



PRODUCT DATA SHEET

C6981

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: 10 - 100 MHz
Power: 5000 W CW
Coupling: 50 ± 1.0 dB Max.
Insertion Loss: 0.1 dB Max.
Flatness: ± 0.5 dB Max.
VSWR (ML): 1.10:1 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 2.24"

Connector Configurations:

Model	Input (J1)	Output (J2)	Fwd (J3)	Rev (J4)
C6981-20	7/16 Female	7/16 Female	N Female	N Female
C6981-30	LC Female	LC Female	N Female	N Female
C6981-33	LC Female	LC Female	BNC	BNC
C6981-391	LC Male	LC Female	N Female	N Female
C6981-503	SQS Female	SQS Female	BNC	BNC
C6981-7503	SQS Male	SQS Female	BNC	BNC
C6981-QC-4	QC Block	SQS 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.

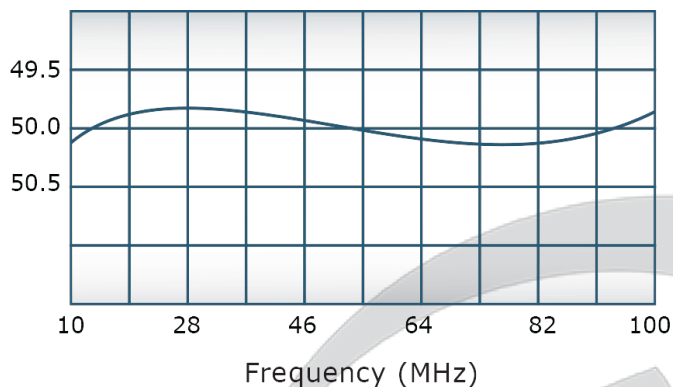


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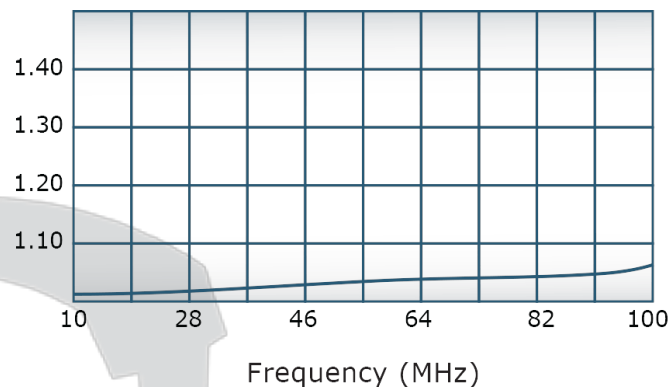
C6981

Performance Data (Specifications subject to change without notice):

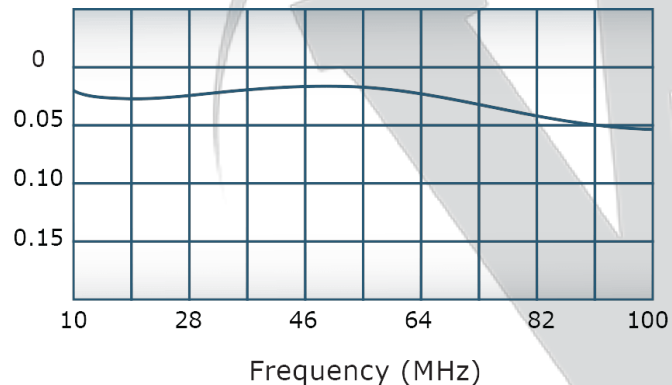
Coupling:



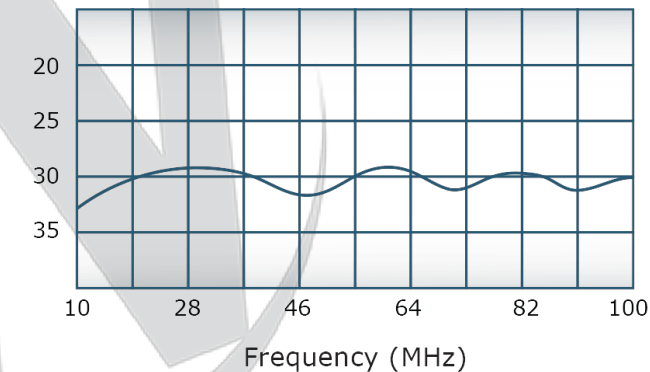
VSWR:



Insertion Loss:

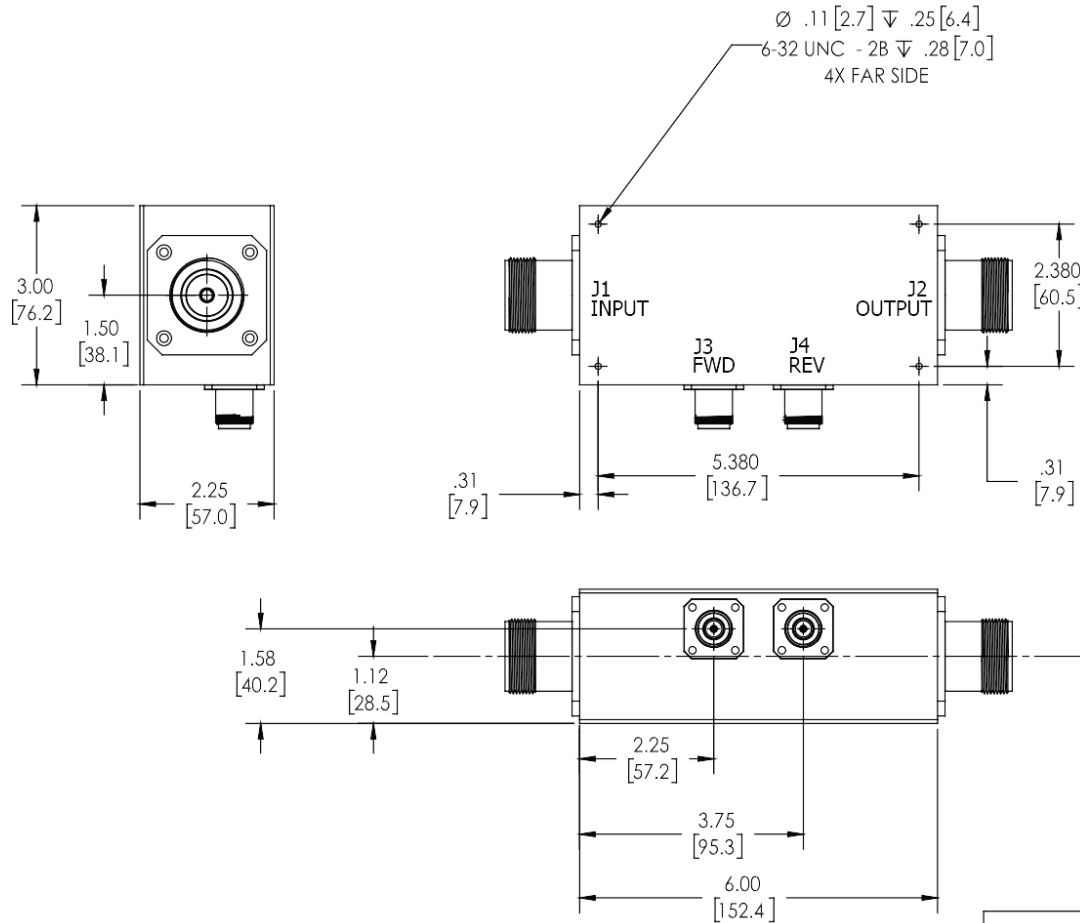


Directivity:



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REVISION HISTORY			
REV.	REVISION RECORD	DATE	APPROVED
-	INITIAL RELEASE	10/29/2018	CS



		UNLESS OTHERWISE SPECIFIED		OWN	DATE	17 Jon Barrett Rd Patterson, NY 12563	
		• INTERPRET DRAWING JAW MIL-STD-100		PLP	10/25/2018	WERLATON SINCE 1965	
		• DIMENSIONING PER ASME Y14.5M-2009		CHK	DATE		
		• PRELIMINARY DIMS FOR REF ONLY		CS	10/29/2018	TITLE	
		• DIMENSIONS ARE IN INCHES (mm)		ENGR	DATE	SIZE CASE CODE DWG NO	
		• DIMENSIONAL UNITS APPLY BEFORE PROCESSES		INFR	DATE		
		• TOLERANCES:		QA	DATE	B 28812 10396-500	
		ANGLES: ± 2°		RLSE	DATE		
		2 PL ± .005 (1.3)					
		2 PL ± .015 (4)					
		• REMOVE ALL BURRS AND SHARP EDGES R.03 MAX		SCALE 1:2			
		• CONCENTRICITY MACHINED DIA: .002 FIM					
		• MACHINE TOOL REPAIR: .003 MAX					
NEXT ACTION USED ON		THIRD ANGLE PROJECTION					

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