



# WERLATONE

Model C10270

Connectorized Directional Couplers



## PRODUCT DATA SHEET

C10270

**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: 1000 - 2000 MHz  
 Power: 5000 W CW  
 Coupling:  $50 \pm 1.0$  dB Max.  
 Insertion Loss: 0.2 dB Max.  
 Flatness:  $\pm 0.5$  dB Max.  
 VSWR (ML): 1.30:1 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: 6" Line Section

### Connector Configurations:

Model	Input (J1)	Output (J2)	Fwd (J3)	Rev (J4)
C10270-81	1 5/8" EIA	1 5/8" EIA	N Female	N Female
C10270-83	1 5/8" EIA	1 5/8" EIA	SMA	SMA
C10270-84	1 5/8" EIA	1 5/8" EIA	BNC	BNC

**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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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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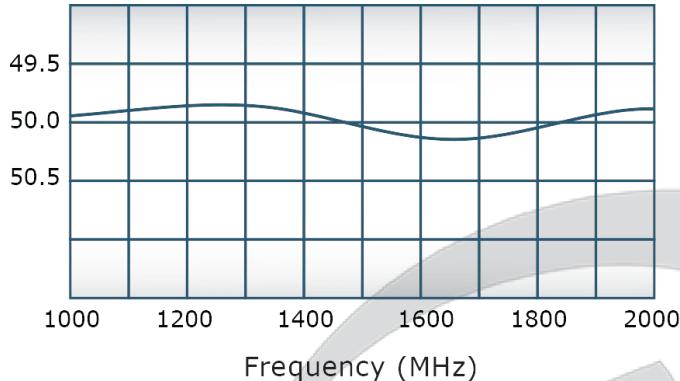


## PRODUCT DATA SHEET

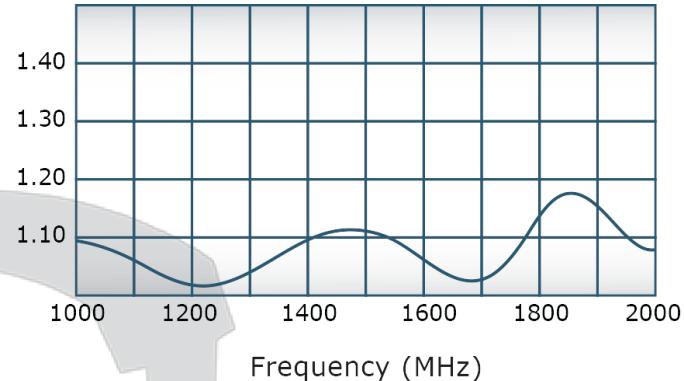
C10270

### Performance Data (Specifications subject to change without notice):

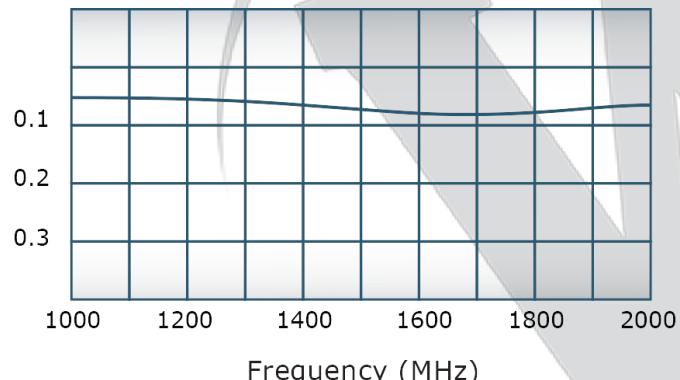
Coupling:



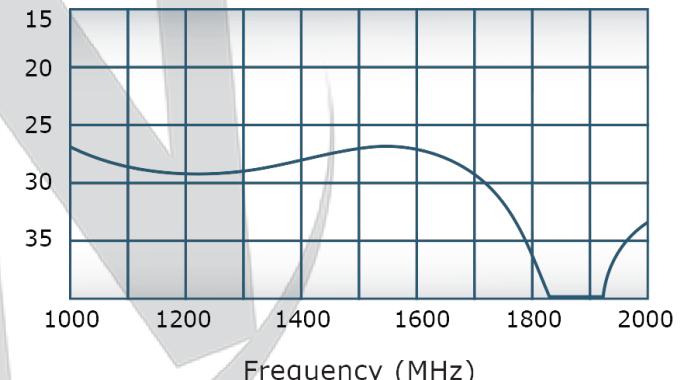
VSWR:



Insertion Loss:



Directivity:



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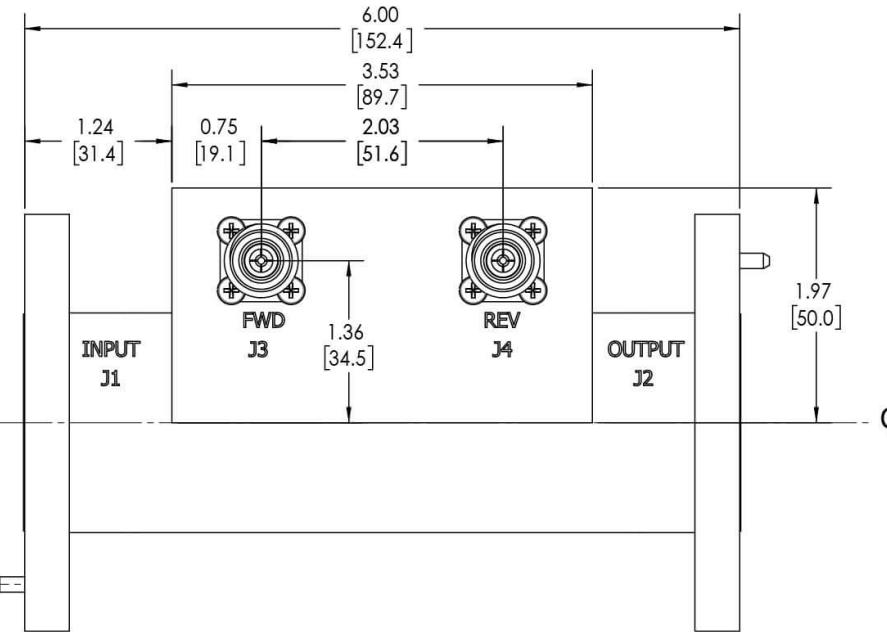
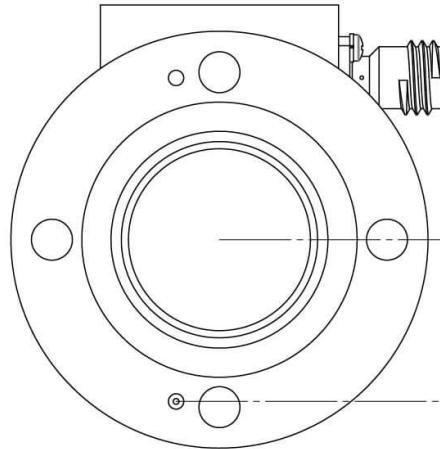
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REVISION HISTORY

REV.	REVISION RECORD	DATE	APPROVED
A	ECN 9696	11/29/18	RB

B



NOTES:

1. CONNECTORS:  
J1, J2: 1 5/8 EIA STANDARD  
J3, J4: N FEMALE

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B

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A

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UNLESS OTHERWISE SPECIFIED	OWN	DATE	17 Jon Barrett Rd
INTERPRET DRAWING JAW MIL-STD-100	SD	DATE	
UNIVERSITY OF ASME Y14.5M-2009	CHK	DATE	
PARENTHETICAL TOLERANCES FOR REFERENCE ONLY	CS	DATE	
DIMENSIONAL LIMITS ARE IN INCHES	ENGR	DATE	
TOLERANCES	DK	DATE	
ANGLES $\pm 2^\circ$	MFGR	DATE	
3 RL $\pm .005$ [1.27]	QA	DATE	
2 RL $\pm .012$ [3.05]	RELEASE	DATE	
REMOVE ALL BURRS AND SHARP EDGES R.01 MAX	SIZE	CAGE CODE	REV
CONCENTRICITY MACHINED DIA. .002 FIM	B	10093-501	A
MACHINE TOOL MISMATCH .003 MAX	SCALE	1:1	
APPLICATION	OUTLINE		
THIRD ANGLE PROJECTION			

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