



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

Connectorized Directional Couplers

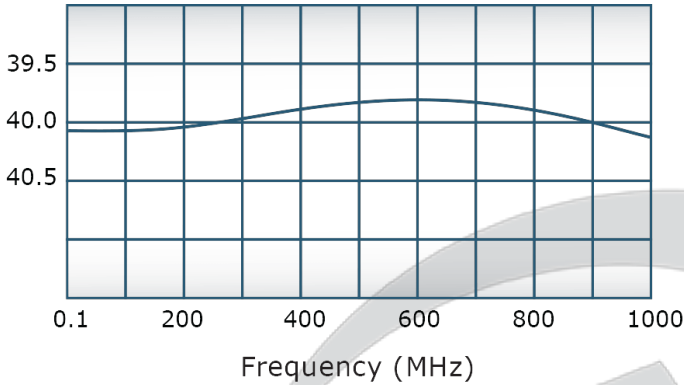


PRODUCT DATA SHEET

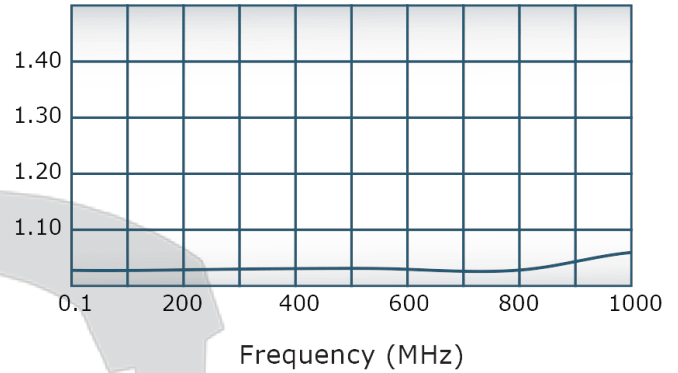
C5081

Performance Data (Specifications subject to change without notice):

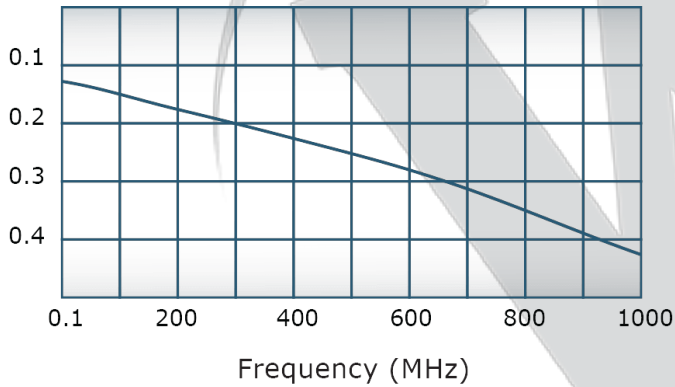
Coupling:



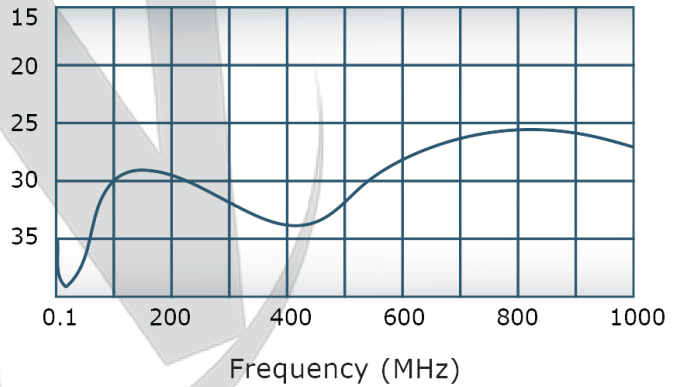
VSWR:



Insertion Loss:



Directivity:



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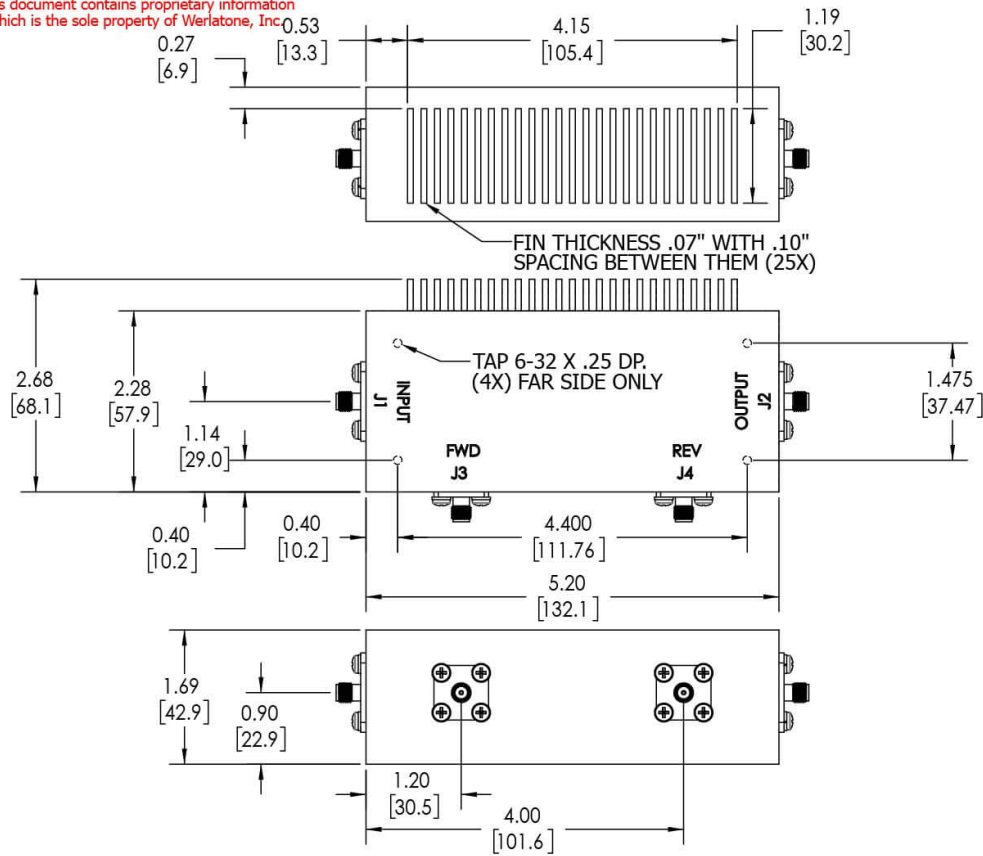
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REVISION HISTORY			
REV.	REVISION RECORD	DATE	APPROVED
A	ECN 9696	11/28/18	RB

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		OWN	DATE	 WERLATONE SINCE 1965	17 Jon Barrett Rd Patterson, NY 12563		
INTERPRET DRAWING IN ACCORDANCE WITH MIL-STD-100 DIMENSIONS PER ASME Y14.5M-2009 PARENTHESES ARE IN INCHES DIMENSIONS ARE IN INCHES DIMENSIONAL LIMITS APPLY BEFORE PROCESSES TOLERANCES: 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		SD	2/11/2019				
NEXT ASSY		CHK	DATE	TITLE			
USED ON		CS	2/11/2019				
APPLICATION		ENGR	DATE	OUTLINE			
THIRD ANGLE PROJECTION 		MRGR	DATE	SIZE	CAGE CODE	DWG NO	REV
		QA	DATE	B		10407-501	A
		RLSE	DATE	SCALE	1:1.5		SHEET 1 OF 1

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