


**PRODUCT DATA SHEET**
**C6442**

**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: 0.01 - 400 MHz  
Power: 100 W CW, 300 W Peak  
Coupling:  $30 \pm 1.0$  dB Max.  
Flatness:  $\pm 0.5$  dB Max.  
Insertion Loss: 0.8 dB Max.  
VSWR (ML): 1.25:1 Max.  
Directivity: 20 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: 5.2 x 2.67 x 1.69"

**Connector Configurations:**

Model	Input (J1)	Output (J2)	Fwd (J3)	Rev (J4)
C6442-10	N Female	N Female	N Female	N Female
C6442-12	N Female	N Female	SMA	SMA
C6442-13	N Female	N Female	BNC	BNC
C6442-102	SMA	SMA	SMA	SMA
C6442-200	BNC	BNC	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.

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



# WERLATONE

Model C6442

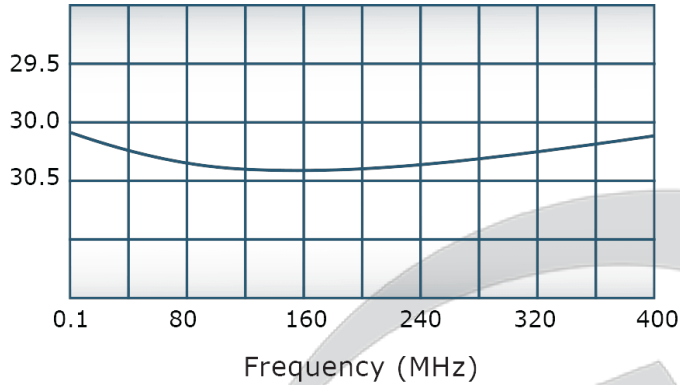


## PRODUCT DATA SHEET

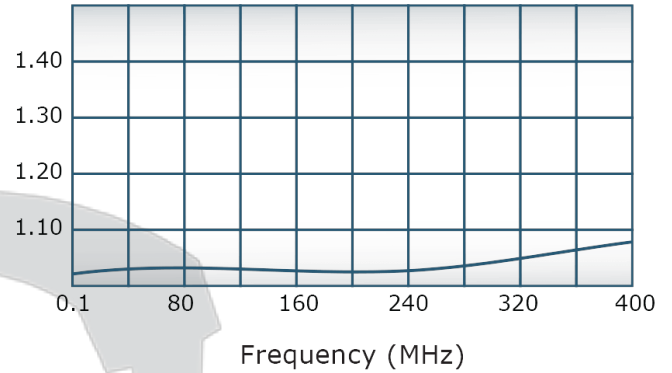
C6442

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

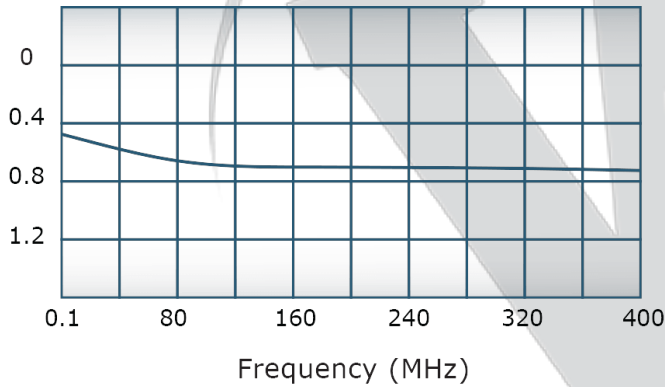
Coupling:



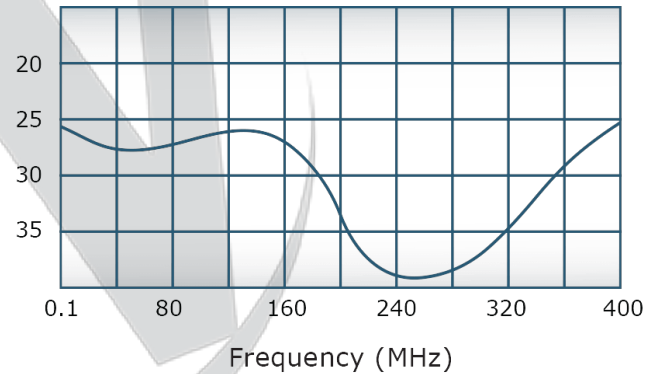
VSWR:



Insertion Loss:



Directivity:



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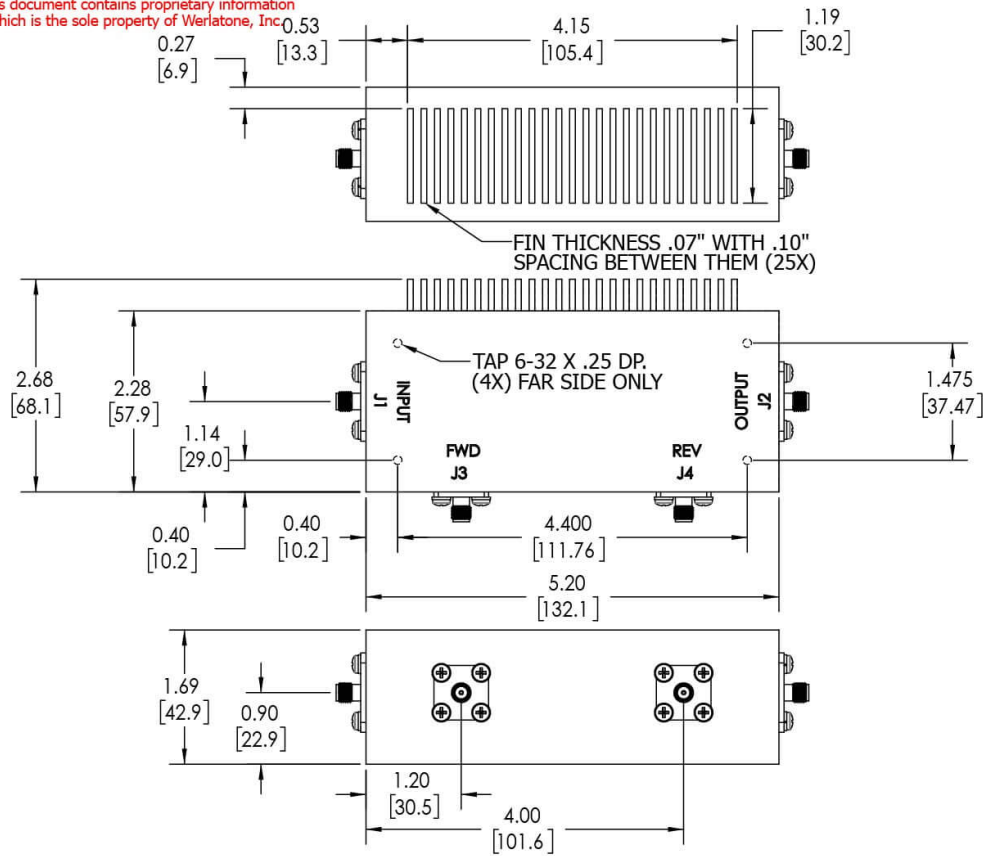
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REVISION HISTORY			
REV.	REVISION RECORD	DATE	APPROVED
A	ECN 9696	11/28/18	RB

**NOTES: UNLESS OTHERWISE SPECIFIED**

- MATERIAL: ALUMINUM 6061-T6**
- FINISH: CHEM FILM PER MIL-DTL-5541F TYPE I CLASS 3 (YELLOW IRIDITE)**
- CONNECTORS:**  
**J1-J4: SMA FEMALE**



UNLESS OTHERWISE SPECIFIED		OWN	DATE	 WERLATONE  SINCE 1965	17 Jon Barrett Rd Patterson, NY 12563		
INTERPRET DRAWING IN ACCORDANCE WITH MIL-STD-100		SD	2/11/2019				
DIMENSIONS PER ASME Y14.5M-2009		CHK	DATE				
PARENTHESES ARE IN INCHES		CS	2/11/2019				
DIMENSIONAL LIMITS APPLY BEFORE PROCESSES		ENGR	DATE				
TOLERANCES:		BW	9/13/1996	OUTLINE			
ANGLES ± 2°		INFR	DATE				
3 PL ± .005 [13]		QA	DATE				
2 PL ± .015 [38]		RLSE	DATE				
REMOVE ALL BURRS AND SHARP EDGES R.01 MAX							
CONCENTRICITY MACHINED DIA. .002 FIM				SIZE	CAGE CODE	DWG NO	REV
MACHINE TOOL MISMATCH .003 MAX				SCALE	10407-501		A
NEXT ASSY		USED ON		1:1.5		SHEET 1 OF 1	
APPLICATION		THIRD ANGLE PROJECTION					

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