

## PRODUCT DATA SHEET

C6504

**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: 123 - 133 MHz  
 Power: 2250 W CW  
 Coupling:  $50 \pm 1.0$  dB Max.  
 Insertion Loss: 0.15 dB Max.  
 Flatness:  $\pm 0.5$  dB Max.  
 VSWR (ML): 1.20:1 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: 6.0 x 3.0 x 1.09"

### Connector Configurations:

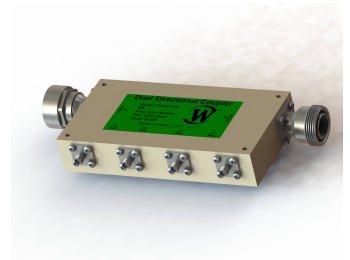
Model	Input (J1)	Output (J2)	Fwd (J3)	Rev (J4)
C6504-22	7/16 Female	7/16 Female	SMA	SMA
C6504-728	7/16 Male	7/16 Female	SMA	SMA

**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.



# WERLATONE

Model C6504

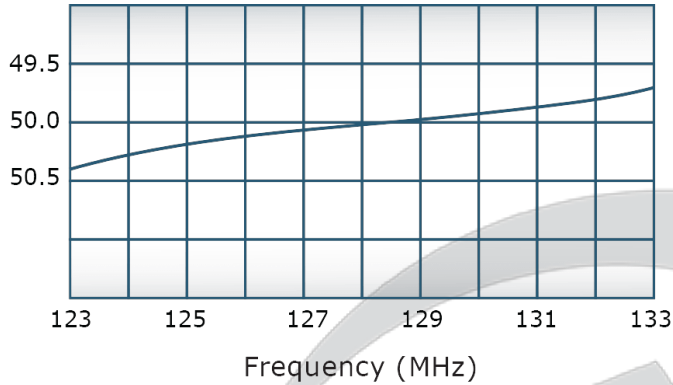


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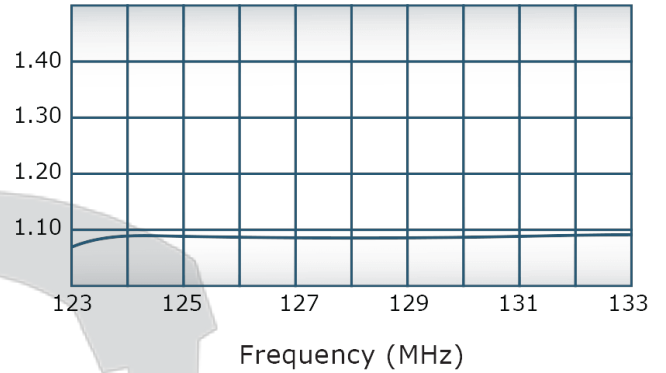
C6504

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

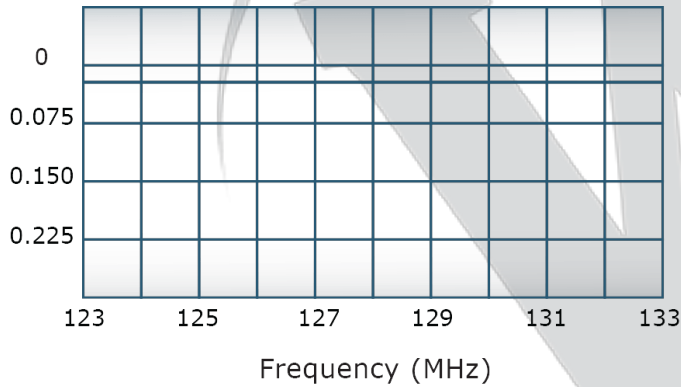
Coupling:



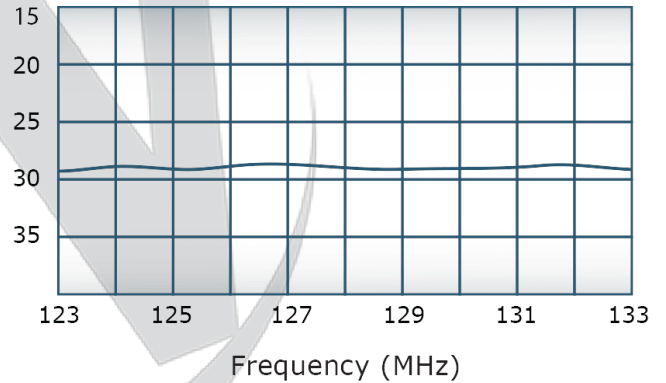
VSWR:



Insertion Loss:



Directivity:



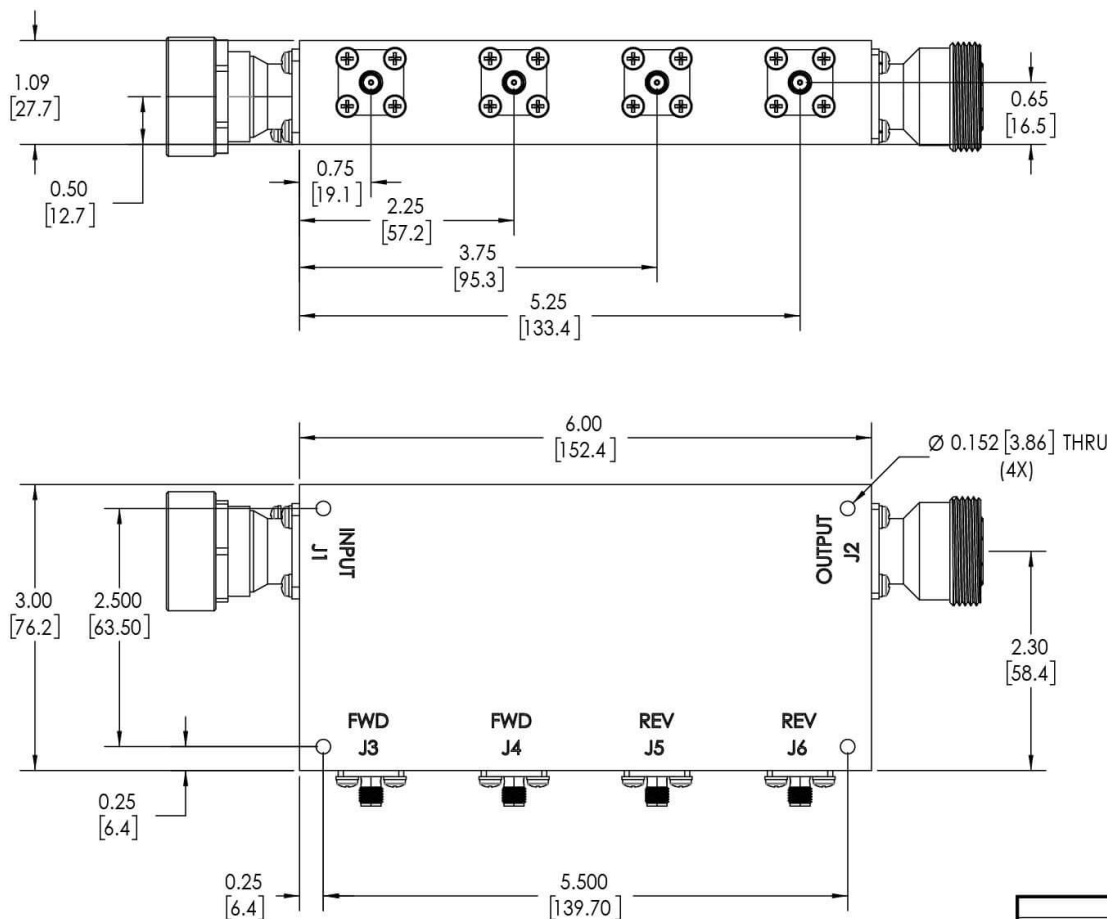
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REVISION HISTORY			
REV.	REVISION RECORD	DATE	APPROVED
A	ECN 2034	6/12/2001	CS
B	ECN 9696	6/18/2019	RB

- NOTES: UNLESS OTHERWISE SPECIFIED**
- MATERIAL: ALUMINUM 6061-T6**
  - FINISH: CHEM FILM PER MIL-DTL-5541F TYPE I CLASS 3 (YELLOW IRIDITE)**
  - CONNECTORS:**  
**J1: 7/16 MALE**  
**J2: 7/16 FEMALE**  
**J3-J6: SMA FEMALE**



UNLESS OTHERWISE SPECIFIED			
INTERPRET DRAWING IN ACCORDANCE WITH MIL-STD-100	DATE	6/18/2019	SD
DIMENSIONS FOR ASSEMBLY SHALL BE IN INCHES	DATE	6/18/2019	CHK
PARENTHESES ARE FOR REFERENCE ONLY	DATE	6/18/2019	CS
DIMENSIONS ARE IN INCHES	DATE	6/18/2019	ENGR
DIMENSIONAL LIMITS APPLY BEFORE PROCESSES	DATE	6/18/2019	INFR
TOLERANCES:	DATE	6/18/2019	QA
ANGLES ± 2°	DATE	6/18/2019	RLSE
3 PL ± .005 [13]	DATE	6/18/2019	
2 PL ± .015 [38]	DATE	6/18/2019	
REMOVE ALL BURRS AND SHARP EDGES R.01 MAX	DATE	6/18/2019	
CONCENTRICITY MACHINED DIA. .002 FIM	DATE	6/18/2019	
MACHINE TOOL MISMATCH .003 MAX	DATE	6/18/2019	
THIRD ANGLE PROJECTION	DATE	6/18/2019	
NEXT ASSY	USED ON	APPLICATION	

WERLATONE SINCE 1965			
17 Jon Barrett Rd Patterson, NY 12563			
TITLE			
OUTLINE			
SIZE	CAGE CODE	DWG NO	REV
B		10750-500	B
SCALE	SHEET 1 OF 1		
1:1.25			

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