

PRODUCT DATA SHEET

C5959

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: 0.1 - 30 MHz
Power: 500 W CW
Coupling: 40 ± 1.0 dB Max.
Insertion Loss: 0.1 dB Max.
Flatness: ± 0.75 dB Max. (0.1-0.5 MHz) ± 0.5 dB (0.5-30 MHz)
VSWR (ML): 1.25:1 Max. (0.1-0.5 MHz) 1.05:1 Max. (0.5-30 MHz)
Directivity: 20 dB Min.

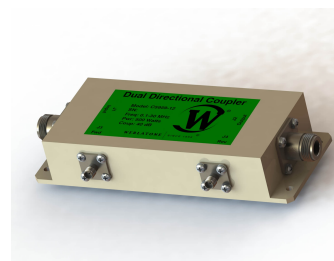
Mechanical Specifications:

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: 6.46 x 2.52 x 1.2"

Connector Configurations:

Model	Input (J1)	Output (J2)	Fwd (J3)	Rev (J4)
C5959-10	N Female	N Female	N Female	N Female
C5959-12	N Female	N Female	SMA	SMA
C5959-13	N Female	N 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.

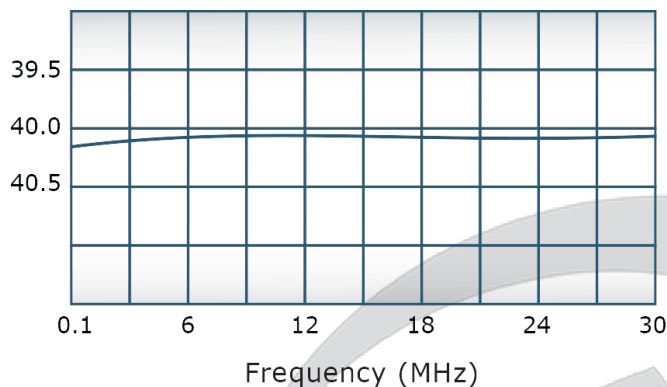


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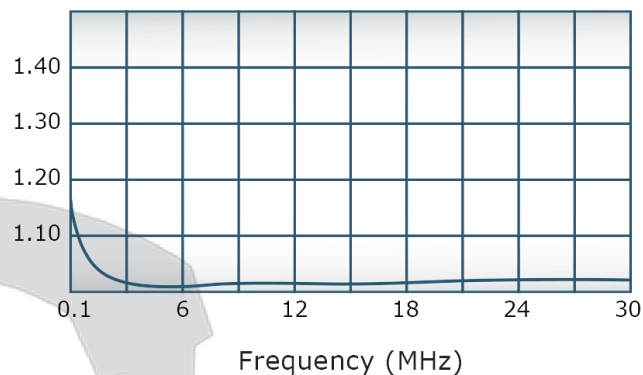
C5959

Performance Data (Specifications subject to change without notice):

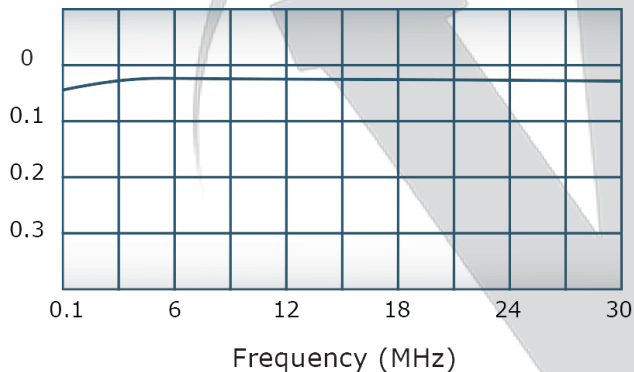
Coupling:



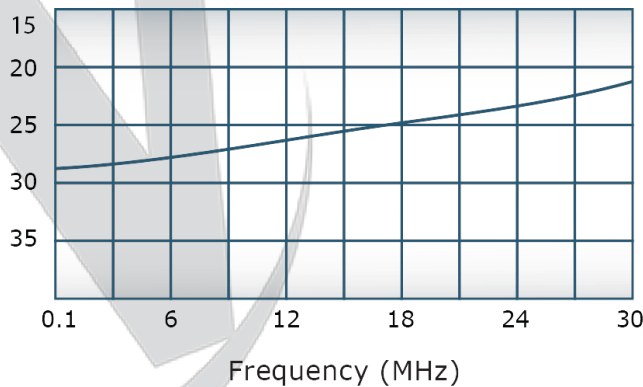
VSWR:



Insertion Loss:



Directivity:

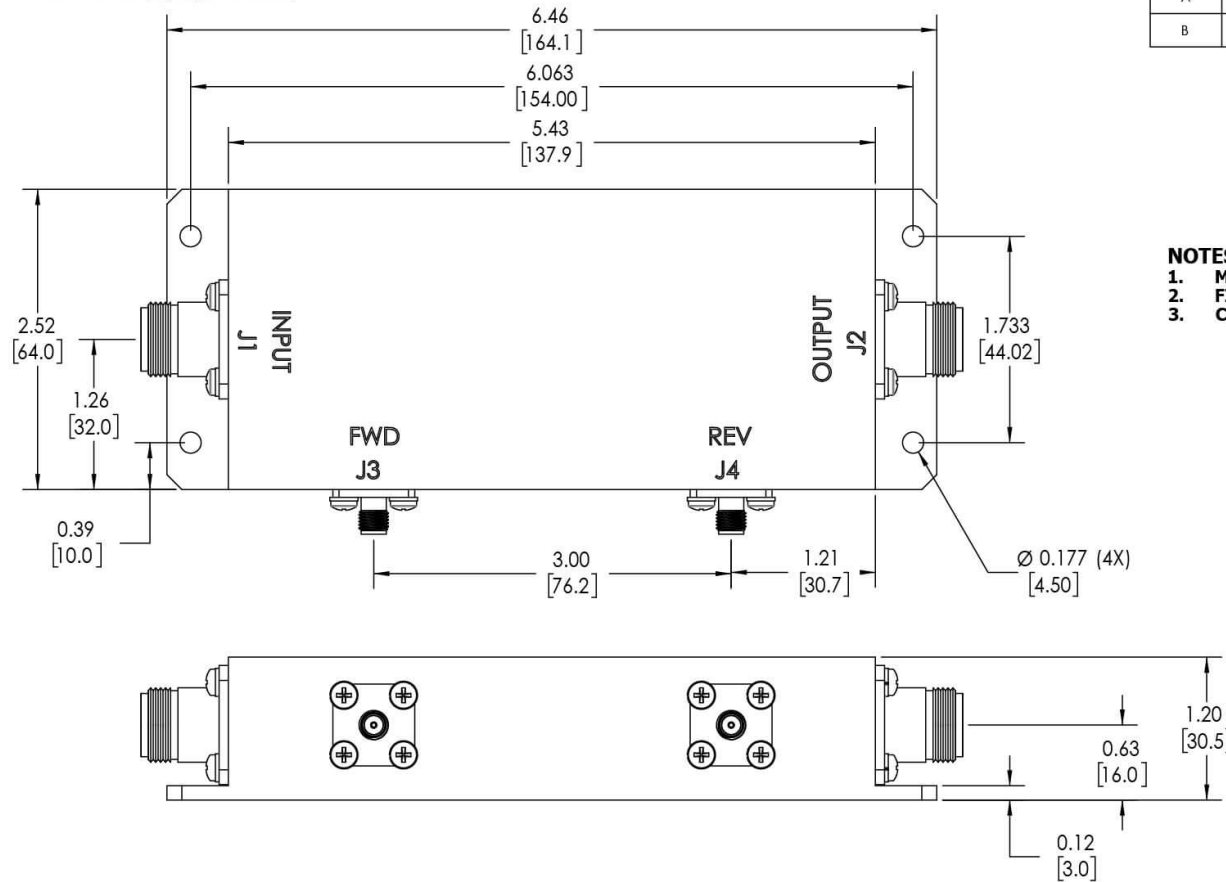


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REVISION HISTORY			
REV.	REVISION RECORD	DATE	APPROVED
A	ECN 1968	3/7/01	BW
B	ECN 9696	3/25/19	RB

NOTES: UNLESS OTHERWISE SPECIFIED

- MATERIAL: ALUMINUM 6061-T6**
- FINISH: CHEM FILM PER MIL-DTL-5541F TYPE I CLASS 3 (YELLOW IRIDITE)**
- CONNECTORS:**
J1, J2: N FEMALE
J3, J4: SMA FEMALE



UNLESS OTHERWISE SPECIFIED		DATE	3/25/2019
INTERPRET DRAWING IN ACCORDANCE WITH MIL-STD-100	SD	DATE	3/25/2019
DIMENSIONS FOR ASME Y14.5M-2009	CHK	DATE	3/25/2019
PARENTHESES FOR REF ONLY	CS	DATE	3/25/2019
DIMENSIONS ARE IN INCHES	ENGR	DATE	
DIMENSIONAL LIMITS APPLY BEFORE PROCESSES	INFR	DATE	
TOLERANCES:	QA	DATE	
ANGLES ± 2°	RLSE	DATE	
3 PL ± .005 [.13]			
2 PL ± .015 [.38]			
REMOVE ALL BURRS AND SHARP EDGES R.01 MAX			
CONCENTRICITY MACHINED DIA. .002 FIM			
MACHINE TOOL MISMATCH .003 MAX			
THIRD ANGLE PROJECTION			
NEXT ASSY USED ON APPLICATION			
TITLE		DATE	3/25/2019
SIZE		CAGE CODE	10194-500
SCALE		DWG NO	10194-500
1:1		REV	B
SHEET 1 OF 1			

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Werlatone, Inc. 17 Jon Barrett Road Patterson, NY 12563 T:(845)278-2220 F:(845)278-3440 sales@werlatone.com www.werlatone.com