

**N Female High Power Circulator With 20 dB Isolation  
 From 2 GHz to 4 GHz And 50 Watts**

The FMCR1005 is a high power circulator offering a forward and reverse power rating of 50 watts over an operational frequency band of 2 to 4 GHz. This coaxial part uses N female connectors on all ports and has a minimum of 20 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.



**Features:**

- Forward Power of 50 watts
- Frequency Range of 2 to 4 GHz
- Female N Connectors
- VSWR of 1.3:1
- Isolation of 20 dB

**Applications:**

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

**Electrical Specifications**

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

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

**Mechanical Specifications**

<b>Size</b>	
Length	1.6 in [40.64 mm]
Width	0.6 in [15.24 mm]
Height	1.6 in [40.64 mm]
Weight	0.2698 lbs [122.38 g]

**Configuration**

Design	Single Junction
Connector 1	N Female
Connector 2	N Female
Connector 3	N Female

**Environmental Specifications**

**Temperature**

Operating Range	0 to +50 deg C
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**Compliance Certifications** (visit [www.FairviewMicrowave.com](http://www.FairviewMicrowave.com) for current document)

RoHS Compliant	Yes
REACH Compliant	12/17/2015

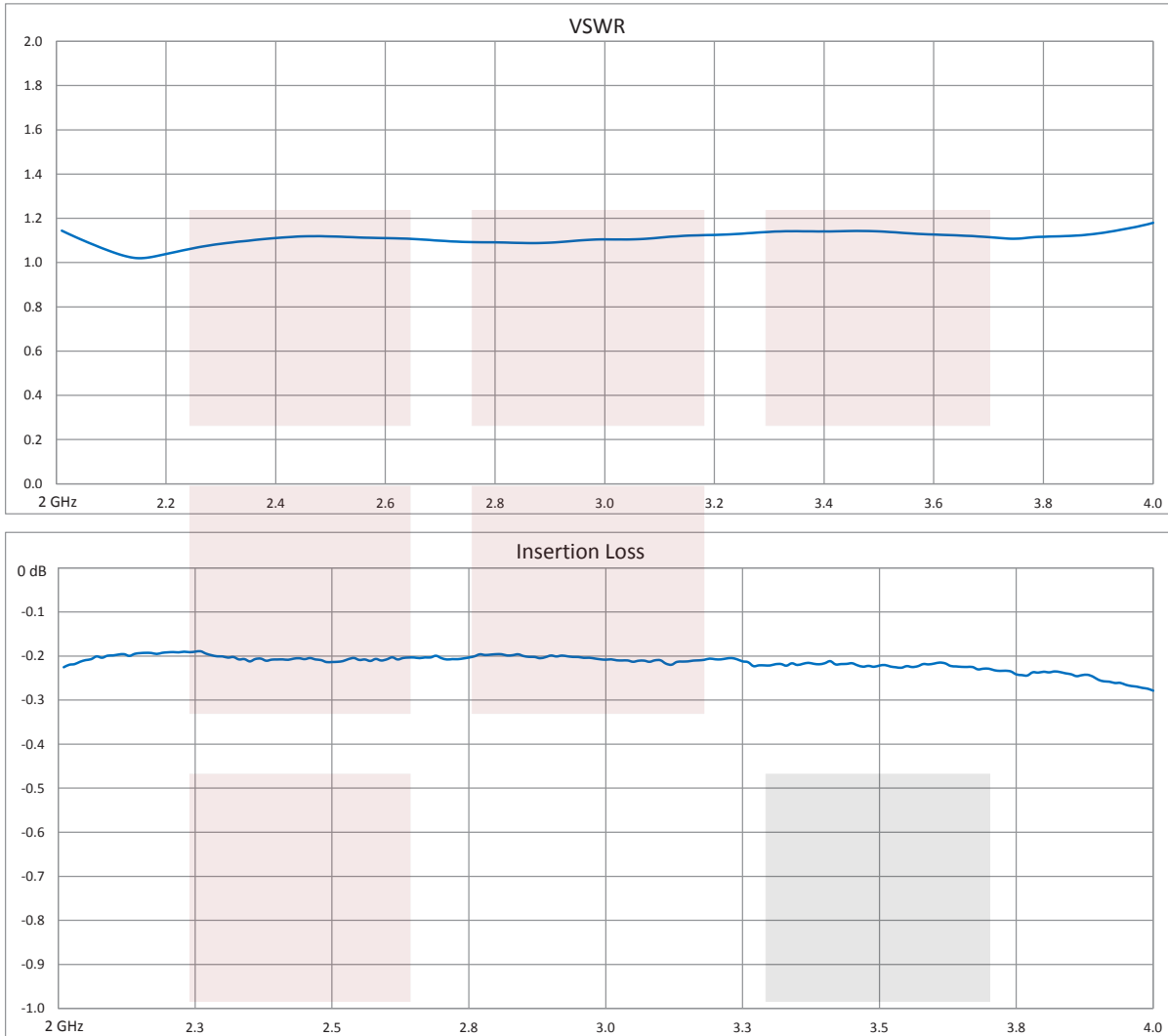
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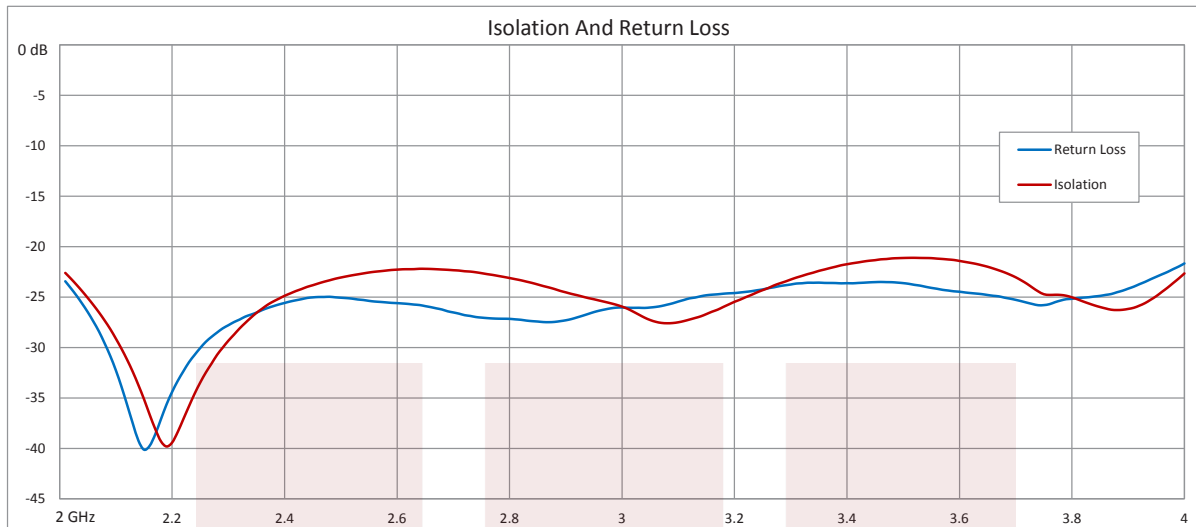
**Plotted and Other Data**

Notes:

- Values at 25°C, sea level.

**Typical Performance Data**



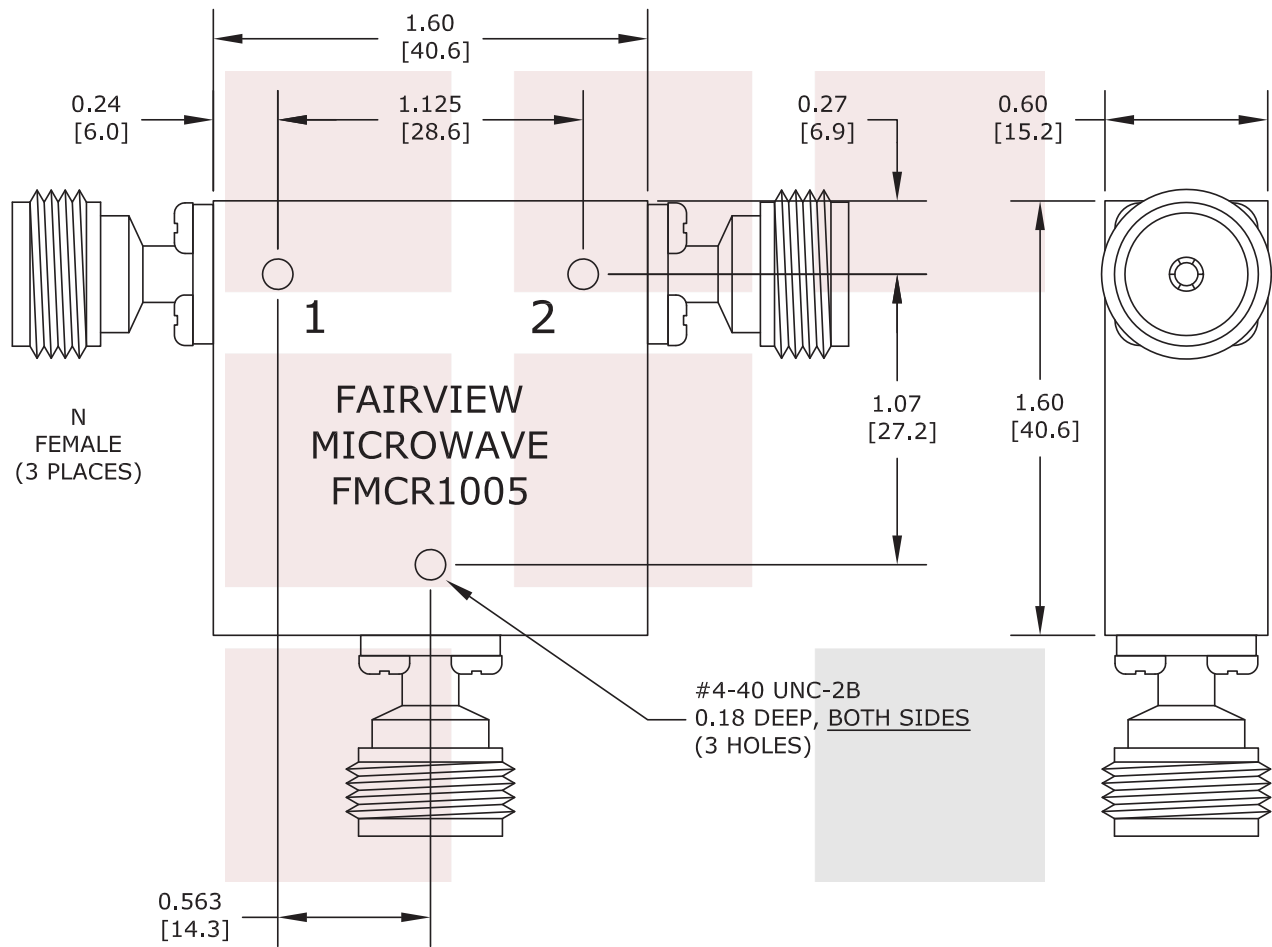


N Female High Power Circulator With 20 dB Isolation From 2 GHz to 4 GHz And 50 Watts from Fairview Microwave is in-stock and available to ship same-day. All of our RF/microwave products are available off-the-shelf from our ISO 9001:2008 certified facilities in Allen, Texas. Fairview Microwave is RF on-demand.

For additional information on this product, please click the following link: [N Female High Power Circulator With 20 dB Isolation From 2 GHz to 4 GHz And 50 Watts FMCR1005](http://www.fairviewmicrowave.com/n-female-high-power-circulator-20db-isolation-4-ghz-50-watts-fmcr1005)

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TITLE N Female High Power Circulator With 20 dB Isolation From 2 GHz to 4 GHz And 50 Watts		DWG NO FMCR1005		CAGE CODE 3FKR5	
CAD FILE	012716	SHEET	SCALE	N/A	SIZE A 2233