WERLATONE

Model C7081

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 ± 1.0 dB Max.
Insertion Loss:	0.5 dB Max.
Flatness:	± 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:

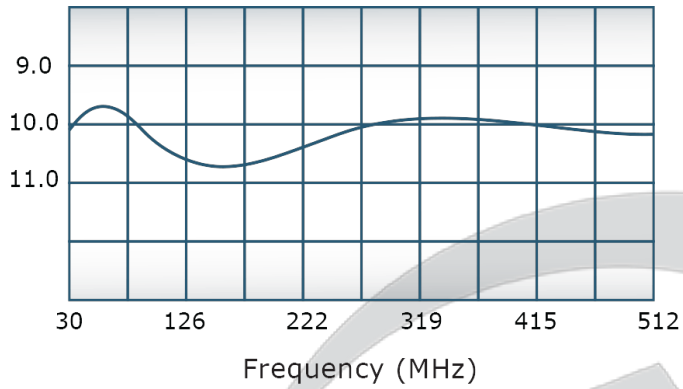
Model	**Input (J1)**	**Output (J2)**	**Fwd (J3)**	**Rev (J4)**
C7081-10	N Female	N Female	N Female	N Female
C7081-12	N Female	N Female	SMA	SMA
C7081-102	SMA	SMA	SMA	SMA

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.

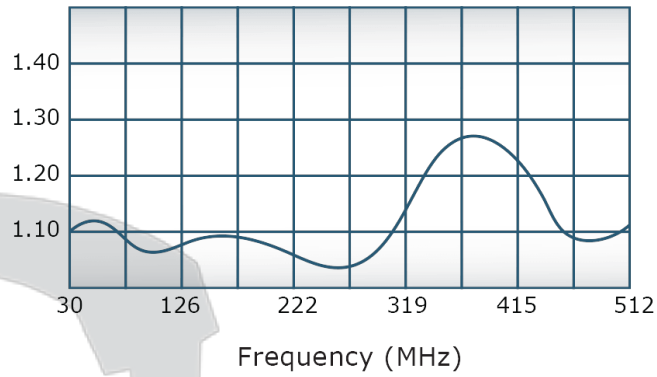
Werlatone, Inc. 17 Jon Barrett Road Patterson, NY 12563 T:(845)278-2220 F:(845)278-3440 sales@werlatone.com www.werlatone.com

Performance Data (Specifications subject to change without notice):

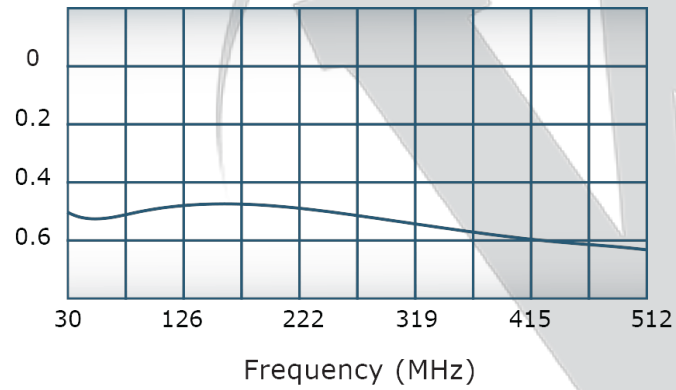
Coupling:



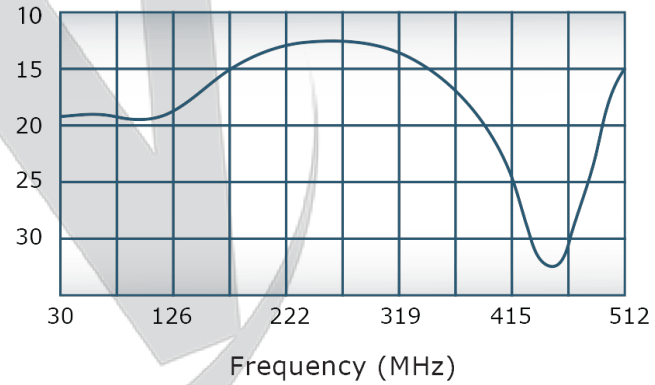
VSWR:



Insertion Loss:



Directivity:



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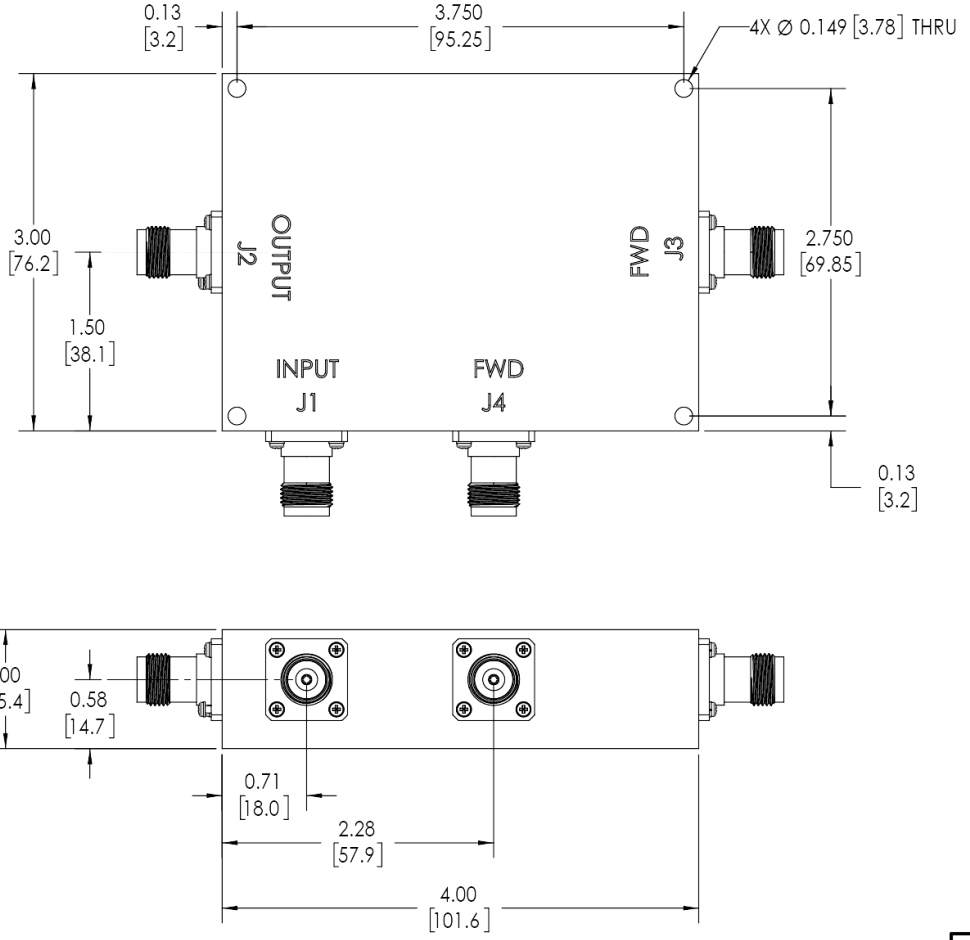
REVISION HISTORY			
REV.	REVISION RECORD	DATE	APPROVED
A	ECN 9696	8/22/2019	RB



NOTES: UNLESS OTHERWISE SPECIFIED

1. **MATERIAL: ALUMINUM 6061-T6**
2. **FINISH: CHEM FILM PER MIL-DTL-5541F TYPE I CLASS 3 (YELLOW IRIDITE)**
3. **CONNECTORS:**
   J1-J4: TNC FEMALE

NEXT ASSY	USED ON
APPLICATION	

UNLESS OTHERWISE SPECIFIED
INTERPRET DRAWING IAW MIL-STD-100
DIMENSIONING PER ASME Y14.5M-2009
PARENTHETICAL INFO 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

THIRD ANGLE PROJECTION

		DATE
DWN	SD	8/22/2019
CHK	CS	8/22/2019
ENGR		
MFGR		
QA		
RLSE		

WERLATONE| SINCE 1965
17 Jon Barrett Rd
Patterson, NY 12563

TITLE
OUTLINE

SIZE	CAGE CODE	DWG NO	REV
B		10908-500	A

SCALE 1:1 SHEET1 OF1