

SMA Directional Coupler 6 dB Coupled Port From 800 MHz to 2.5 GHz Rated To 50 Watts

The FMCP1024-6 is an 6 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 FMCP1024-6 has a coupling factor of 1 dB, insertion loss of 0.5 (excluding coupled power) and a maximum VSWR of 1.25. 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		6 ±1		dB
Freq. Sensitivity			±0.7	dB
Insertion Loss			0.5	dB
Directivity	20			dB
Main Line VSWR			1.25:1	
Input Power (CW)			50	Watts
Input Power (Peak)			1	KWatts

Mechanical Specifications

Size

Length	5.99 in [152.15 mm]
Width/Dia.	0.435 in [11.05 mm]
Height	0.965 in [24.51 mm]
Weight	0.148 lbs [67.13 g]

Configuration

Package Type	Connectorized
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
- 6 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
sales@fairviewmicrowave.com

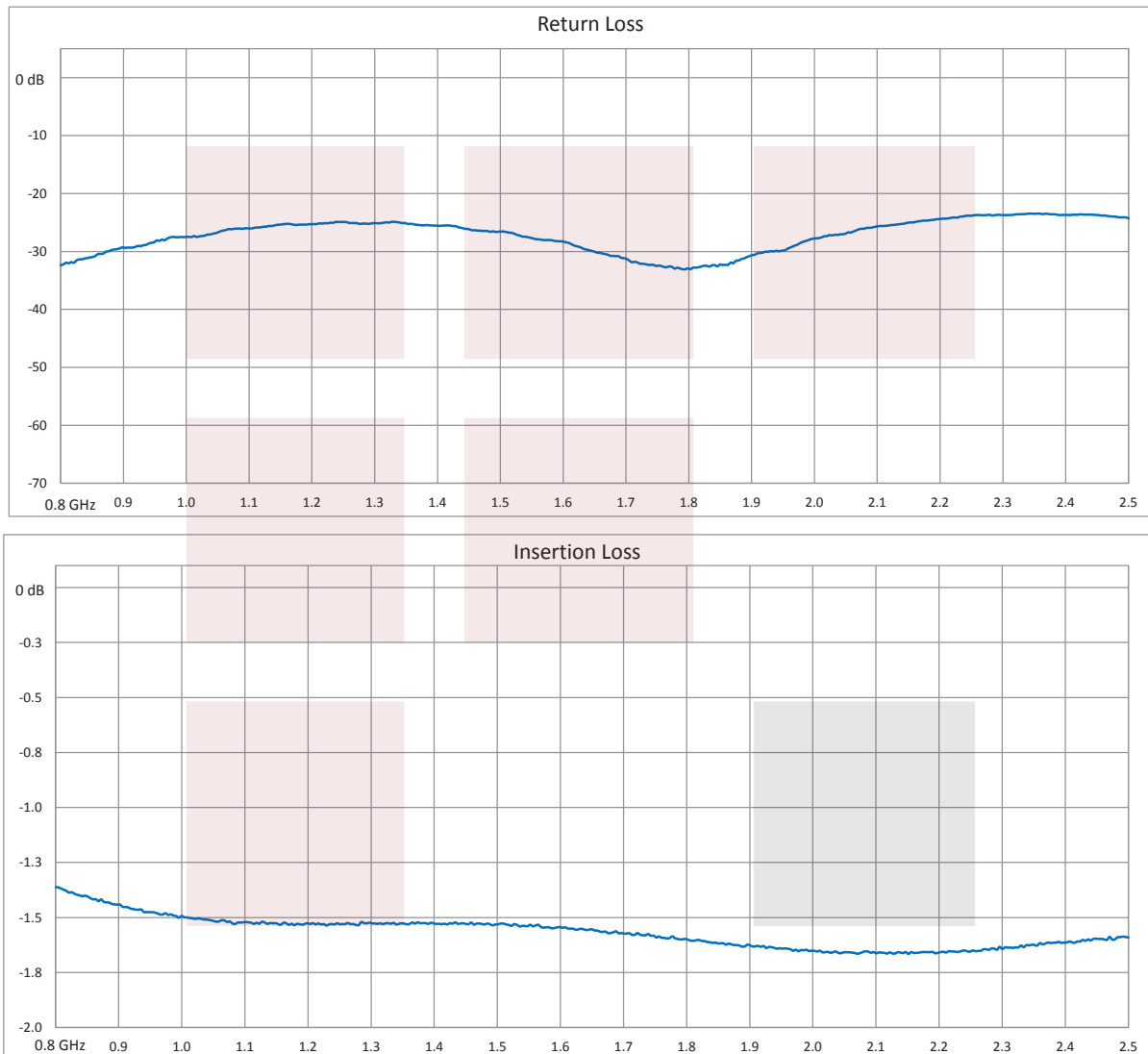
Compliance Certifications (see [product page](#) for current document)

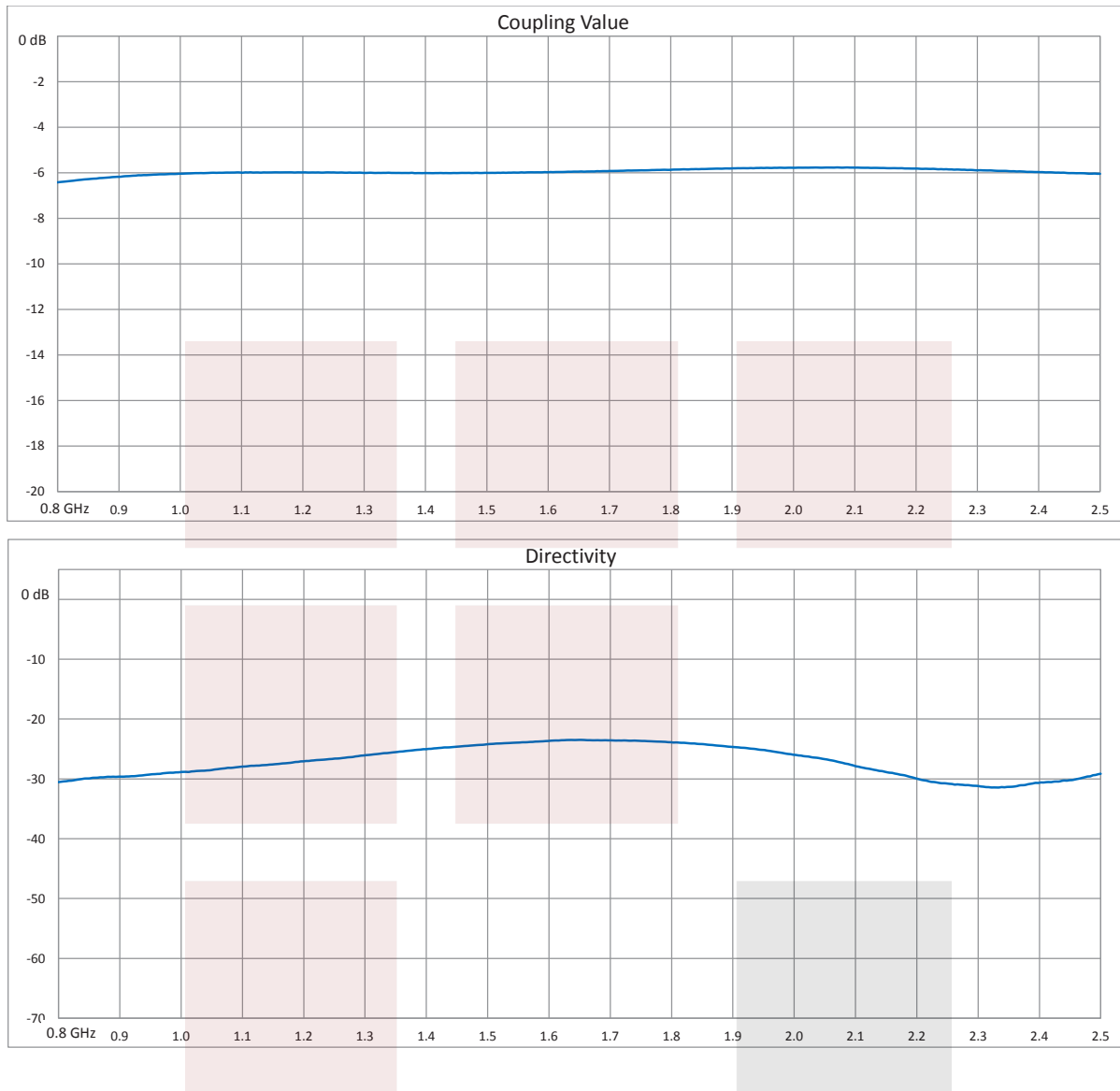
Plotted and Other Data

Notes:

- Values at 25°C, sea level.

Typical Performance Data



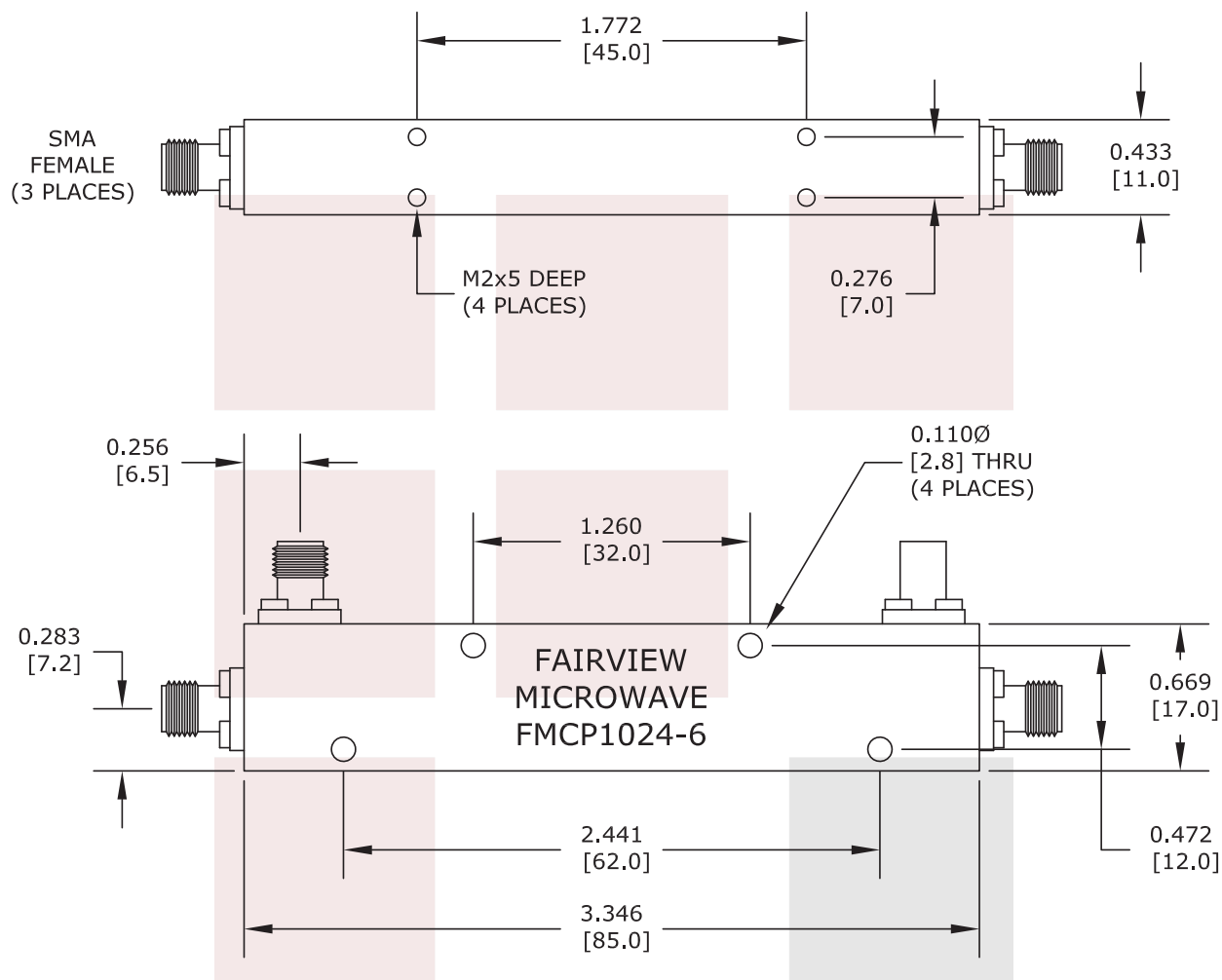


SMA Directional Coupler 6 dB Coupled Port From 800 MHz to 2.5 GHz Rated To 50 Watts from Fairview Microwave is in-stock and available to ship same-day. All of our RF/microwave products are available off-the-shelf from our ISO 9001:2008 certified facilities in Allen, Texas. Fairview Microwave is RF on-demand.

For additional information on this product, please click the following link: [SMA Directional Coupler 6 dB Coupled Port From 800 MHz to 2.5 GHz Rated To 50 Watts FMCP1024-6](https://www.fairviewmicrowave.com/sma-directional-coupler-6-db-2.5-ghz-50-watts-fmcp1024-6-p.aspx)

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TITLE SMA Directional Coupler 6 dB Coupled Port From 800 MHz to 2.5 GHz Rated To 50 Watts		DWG NO FMCP1024-6		CAGE CODE 3FKR5	
CAD FILE	041415	SHEET	SCALE	N/A	SIZE A 2233