
PRODUCT DATA SHEET
C10270

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: 1000 - 2000 MHz
Power: 5000 W CW
Coupling: 50 ± 1.0 dB Max.
Insertion Loss: 0.2 dB Max.
Flatness: ± 0.5 dB Max.
VSWR (ML): 1.30:1 Max.
Directivity: 20 dB Min.

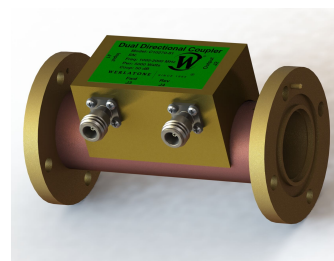
Mechanical Specifications:

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: 6" Line Section

Connector Configurations:

Model	Input (J1)	Output (J2)	Fwd (J3)	Rev (J4)
C10270-81	1 5/8" EIA	1 5/8" EIA	N Female	N Female
C10270-83	1 5/8" EIA	1 5/8" EIA	SMA	SMA
C10270-84	1 5/8" EIA	1 5/8" EIA	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.

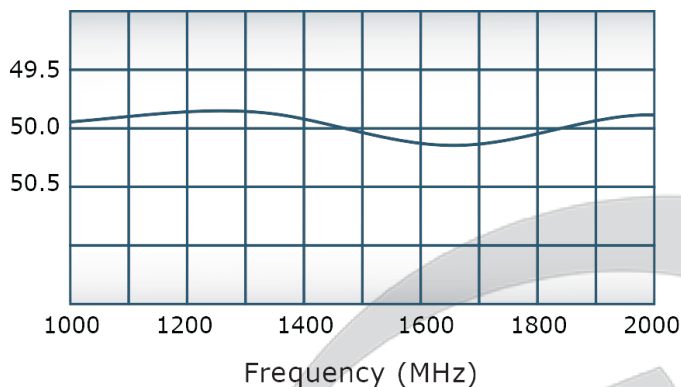


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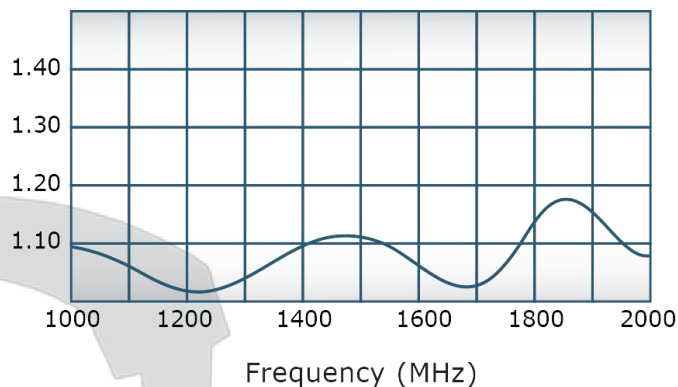
C10270

Performance Data (Specifications subject to change without notice):

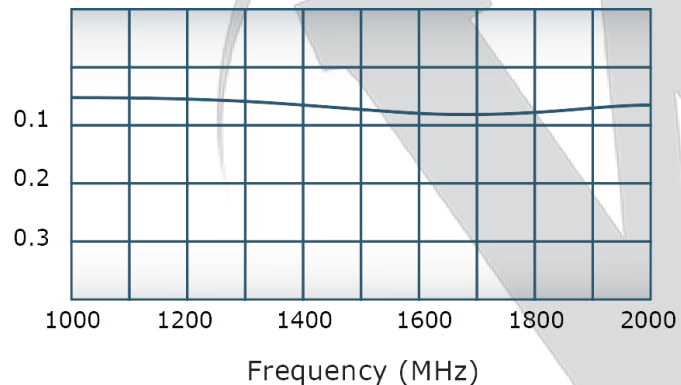
Coupling:



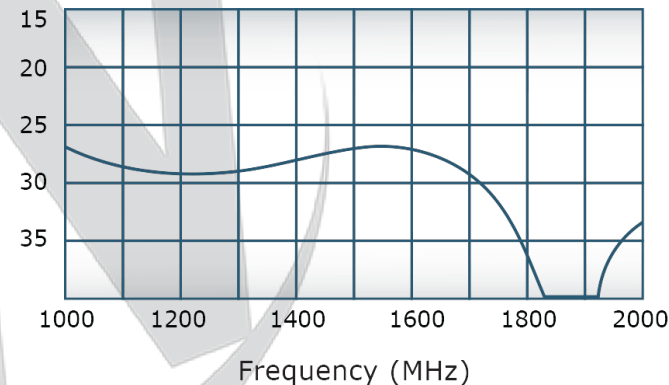
VSWR:



Insertion Loss:



Directivity:



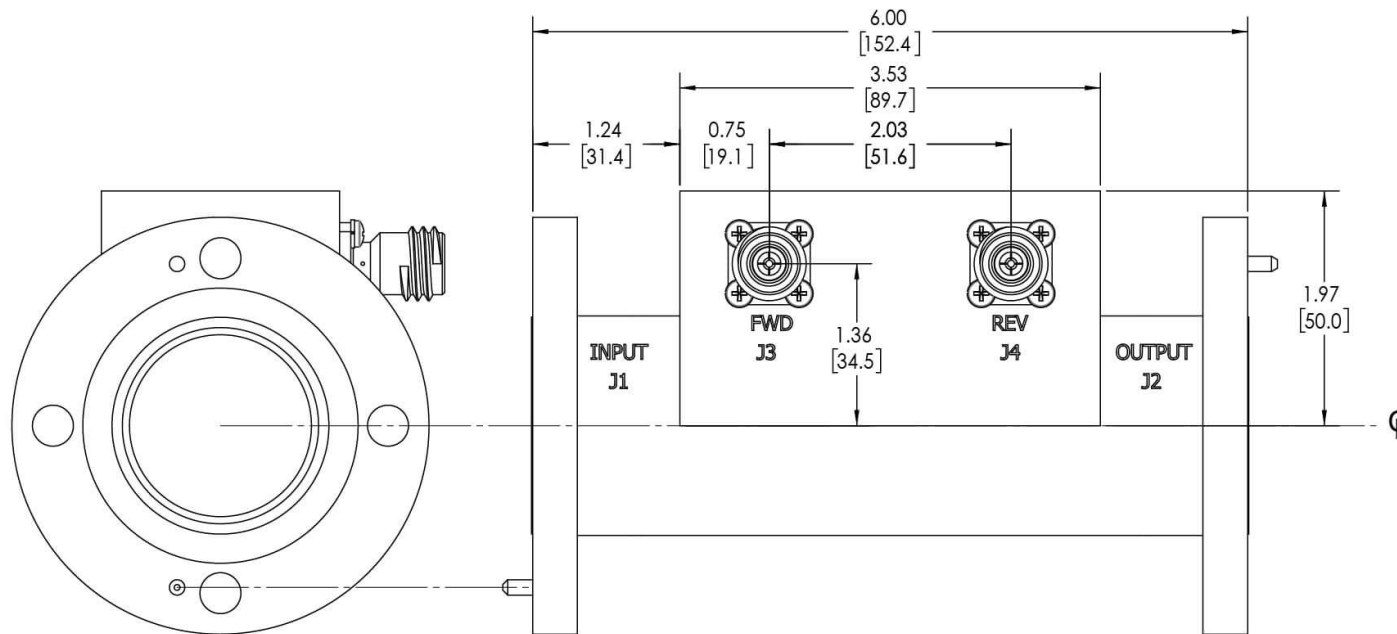
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REVISION HISTORY			
REV.	REVISION RECORD	DATE	APPROVED
A	ECN 9696	11/29/18	RB

NOTES:
 1. **CONNECTORS:**
 J1, J2: 1 5/8 EIA STANDARD
 J3, J4: N FEMALE



		UNLESS OTHERWISE SPECIFIED		OWN	DATE	 WERLATONE SINCE 1965		17 Jon Barrett Rd Patterson, NY 12563	
		INTERPRET DRAWING IN ACCORDANCE WITH MIL-STD-100		SD	2/11/2019				
		DIMENSIONS FOR ASME Y14.5M-2009		CHK	DATE				
		PARENTHESES FOR REF ONLY		CS	2/11/2019	TITLE			
		DIMENSIONS ARE IN INCHES		ENGR	DATE				
		DIMENSIONAL LIMITS APPLY BEFORE PROCESSES		DK	8/4/1992				
		TOLERANCES:		INFR	DATE	OUTLINE			
		ANGLES ± 2°							
		3 PL ± .005 [13]							
		2 PL ± .015 [38]							
		REMOVE ALL BURRS AND SHARP EDGES R.01 MAX		QA	DATE	SIZE	CAGE CODE	DWG NO	REV
		CONCENTRICITY MACHINED DIA: .002 FIM				B		10093-501	A
		MACHINE TOOL MISMATCH .003 MAX		RLSE	DATE	SCALE			
NEXT ASSY		USED ON				1:1			SHEET 1 OF 1
APPLICATION		THIRD ANGLE PROJECTION							

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