


**PRODUCT DATA SHEET**
**C1804**

**4-Port Bi-Directional Coupler:** Similar to the 3-Port Uni-Directional Coupler, except that both ends of the coupled line serve as coupled ports. Convenient for simultaneously monitoring both forward and reverse power. The directivity of this coupler design is, however, dependent upon well matched 50 Ohm loads on the coupled ports.

**Features:**

High Power      Wide Bandwidths      Small Size      Flat Coupling      Custom Designs Available

**Electrical Specifications:**

Frequency: 2 - 32 MHz  
Power: 1000 W CW  
Coupling:  $20 \pm 1.0$  dB Max.  
Insertion Loss: 0.2 dB Max.  
Flatness:  $\pm 0.5$  dB Max.  
VSWR (ML): 1.25:1 Max.  
Directivity: 20 dB Min.

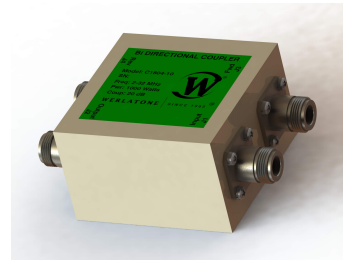
**Mechanical Specifications:**

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: 3.0 x 3.0 x 1.87"

**Port Configurations:**

Model	Input (J1)	Output (J2)	Fwd (J3)	Rev (J4)
C1804-10	N Female	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.

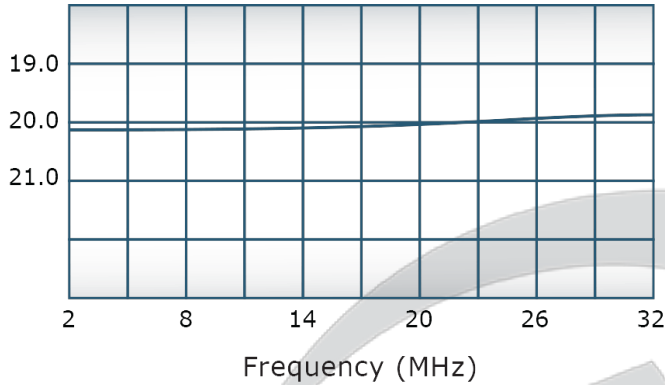


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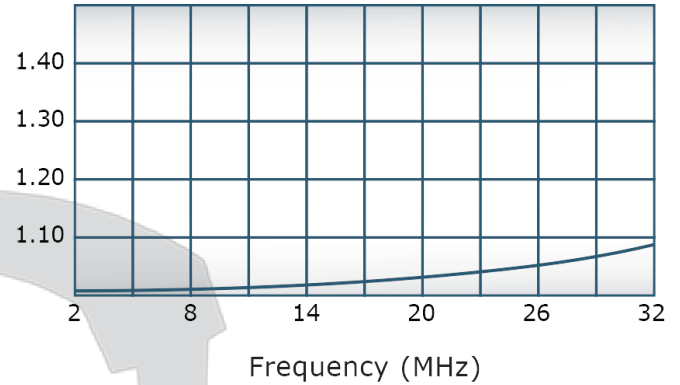
C1804

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

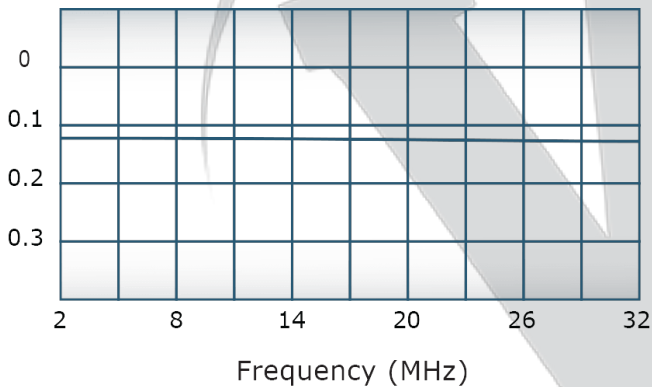
Coupling:



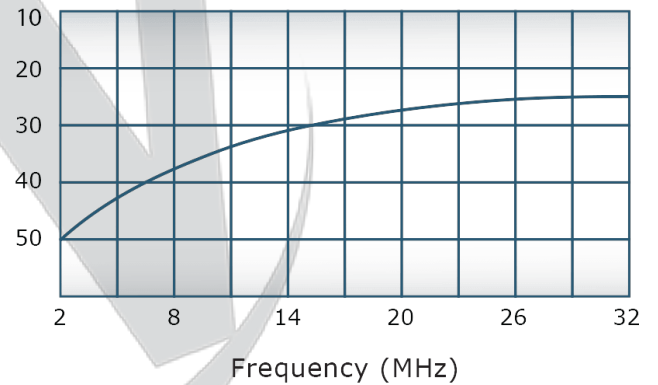
VSWR:



Insertion Loss:



Directivity:



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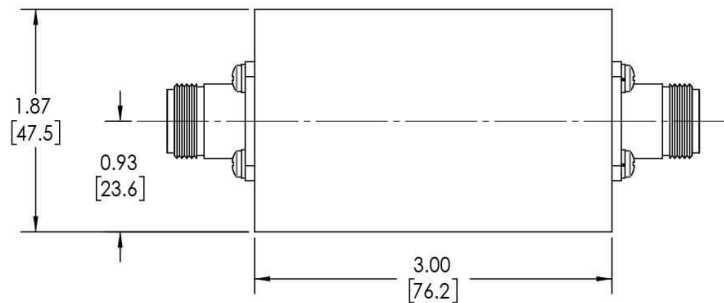
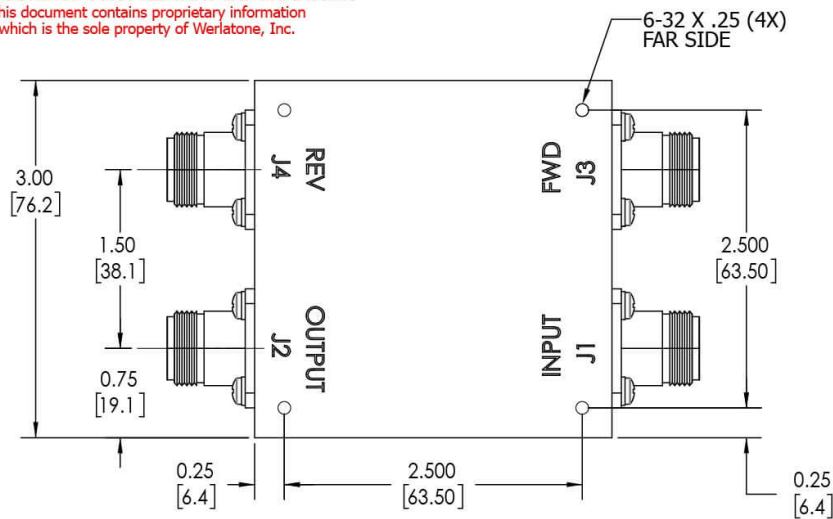
Werlatone, Inc. 17 Jon Barrett Road Patterson, NY 12563 T:(845)278-2220 F:(845)278-3440 sales@werlatone.com www.werlatone.com



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REVISION HISTORY			
REV.	REVISION RECORD	DATE	APPROVED
A	ECN 9696	8/13/2019	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**



		UNLESS OTHERWISE SPECIFIED		OWN	DATE	 WERLATONE  SINCE 1965	17 Jon Barrett Rd Patterson, NY 12563		
		INTERPRET DRAWING IN ACCORDANCE WITH MIL-STD-100		SD	8/13/2019				
		DIMENSIONS FOR ASME Y14.5M-2009		CHK	DATE				
		PARENTHESES FOR REF ONLY		CS	8/13/2019				
		DIMENSIONS ARE IN INCHES		ENGR	DATE				
		DIMENSIONAL LIMITS APPLY BEFORE PROCESSES		INFR	DATE				
		TOLERANCES:		QA	DATE				
		ANGLES ± 2°		RLSE	DATE				
		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							
NEXT ASSY USED ON		THIRD ANGLE PROJECTION 				SIZE	CAGE CODE	DWG NO	REV
APPLICATION						B	20453-500		A
						SCALE	1:1		SHEET 1 OF 1

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