

## PRODUCT DATA SHEET

C5710

**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: 20 - 500 MHz  
 Power: 400 W CW  
 Coupling:  $40 \pm 1.0$  dB Max.  
 Insertion Loss: 0.35 dB Max.  
 Flatness:  $\pm 0.5$  dB Max.  
 VSWR (ML): 1.30:1 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: 5.20 x 2.68 x 1.69"  
 Weight: 1.75 lbs.

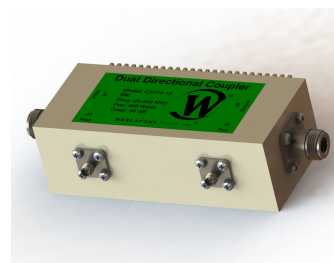
### Connector Configurations:

Model	Input (J1)	Output (J2)	Fwd (J3)	Rev (J4)
C5710-10	N Female	N Female	N Female	N Female
C5710-12	N Female	N Female	SMA	SMA
C5710-13	N Female	N Female	BNC	BNC
C5710-102	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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Werlatone, Inc. 17 Jon Barrett Road Patterson, NY 12563 T:(845)278-2220 F:(845)278-3440 sales@werlatone.com www.werlatone.com

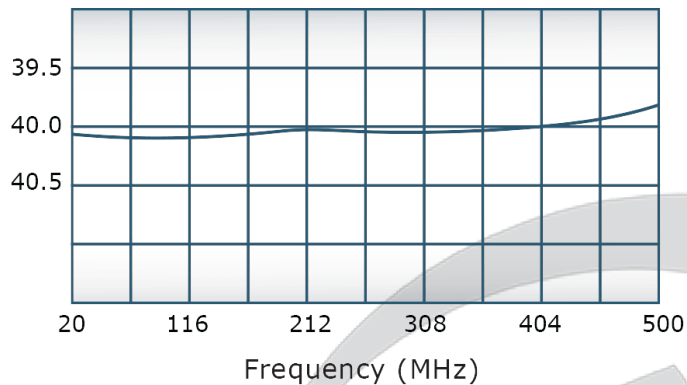


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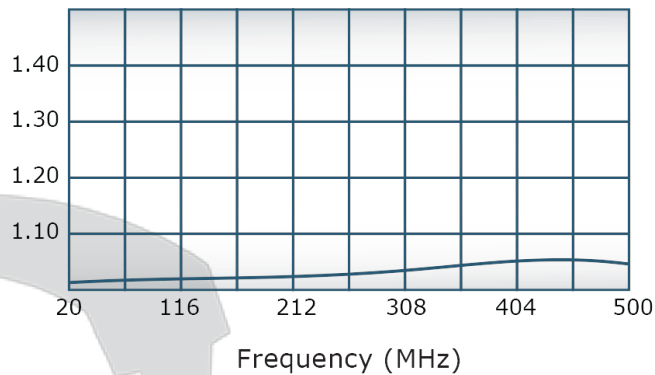
C5710

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

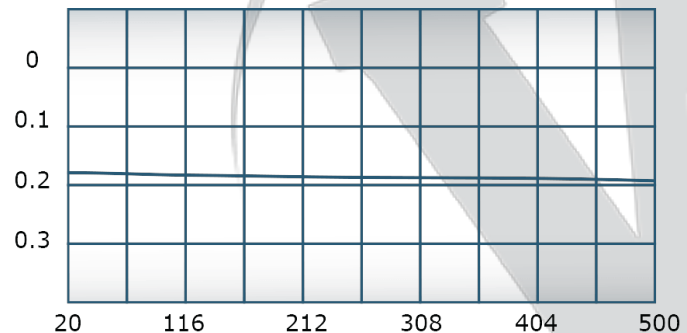
Coupling:



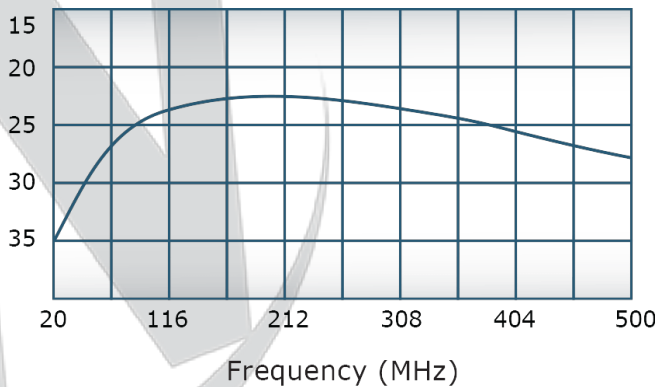
VSWR:



Insertion Loss:

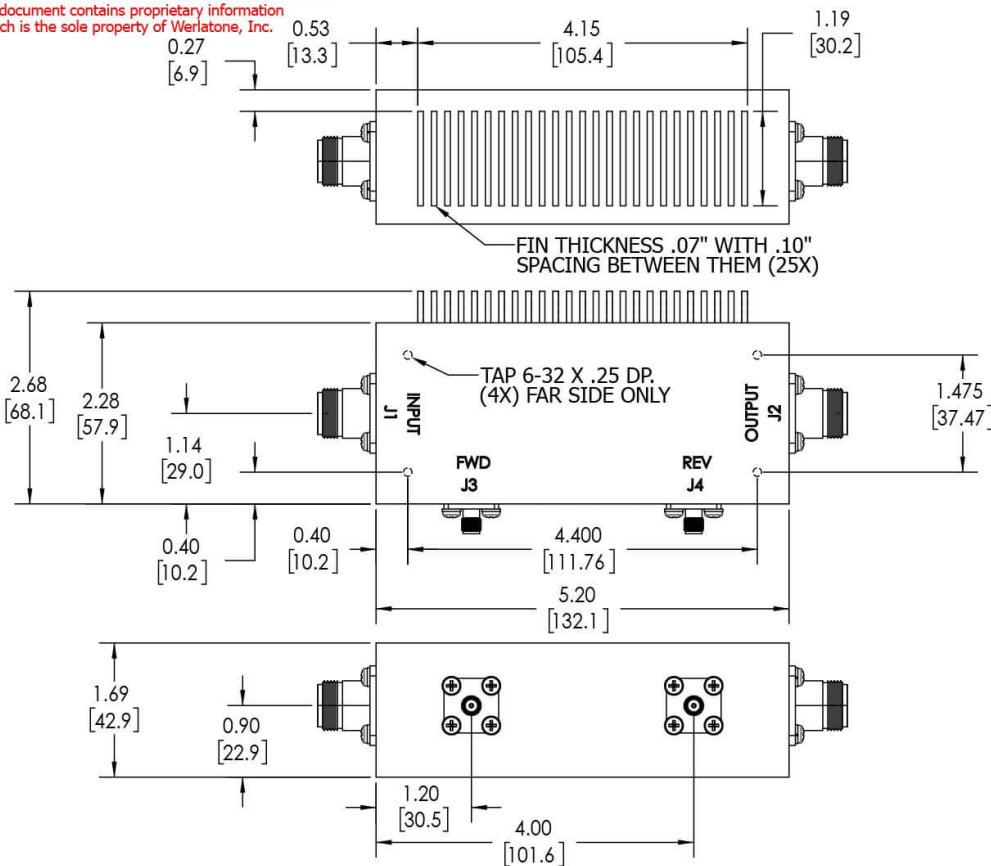


Directivity:



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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, J2: N FEMALE  
J3, J4: SMA FEMALE

<b>UNLESS OTHERWISE SPECIFIED</b> INTERPRET DRAWING IN ACCORDANCE WITH MIL-STD-100 DIMENSIONS FOR ASME Y14.5M-2009 PARENTHESES FOR REF ONLY DIMENSIONS ARE IN INCHES DIMENSIONAL LIMITS APPLY BEFORE PROCESSES TOLERANCES: ANGLES ± 2° 3 PL ± .005 [13] 2 PL ± .015 [38] REMOVE ALL BURRS AND SHARP EDGES R.01 MAX CONCENTRICITY MACHINED DIA. .002 FIM MACHINE TOOL MISMATCH .003 MAX		OWN	DATE	<b>WERLATONE</b> SINCE 1965 17 Jon Barrett Rd Patterson, NY 12563
		SD	2/11/2019	
NEXT ASSY USED ON APPLICATION		CHK	DATE	<b>OUTLINE</b> SIZE CAGE CODE DWG NO B 10407-502
		ENGR	2/11/2019	
		DATE	5/28/2008	SCALE 1:1.5
		INFR	DATE	
		QA	DATE	SHEET 1 OF 1
		RLSE	DATE	

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