



## PRODUCT DATA SHEET

C8698

**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: 700 - 3800 MHz  
 Power: 250 W CW  
 Coupling:  $40 \pm 1.0$  dB Max.  
 Insertion Loss: 0.2 dB Max.  
 Flatness:  $\pm 1.0$  dB Max.  
 VSWR (ML): 1.30:1 Max.  
 Directivity: 15 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: 3.0 x 3.0 x 1.09"

### Connector Configurations:

Model	Input (J1)	Output (J2)	Fwd (J3)	Rev (J4)
C8698-10	N Female	N Female	N Female	N Female
C8698-12	N Female	N Female	SMA	SMA
C8698-13	N Female	N Female	BNC	BNC
C8698-102	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 C8698

Connectorized Directional Couplers

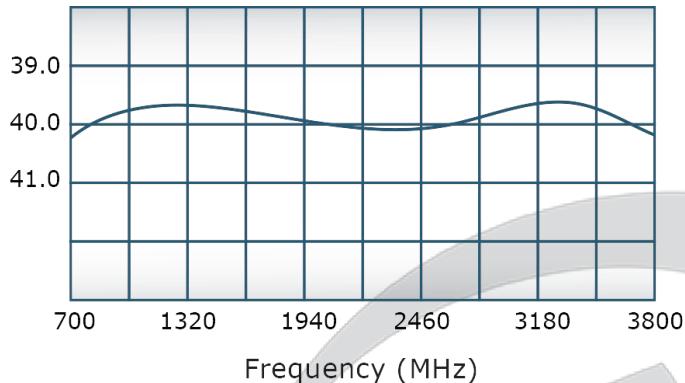


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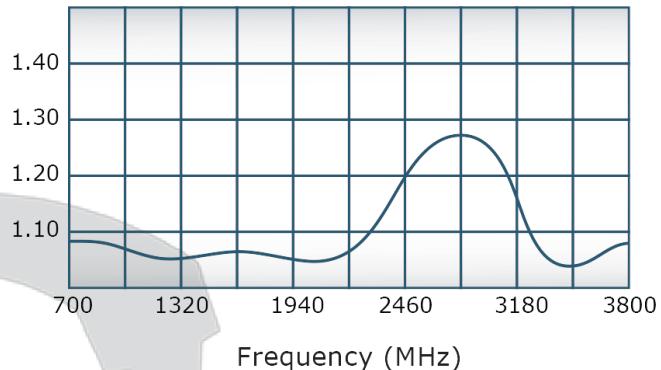
C8698

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

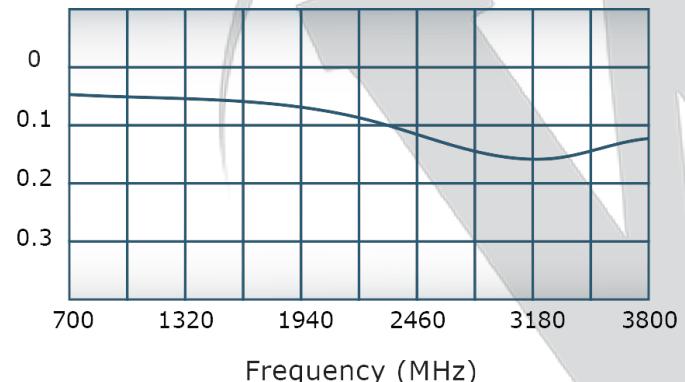
Coupling:



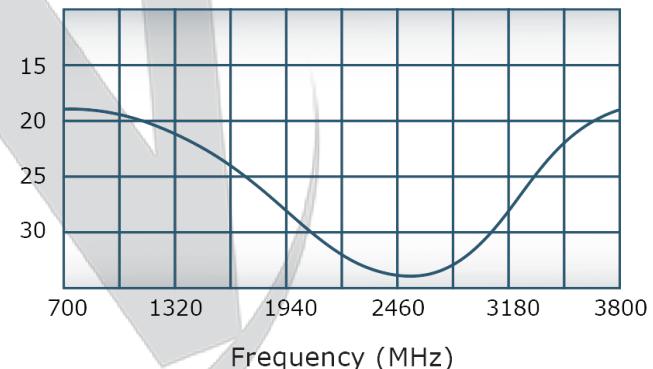
VSWR:



Insertion Loss:



Directivity:



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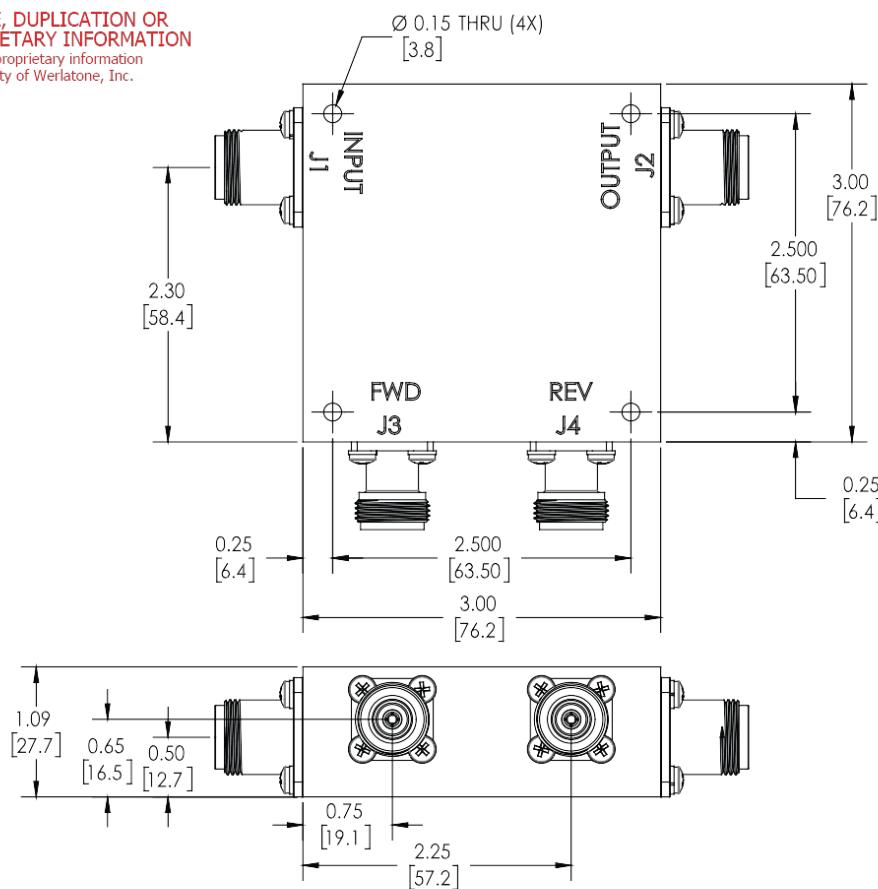
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#### REVISION HISTORY

REV.	REVISION RECORD	DATE	APPROVED
A	ECN 9696	11/27/18	RB

#### NOTES: UNLESS OTHERWISE SPECIFIED

1. MATERIAL: ALUMINUM 6061-T6
2. FINISH: CHEM FILM PER MIL-DTL-5541F TYPE I CLASS 3 (YELLOW IRIDITE)

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		UNLESS OTHERWISE SPECIFIED	OWN	DATE		
		• INTERPRET DRAWING DAW MIL-STD-100	RH	7/5/2001		
		• END DIMMING PER ASME B1.94-2009	CHR	DATE		
		• PARALLELISM TOLERANCE FOR REF ONLY				
		• DIMENSIONS ARE IN INCHES				
		• DIMENSIONAL LIMITS APPLY BEFORE PROCESSES				
		• TOLERANCES				
		• ANGLES ± 2°				
		• 3 AL + 0.01 [1.2]				
		• 2 AL + 0.01 [1.2]				
		• REMOVE ALL BURRS AND SHARP EDGES R.01 MAX				
		• CONCENTRICITY MACHINED 0.002 INCH				
		• MACHINE TOOL MISMATCH 0.03 MAX				
NEXT ASSY	USED ON		ENGR	DATE		
APPLICATION	THIRD ANGLE PROJECTION		MFGR	DATE		
			QA	DATE		
			PLSE	DATE	SCALE	REV
					1:1	A
						SHEET 1 OF 1

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