

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

Model C7081

Connectorized Directional Couplers

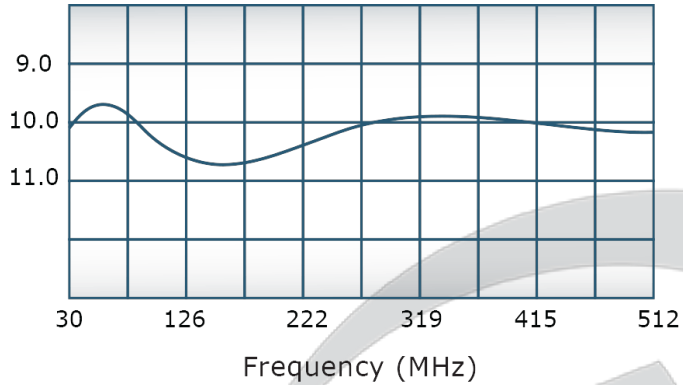


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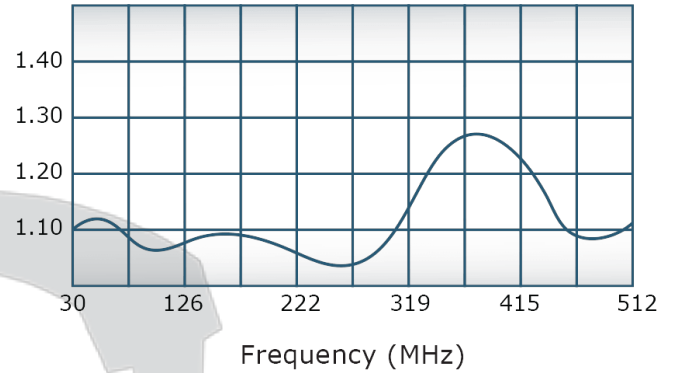
C7081

Performance Data (Specifications subject to change without notice):

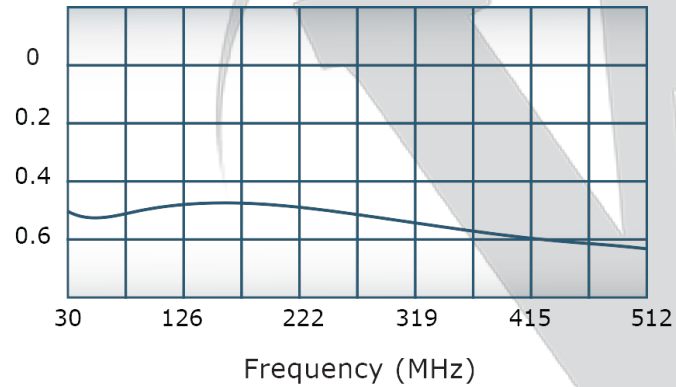
Coupling:



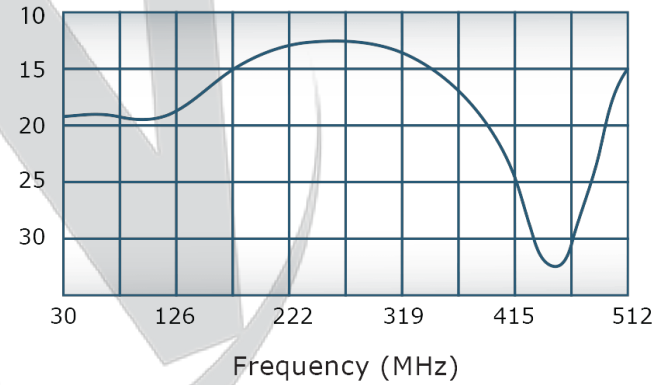
VSWR:



Insertion Loss:



Directivity:



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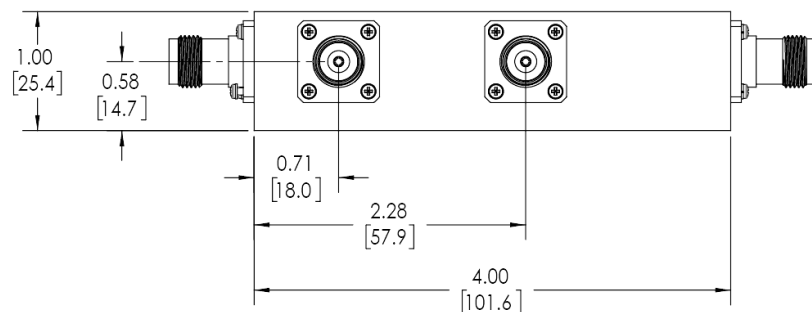
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REV.	REVISION RECORD	DATE	APPROVED
A	ECN 9696	8/22/2019	RB



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



		UNLESS OTHERWISE SPECIFIED		OWN	DATE	 WERLATONE SINCE 1965	17 Jon Barrett Rd Patterson, NY 12565	
		INTERPRET DRAWING IN ACC. WITH MIL-STD-100		SD	8/22/2019			
		DIMENSIONS PER ASME Y14.5M-2009		CHK	DATE			
		PARENT/CHILD DIMS. FOR REF. ONLY		CS	8/22/2019			
		DIMENSIONS ARE IN INCHES		ENGR	DATE	TITLE		
		DIMENSIONAL LIMITS APPLY BEFORE PROCESSES		REFGR	DATE	<h1>OUTLINE</h1>		
		TOLERANCES:		QA	DATE	SIZE	CAGE CODE	DWG NO
		ANGLES = 2° 3 P. & .005 (13) 2 P. & .015 (30)		RLSE	DATE	10908-500		REV
		REMOVE ALL BURRS AND SHARP EDGES R.01 MAX				SCALE	A	
		CHUCK/STRICTLY MACHINED DIA. .002 FPM				1:1	SHEET 1 OF 1	
		MACHINE TIME PROJECTION .000 MAX						
NEXT ASSY USED ON		THIRD ANGLE PROJECTION						
APPLICATION								

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C7081 Rev.-