


**PRODUCT DATA SHEET**
**C10568**

**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: 1.5-32 MHz  
Power: 1500 W CW  
Coupling:  $30 \pm 1.0$  dB Max.  
Insertion Loss: 0.15 dB Max.  
Flatness:  $\pm 0.5$  dB Max.  
VSWR (ML): 1.10:1 Max.  
Directivity: 25 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: 4.0 x 2.0 x 1.50"

**Connector Configurations:**

Model	Input (J1)	Output (J2)	Fwd (J3)	Rev (J4)
C10568-10	N Female	N Female	N Female	N Female
C10568-12	N Female	N Female	SMA	SMA
C10568-13	N Female	N Female	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.

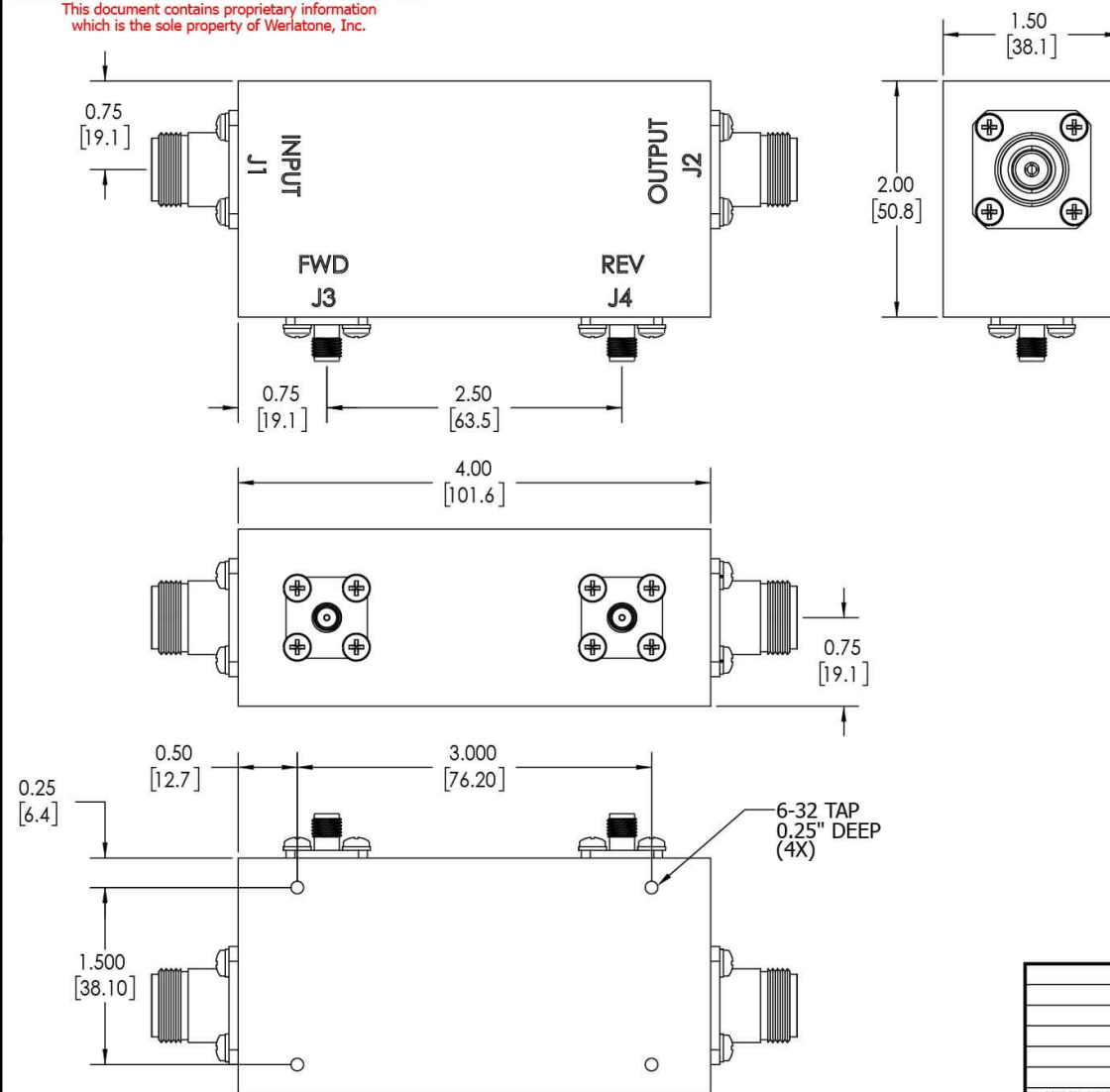
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REVISION HISTORY			
REV.	REVISION RECORD	DATE	APPROVED
A	ECN 9696	3/25/19	RB

**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**



		UNLESS OTHERWISE SPECIFIED		OWN	DATE	 WERLATONE  SINCE 1965	17 Jon Barrett Rd Patterson, NY 12563						
		INTERPRET DRAWING IN ACCORDANCE WITH MIL-STD-100		SD	3/25/2019								
		DIMENSIONS PER ASME Y14.5M-2009		CHK	DATE								
		PARENTHESES FOR REF ONLY		CS	3/25/2019								
		DIMENSIONS ARE IN INCHES		ENGR	DATE				TITLE  <b>OUTLINE</b>	SIZE  <b>B</b>	CAGE CODE  <b>21399-500</b>	DWG NO  <b>A</b>	REV  <b>A</b>
		DIMENSIONAL LIMITS APPLY BEFORE PROCESSES		INFR	DATE								
		TOLERANCES:		QA	DATE								
		ANGLES ± 2°		RLSE	DATE								
NEXT ASSY USED ON		3 PL ± .005 [13]											
		2 PL ± .015 [38]											
		REMOVE ALL BURRS AND SHARP EDGES R.01 MAX											
		CONCENTRICITY MACHINED DIA. .002 FIM											
APPLICATION		MACHINE TOOL MISMATCH .003 MAX											
		THIRD ANGLE PROJECTION 		SCALE		1:1		SHEET 1 OF 1					

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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