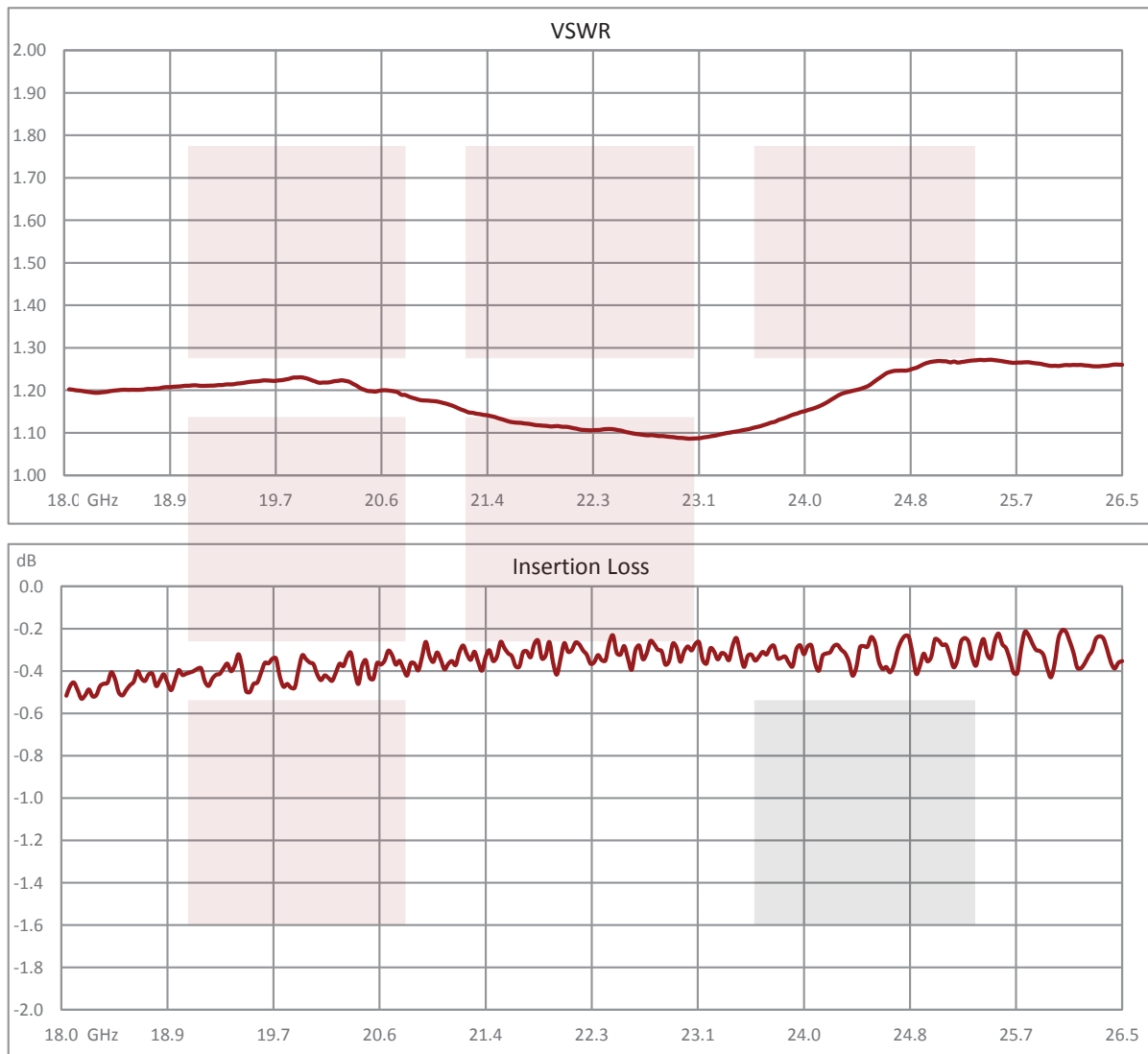
Compliance Certifications (see [product page](#) for current document)

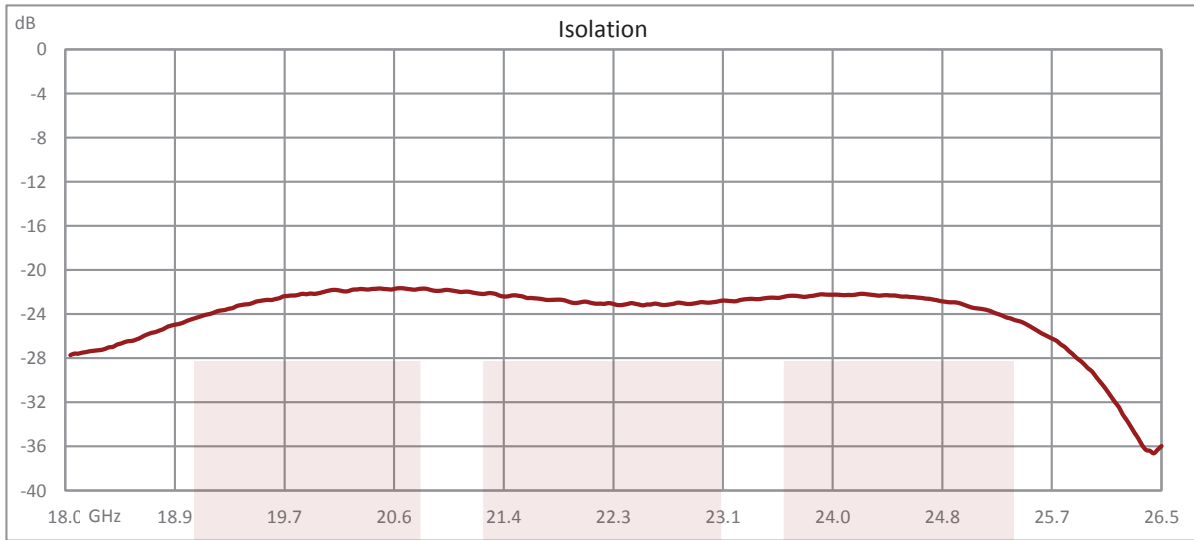
Plotted and Other Data

Notes:

- Values at 25°C, sea level.

Typical Performance Data



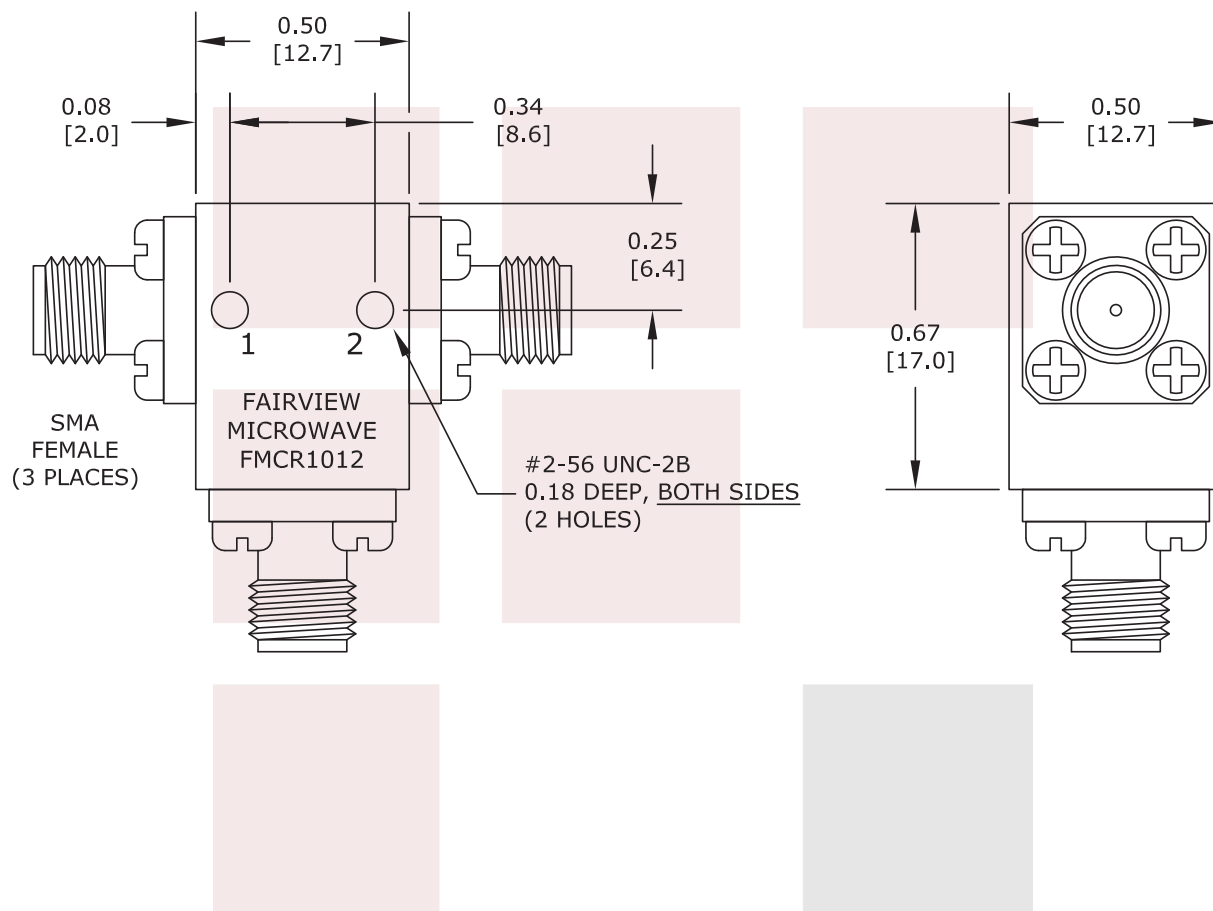


High Power Circulator SMA Female With 17 dB Isolation From 18 GHz to 26.5 GHz Rated to 50 Watts from Fairview Microwave is in-stock and available to ship same-day. All of our RF/microwave products are available off-the-shelf from our ISO 9001:2008 certified facilities in Allen, Texas. Fairview Microwave is RF on-demand.

For additional information on this product, please click the following link: [High Power Circulator SMA Female With 17 dB Isolation From 18 GHz to 26.5 GHz Rated to 50 Watts FMCR1012](https://www.fairviewmicrowave.com/high-power-circulator-sma-female-17db-isolation-26.5-ghz-50-watts-fm-cr1012-p.aspx)

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TITLE High Power Circulator SMA Female With 17 dB Isolation From 18 GHz to 26.5 GHz Rated to 50 Watts		DWG NO FMC1012		CAGE CODE 3FKR5	
CAD FILE	020216	SHEET	SCALE	N/A	SIZE A 2233