


**PRODUCT DATA SHEET**
**C10701**

**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 - 500 MHz  
Power: 100 W CW  
Coupling:  $30 \pm 1.0$  dB Max.  
Insertion Loss: 0.8 dB Max.  
Flatness:  $\pm 0.5$  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)
C10701-10	N Female	N Female	N Female	N Female
C10701-12	N Female	N Female	SMA	SMA
C10701-13	N Female	N Female	BNC	BNC
C10701-102	SMA	SMA	SMA	SMA

**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.

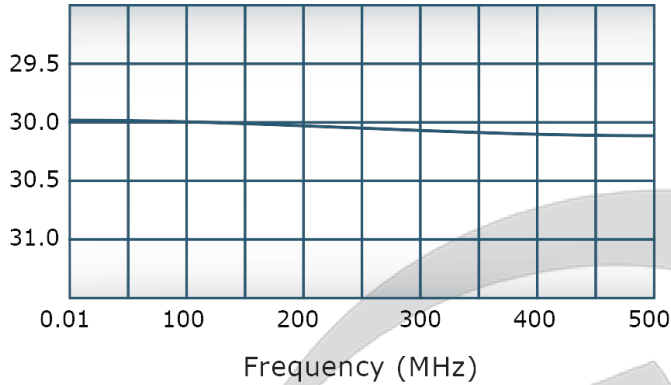


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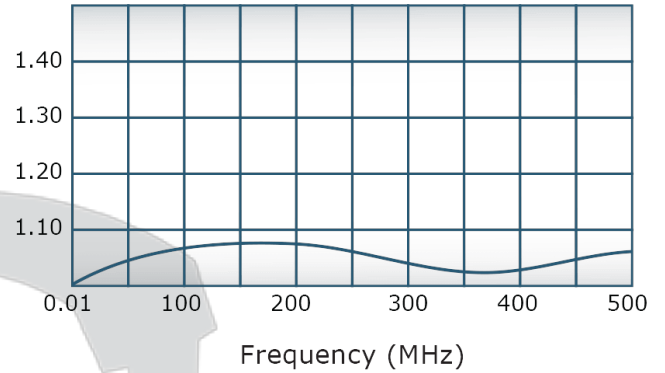
C10701

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

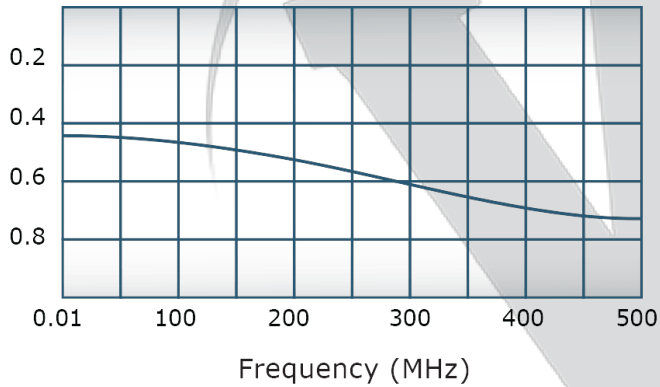
Coupling:



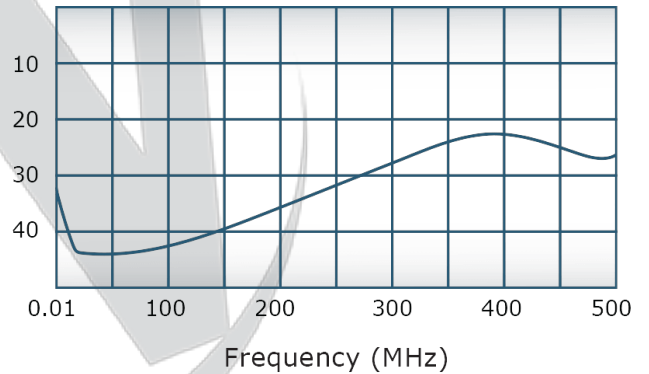
VSWR:



Insertion Loss:



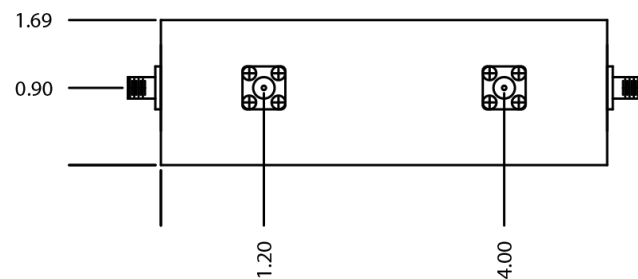
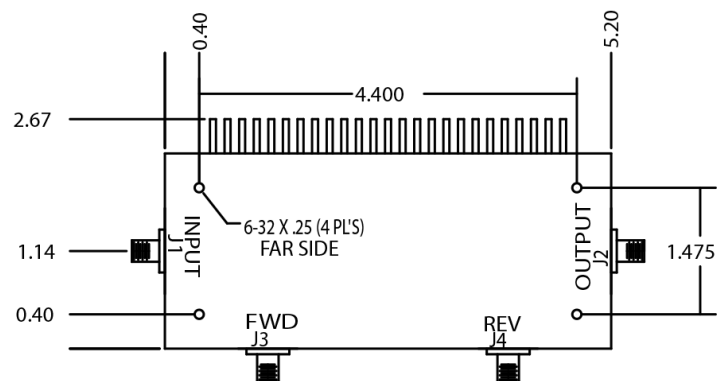
Directivity:



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DATE	SYM	REVISION RECORD	AUTH	DR	CK



TOLERANCE (EXCEPT AS NOTED)	WERLATONE INC.				
XX +/- .015 XXX +/- .005	USED ON: C4049	SCALE	DRAWN BY BW	APPROVED BY BW	12/96
	TITLE OUTLINE				
	DATE 9/13/96	DRAWING NUMBER 10407-501			

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