


PRODUCT DATA SHEET
C1848

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 - 100 MHz
 Power: 1500 W CW
 Coupling: 40 ± 1.0 dB Max.
 Insertion Loss: 0.1 dB Max.
 Flatness: ± 0.5 dB Max.
 VSWR (ML): 1.15:1 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: 5.0 x 3.0 x 1.87"

Port Configurations:

Model	Input (J1)	Output (J2)	Fwd (J3)	Rev (J4)
C1848-10	N Female	N Female	N Female	N Female
C1848-12	N Female	N Female	SMA	SMA
C1848-13	N Female	N Female	BNC	BNC
C1848-20	7/16 Female	7/16 Female	N Female	N Female

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.

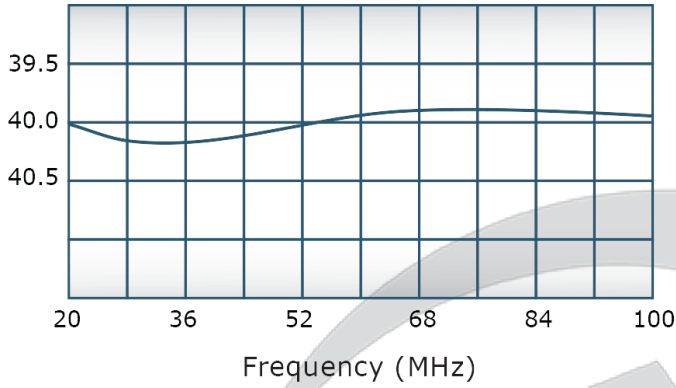


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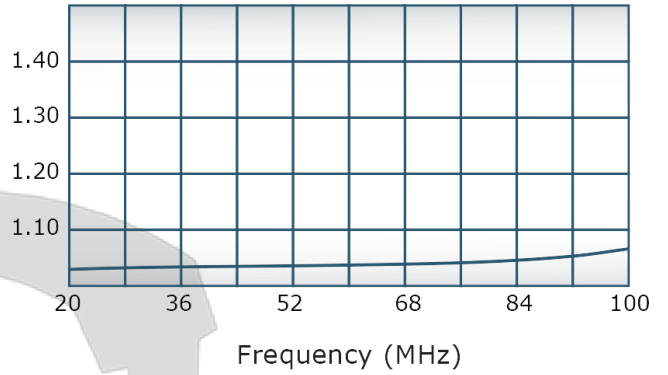
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Performance Data (Specifications subject to change without notice):

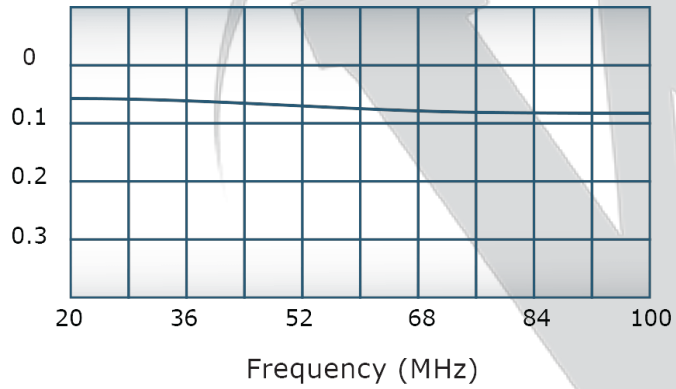
Coupling:



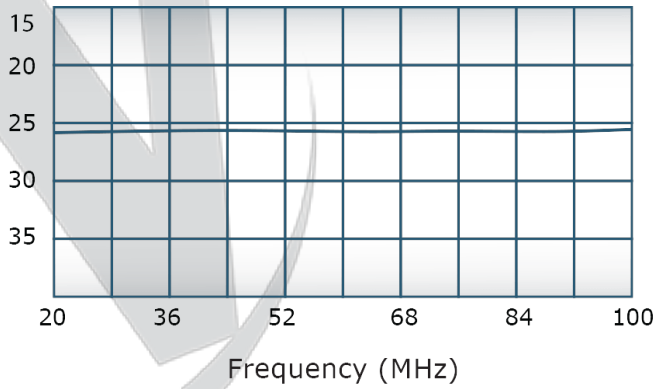
VSWR:



Insertion Loss:



Directivity:



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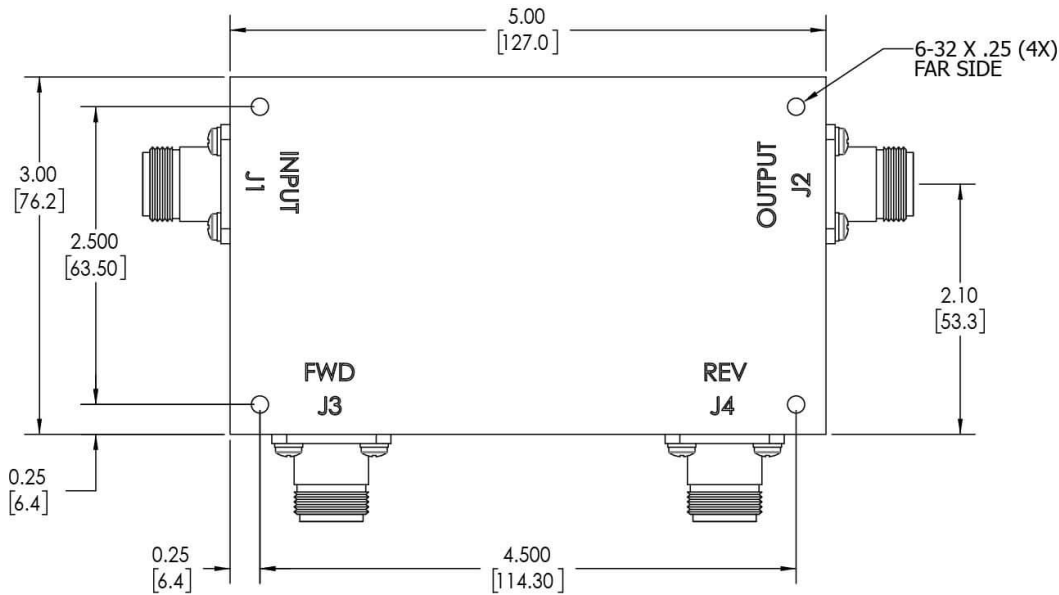
Werlatone, Inc.

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

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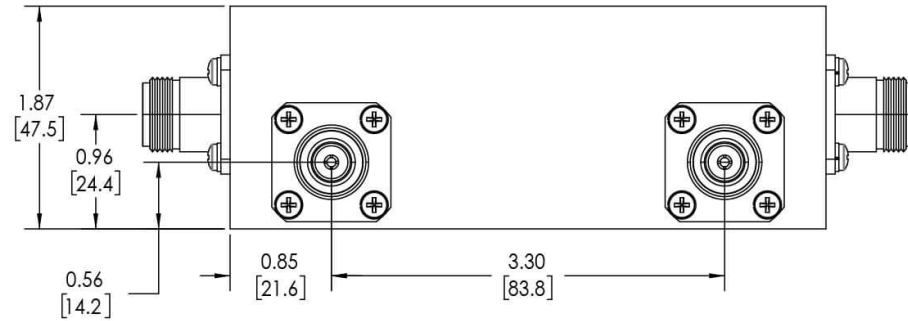
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REVISION HISTORY			
REV.	REVISION RECORD	DATE	APPROVED
A	ECN 9696	5/15/2019	RB



NOTES: UNLESS OTHERWISE SPECIFIED

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



UNLESS OTHERWISE SPECIFIED		DWN	DATE	17 Jon Barrett Rd Patterson, NY 12563	
INTERPRET DRAWING IAW MIL-STD-100	SD	5/14/2019	WERLATONE SINCE 1965		
DIMENSIONS PER ASME Y14.5M-2009	CHK	DATE			
PARENTHEetical INFO FOR REF ONLY	CS	5/14/2019	OUTLINE TITLE SIZE CAGE CODE DWG NO B 10046-500		
DIMENSIONS ARE IN INCHES	ENGR	DATE			
DIMENSIONAL LIMITS APPLY BEFORE PROCESSES	INFR	DATE	SCALE 1:1 SHEET 1 OF 1		
TOLERANCES:	QA	DATE			
ANGLES ± 2°	RLSE	DATE	APPLICATION USED ON THIRD ANGLE PROJECTION		
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					

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