

**SMA Directional Coupler 20 dB Coupled Port From 800 MHz to 2.5 GHz Rated To 50 Watts**

The FMCP1025-20 is an 20 dB RF coupler with 50 ohm SMA connectors operating from 0.8 to 2.5 GHz with a maximum input power of 50 Watts, and peak power handling of 1 kilowatt. The FMCP1025-20 has a coupling factor of 1 dB, insertion loss of 0.4 (excluding coupled power) and a maximum VSWR of 1.20. The coupler operates over a temperature range of -55° to 125° C and meets military environmental standard for humidity, shock, vibration, altitude and temperature. Couplers have many application and perform many valuable functions within the RF/Microwave world such as circuit feedback and signal sampling for measurement or monitoring.



**Electrical Specifications**

Description	Min	Typ	Max	Units
Frequency Range	0.8		2.5	GHz
Impedance		50		Ohms
Coupling		20 ±1		dB
Freq. Sensitivity			0.7	dB
Insertion Loss			0.4	dB
Directivity	20			dB
Main Line VSWR			1.2:1	
Input Power (CW)			50	Watts
Input Power (Peak)			1	KWatts

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

**Mechanical Specifications**

Size	
Length	4.1 in [104.14 mm]
Width/Dia.	0.63 in [16 mm]
Height	0.9 in [22.86 mm]
Weight	0.13 lbs [58.97 g]

**Configuration**

Input Connector	SMA Female
Output Connector	SMA Female
Coupled Connectors	SMA Female

**Environmental Specifications**

**Temperature**

Operating Range	-55 to +85 deg C
Storage Range	-65 to +125 deg C

Humidity	MIL-STD-202F METHOD 103B COND. B
Shock	MIL-STD-202F METHOD 213B COND. B
Vibration	MIL-STD-202F METHOD 204D COND. B
Altitude	MIL-STD-202F METHOD 105C COND. B
Temperature Cycle	MIL-STD-202F METHOD 107D COND. A

**Features:**

- 0.8 to 2.5 GHz
- 50 Watts Max Power
- 20 dB Coupling Value
- Directional SMA Coupler
- Meets MIL-STD-202F for Humidity, Shock, Vibration, Altitude, Temperature Cycle

**Applications:**

- Communications Systems
- CDMA, GSM, LTE
- Amplifier Systems
- Amplifier Power Dividing
- Aviation/Aerospace
- Defense Applications

Fairview Microwave  
 1130 Junction Dr. #100  
 Allen, TX 75013  
 Tel: 1-800-715-4396 / (972) 649-6678  
 Fax: (972) 649-6689  
[www.fairviewmicrowave.com](http://www.fairviewmicrowave.com)  
[sales@fairviewmicrowave.com](mailto:sales@fairviewmicrowave.com)

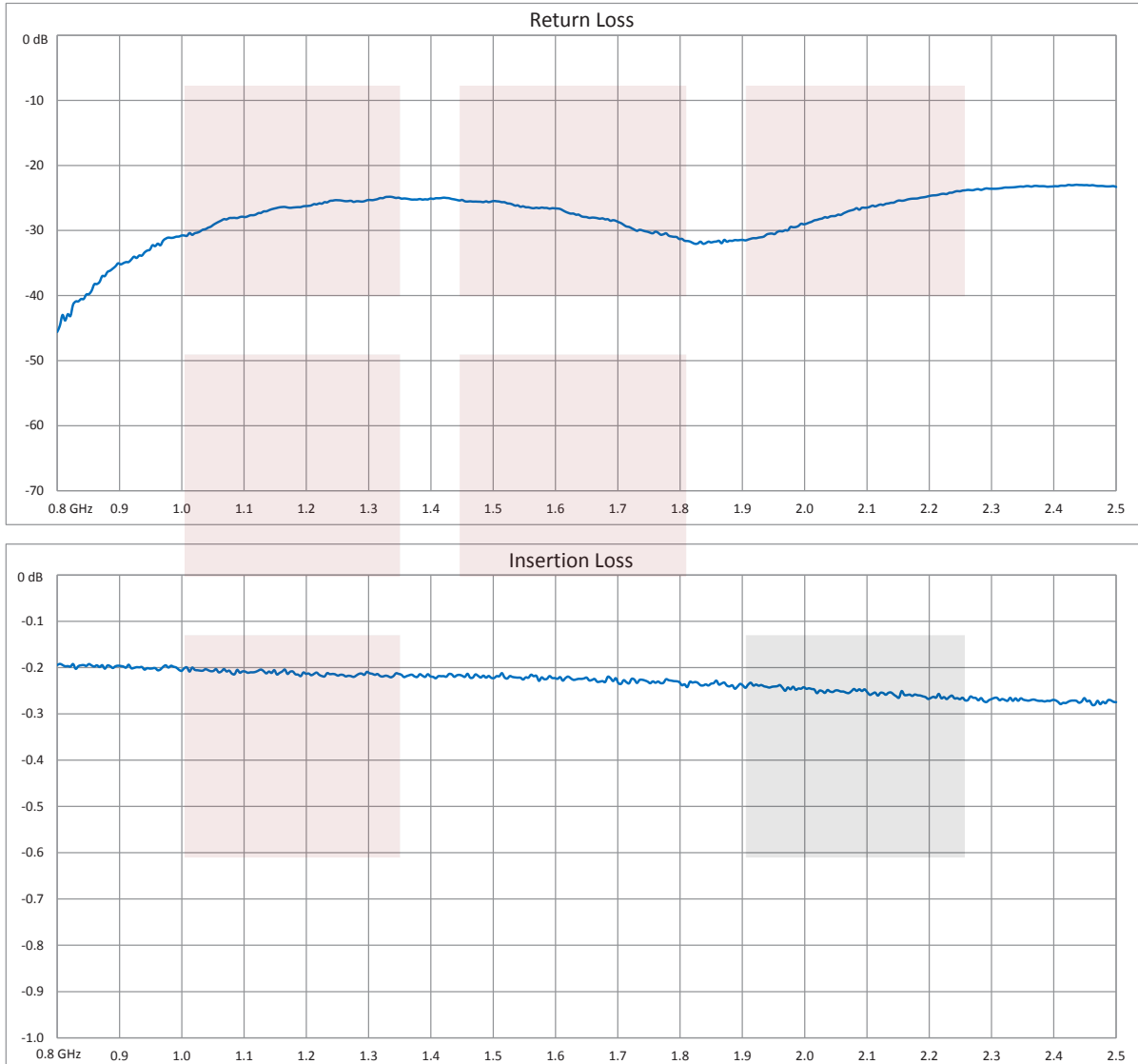
**Compliance Certifications** (visit [www.FairviewMicrowave.com](http://www.FairviewMicrowave.com) for current document)

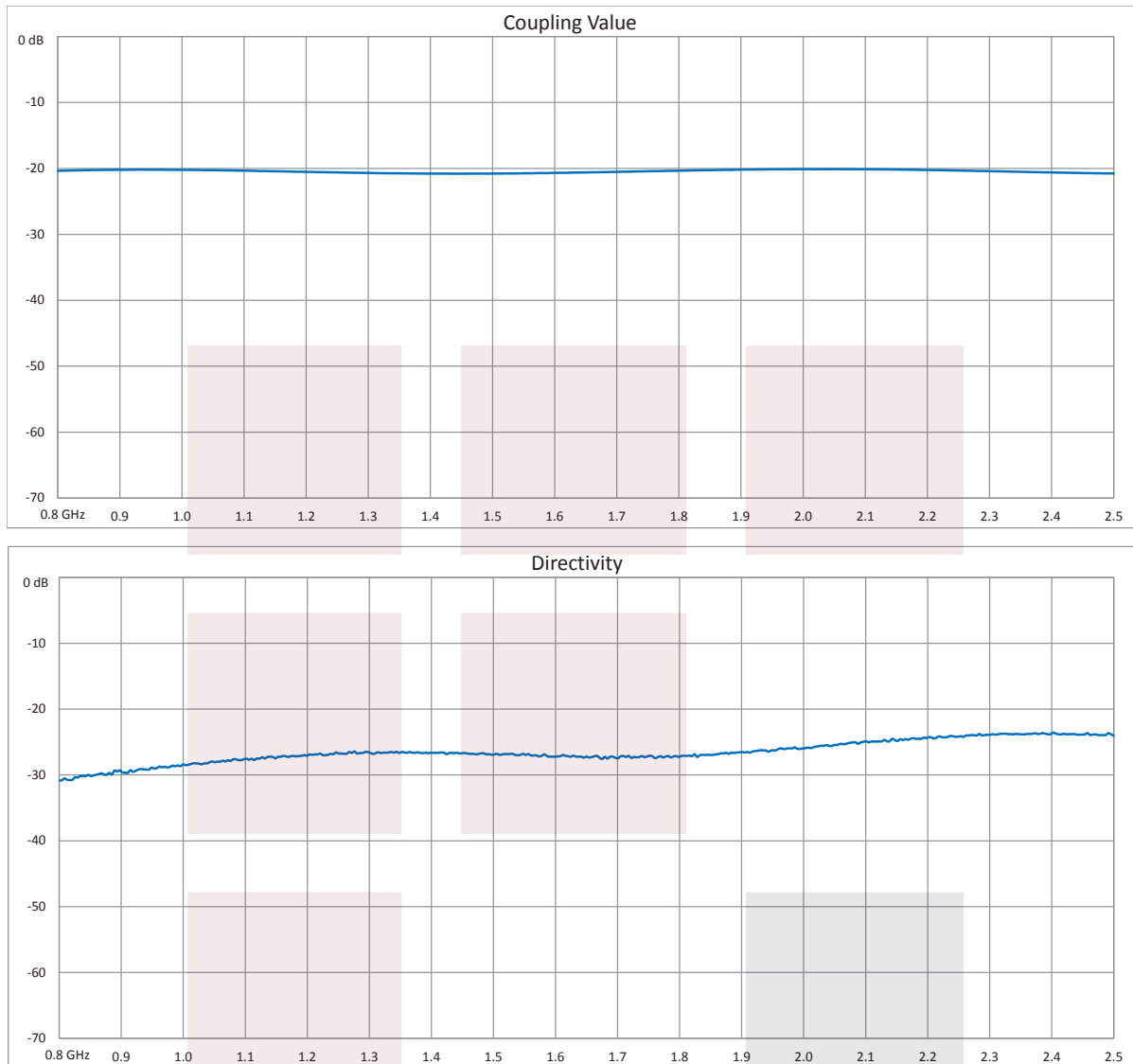
RoHS Compliant Yes  
 REACH Compliant 12/17/2015

**Plotted and Other Data**

- Notes:  
 • Values at 25°C, sea level.

**Typical Performance Data**



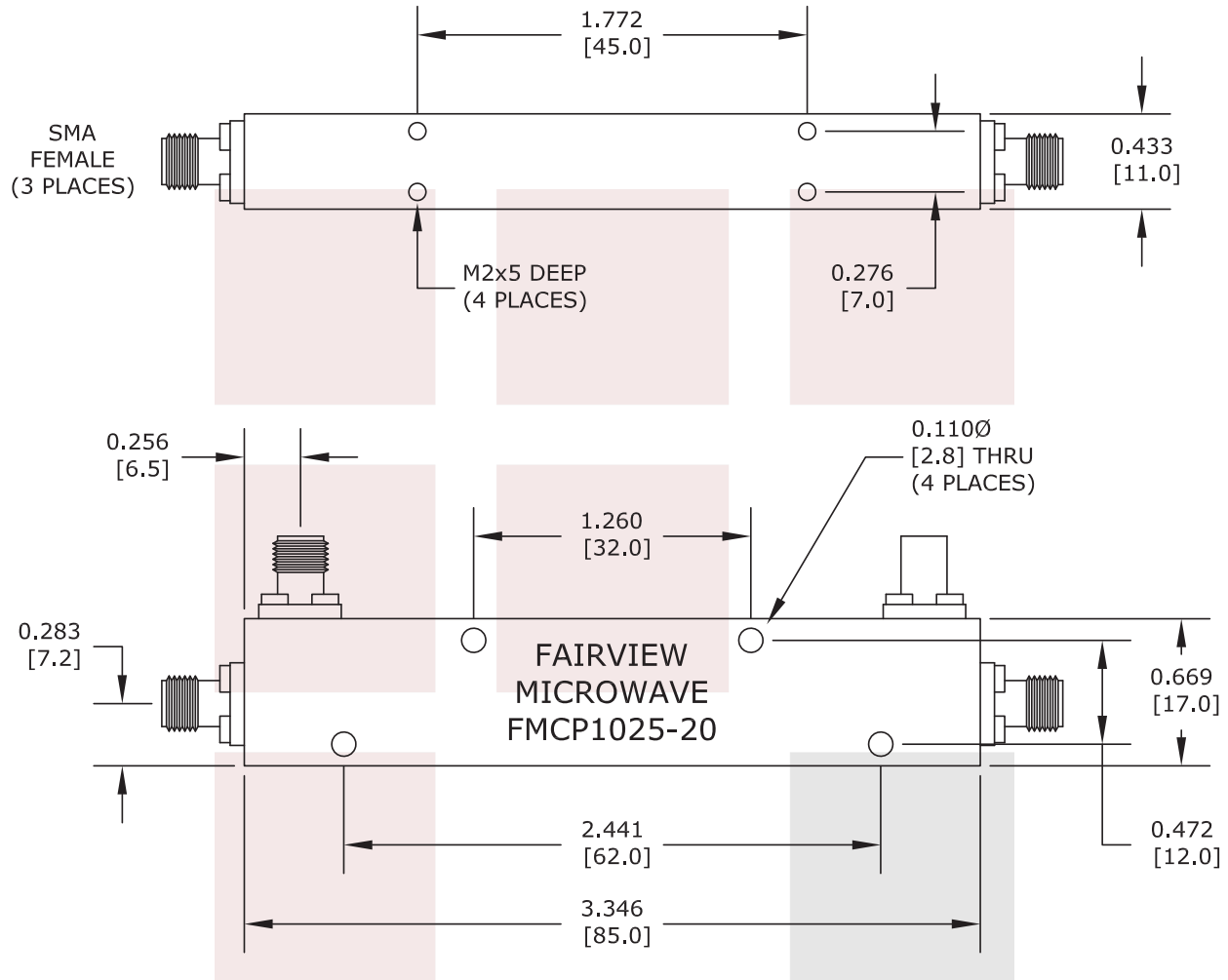


SMA Directional Coupler 20 dB Coupled Port From 800 MHz to 2.5 GHz Rated To 50 Watts from Fairview Microwave is in-stock and available to ship same-day. All of our RF/microwave products are available off-the-shelf from our ISO 9001:2008 certified facilities in Allen, Texas. Fairview Microwave is RF on-demand.

For additional information on this product, please click the following link: [SMA Directional Coupler 20 dB Coupled Port From 800 MHz to 2.5 GHz Rated To 50 Watts FMCP1025-20](https://www.fairviewmicrowave.com/sma-directional-coupler-20-db-2.5-ghz-50-watts-fmcp1025-20)

URL: <https://www.fairviewmicrowave.com/sma-directional-coupler-20-db-2.5-ghz-50-watts-fmcp1025-20-p.aspx>

The information contained in 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 implement 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 any liability arising out of the use of any part or documentation.



<b>FAIRVIEW MICROWAVE INC.</b> ALLEN, TX 75013 WWW.FAIRVIEWMICROWAVE.COM		NOTES: 1. UNLESS OTHERWISE SPECIFIED ALL DIMENSIONS ARE NOMINAL. 2. ALL SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE AT ANY TIME. 3. DIMENSIONS ARE IN INCHES [mm].			
TITLE SMA Directional Coupler 20 dB Coupled Port From 800 MHz to 2.5 GHz Rated To 50 Watts		DWG NO FMCP1025-20		CAGE CODE 3FKR5	
CAD FILE	041415	SHEET	SCALE	N/A	SIZE A 2233