4-Port Bi-Directional Coupler: Similar to the 3-Port Uni-Directional Coupler, except that both ends of the coupled line serve as coupled ports. Convenient for simultaneously monitoring both forward and reverse power. The directivity of this coupler design is, however, dependent upon well matched 50 Ohm loads on the coupled ports.

Features:
- High Power
- Wide Bandwidths
- Small Size
- Flat Coupling
- Custom Designs Available

Electrical Specifications:
- Frequency: 200 - 6000 MHz
- Power: 200 W CW
- Coupling: 20 ± 1.0 dB Max.
- Insertion Loss: 0.55 dB Max. (200-2000 MHz), 1.1 dB Max. (2000-6000 MHz)
- Flatness: ± 1.75 dB Max. (200-2000 MHz), ± 2.25 dB Max. (2000-6000 MHz)
- Directivity: 18 dB Min. (200-2000 MHz), 14 dB Min. (2000-6000 MHz)

Mechanical Specifications:
- Type: Connectorized
- Material: Aluminum 6061-T6
- Surface Finish: Chem. Film Per MIL-DTL-5541F Type I Class 3 (Yellow Iridite)
- RoHS Compliant Available
- Operating Temperature: -55°C to +75°C
- Storage Temperature: -60°C to +85°C
- Humidity: 95% Non-Condensing
- Size: 4.8 x 0.88 x 0.5"
- Weight: 3.5 oz. / 99 grams

Connector Configurations:

Werlatone® Broadband Dual, Uni, and Bi Directional RF Couplers are designed to tolerate the most stringent operating conditions associated with military and EMC testing environments. Many of our RF Directional Couplers, designated Mismatch Tolerant®, will operate continuously, at rated power, into a severe load mismatch condition. Our multi-octave Directional Couplers maintain exceptional coupling flatness, directivity, VSWR, and insertion loss.
Performance Data (Specifications subject to change without notice):

**Coupling:**

![Graph showing coupling variation with frequency](image)

**VSWR:**

![Graph showing VSWR variation with frequency](image)

**Insertion Loss:**

![Graph showing insertion loss variation with frequency](image)

**Directivity:**

![Graph showing directivity variation with frequency](image)
NOTES: UNLESS OTHERWISE SPECIFIED
1. MATERIAL: ALUMINIUM 6061-T6
2. FINISH: CHEM FILM PER MIL-DTL-5541F TYPE I CLASS 3 (YELLOW IRIDITE)
3. CONNECTORS:
   J1-J4: SMA FEMALE
4. J1 - INPUT
   J2 - OUTPUT
   J3 - FWD
   J4 - REV

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