WERLATONE

Model C7881

PRODUCT DATA SHEET **C7881**

4-Port Dual Directional Coupler employs two, 3-Port Uni-Directional Couplers, internally connected, in tandem, providing measurement of both forward and reverse power. Ideal for simultaneously monitoring a system's forward and reverse power and for reflectometer measurements. Unlike the Bi-Directional Coupler, the directivity of the Dual Directional Coupler is unaffected by the loads on the coupled ports.

Features:

High Power Wide Bandwidths Small Size Flat Coupling Custom Designs Available

Electrical Specifications:

Frequency:	20 - 500 MHz
Power:	25 W CW
Coupling:	30 ± 1.0 dB Max.
Insertion Loss:	0.75 dB Max.
Flatness:	± 1.0 dB Max.
VSWR (ML):	1.20:1 Max.
Directivity:	20 dB Min.

Mechanical Specifications:

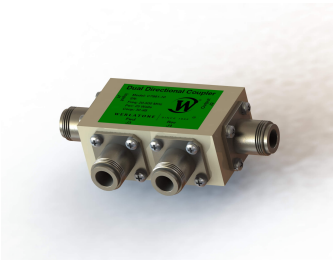
Type:	Connectorized
Material:	Aluminum 6061-T6
Surface Finish:	Chem. Film Per MIL-DTL-5541F Type I Class 3 (Yellow Iridite) RoHS Compliant Available
Operating Temperature:	-55°C to +75°C
Storage Temperature:	-60°C to +85°C
Humidity:	95% Non-Condensing
Size:	2.7 x 1.5 x 1.1"

Connector Configurations:

Model	**Input (J1)**	**Output (J2)**	**Fwd (J3)**	**Rev (J4)**
C7881-10	N Female	N Female	N Female	N Female
C7881-12	N Female	N Female	SMA	SMA
C7881-102	SMA	SMA	SMA	SMA

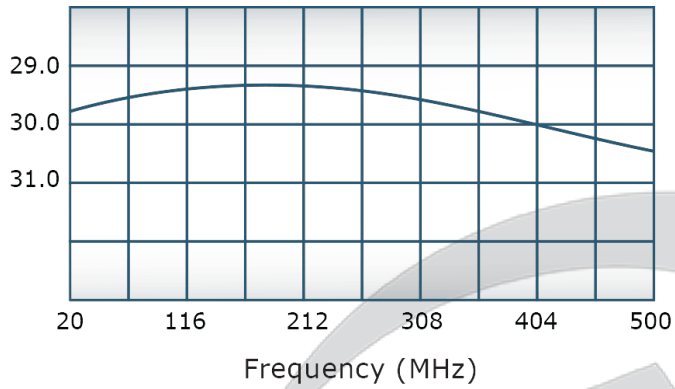
Werlatone® Broadband Dual, Uni, and Bi Directional RF Couplers are designed to tolerate the most stringent operating conditions associated with military and EMC testing environments. Many of our RF Directional Couplers, designated Mismatch Tolerant®, will operate continuously, at rated power, into a 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

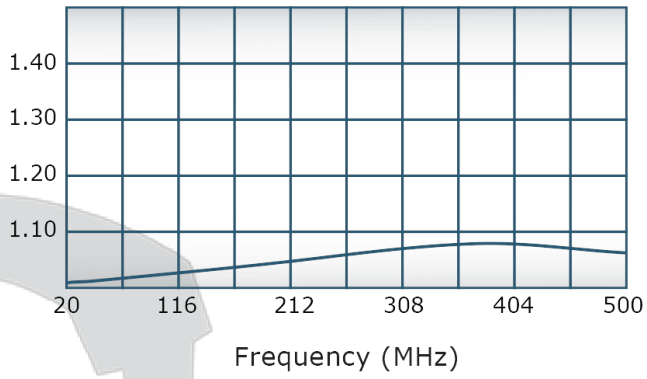


Performance Data (Specifications subject to change without notice):

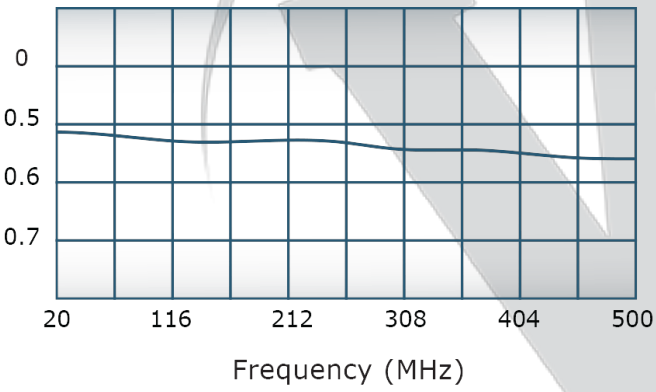
Coupling:



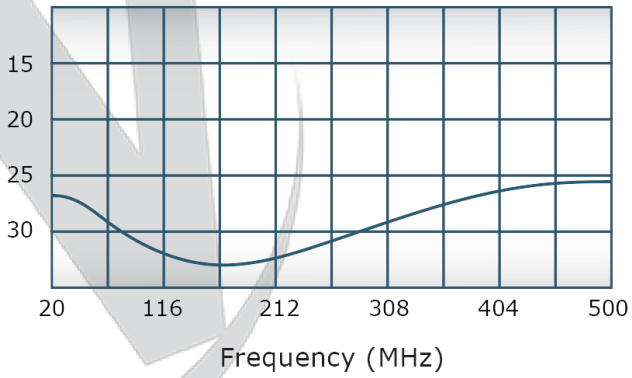
VSWR:



Insertion Loss:



Directivity:



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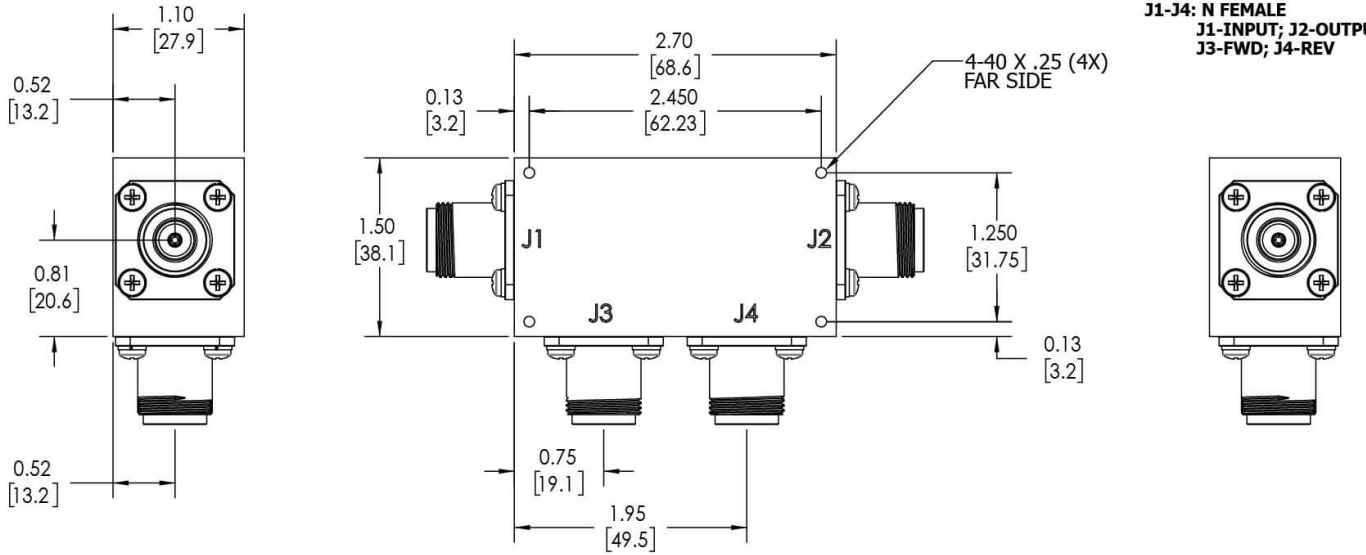
REVISION HISTORY			
REV.	REVISION RECORD	DATE	APPROVED
A	ECN 9696	5/14/2019	RB

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: N FEMALE
   J1-INPUT; J2-OUTPUT
   J3-FWD; J4-REV



UNLESS OTHERWISE SPECIFIED		DWN	DATE	WERLATONE| SINCE 1965	17 Jon Barrett Rd Patterson, NY 12563
· INTERPRET DRAWING IAW MIL-STD-100		SD	5/14/2019		
· DIMENSIONING PER ASME Y14.5M-2009		CHK	DATE		
· PARENTHETICAL INFO FOR REF ONLY		CS	5/14/2019		
· DIMENSIONS ARE IN INCHES		ENGR	DATE	TITLE	
· DIMENSIONAL LIMITS APPLY BEFORE PROCESSES				OUTLINE	
· TOLERANCES: ANGLES ± 2°		MFGR	DATE		
3 PL ± .005 [.13]				SIZE / CAGE CODE / DWG NO / REV	
2 PL ± .015 [.38]		QA	DATE	B /	10685-500 / A
· REMOVE ALL BURRS AND SHARP EDGES R.01 MAX					
· CONCENTRICITY MACHINED DIA: .002 FIM		RLSE	DATE	SCALE 1:1	SHEET 1 OF 1
· MACHINE TOOL MISMATCH .003 MAX					
NEXT ASSY / USED ON		THIRD ANGLE PROJECTION			
APPLICATION					

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