



## PRODUCT DATA SHEET

C7422

**4-Port Dual Directional Coupler** employs two, 3-Port Uni-Directional Couplers, internally connected, in tandem, providing measurement of both forward and reverse power. Ideal for simultaneously monitoring a system's forward and reverse power and for reflectometer measurements. Unlike the Bi-Directional Coupler, the directivity of the Dual Directional Coupler is unaffected by the loads on the coupled ports.

### Features:

High Power      Wide Bandwidths      Small Size      Flat Coupling      Custom Designs Available

### Electrical Specifications:

Frequency: 2 - 30 MHz  
Power: 50,000 W CW  
Coupling:  $70 \pm 1.0$  dB Max.  
Insertion Loss: 0.1 dB Max.  
Flatness:  $\pm 0.5$  dB Max.  
VSWR (ML): 1.15:1 Max.  
Directivity: 30 dB Min.

### 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: 6" Line Section

### Connector Configurations:

| Model    | Input (J1) | Output (J2) | Fwd (J3) | Rev (J4) |
|----------|------------|-------------|----------|----------|
| C7422-91 | 3 1/8" EIA | 3 1/8" EIA  | N Female | N Female |
| C7422-93 | 3 1/8" EIA | 3 1/8" EIA  | SMA      | SMA      |
| C7422-94 | 3 1/8" EIA | 3 1/8" EIA  | BNC      | BNC      |

**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.

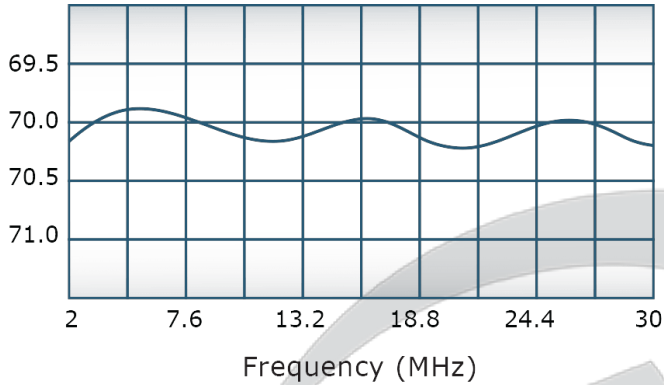


## PRODUCT DATA SHEET

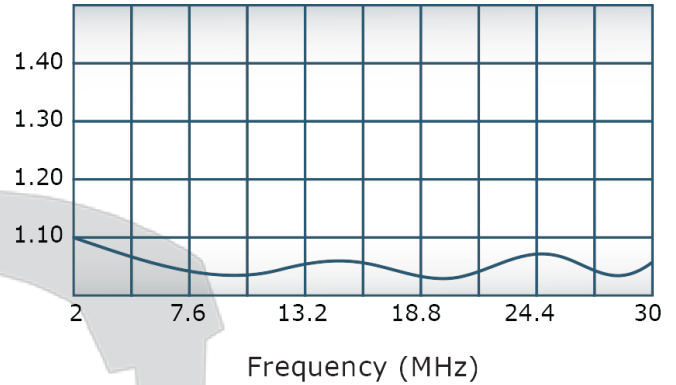
C7422

### Performance Data (Specifications subject to change without notice):

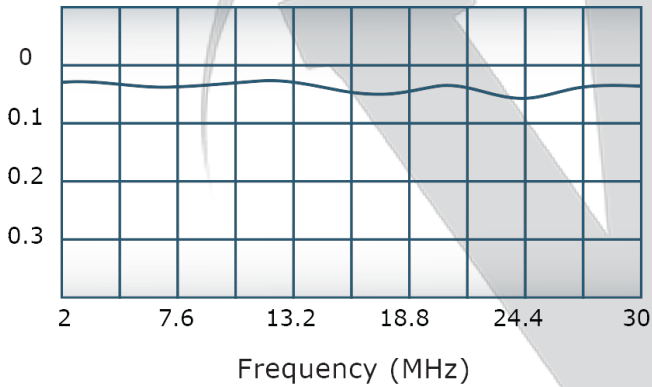
Coupling:



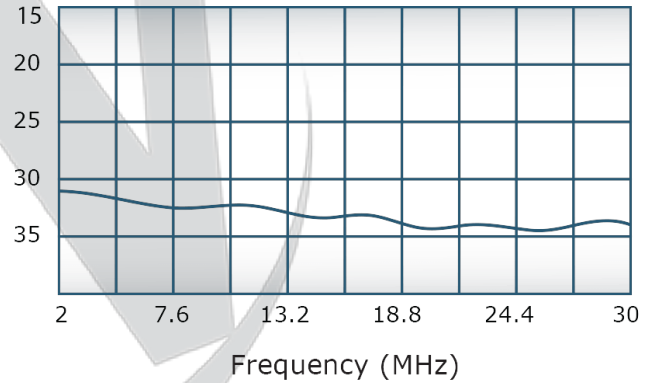
VSWR:



Insertion Loss:



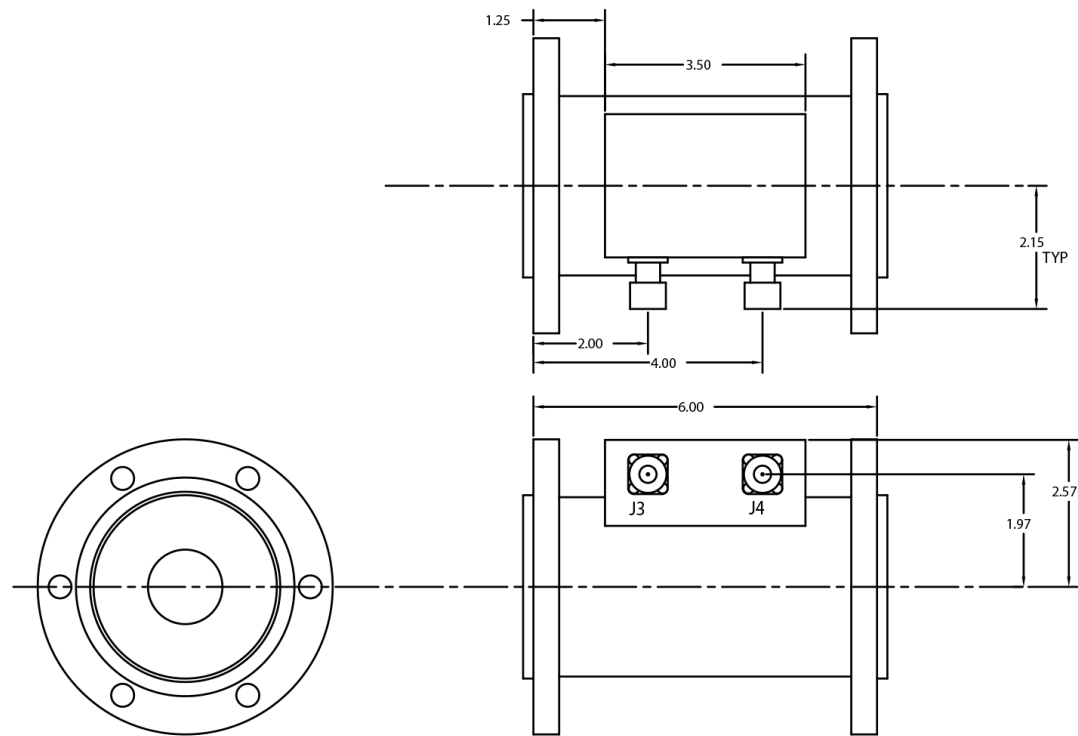
Directivity:



Restriction on use, duplication, or disclosure of proprietary information. This document contains proprietary information which is the sole property of Werlatone, Inc.

Werlatone, Inc. 17 Jon Barrett Road Patterson, NY 12563 T:(845)278-2220 F:(845)278-3440 sales@werlatone.com www.werlatone.com

| DATE | SYM | REVISION RECORD | AUTH | DR | CK |
|------|-----|-----------------|------|----|----|
|      |     |                 |      |    |    |
|      |     |                 |      |    |    |
|      |     |                 |      |    |    |
|      |     |                 |      |    |    |
|      |     |                 |      |    |    |



THIS DRAWING CONTAINS INFORMATION  
PROPRIETARY TO WERLATONE INC. AND  
MAY NOT BE USED OR COPIED WITHOUT  
THE WRITTEN CONSENT OF WERLATONE INC.

|                             |                  |                             |                           |
|-----------------------------|------------------|-----------------------------|---------------------------|
| TOLERANCE                   | WERLATONE INC.   |                             |                           |
| XX +/- .015<br>XXX +/- .005 | USED ON:         | SCALE                       | DRAWN BY: RH<br>APPVD BY: |
|                             | TITLE<br>OUTLINE |                             |                           |
|                             | DATE<br>9/22/03  | DRAWING NUMBER<br>10388-500 |                           |

**Restriction on use, duplication, or disclosure of proprietary information.** This document contains proprietary information which is the sole property of Werlatone, Inc.  
Werlatone, Inc. 17 Jon Barrett Road Patterson, NY 12563 T:(845)278-2220 F:(845)278-3440 sales@werlatone.com www.werlatone.com