

## PRODUCT DATA SHEET

C8212

**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: 100 - 500 MHz  
Power: 1000 W CW  
Coupling:  $50 \pm 1.0$  dB Max.  
Insertion Loss: 0.2 dB Max.  
Flatness:  $\pm 0.3$  dB Max.  
VSWR (ML): 1.10:1 Max.  
Directivity: 20 dB Min.

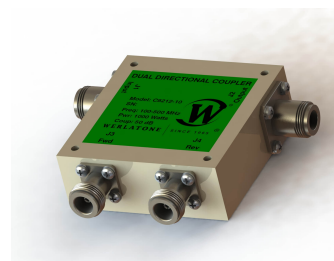
### Mechanical Specifications:

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: 3.0 x 3.0 x 1.09"

### Connector Configurations:

Model	Input (J1)	Output (J2)	Fwd (J3)	Rev (J4)
C8212-10	N Female	N Female	N Female	N Female
C8212-12	N Female	N Female	SMA	SMA
C8212-13	N Female	N Female	BNC	BNC
C8212-302	TNC Female	TNC Female	SMA	SMA
C8212-712	N Male	N Female	SMA	SMA
C8212-714	N Male	N 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.

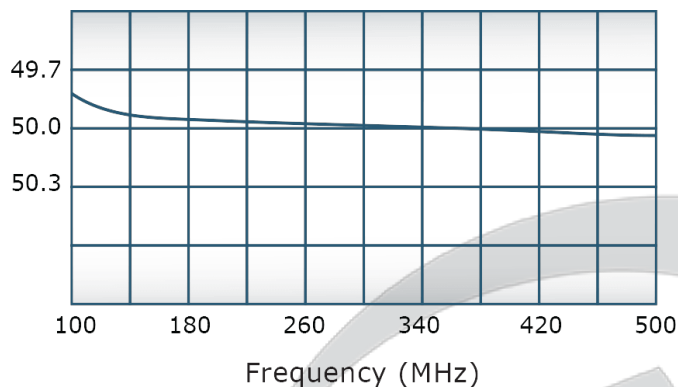


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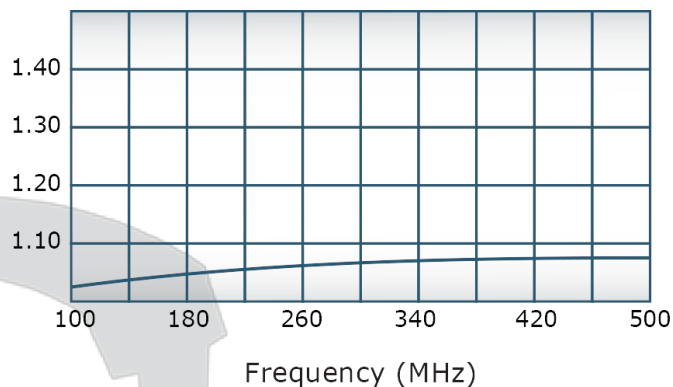
C8212

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

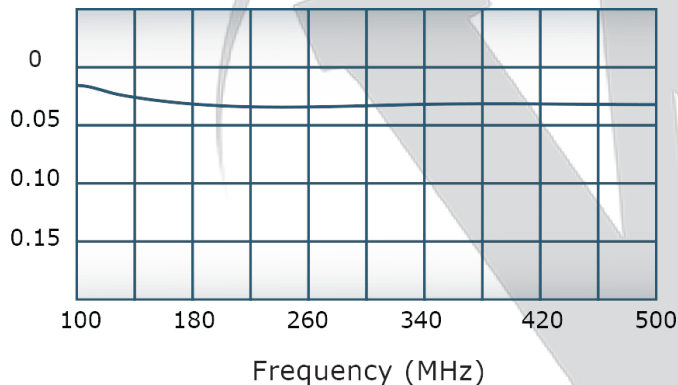
Coupling:



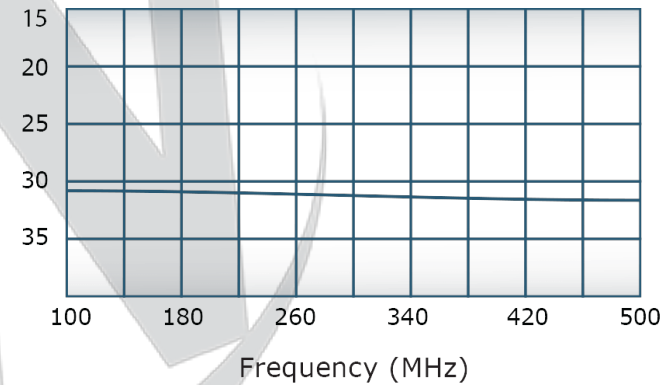
VSWR:



Insertion Loss:



Directivity:



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

**NOTES: UNLESS OTHERWISE SPECIFIED**

- MATERIAL: ALUMINUM 6061-T6**
- FINISH: CHEM FILM PER MIL-DTL\_5541F TYPE I CLASS 3 (YELLOW IRIDITE)**

UNLESS OTHERWISE SPECIFIED		OWN	DATE	<b>WERLATONE SINCE 1965</b> 17 Jon Barrett Rd Patterson, NY 12563
• INTERPRET DRAWING JAW MIL-STD-100		RH	7/5/2001	
• DIMENSIONING PER ASME Y14.5M-2009		CHK	DATE	TITLE
• PARENTHETICAL INFO FOR REF ONLY				
• DIMENSIONS ARE IN INCHES		ENGR	DATE	<b>OUTLINE</b> SIZE CAGE CODE DWG NO B 10379-505
• DIMENSIONAL LIMITS APPLY BEFORE PROCESSES		MJ	7/5/2001	
• TOLERANCES:		MPGR	DATE	REV
ANGLES ± 2°				
3 PL ± .005 [1.3]				A
2 PL ± .015 [3.8]				
• REMOVE ALL BURRS AND SHARP EDGES R.01 MAX		QA	DATE	SCALE
• CONCENTRICITY MACHINED DIA: .002 FIM				
• MACHINE TOOL MISMATCH: .003 MAX		RLSE	DATE	1:1
THIRD ANGLE PROJECTION		SHEET 1 OF 1		

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