



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:

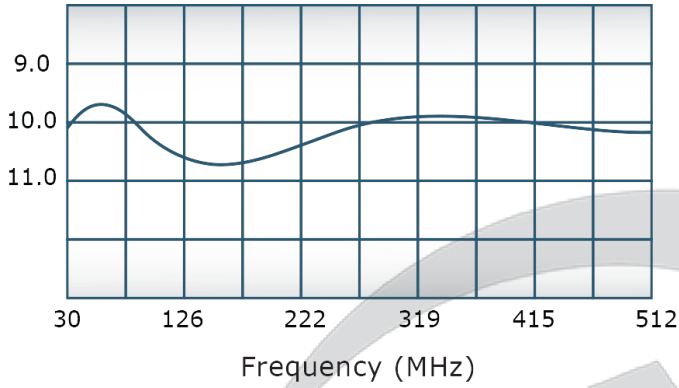
Model	Input (J1)	Output (J2)	Fwd (J3)	Rev (J4)
C7081-10	N Female	N Female	N Female	N Female
C7081-12	N Female	N Female	SMA	SMA
C7081-102	SMA	SMA	SMA	SMA

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.

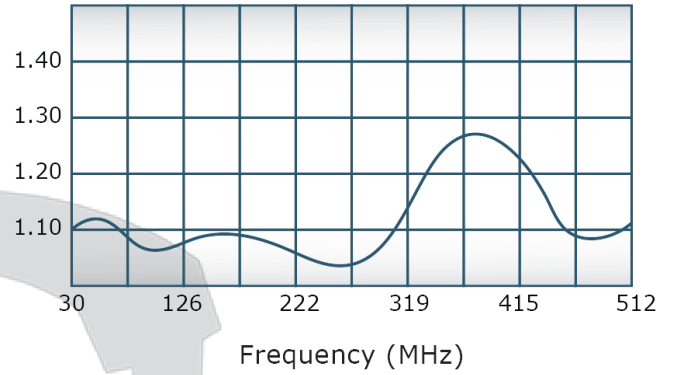


Performance Data (Specifications subject to change without notice):

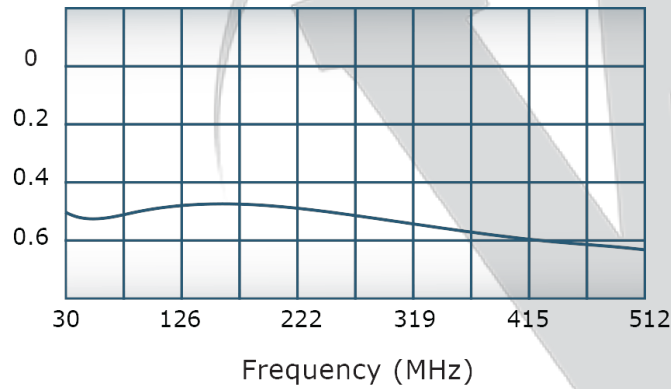
Coupling:



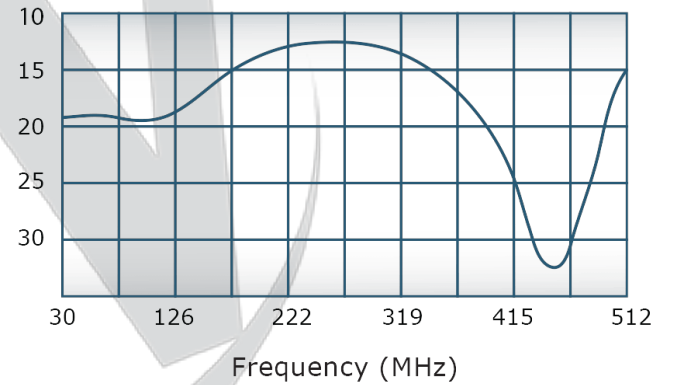
VSWR:



Insertion Loss:



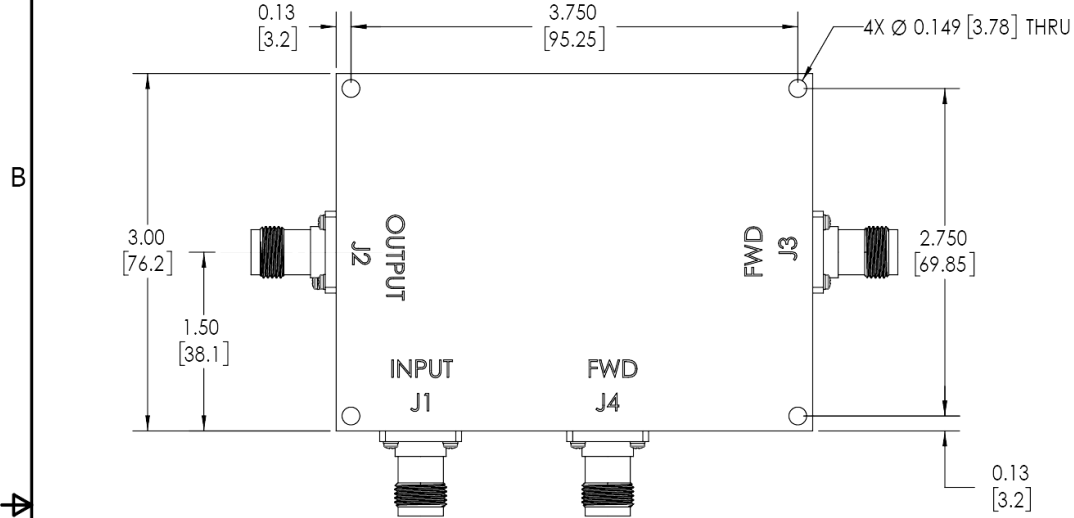
Directivity:



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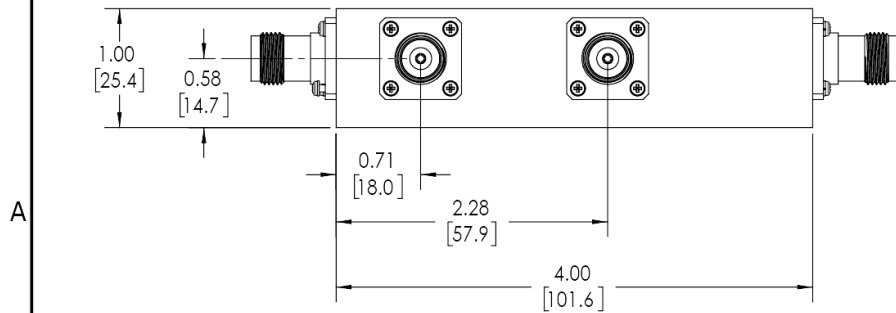
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REVISION HISTORY			
REV.	REVISION RECORD	DATE	APPROVED
A	ECN 9696	8/22/2019	RB



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**



UNLESS OTHERWISE SPECIFIED		OWN	DATE	17 Jon Barrett Rd Patterson, NY 12563
INTERPRET DRAWING IAW MIL-STD-100	SD	8/22/2019	WERLATONE SINCE 1965	TITLE OUTLINE
DIMENSIONS PER ASME Y14.5M-2009	CHK	DATE		
PARENTHEetical INFO FOR REF ONLY	CS	8/22/2019	SIZE	CAGE CODE
DIMENSIONS ARE IN INCHES	ENGR	DATE	B	10908-500
DIMENSIONAL LIMITS APPLY BEFORE PROCESSES	INFR	DATE	DWG NO.	REV
TOLERANCES:	QA	DATE	1:1	A
ANGLES = 2°	RLSE	DATE	SCALE	SHEET 1 OF 1
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				
NEXT ASSY	USED ON	APPLICATION	THIRD ANGLE PROJECTION	

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