
**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 ± 1.0 dB Max.  
 Insertion Loss: 0.25 dB Max.  
 Flatness:        ± 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.

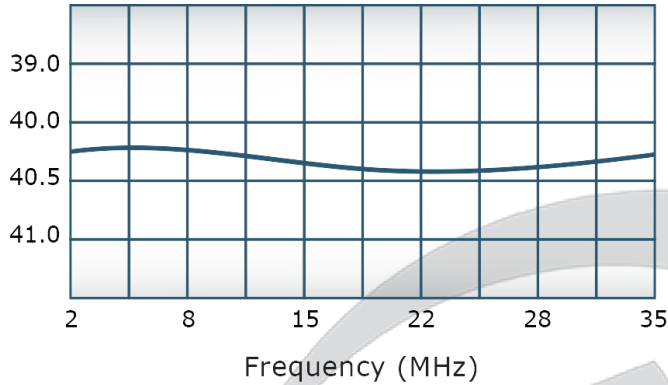
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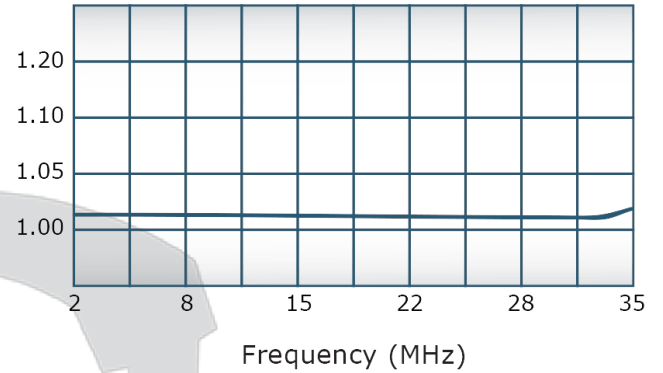


## Performance Data (Specifications subject to change without notice):

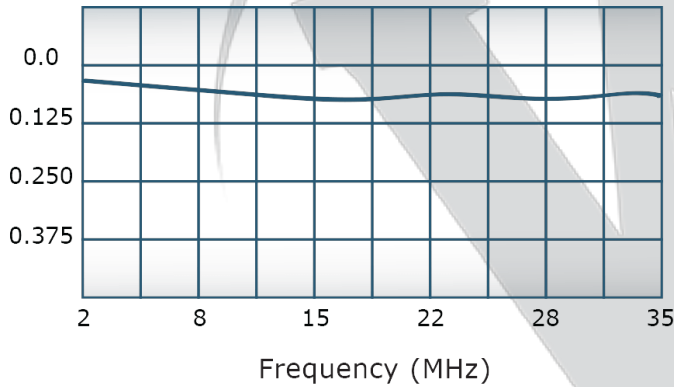
Coupling:



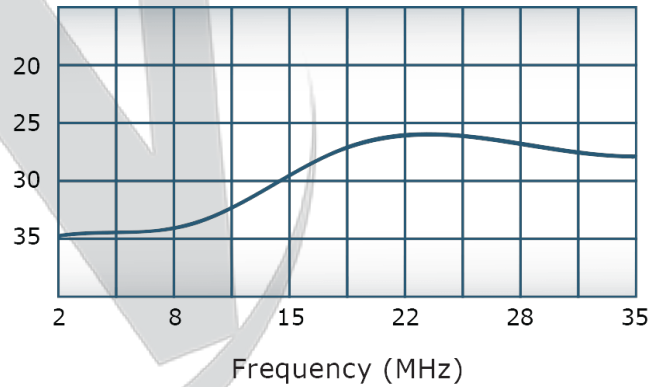
VSWR:



Insertion Loss:



Directivity:



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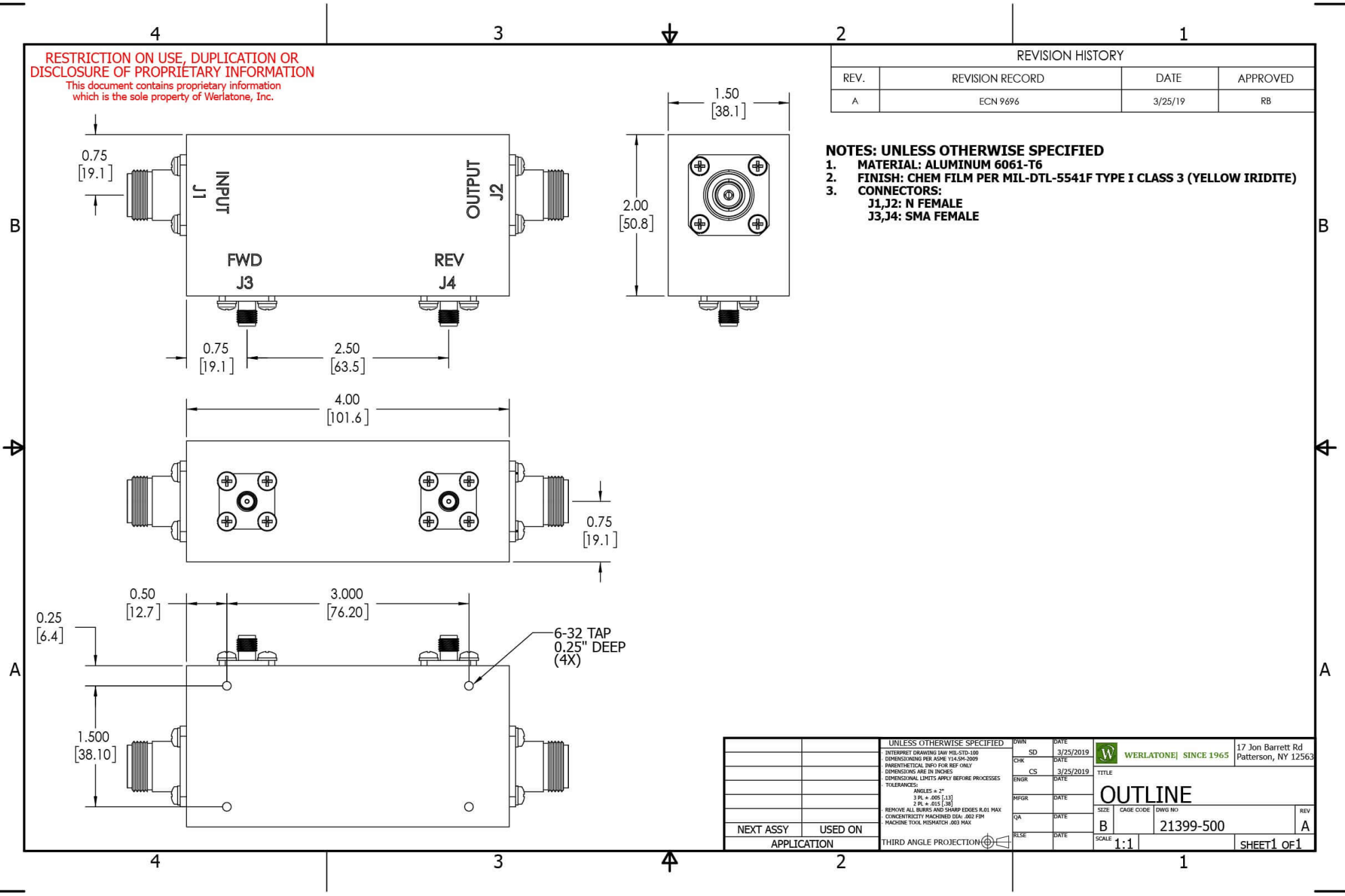
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REVISION HISTORY

REV.	REVISION RECORD	DATE	APPROVED
A	ECN 9696	3/25/19	RB

**NOTES: UNLESS OTHERWISE SPECIFIED**

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



UNLESS OTHERWISE SPECIFIED		DWN	DATE	17 Jon Barrett Rd
INTERPRET DRAWING IAW MIL-STD-100	SD	3/25/2019	DATE	Patterson, NY 12563
DIMENSIONS PER ASME Y14.5M-2009	CHK	DATE	WERLATONE SINCE 1965	
PARENTHEetical INFO FOR REF ONLY	CS	3/25/2019	TITLE	
DIMENSIONS ARE IN INCHES	ENGR	DATE	OUTLINE	
DIMENSIONAL LIMITS APPLY BEFORE PROCESSES	INFR	DATE	SIZE	CAGE CODE
TOLERANCES:	QA	DATE	B	21399-500
ANGLES ± 2°	RLSE	DATE	SCALE	1:1
3 PL ± .005 [13]	DATE		REV	A
2 PL ± .015 [38]	DATE		SCALE	1:1
REMOVE ALL BURS AND SHARP EDGES R.01 MAX	DATE		SHEET 1 OF 1	
CONCENTRICITY MACHINED DIA: .002 FIM	DATE			
MACHINE TOOL MISMATCH .003 MAX.	DATE			
NEXT ASSY	USED ON	APPLICATION		

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