

PRODUCT DATA SHEET

C10309

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: 500 - 2500 MHz
 Power: 2500 W CW
 Coupling: 50 ± 1.0 dB Max.
 Insertion Loss: 0.25 dB Max.
 Flatness: ± 0.5 dB Max.
 VSWR (ML): 1.30:1 Max.
 Directivity: 15 dB Min.

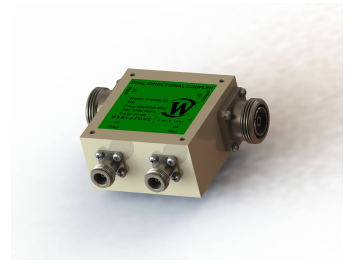
Mechanical Specifications:

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 1.59"

Connector Configurations:

Model	Input (J1)	Output (J2)	Fwd (J3)	Rev (J4)
C10309-20	7/16 Female	7/16 Female	N Female	N Female
C10309-22	7/16 Female	7/16 Female	SMA	SMA
C10309-28	7/16 Male	7/16 Male	SMA	SMA
C10309-728	7/16 Male	7/16 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.

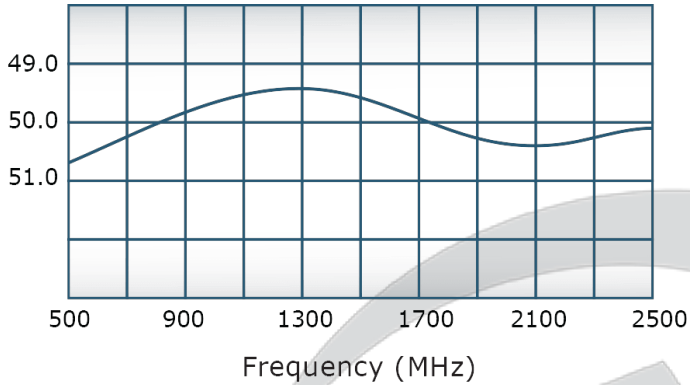


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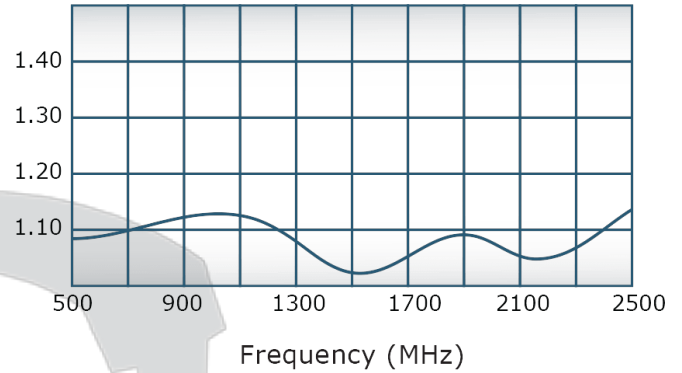
C10309

Performance Data (Specifications subject to change without notice):

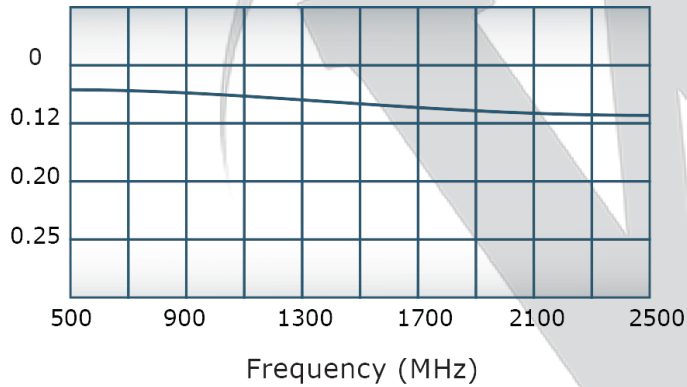
Coupling:



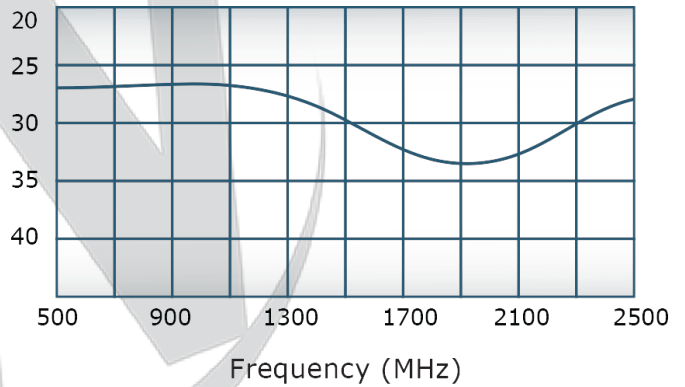
VSWR:



Insertion Loss:



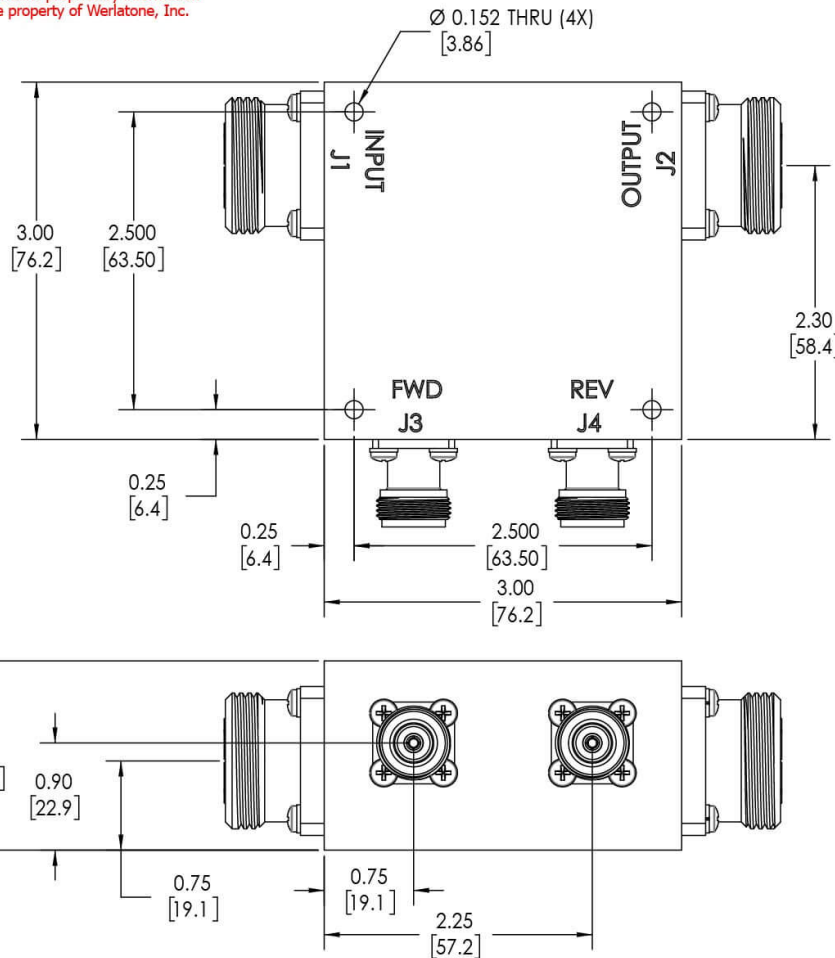
Directivity:



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REVISION HISTORY			
REV.	REVISION RECORD	DATE	APPROVED
A	ECN 9696	5/13/2019	RB

NOTES: UNLESS OTHERWISE SPECIFIED

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

NEXT ASSY USED ON		UNLESS OTHERWISE SPECIFIED INTERPRET DRAWING IN ACCORDANCE WITH MIL-STD-100 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		DOWN	DATE	 WERLATONE SINCE 1965	17 Jon Barrett Rd Patterson, NY 12563	
				SD	5/13/2019			
				CHK	DATE			
				CS	5/13/2019			
APPLICATION		THIRD ANGLE PROJECTION 		ENGR	DATE	TITLE	OUTLINE	
				INPR	DATE			
				QA	DATE			
				RLSE	DATE			
				SIZE	CAGE CODE	DWG NO	REV	
				B		10443-501	A	
				SCALE	1:1		SHEET 1 OF 1	

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