


PRODUCT DATA SHEET
C5081

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 - 1000 MHz
Power: 200 W CW
Coupling: 40 ± 1.0 dB Max.
Insertion Loss: 0.6 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: 5.2 x 2.67 x 1.69"

Port Configurations:

Model	Input (J1)	Output (J2)	Fwd (J3)	Rev (J4)
C5081-10	N Female	N Female	N Female	N Female
C5081-12	N Female	N Female	SMA	SMA
C5081-13	N Female	N Female	BNC	BNC
C5081-102	SMA	SMA	SMA	SMA
C5081-714	N Male	N Female	N Female	N Female
C5081-727	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.



WERLATONE

Model C5081

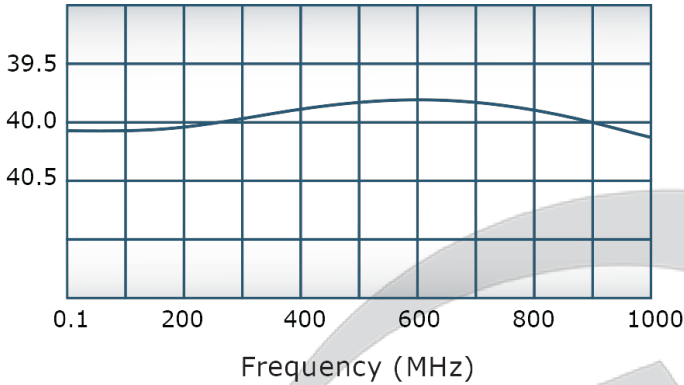


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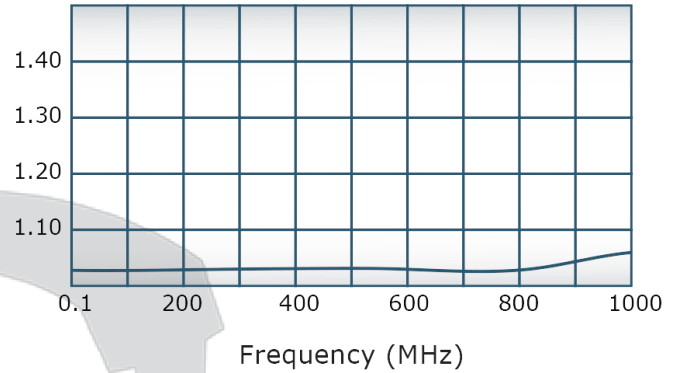
C5081

Performance Data (Specifications subject to change without notice):

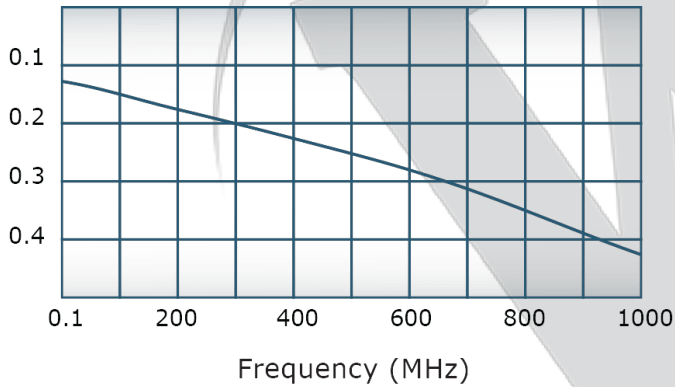
Coupling:



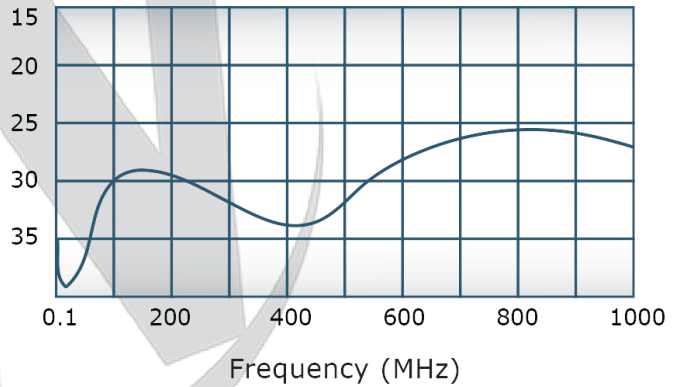
VSWR:



Insertion Loss:



Directivity:



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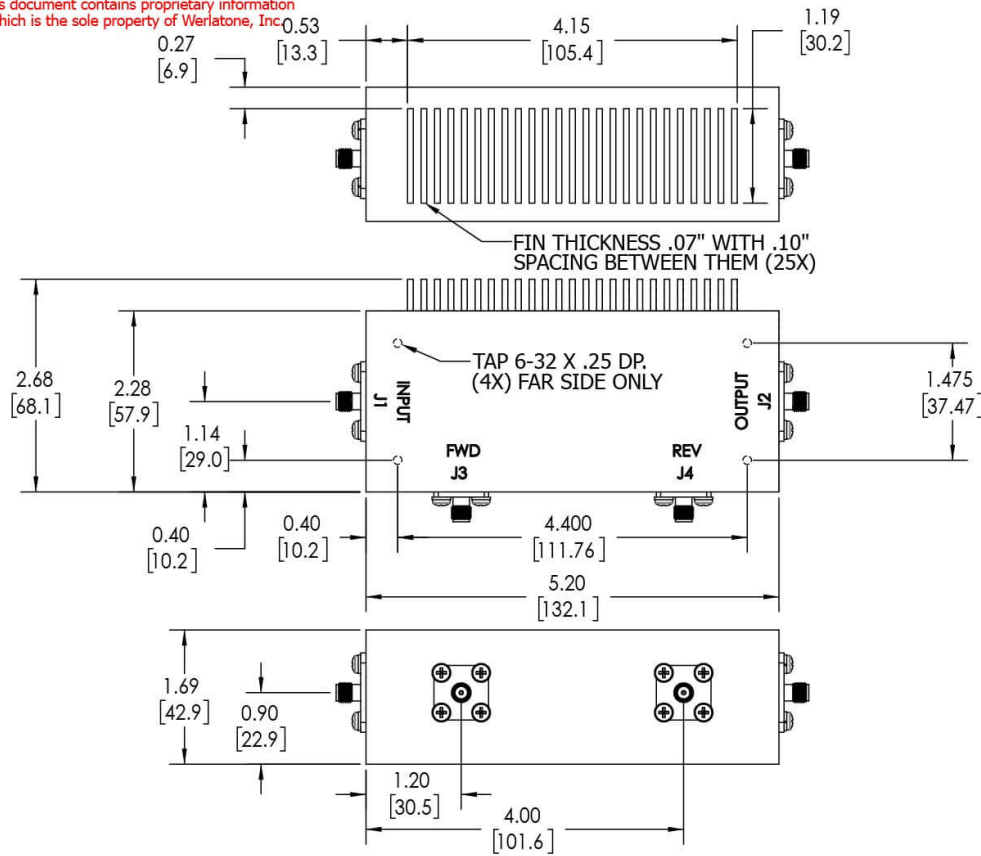
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REVISION HISTORY			
REV.	REVISION RECORD	DATE	APPROVED
A	ECN 9696	11/28/18	RB

NOTES: UNLESS OTHERWISE SPECIFIED

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



UNLESS OTHERWISE SPECIFIED		DATE	2/11/2019	17 Jon Barrett Rd Patterson, NY 12563
INTERPRET DRAWING IN ACCORDANCE WITH MIL-STD-100		DATE	2/11/2019	
DIMENSIONS FOR ASSEMBLY		DATE	2/11/2019	TITLE
PARENTHESES ARE IN INCHES		DATE	2/11/2019	
DIMENSIONAL LIMITS APPLY BEFORE PROCESSES		DATE	2/11/2019	SIZE
TOLERANCES:		DATE	2/11/2019	
ANGLES ± 2°		DATE	2/11/2019	CAGE CODE
3 PL ± .005 [13]		DATE	2/11/2019	
2 PL ± .015 [38]		DATE	2/11/2019	DWG NO
REMOVE ALL BURRS AND SHARP EDGES R.01 MAX		DATE	2/11/2019	
CONCENTRICITY MACHINED DIA. .002 FIM		DATE	2/11/2019	REV
MACHINE TOOL MISMATCH .003 MAX		DATE	2/11/2019	
THIRD ANGLE PROJECTION		DATE	2/11/2019	SCALE
NEXT ASSY		DATE	2/11/2019	
USED ON		DATE	2/11/2019	SHEET 1 OF 1
APPLICATION		DATE	2/11/2019	

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