



WERLATONE

Model C3824

Connectorized Directional Couplers



PRODUCT DATA SHEET

C3824

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 - 80 MHz

Power: 500 W CW

Coupling: 60 ± 1.0 dB Max.

Insertion Loss: 0.15 dB Max.

Flatness: ± 0.5 dB Max.

VSWR (ML): 1.10:1 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 1.88"

Connector Configurations:

Model	Input (J1)	Output (J2)	Fwd (J3)	Rev (J4)
C3824-10	N Female	N Female	N Female	N Female
C3824-12	N Female	N Female	SMA	SMA
C3824-13	N Female	N Female	BNC	BNC
C3824-102	SMA	SMA	SMA	SMA
C3824-200	BNC	BNC	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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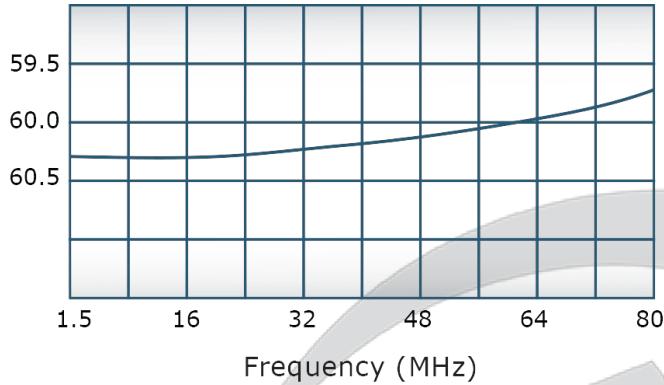


PRODUCT DATA SHEET

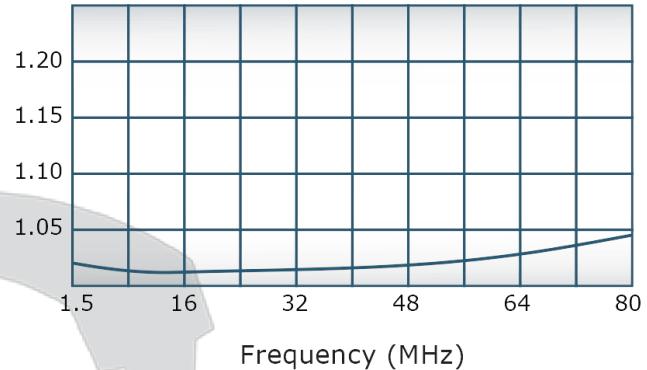
C3824

Performance Data (Specifications subject to change without notice):

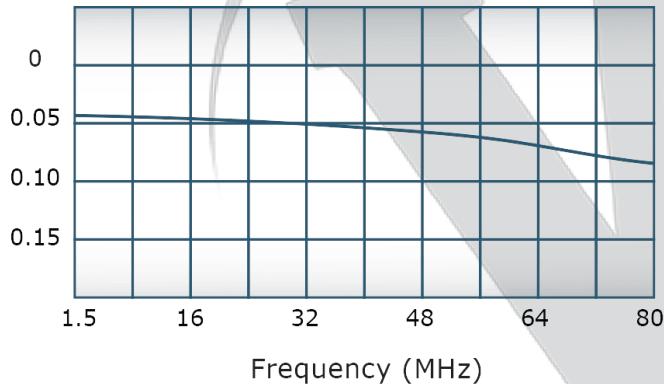
Coupling:



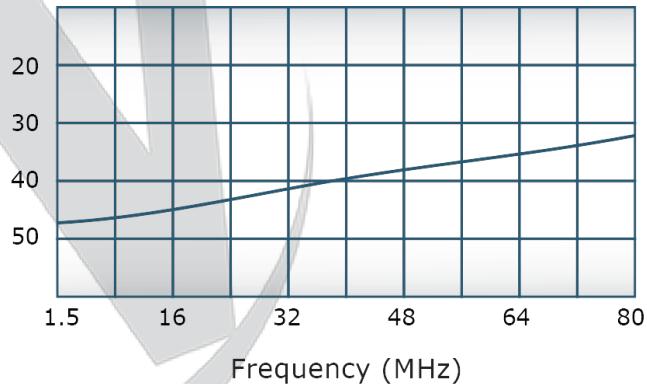
VSWR:



Insertion Loss:



Directivity:



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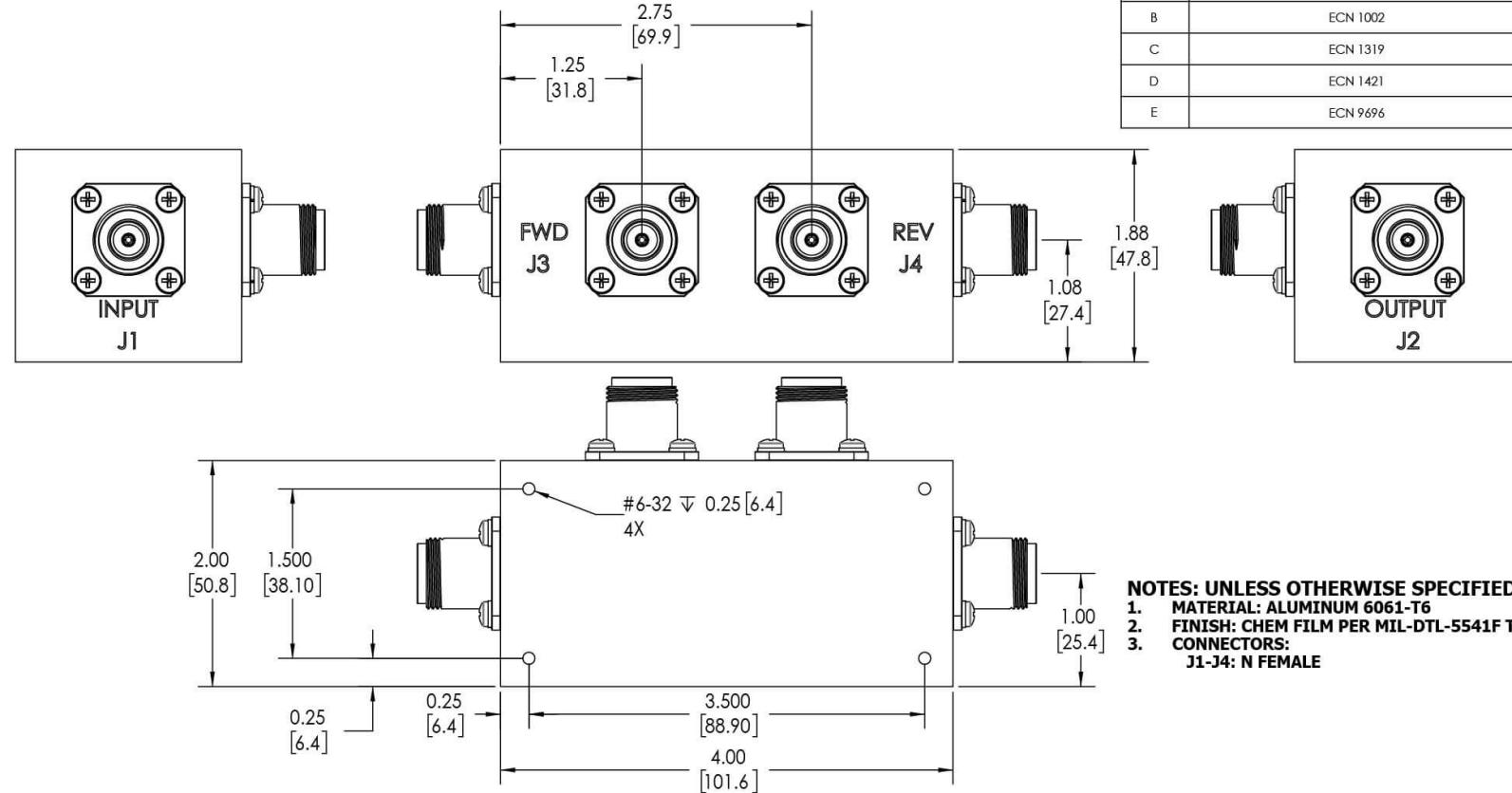
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REVISION HISTORY

REV.	REVISION RECORD	DATE	APPROVED
A	ECN 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

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	OWN SD	DATE 2/11/2019	W	WERLATONE SINCE 1965	17 Jon Barrett Rd Patterson, NY 12563
INTERPRET DRAWING AS MIL-STD-100 UNLESS OTHERWISE SPECIFIED AS MIL-AS-114-SM-2009	CHK CS	DATE 2/11/2019			
PARENTHETICAL TEXT FOR REFERENCE ONLY	ENGR	DATE			
DIMENSIONAL LIMITS APPLY BEFORE PROCESSES					
TOLERANCES					
ANGLES $\pm 2^\circ$					
3 RL ± 0.005					
2 RL ± 0.012					
REMOVE ALL BURRS AND SHARP EDGES R0.01 MAX					
CONCENTRICITY MACHINED DIA. .002 FIM					
MACHINE TOOL MISMATCH .003 MAX					
NEXT ASSY USED ON	MRGR QA	DATE	SIZE	CAGE CODE	DWG NO.
APPLICATION	THIRD ANGLE PROJECTION		B	10018-500	REV E
	RELEASE DATE	SCALE 1:1			
					SHEET 1 OF 1

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