


**PRODUCT DATA SHEET**
**C9771**

**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: 10 - 1000 MHz  
Power: 170 W CW  
Coupling:  $40 \pm 1.0$  dB Max.  
Insertion Loss: 0.35 dB Max.  
Flatness:  $\pm 0.5$  dB Max.  
VSWR (ML): 1.10:1 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: 3.0 x 2.0 x 1.0"

**Connector Configurations:**

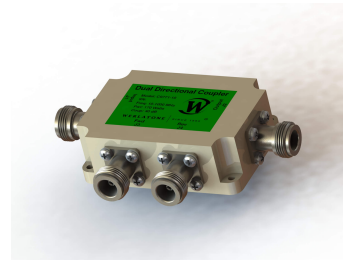
Model	Input (J1)	Output (J2)	Fwd (J3)	Rev (J4)
C9771-10	N Female	N Female	N Female	N Female
C9771-12	N Female	N Female	SMA	SMA
C9771-714	N Male	N Female	N Female	N Female

**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.



# WERLATONE

Model C9771

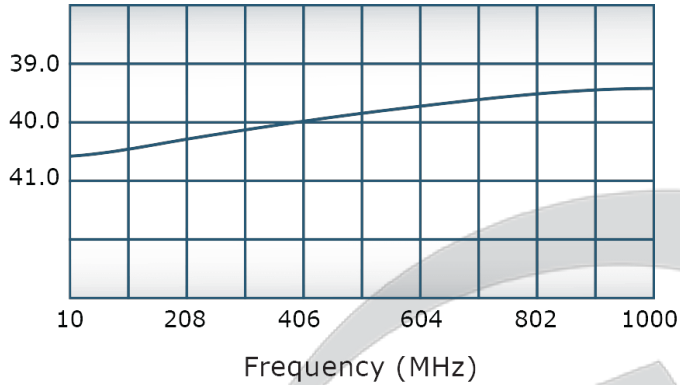


## PRODUCT DATA SHEET

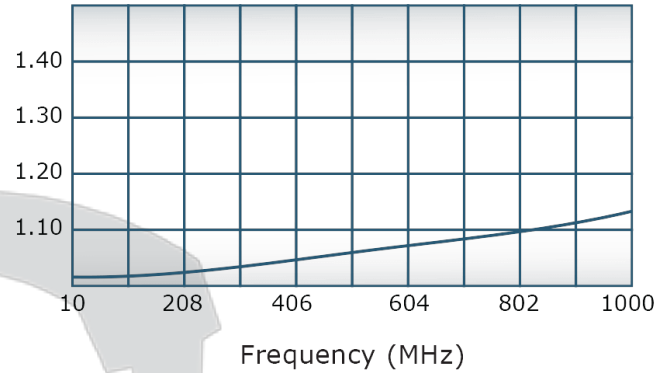
C9771

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

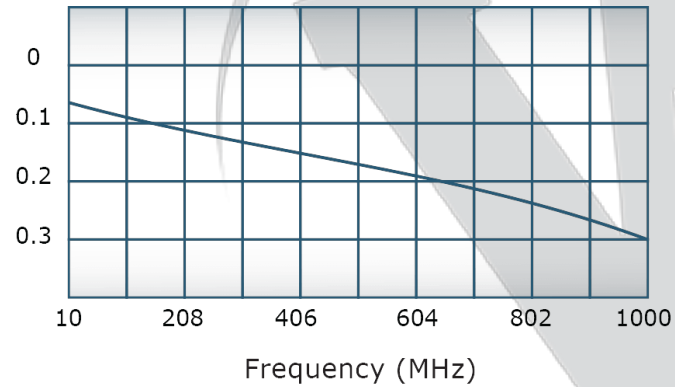
Coupling:



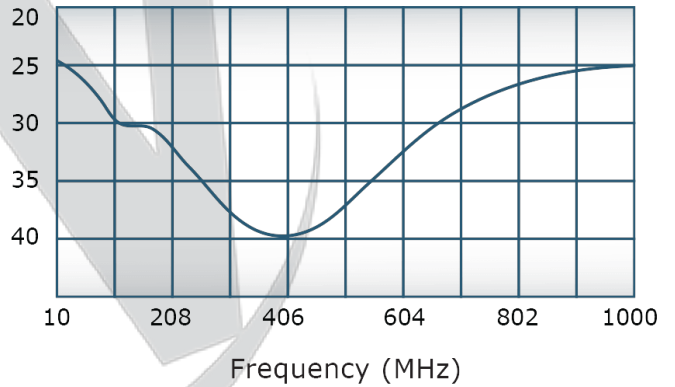
VSWR:



Insertion Loss:



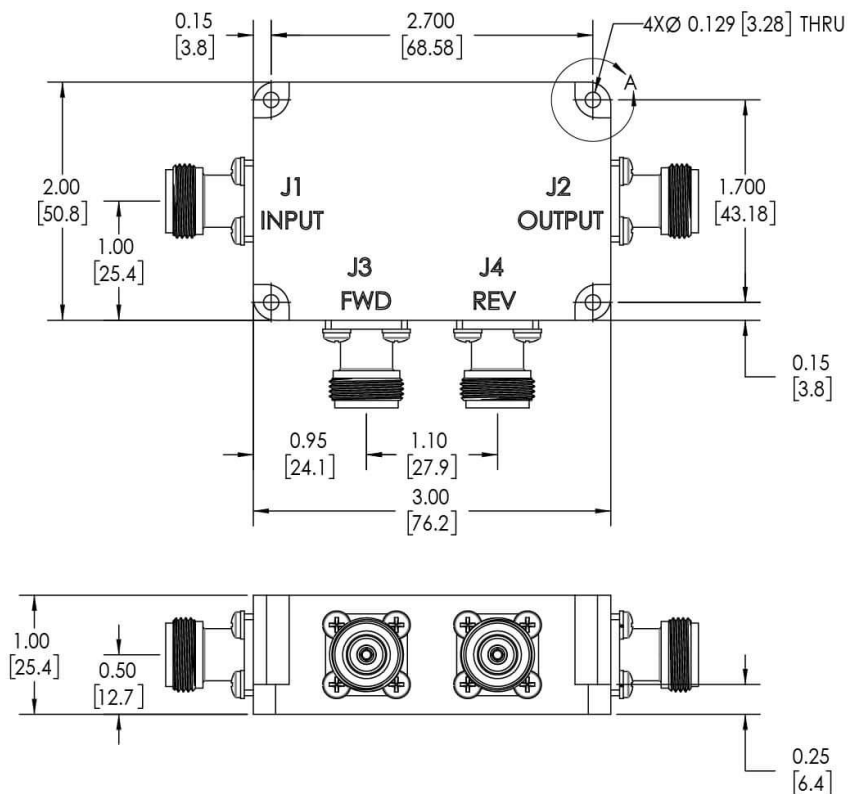
Directivity:



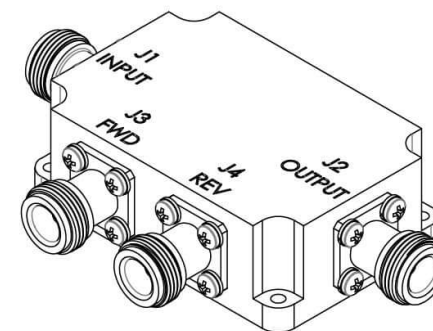
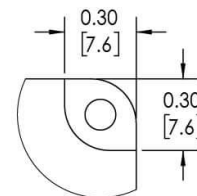
**Restriction on use, duplication, or disclosure of proprietary information.** This document contains proprietary information which is the sole property of Werlatone, Inc.

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



**RESTRICTION ON USE, DUPLICATION OR DISCLOSURE OF PROPRIETARY INFORMATION**  
This document contains proprietary information which is the sole property of Werlatone, Inc.



REVISION HISTORY			
REV.	REVISION RECORD	DATE	APPROVED
-	INITIAL RELEASE	9/6/2013	GP
A	ECN 9696	5/15/2019	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: N FEMALE
  - ALL RADII .188**

		UNLESS OTHERWISE SPECIFIED		OWN	DATE			17 Jon Barrett Rd Patterson, NY 12563	
		INTERPRET DRAWING IAW MIL-STD-180		SD	5/14/2019		WERLATONE SINCE 1965		
		DIMENSIONING PER ASME Y14.5M-2009		CHK	DATE				
		PARENTHESES INFO FOR REF ONLY		CS	5/14/2019	TITLE			
		DIMENSIONS ARE IN INCHES		ENGR	DATE	OUTLINE			
		DIMENSIONAL LIMITS APPLY BEFORE PROCESSES		INFR	DATE				
		TOLERANCES:		QA	DATE	SIZE	CAGE CODE	DWG NO	REV
		ANGLES ± 2°				21084-500		A	
		3 PL ± .005 [13]				SCALE	1:1		
		2 PL ± .015 [38]				SHEET 1 OF 1			
		REMOVE ALL BURRS AND SHARP EDGES R.01 MAX							
		CONCENTRICITY MACHINED DIA. .002 FIM							
		MACHINE TOOL MISMATCH .003 MAX							
NEXT ASSY USED ON		THIRD ANGLE PROJECTION		RLSE	DATE				
APPLICATION									

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