

**N Directional Coupler 30 dB Coupled Port From
 800 MHz to 2.5 GHz Rated To 60 Watts**

The FMCP1023-30 is an 30 dB RF coupler with 50 ohm N connectors operating from 0.8 to 2.5 GHz with a maximum input power of 60 Watts CW, and peak power handling of 1 kilowatt. The FMCP1023-30 has a coupling factor of 1 dB, insertion loss of 0.4 (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 | | 30 ±1 | | dB |
| Freq. Sensitivity | | | ±0.7 | dB |
| Insertion Loss | | | 0.4 | dB |
| Directivity | 20 | | | dB |
| Main Line VSWR | | | 1.25:1 | |
| Input Power (CW) | | | 60 | Watts |
| Input Power (Peak) | | | 1 | KWatts |

Features:

- 0.8 to 2.5 GHz
- 60 Watts CW Max Power
- 30 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

Mechanical Specifications

| | |
|-------------|----------------------|
| Size | |
| Length | 5.635 in [143.13 mm] |
| Width/Dia. | 0.825 in [20.96 mm] |
| Height | 2.45 in [62.23 mm] |
| Weight | 0.531 lbs [240.86 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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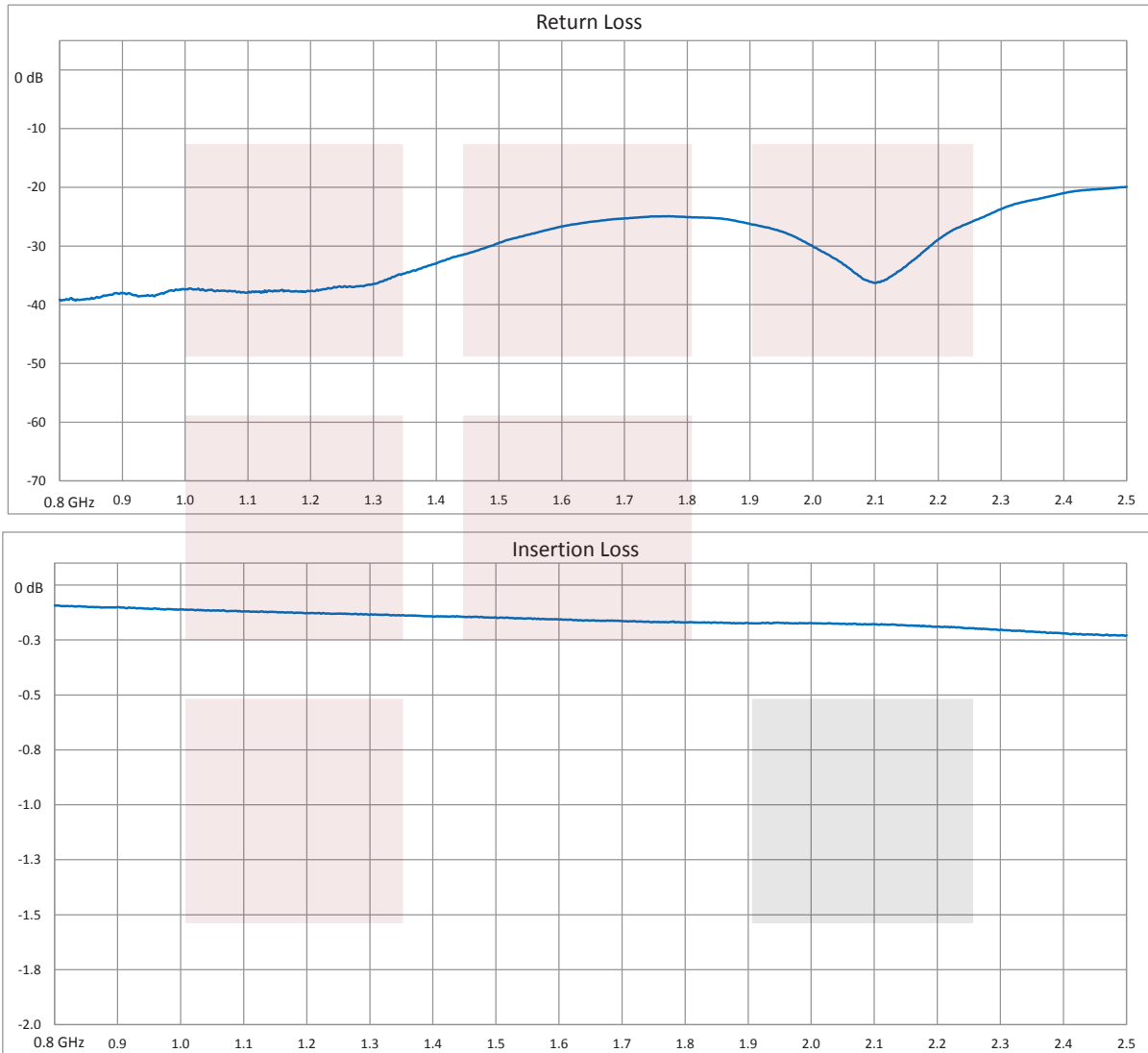
Compliance Certifications (see [product page](#) for current document)

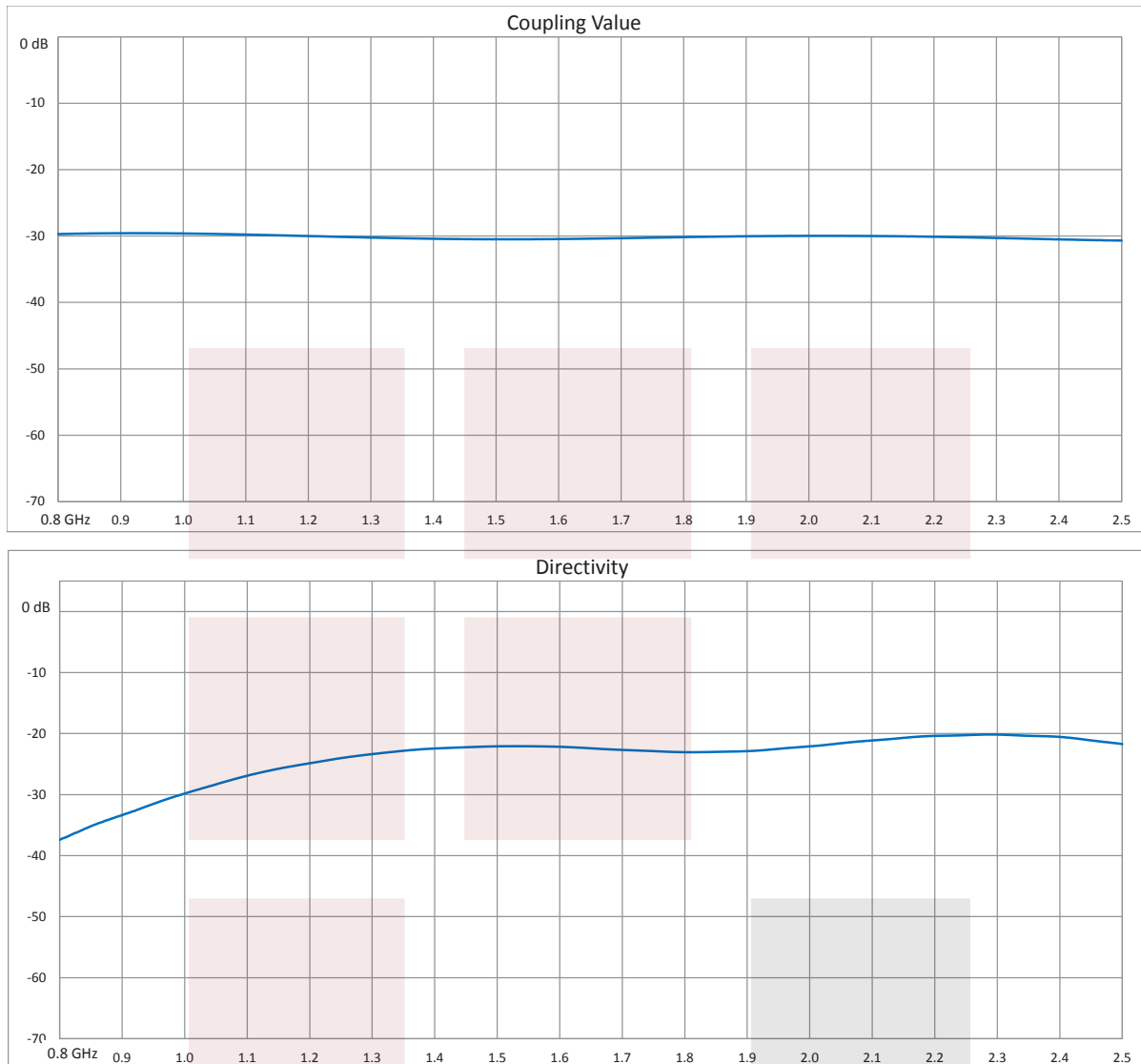
Plotted and Other Data

Notes:

- Values at 25°C, sea level.

Typical Performance Data



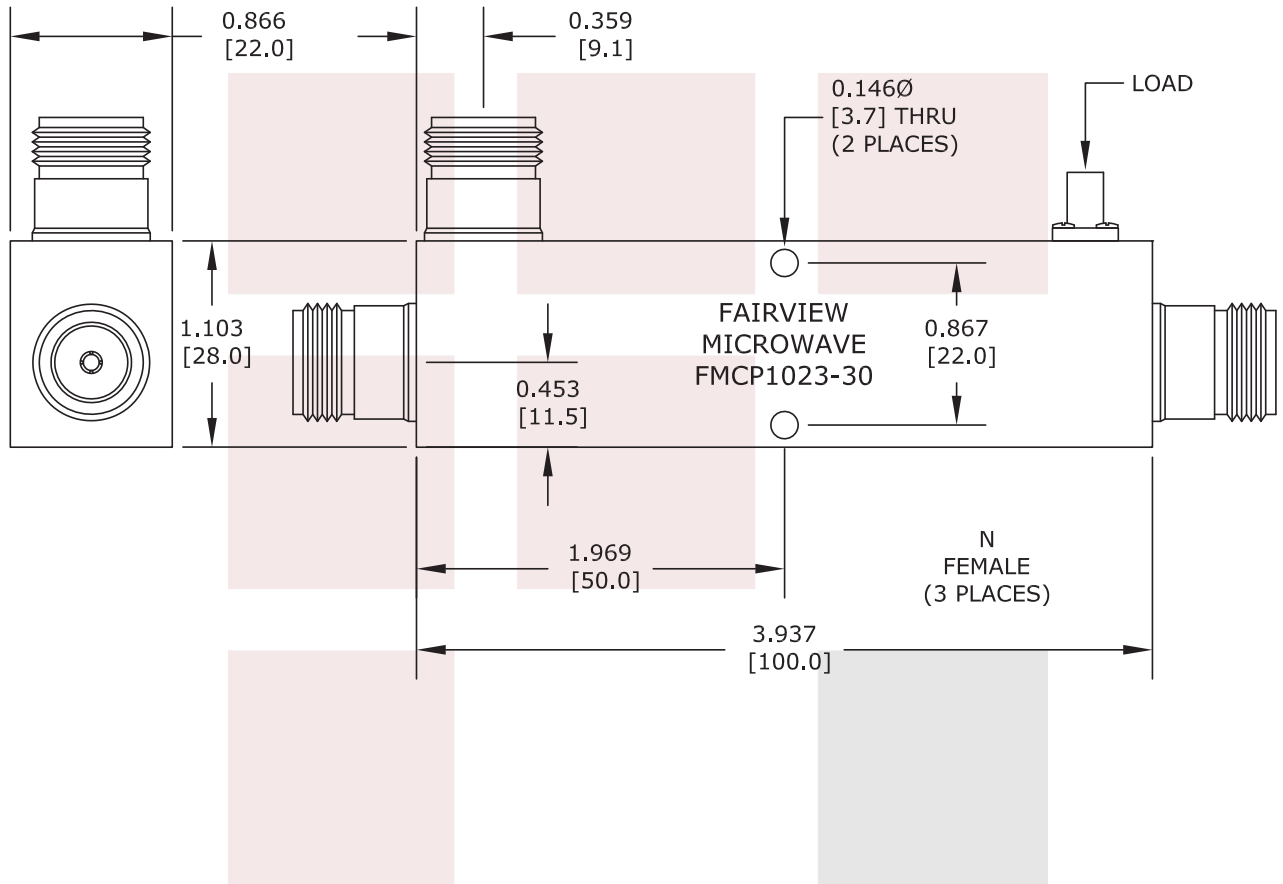


N Directional Coupler 30 dB Coupled Port From 800 MHz to 2.5 GHz Rated To 60 Watts from Fairview Microwave is in-stock and available to ship same-day. All of our RF/microwave products are available off-the-shelf from our ISO 9001:2008 certified facilities in Allen, Texas. Fairview Microwave is RF on-demand.

For additional information on this product, please click the following link: [N Directional Coupler 30 dB Coupled Port From 800 MHz to 2.5 GHz Rated To 60 Watts FMCP1023-30](#)

URL: <https://www.fairviewmicrowave.com/n-directional-coupler-30-db-2.5-ghz-60-watts-fmcp1023-30-p.aspx>

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|---|--------|---|-------|--------------------|-------------|
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| TITLE N Directional Coupler 30 dB Coupled Port From 800 MHz to 2.5 GHz Rated To 60 Watts | | DWG NO FMCP1023-30 | | CAGE CODE 3FKR5 | |
| CAD FILE | 041415 | SHEET | SCALE | N/A | SIZE A 2233 |