



## PRODUCT DATA SHEET

C1407

**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:          250 W CW  
 Coupling:        30 ± 1.0 dB Max.  
 Flatness:        ± 0.75 dB Max.  
 Insertion Loss: 0.25 dB Max.  
 VSWR (ML):    1.25:1 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:             5.0 x 2.0 x 1.87"

### Connector Configurations:

Model	Input (J1)	Output (J2)	Fwd (J3)	Rev (J4)
C1407-10	N Female	N Female	N Female	N Female
C1407-12	N Female	N Female	SMA	SMA
C1407-13	N Female	N Female	BNC	BNC
C1407-102	SMA	SMA	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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Werlatone, Inc. 17 Jon Barrett Road Patterson, NY 12563 T:(845)278-2220 F:(845)278-3440 sales@werlatone.com www.werlatone.com

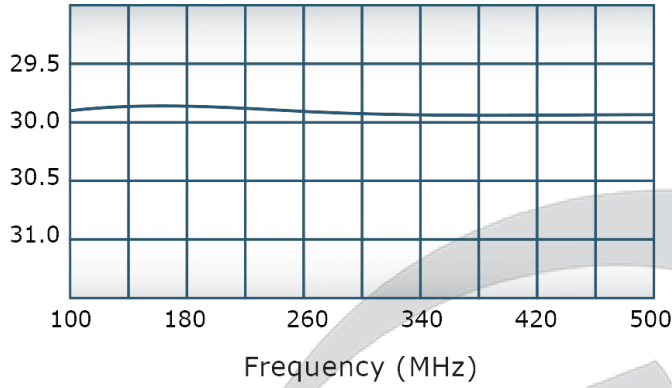


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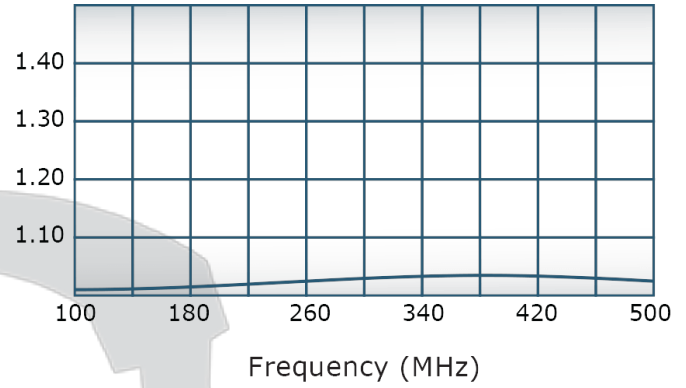
C1407

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

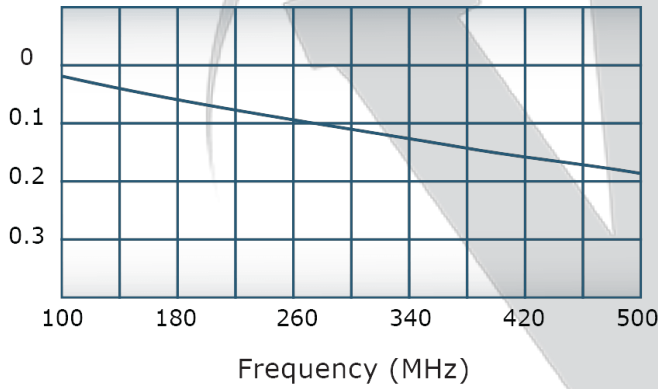
Coupling:



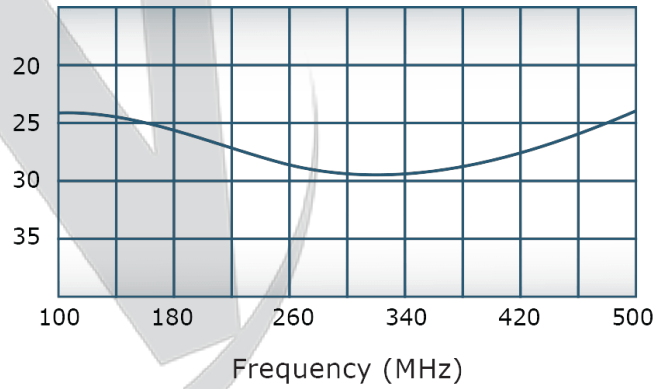
VSWR:



Insertion Loss:



Directivity:



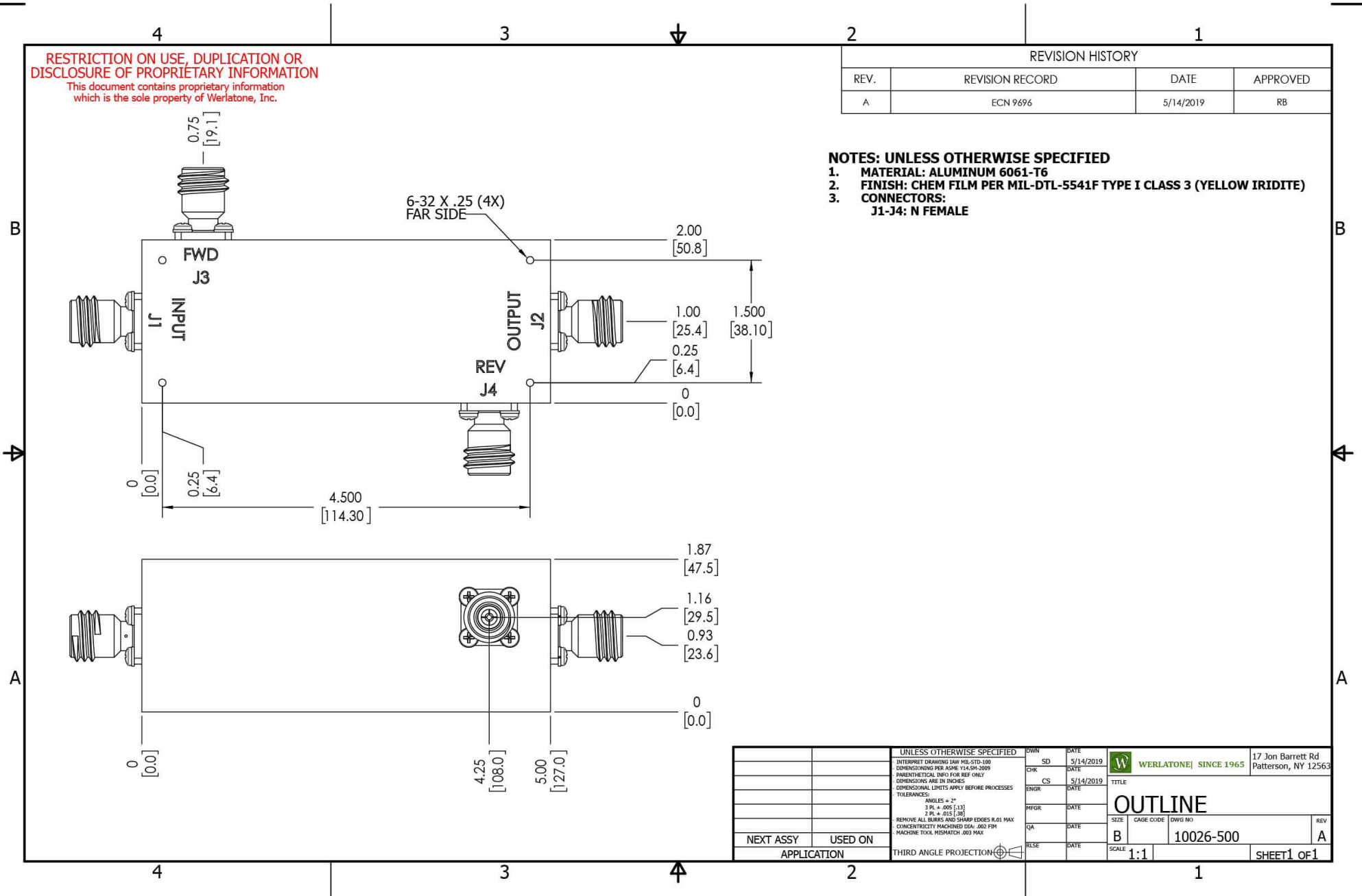
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REVISION HISTORY			
REV.	REVISION RECORD	DATE	APPROVED
A	ECN 9696	5/14/2019	RB

- 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		DWN	DATE	17 Jon Barrett Rd Patterson, NY 12563	
INTERPRET DRAWING IN ACCORDANCE WITH MIL-STD-100	SD	5/14/2019	WERLATONE SINCE 1965		
DIMENSIONS FOR ASME Y14.5M-2009	CHK	DATE			
PARENTHEetical INFO FOR REF ONLY	CS	5/14/2019	<b>OUTLINE</b>		
DIMENSIONS ARE IN INCHES	ENGR	DATE			
DIMENSIONAL LIMITS APPLY BEFORE PROCESSES	INFR	DATE	SIZE	CAGE CODE	DWG NO
TOLERANCES:	QA	DATE	B	10026-500	REV
ANGLES ± 2°	RLSE	DATE	SCALE	1:1	A
3 PL ± .005 [13]	APPLICATION		SHEET 1 OF 1		
2 PL ± .015 [38]	USED ON				
REMOVE ALL BURRS AND SHARP EDGES R.01 MAX	THIRD ANGLE PROJECTION				
CONCENTRICITY MACHINED DIA: .002 FIM					
MACHINE TOOL MISMATCH .003 MAX.					

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