Fairview Microwave
RF COMPONENTS ON DEMAND. Done!

# FMCP1023-6
# DATA SHEET

## N Directional Coupler 6 dB Coupled Port From 800 MHz to 2.5 GHz Rated To 60 Watts

The FMCP1023-6 is an 6 dB RF coupler with 50 ohm N connectors operating from 0.8 to 2.5 GHz with a maximum input power of 60 Watts, and peak power handling of 1 kilowatt. The FMCP1023-6 has a coupling factor of 0.5 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.

### Features:

- 0.8 to 2.5 GHz
- 60 Watts Max Power
- 6 dB Coupling Value
- Directional N 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

### Electrical Specifications

| Description | Min | Typ | Max | Units |
|---|---|---|---|---|
| Frequency Range | 0.8 | | 2.5 | GHz |
| Impedance | | 50 | | Ohms |
| Coupling | | 6 ±0.5 | | dB |
| Freq. Sensitivity | | | ±0.7 | dB |
| Insertion Loss | | | 0.5 | dB |
| Directivity | 20 | | | dB |
| Main Line VSWR | | | 1.25:1 | |
| Input Power (CW) | | | 60 | Watts |
| Input Power (Peak) | | | 1 | KWatts |

### Mechanical Specifications

**Size**

| | |
|---|---|
| Length | 5.635 in [143.13 mm] |
| Width/Dia. | 0.825 in [20.96 mm] |
| Height | 1.94 in [49.28 mm] |
| Weight | 0.5615 lbs [254.69 g] |

**Configuration**

| | |
|---|---|
| Package Type | Connectorized |
| Input Connector | N Female |
| Output Connector | N Female |
| Coupled Connectors | N 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 |

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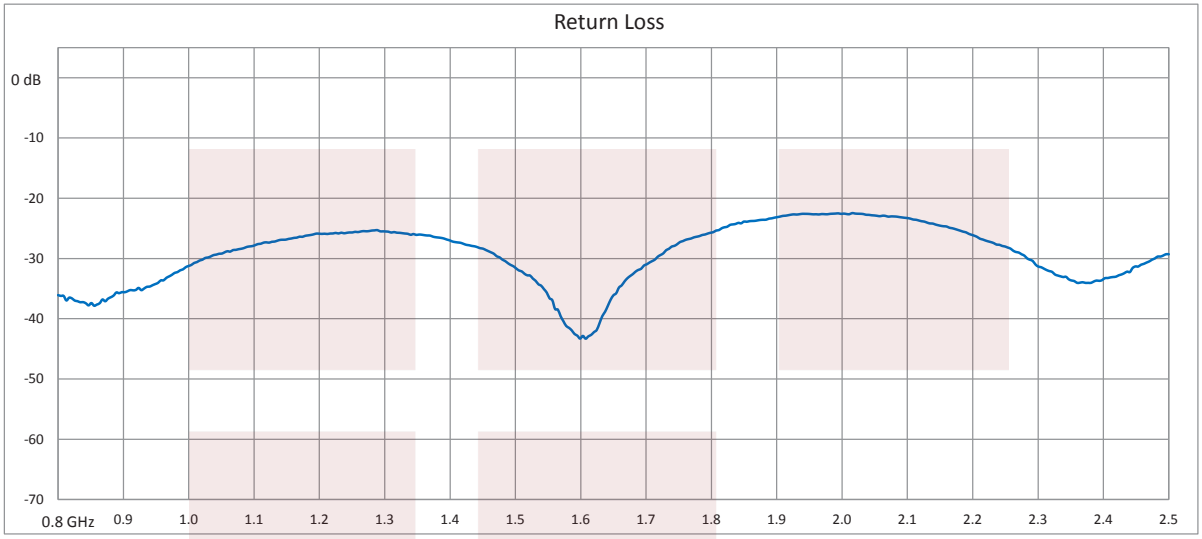
## Compliance Certifications (see product page for current document)

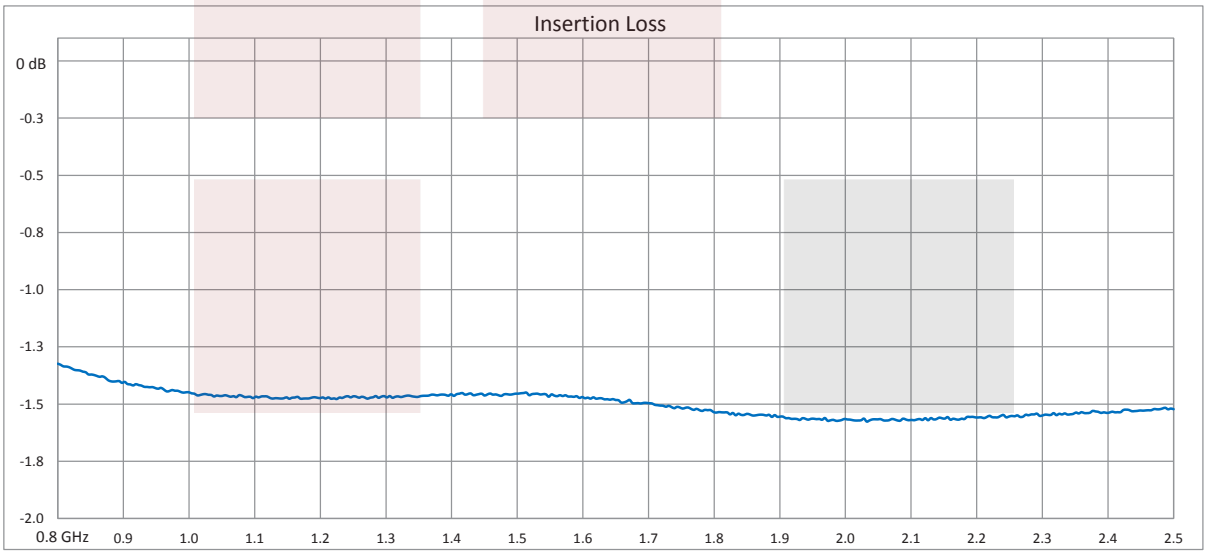
## Plotted and Other Data

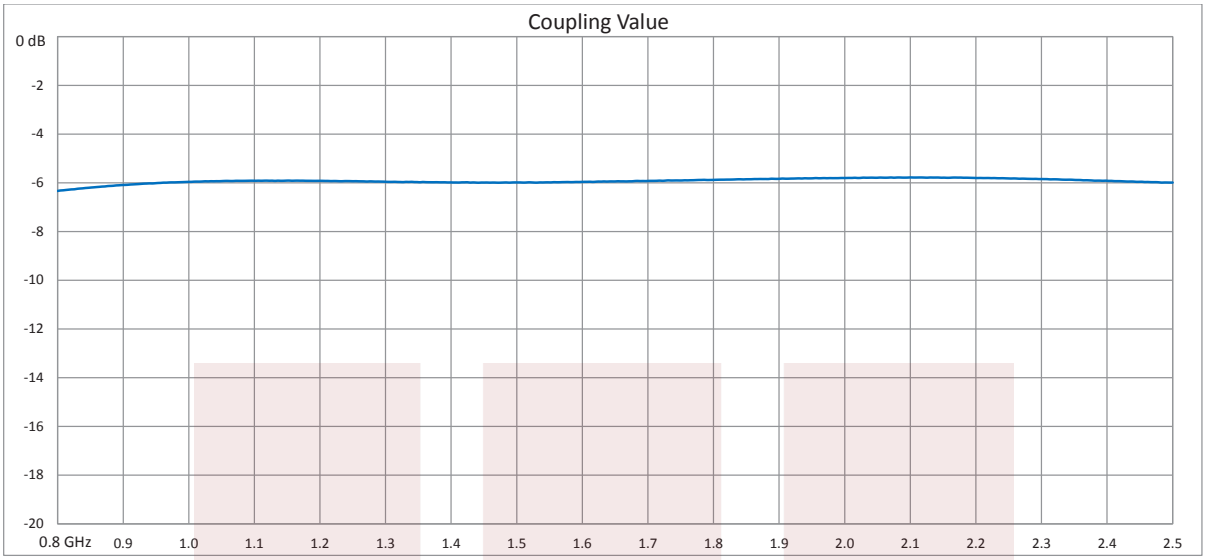
Notes:

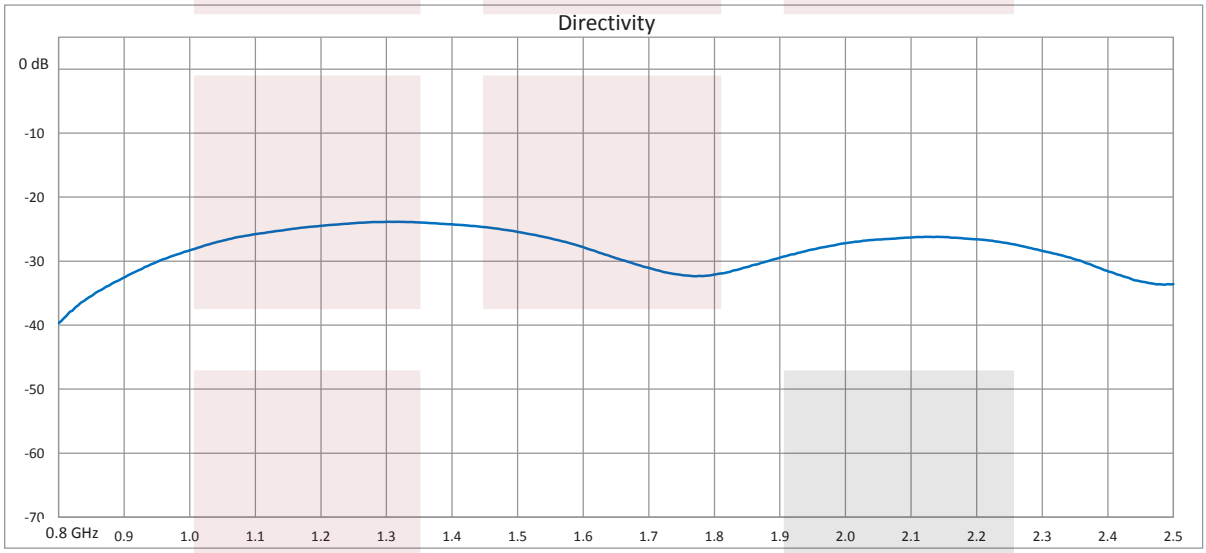
- Values at 25°C, sea level.

### Typical Performance Data



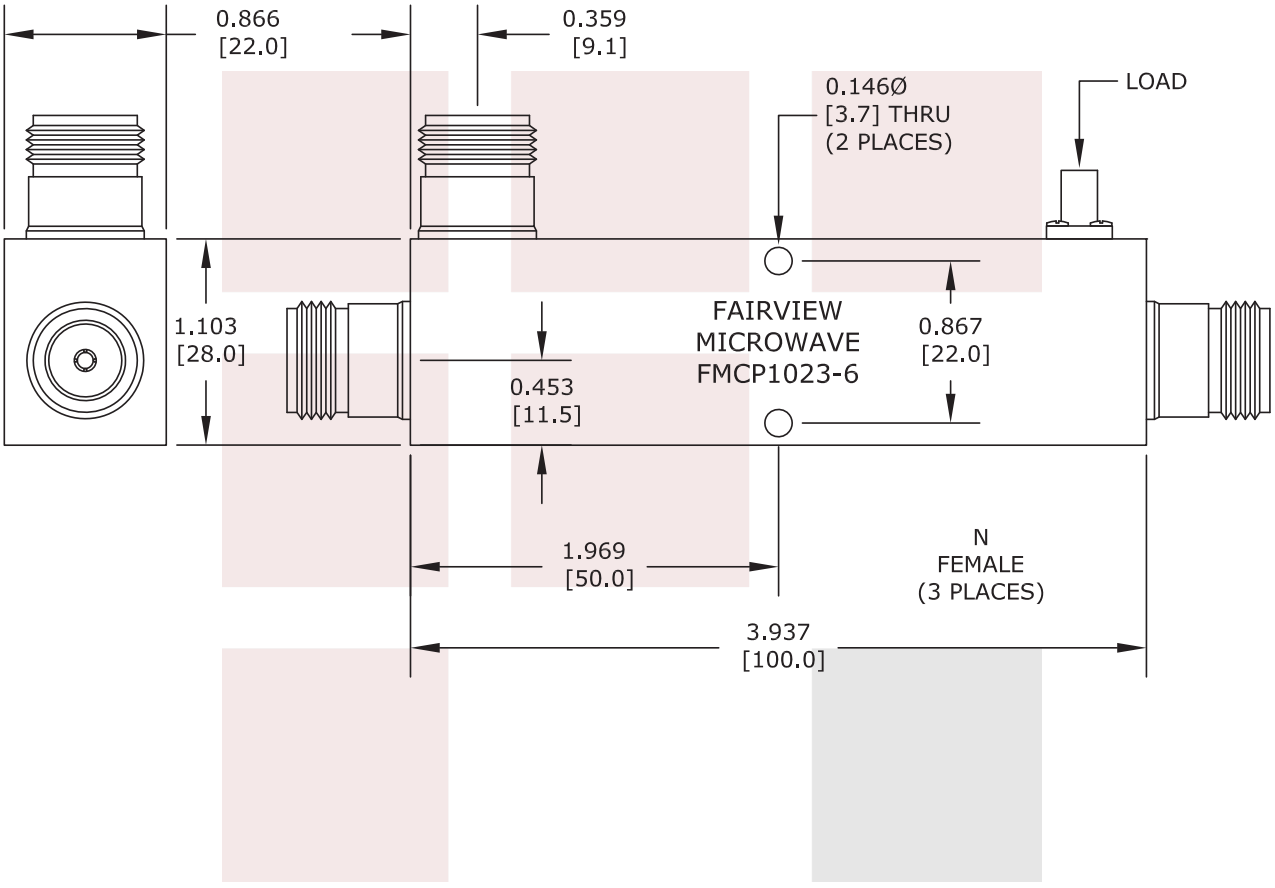



N Directional Coupler 6 dB Coupled Port From 800 MHz to 2.5 GHz Rated To 60 Watts from Fairview Microwave is in-stock and available to ship same-day. All of our RF/microwave products are available off-the-shelf from our ISO 9001:2008 certified facilities in Allen, Texas. Fairview Microwave is RF on-demand.

For additional information on this product, please click the following link: N Directional Coupler 6 dB Coupled Port From 800 MHz to 2.5 GHz Rated To 60 Watts FMCP1023-6

URL: https://www.fairviewmicrowave.com/n-directional-coupler-6-db-2.5-ghz-60-watts-fmcp1023-6-p.aspx

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| FAIRVIEW MICROWAVE INC.<br>ALLEN, TX 75013 WWW.FAIRVIEWMICROWAVE.COM | NOTES:<br>1. UNLESS OTHERWISE SPECIFIED ALL DIMENSIONS ARE NOMINAL.<br>2. ALL SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE AT ANY TIME.<br>3. DIMENSIONS ARE IN INCHES [mm]. | | | | |
| TITLE<br>N Directional Coupler 6 dB Coupled Port From 800 MHz to 2.5 GHz Rated To 60 Watts | DWG NO<br>FMCP1023-6 | | CAGE CODE<br>3FKR5 | | |
| | CAD FILE 041415 | SHEET | SCALE N/A | SIZE A | 2233 |