



## PRODUCT DATA SHEET

C11078

**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: 1 - 1000 MHz  
Power: 1000 W CW  
Coupling:  $43 \pm 1.0$  dB Max.  
Insertion Loss: 0.45 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: 6.7 x 2.27 x 1.69"

### Connector Configurations:

Model	Input (J1)	Output (J2)	Fwd (J3)	Rev (J4)
C11078-41	SC Female	SC Female	N Female	N Female
C11078-43	SC Female	SC Female	SMA	SMA

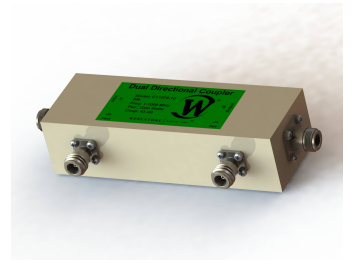
**Werlatone®** Broadband Dual, Uni, and Bi Directional RF Couplers are designed to tolerate the most stringent operating conditions associated with military and EMC testing environments. Many of our RF Directional Couplers, designated Mismatch Tolerant®, will operate continuously, at rated power, into a severe load mismatch condition. Our multi-octave Directional Couplers maintain exceptional coupling flatness, directivity, VSWR, and insertion loss.



# WERLATONE

Model C11078

Connectorized Directional Couplers

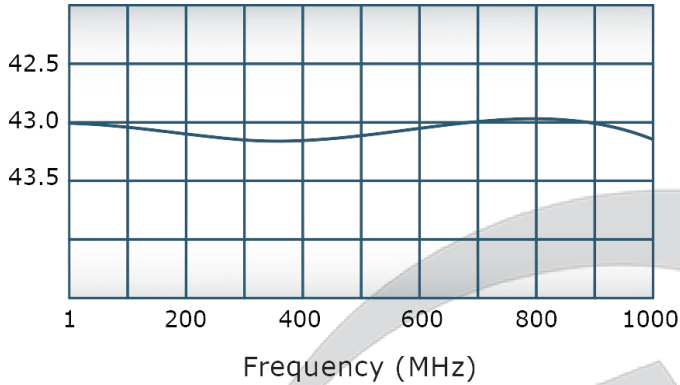


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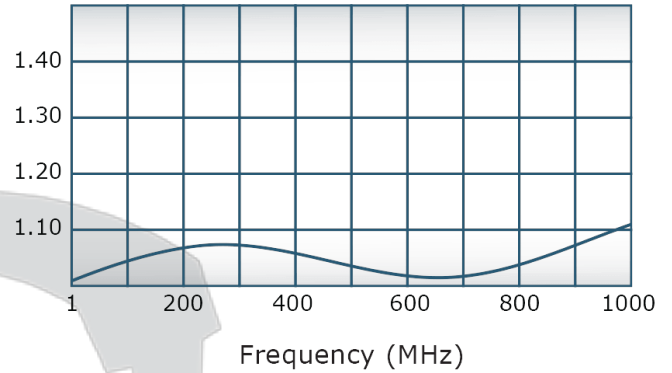
C11078

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

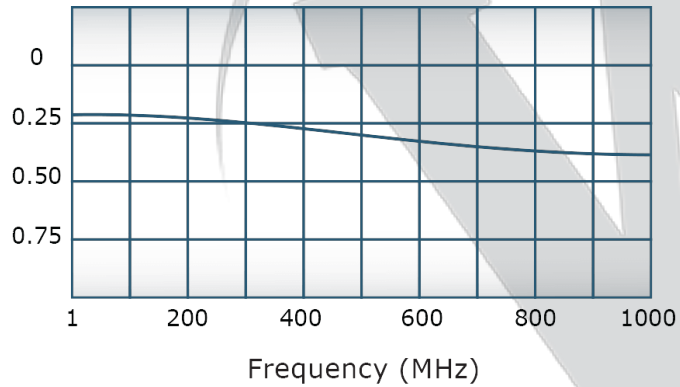
Coupling:



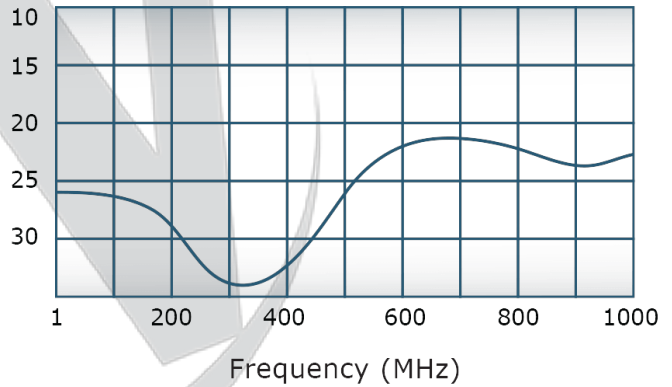
VSWR:



Insertion Loss:



Directivity:



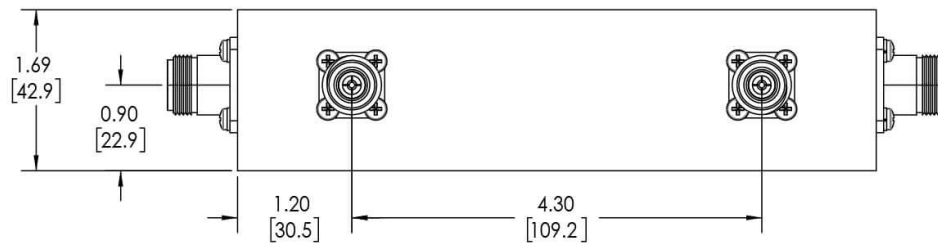
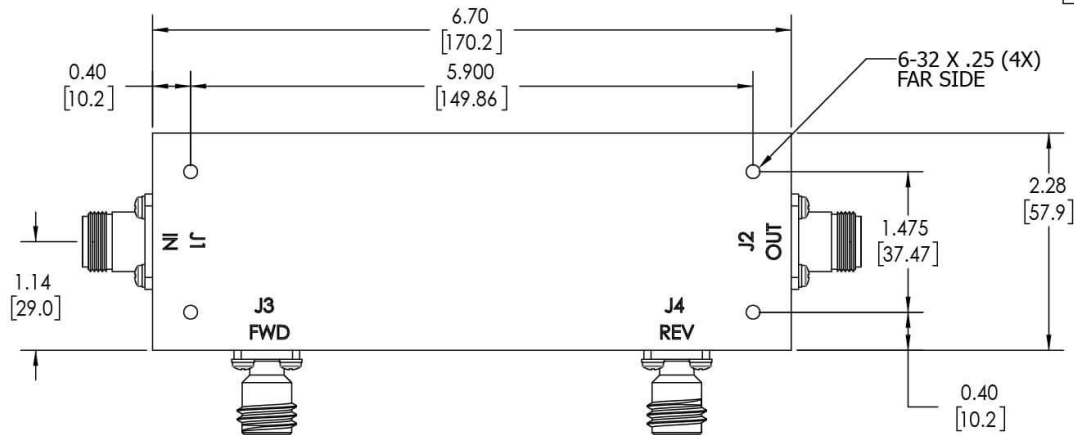
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REVISION HISTORY			
REV.	REVISION RECORD	DATE	APPROVED
A	ECN 9696	5/14/2019	RB



**NOTES: UNLESS OTHERWISE SPECIFIED**

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

		UNLESS OTHERWISE SPECIFIED		OWN	DATE	 WERLATONE  SINCE 1965		17 Jon Barrett Rd Patterson, NY 12563	
		INTERPRET DRAWING IN ACCORDANCE WITH MIL-STD-100		SD	5/14/2019	TITLE		OUTLINE	
		DIMENSIONS PER ASME Y14.5-2009		CHK	DATE				
		DIMENSIONAL INFO FOR REF ONLY		CS	5/14/2019	SIZE CAGE CODE DWG NO		REV	
		DIMENSIONS ARE IN INCHES		ENGR	DATE				
		DIMENSIONAL LIMITS APPLY BEFORE PROCESSES		INFR	DATE	SCALE		10641-500	
		TOLERANCES:		QA	DATE				
		ANGLES ± 2°		RLSE	DATE	1:1.25		SHEET 1 OF 1	
		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							
NEXT ASSY		USED ON							
APPLICATION		THIRD ANGLE PROJECTION							

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