


**PRODUCT DATA SHEET**
**C2531**

**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: 1.5 - 100 MHz  
Power: 750 W CW  
Coupling:  $30 \pm 1.0$  dB Max.  
Flatness:  $\pm 0.2$  dB Max.  
Insertion Loss: 0.2 dB Max.  
VSWR (ML): 1.15:1 Max.  
Directivity: 25 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 1.88"

**Connector Configurations:**

Model	Input (J1)	Output (J2)	Fwd (J3)	Rev (J4)
C2531-10	N Female	N Female	N Female	N Female
C2531-12	N Female	N Female	SMA	SMA
C2531-13	N Female	N Female	BNC	BNC
C2531-102	SMA	SMA	SMA	SMA

Designed to operate, at 250 W CW, into an infinite VSWR. Designed to operate into a 3:1 Load VSWR, at a rated power of 750 W CW.

**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 C2531

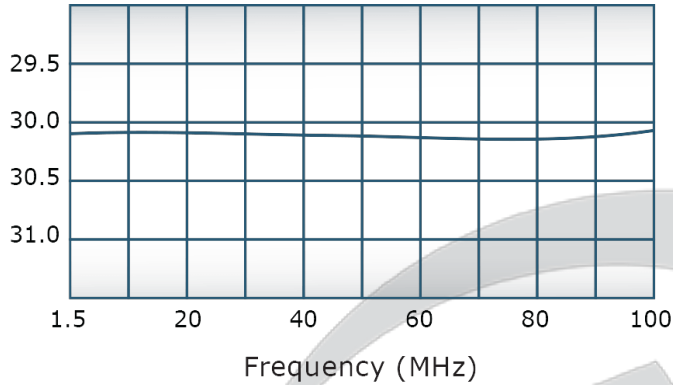


## PRODUCT DATA SHEET

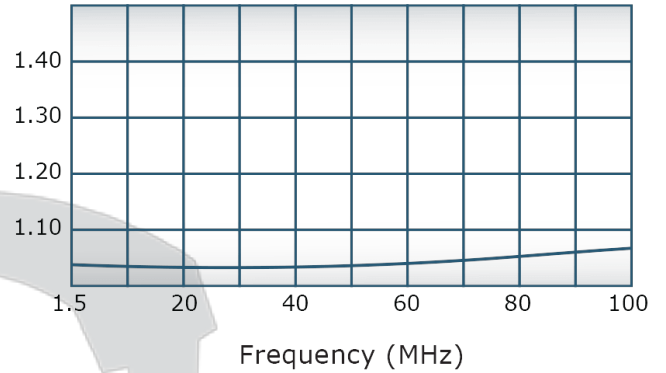
C2531

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

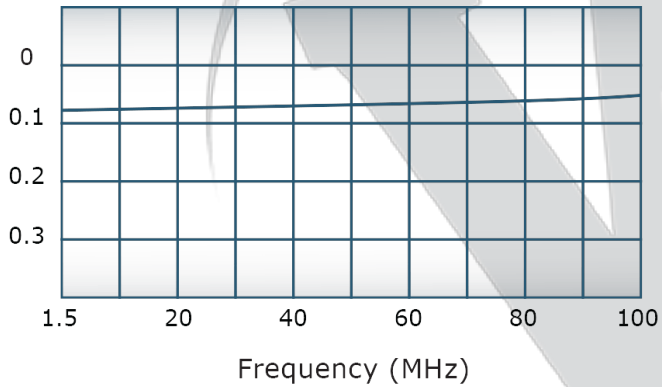
Coupling:



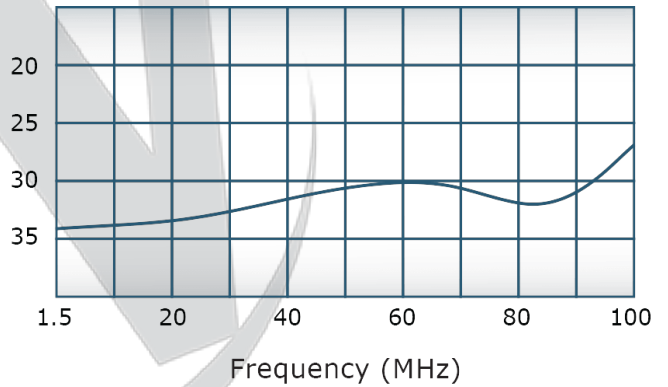
VSWR:



Insertion Loss:



Directivity:

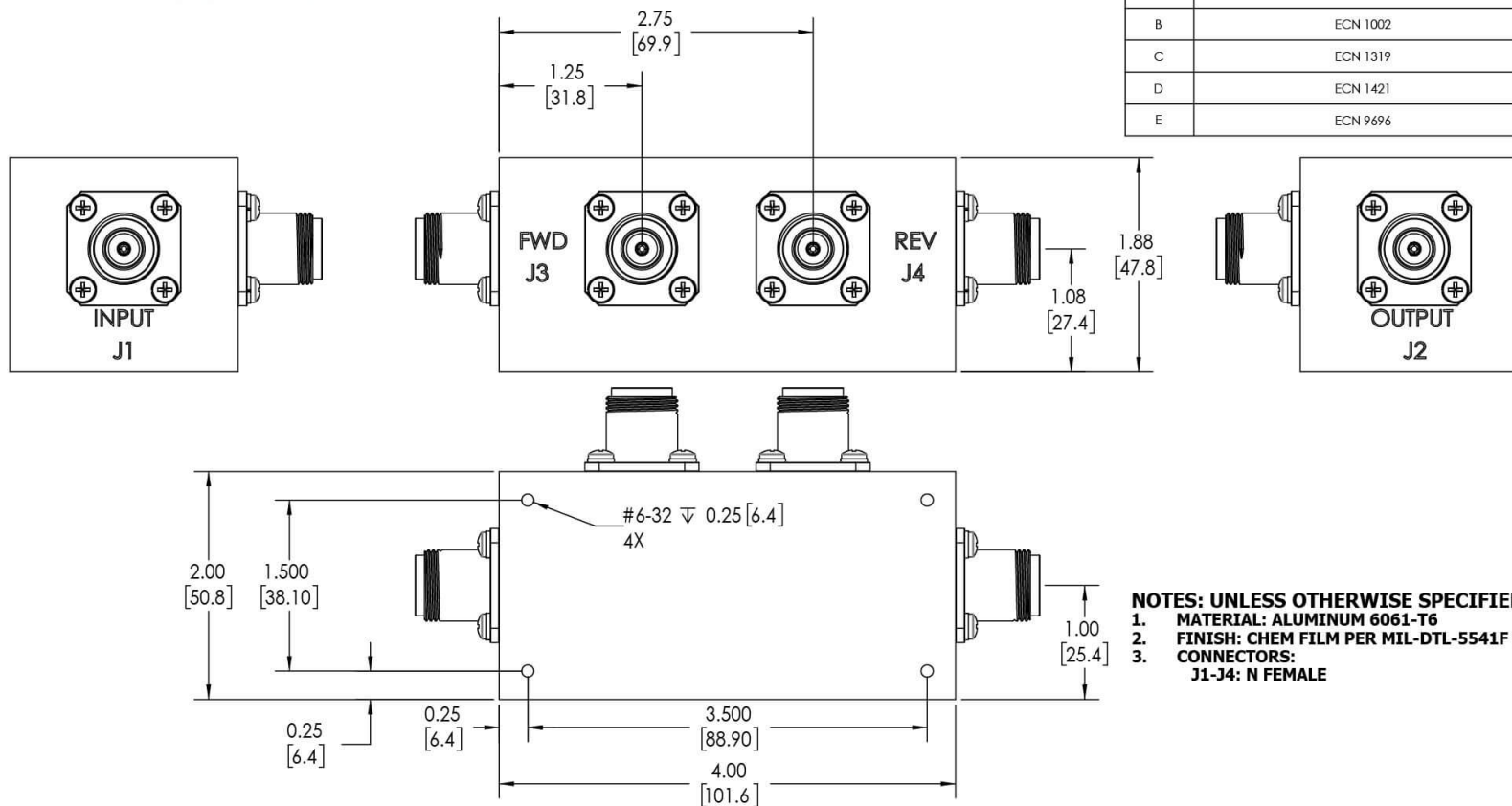


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REVISION HISTORY			
REV.	REVISION RECORD	DATE	APPROVED
A	ECN 1001	10/86	GW
B	ECN 1002	6/92	DK
C	ECN 1319	4/95	CS
D	ECN 1421	12/96	CS
E	ECN 9696	11/18	RB



**NOTES: UNLESS OTHERWISE SPECIFIED**

- 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-J4: N FEMALE

										UNLESS OTHERWISE SPECIFIED										DWN DATE		 WERLATONE <sup>®</sup> SINCE 1965		17 Jon Barrett Rd Patterson, NY 12563					
										INTERPRET DRAWING IN ACCORDANCE WITH: DIMENSIONING PER ASME Y14.5-2009 PREREQUISITE DWG FOR BEST RESULT DIMENSIONING ARE IN INCHES DIMENSIONAL UNITS APPLY BEFORE PROCESSES TOLERANCES:										SD 2/11/2019									
										ANGLES = F° 3 PL = .005 [13] 2 PL = .015 [30] REMOVE ALL BURRS AND SHARP EDGES R.01 MAX CONCENTRICITY MACHINED DIA. AND FIM MACHINE TOOL PROJECTION @.01 MAX										CHR DATE		TITLE							
																				CS 2/11/2019		MPFR DATE		SIZE		DWG NO		REV	
NEXT ASSY USED ON																				QA DATE		10018-500		E					
APPLICATION										THIRD ANGLE PROJECTION 										RLSE DATE		SCALE		1:1		SHEET 1 OF 1			
																				B									

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