


**PRODUCT DATA SHEET**
**C11179**

**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: 2 - 35 MHz  
Power: 2500 W CW  
Coupling:  $40 \pm 1.0$  dB Max.  
Insertion Loss: 0.25 dB Max.  
Flatness:  $\pm 0.5$  dB Max.  
VSWR (ML): 1.30:1 Max.  
Directivity: 20 dB Min.

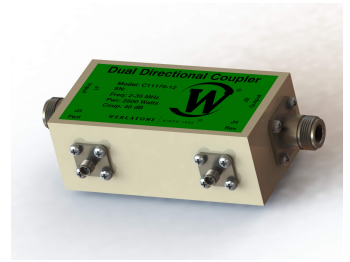
**Mechanical Specifications:**

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: 4.0 x 2.0 x 1.5"

**Connector Configurations:**

Model	Input (J1)	Output (J2)	Fwd (J3)	Rev (J4)
C11179-10	N Female	N Female	N Female	N Female
C11179-12	N Female	N Female	SMA	SMA
C11179-13	N Female	N Female	BNC	BNC

**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.

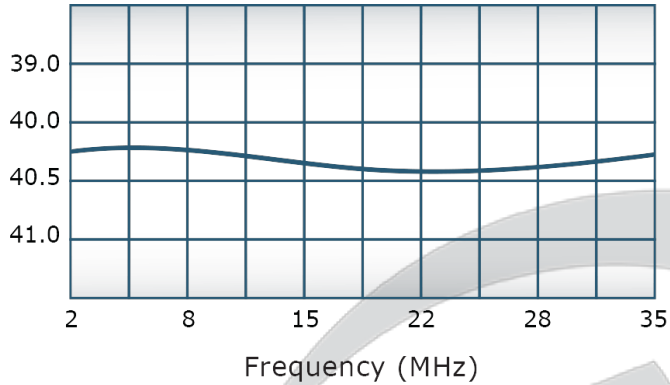


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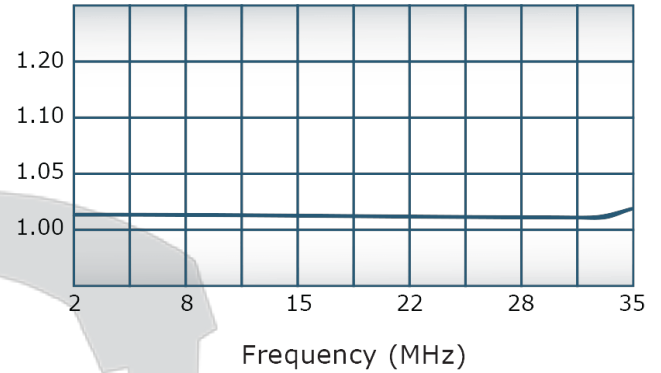
C11179

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

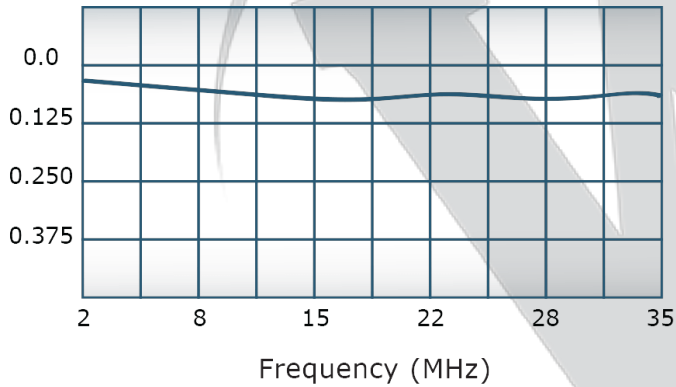
Coupling:



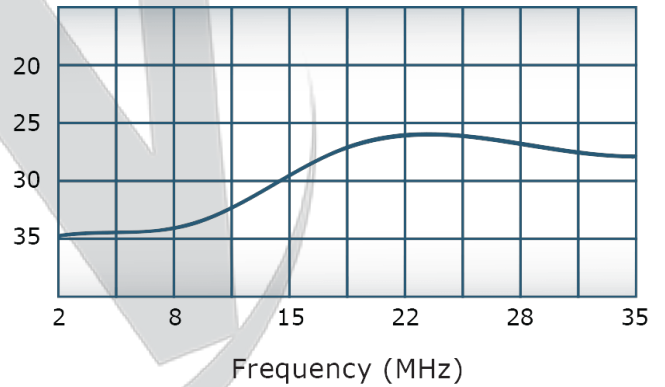
VSWR:



Insertion Loss:



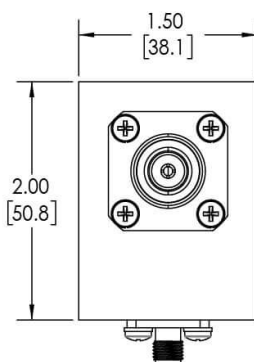
Directivity:



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**NOTES: UNLESS OTHERWISE SPECIFIED**

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

		UNLESS OTHERWISE SPECIFIED		DWN	DATE	 <b>WERLATONE</b>   SINCE 1965	17 Jon Barrett Rd Patterson, NY 12563		
		INTERPRET DRAWING IAW MIL-STD-100		SD	3/25/2019				
		DIMENSIONING PER ASME Y14.5-2009		CHK	DATE				
		PARENT/CHILD INFO FOR REF ONLY		CS	3/25/2019				
		DIMENSIONS ARE IN INCHES		ENGR	DATE				
		DIMENSIONAL LIMITS APPLY BEFORE PROCESSES				TITLE			
		TOLERANCES:				<h1>OUTLINE</h1>			
		ANGLES = 2"					SIZE	CAGE CODE	DWG NO
		3 P.L. X .005 [13]		MFGR	DATE		B		REV
		3 P.L. X .015 [38]		QA	DATE				
		REMOVE ALL BURRS AND SHARP EDGES R.01 MAX							
		CONCENTRICITY MACHINEED DIA. .002 FPM							
		MACHINE TOOL INDICATOR .003 MAX							
NEXT ASSY	USED ON			RLSE	DATE	SCALE			
APPLICATION		THIRD ANGLE PROJECTION 				1:1			
								SHEET 1 of 1	

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