

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"

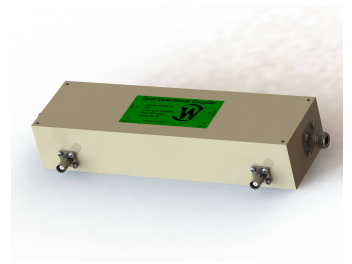
Connector Configurations:

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.

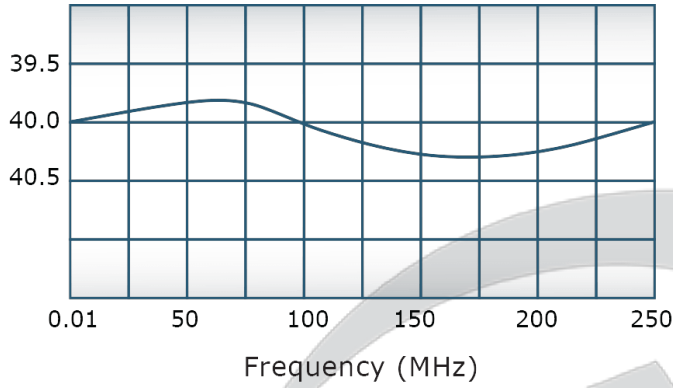
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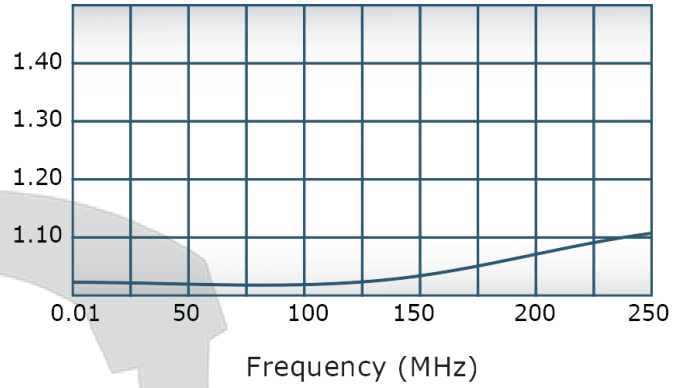


Performance Data (Specifications subject to change without notice):

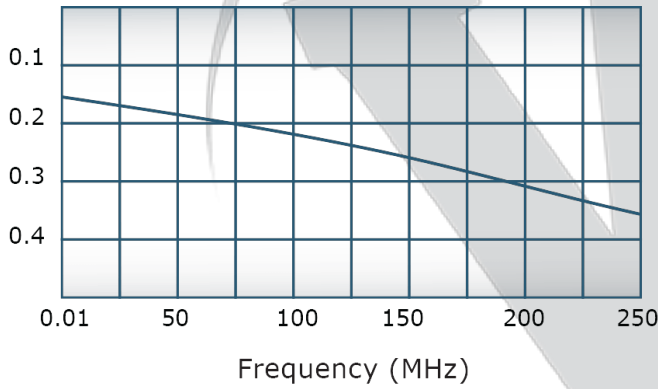
Coupling:



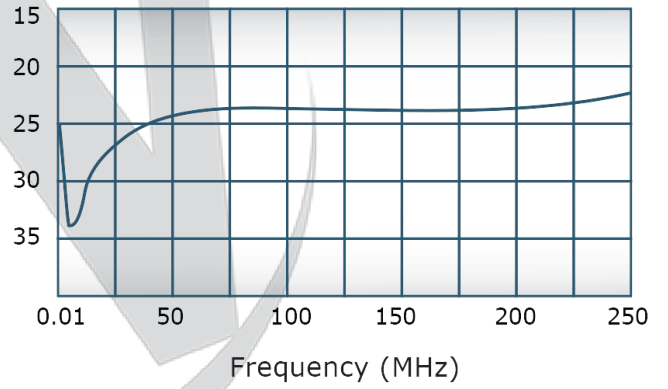
VSWR:



Insertion Loss:



Directivity:



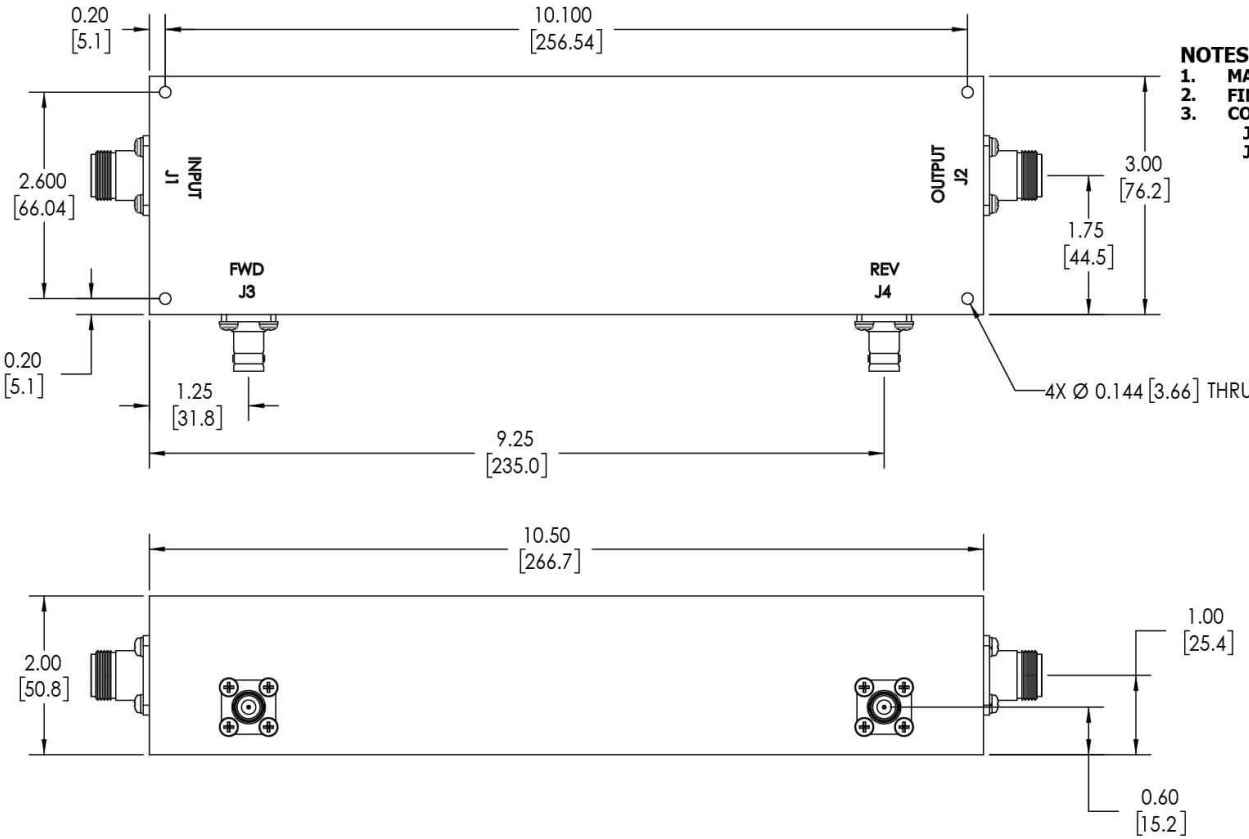
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REVISION HISTORY			
REV.	REVISION RECORD	DATE	APPROVED
A	ECN 9696	5/13/2019	RB



NOTES: UNLESS OTHERWISE SPECIFIED
 1. MATERIAL: ALUMINUM 6061-T6
 2. FINISH: CHEM FILM PER MIL-DTL-5541F TYPE I CLASS 3 (YELLOW IRIDITE)
 3. CONNECTORS:
 J1-J2: N FEMALE
 J3-J4: BNC FEMALE

UNLESS OTHERWISE SPECIFIED		DWN	DATE	17 Jon Barrett Rd Patterson, NY 12563
INTERPRET DRAWING IN ACCORDANCE WITH MIL-STD-100		SD	5/13/2019	WERLATONE SINCE 1965
DIMENSIONS PER ASME Y14.5M-2009		CHK	DATE	
PARENTHEetical INFO FOR REF ONLY		CS	5/13/2019	TITLE
DIMENSIONS ARE IN INCHES		ENGR	DATE	OUTLINE
DIMENSIONAL LIMITS APPLY BEFORE PROCESSES		INFR	DATE	SIZE CAGE CODE DWG NO
TOLERANCES:		QA	DATE	B 10449-500
ANGLES ± 2°		RLSE	DATE	REV
3 PL ± .005 [1.3]				A
2 PL ± .015 [3.8]				
REMOVE ALL BURRS AND SHARP EDGES R.01 MAX				
CONCENTRICITY MACHINED DIA: .002 FIM				
MACHINE TOOL MISMATCH .003 MAX.				
NEXT ASSY	USED ON	APPLICATION		THIRD ANGLE PROJECTION
				SCALE: 1:1.5
				SHEET 1 OF 1

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