



## PRODUCT DATA SHEET

C9439

**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 - 520 MHz  
 Power: 1000 W CW  
 Coupling:  $53 \pm 1.0$  dB Max.  
 Insertion Loss: 0.3 dB Max.  
 Flatness:  $\pm 1.0$  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: 4.45 x 2.4 x 1.59"

### Connector Configurations:

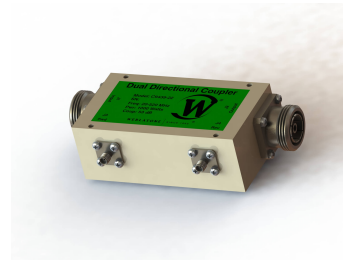
Model	Input (J1)	Output (J2)	Fwd (J3)	Rev (J4)
C9439-12	N Female	N Female	SMA	SMA
C9439-20	7/16 Female	7/16 Female	N Female	N Female
C9439-22	7/16 Female	7/16 Female	SMA	SMA
C9439-23	7/16 Female	7/16 Female	BNC	BNC
C9439-41	SC Female	SC Female	N Female	N Female
C9439-43	SC Female	SC Female	SMA	SMA

**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 C9439

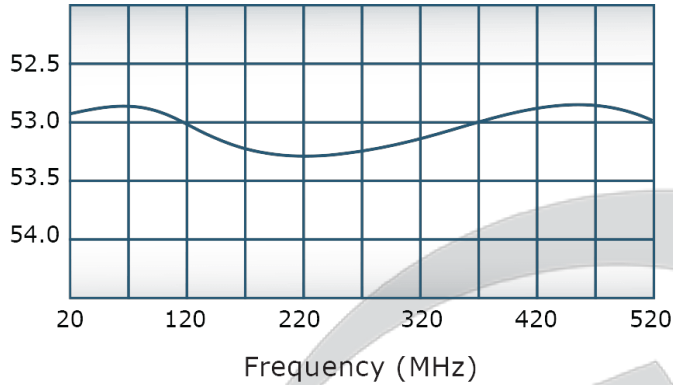


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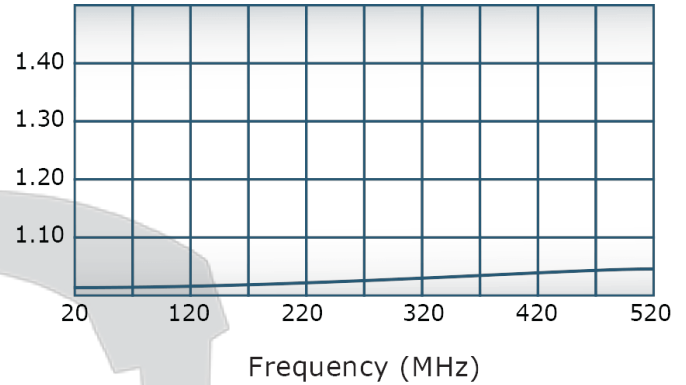
C9439

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

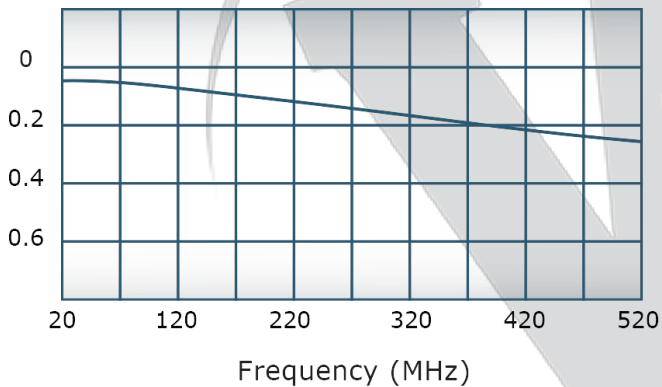
Coupling:



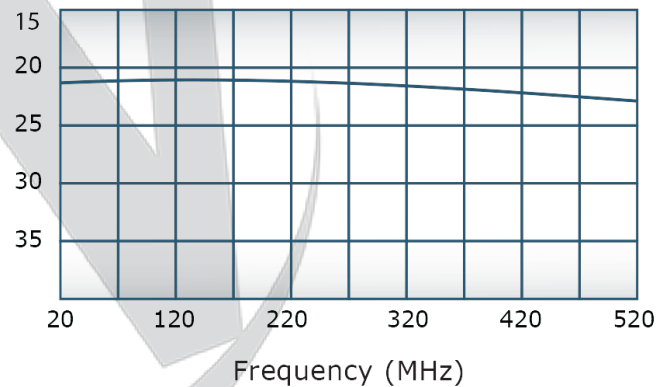
VSWR:



Insertion Loss:



Directivity:



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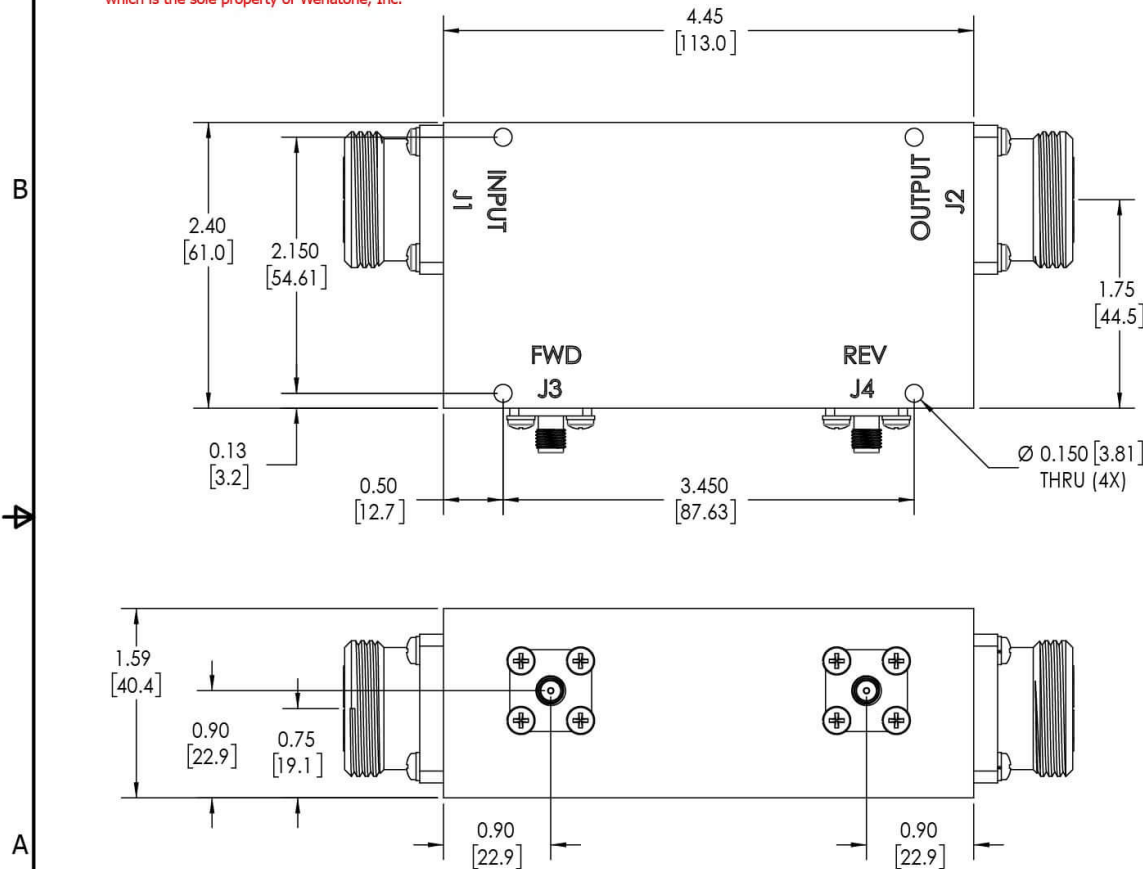
Werlatone, Inc. 17 Jon Barrett Road Patterson, NY 12563 T:(845)278-2220 F:(845)278-3440 sales@werlatone.com www.werlatone.com



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REVISION HISTORY			
REV.	REVISION RECORD	DATE	APPROVED
A	ECN 9696	3/25/19	RB

**NOTES: UNLESS OTHERWISE SPECIFIED**

- MATERIAL: ALUMINUM 6061-T6**
- FINISH: CHEM FILM PER MIL-DTL-5541F TYPE I CLASS 3 (YELLOW IRIDITE)**
- CONNECTORS:**  
**J1,J2: 7/16 FEMALE**  
**J3,J4: SMA FEMALE**



		UNLESS OTHERWISE SPECIFIED		DWN	DATE		WERLATONE <sup>®</sup> SINCE 1965	17 Jon Barrett Rd Patterson, NY 12563			
		INTERPRET DRAWING IAW MIL-STD-100 DIMENSIONS PER ASME Y14.5M-2009 PARENTHESES FOR REF ONLY DIMENSIONS ARE IN INCHES DIMENSIONAL LIMITS APPLY BEFORE PROCESSES TOLERANCES: ANGLES ± 2° 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		SD	3/25/2019						
				CHK	DATE	TITLE					
				CS	3/25/2019						
				ENGR	DATE	OUTLINE					
				INFR	DATE						
				QA	DATE	SIZE	CAGE CODE			DWG NO	REV
NEXT ASSY	USED ON			RLSE	DATE	B				20828-500	A
APPLICATION		THIRD ANGLE PROJECTION 				SCALE		1:1	SHEET 1 OF 1		

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