

## PRODUCT DATA SHEET

C7081

**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: 30 - 512 MHz  
 Power: 50 W CW  
 Coupling:  $10 \pm 1.0$  dB Max.  
 Insertion Loss: 0.5 dB Max.  
 Flatness:  $\pm 1.0$  dB Max.  
 VSWR (ML): 1.30:1 Max.  
 Directivity: 13 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 3.0 x 1.0"  
 Weight: 16 ounces

### Connector Configurations:

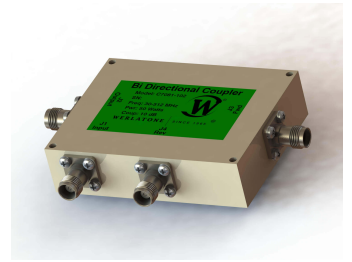
Model	Input (J1)	Output (J2)	Fwd (J3)	Rev (J4)
C7081-10	N Female	N Female	N Female	N Female
C7081-12	N Female	N Female	SMA	SMA
C7081-102	SMA	SMA	SMA	SMA

**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.



# WERLATONE

Model C7081

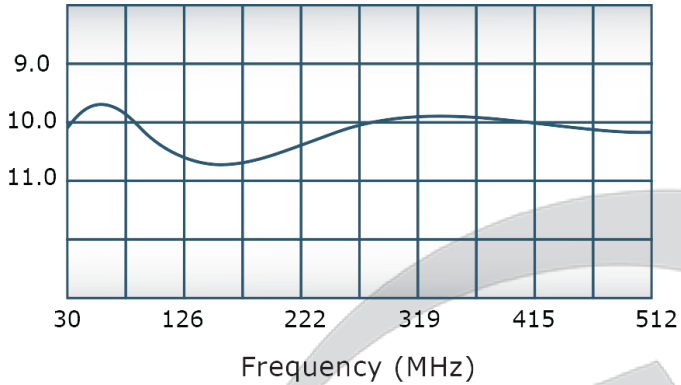


## PRODUCT DATA SHEET

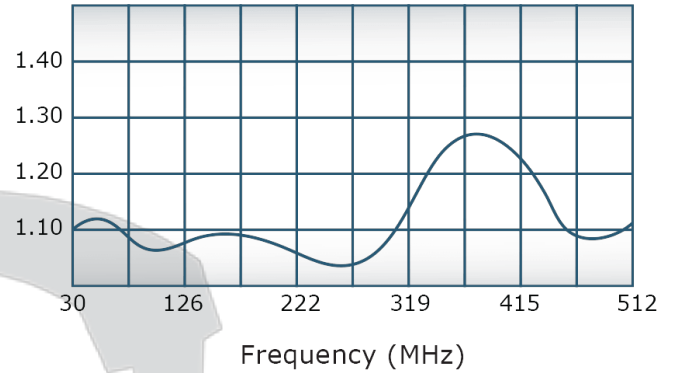
C7081

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

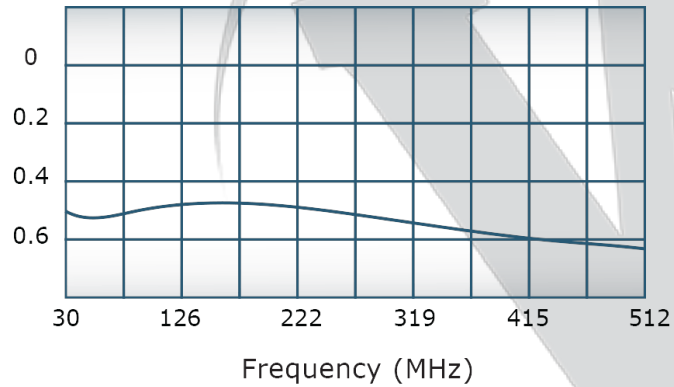
Coupling:



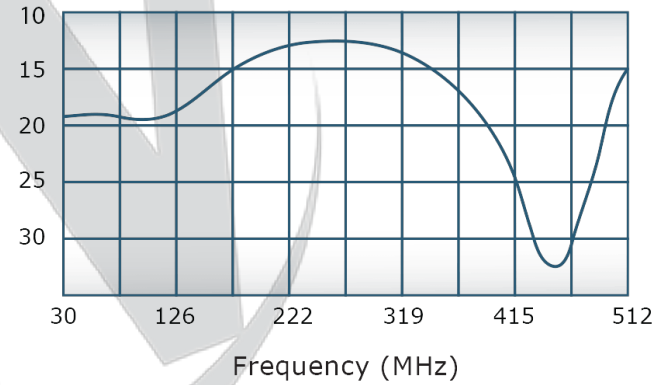
VSWR:



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**

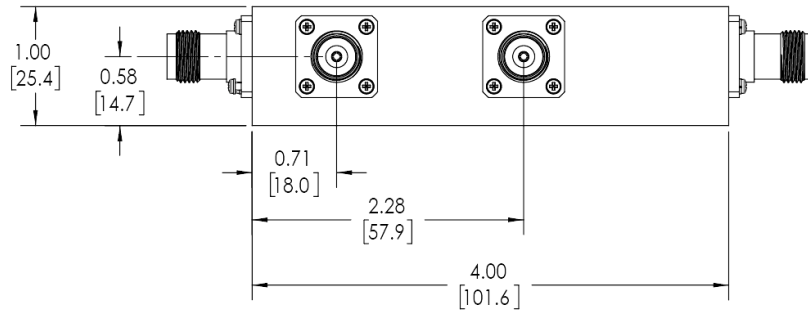
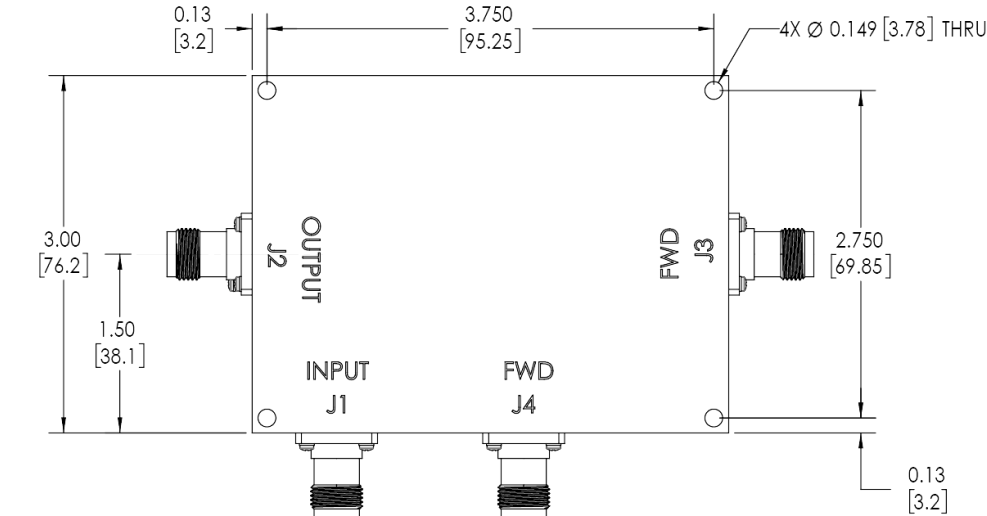
This document contains proprietary information which is the sole property of Werlatone, Inc.

**REVISION HISTORY**

REV.	REVISION RECORD	DATE	APPROVED
A	ECN 9696	8/22/2019	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: TNC FEMALE**



<b>UNLESS OTHERWISE SPECIFIED</b> INTERPRET DRAWING IN ACCORDANCE WITH MIL-STD-100 DIMENSIONS PER ASME Y14.5M-2009 PARENTHESES FOR REFERENCE ONLY DIMENSIONS ARE IN INCHES DIMENSIONAL LIMITS APPLY BEFORE FINISHES 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 FIM		OWN	DATE	<b>WERLATONE</b> SINCE 1965 17 Jon Barrett Rd Patterson, NY 12563
		SD	8/22/2019	
NEXT ASSY USED ON APPLICATION	THIRD ANGLE PROJECTION	CHK	DATE	<b>OUTLINE</b> SIZE CAGE CODE DWG NO B 10908-500
		CS	8/22/2019	
		ENGR	DATE	SCALE 1:1 SHEET 1 OF 1
		INPR	DATE	
		QA	DATE	REV A
		RLSE	DATE	

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