

PRODUCT DATA SHEET

C5100

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: 0.01 - 250 MHz
 Power: 500 W CW
 Coupling: 40 ± 1.0 dB Max.
 Insertion Loss: 0.4 dB Max.
 Flatness: ± 0.75 dB Max.
 VSWR (ML): 1.25:1 Max.
 Directivity: 20 dB Min.

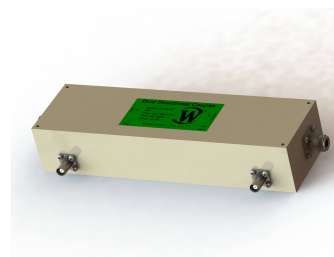
Mechanical Specifications:

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: 10.5 x 3.0 x 2.0"

Connector Configurations:

Model	Input (J1)	Output (J2)	Fwd (J3)	Rev (J4)
C5100-10	N Female	N Female	N Female	N Female
C5100-12	N Female	N Female	SMA	SMA
C5100-13	N Female	N Female	BNC	BNC
C5100-20	7/16 Female	7/16 Female	N Female	SMA
C5100-614	N Female	7/16 Female	SMA	SMA
C5100-727	7/16 Male	7/16 Female	N Female	N Female

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.

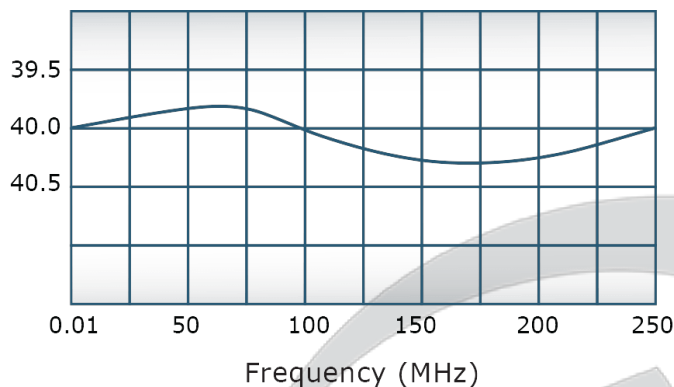


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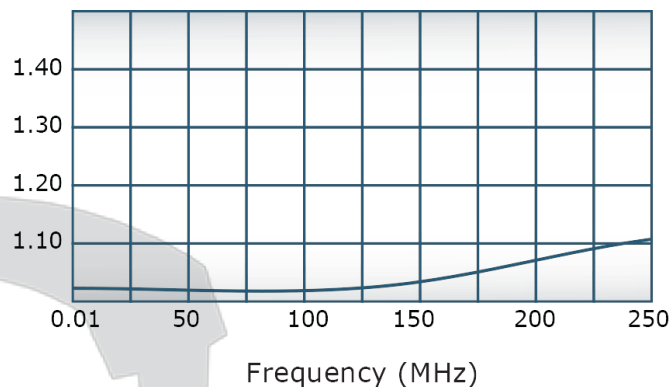
C5100

Performance Data (Specifications subject to change without notice):

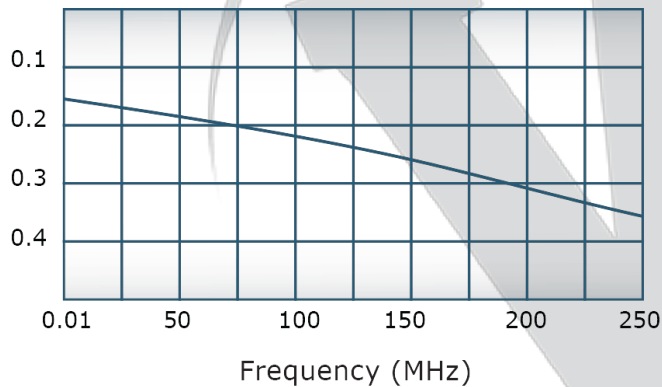
Coupling:



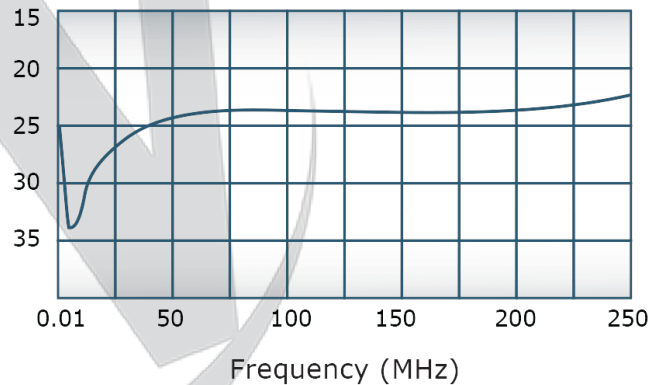
VSWR:



Insertion Loss:



Directivity:

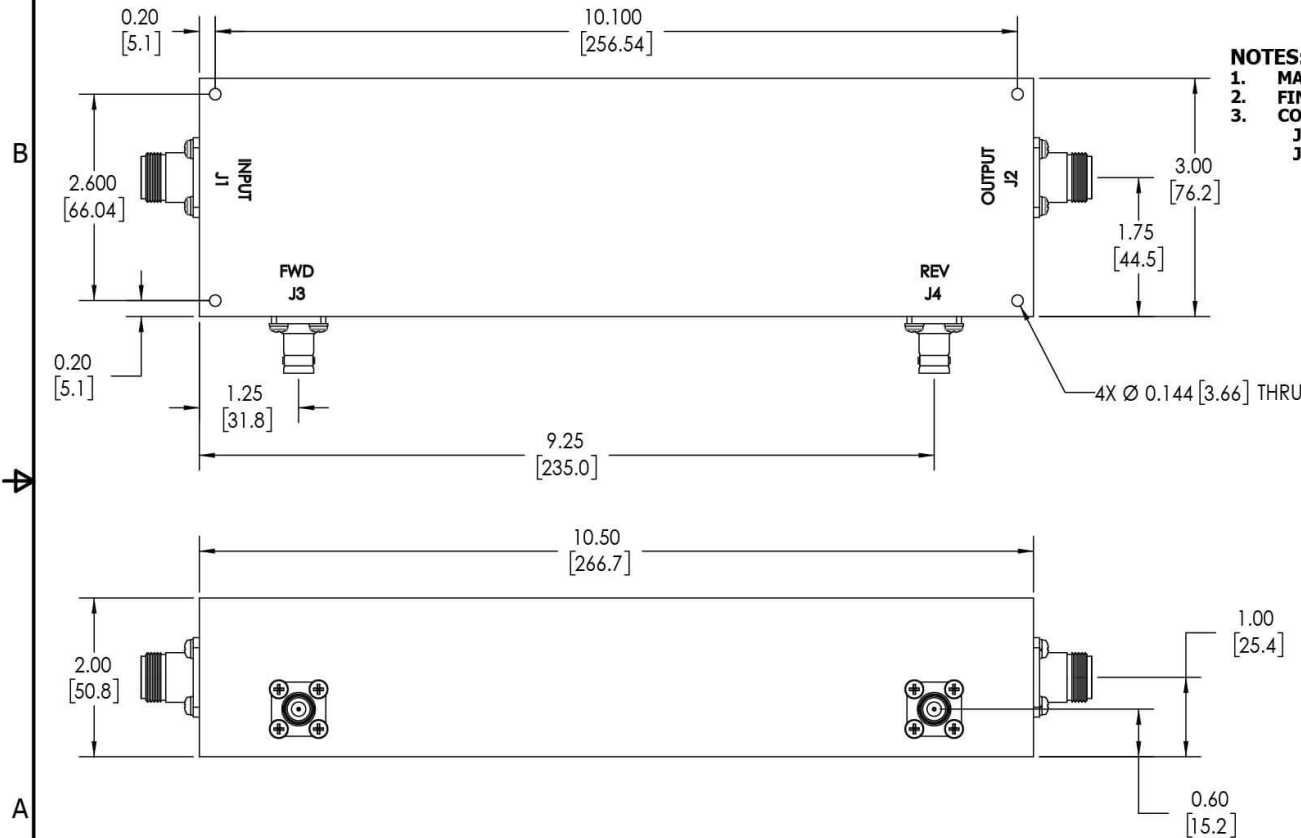


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REVISION HISTORY			
REV.	REVISION RECORD	DATE	APPROVED
A	ECN 9696	5/13/2019	RB

NOTES: UNLESS OTHERWISE SPECIFIED

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



UNLESS OTHERWISE SPECIFIED		OWN	DATE	WERLATONE SINCE 1965 17 Jon Barrett Rd Patterson, NY 12563
INTERPRET DRAWING IN ACCORDANCE WITH MIL-STD-100	CHK	SD	5/13/2019	
DIMENSIONS FOR ASME Y14.5M-2009	CS	DATE	5/13/2019	
PARENTHESES FOR REF ONLY	ENGR	DATE		
DIMENSIONS ARE IN INCHES	INFR	DATE		
DIMENSIONAL LIMITS APPLY BEFORE PROCESSES	QA	DATE		OUTLINE SIZE CAGE CODE DWG NO B 10449-500 SCALE: 1:1.5 SHEET 1 OF 1
TOLERANCES:	RLSE	DATE		
ANGLES ± 2°				
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				

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