
**PRODUCT DATA SHEET**
**C5681**

**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.

**Electrical Specifications:**

Frequency: 800 - 2800 MHz  
 Power: 1000 W CW \*  
 Coupling:  $40 \pm 1.0$  dB Max.  
 Insertion Loss: 0.2 dB Max.  
 Flatness:  $\pm 0.75$  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: 3.0 x 3.0 x 1.09"

**Connector Configurations:**

Model	Input (J1)	Output (J2)	Fwd (J3)	Rev (J4)
C5681-10	N Female	N Female	N Female	N Female
C5681-12	N Female	N Female	SMA	SMA
C5681-13	N Female	N Female	BNC	BNC
C5681-16	N Male	N Male	SMA	SMA
C5681-20*	7/16 Female	7/16 Female	N Female	N Female
C5681-22*	7/16 Female	7/16 Female	SMA	SMA
C5681-627*	7/16 Female	7/16 Male	N Female	N Female
C5681-712	N Male	N Female	SMA	SMA
C5681-714	N Male	N Female	N Female	N Female
C5681-727*	7/16 Male	7/16 Female	N Female	N Female
C5681-728*	7/16 Male	7/16 Female	SMA	SMA
C5681-7726*	7/16 Male	7/16 Male	N Female	N Female

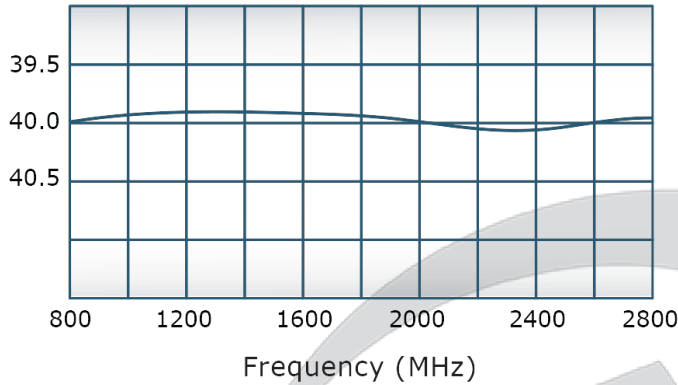
Unit is de-rated to 500 W CW with N-F mainline connectors.

7/16-F Main Line connector option increases size to 3.0 x 3.0 x 1.59"

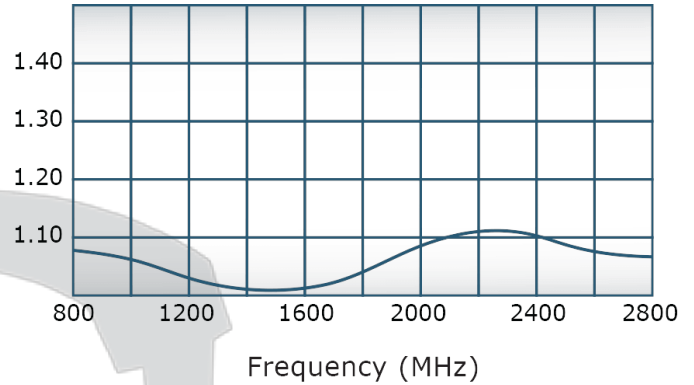


## Performance Data (Specifications subject to change without notice):

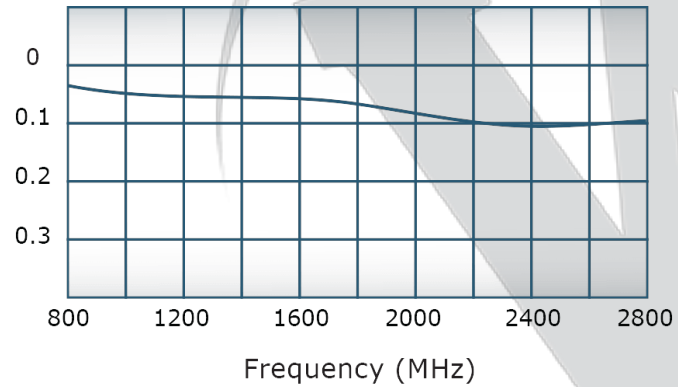
Coupling:



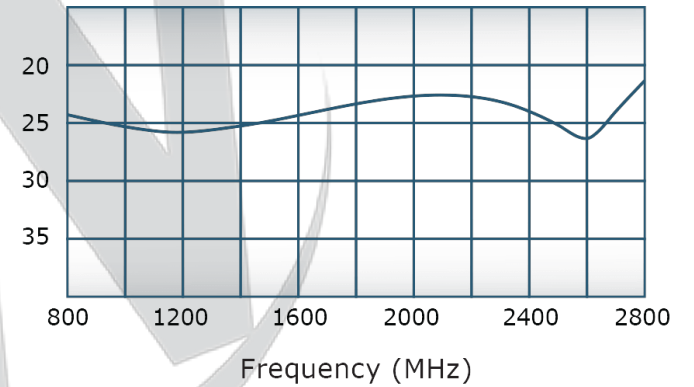
VSWR:



Insertion Loss:



Directivity:



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REVISION HISTORY			
REV.	REVISION RECORD	DATE	APPROVED
A	ECN 9696	11/27/18	RB

- NOTES: UNLESS OTHERWISE SPECIFIED**
- MATERIAL: ALUMINUM 6061-T6**
  - FINISH: CHEM FILM PER MIL-DTL\_5541F TYPE I CLASS 3 (YELLOW IRIDITE)**

UNLESS OTHERWISE SPECIFIED		OWN	DATE	<b>WERLATONE SINCE 1965</b> 17 Jon Barrett Rd Patterson, NY 12563
• INTERPRET DRAWING JAW MIL-STD-100 • DIMENSIONING PER ASME Y14.5M-2009 • PARENTHESES INFO FOR REF ONLY • DIMENSIONS ARE IN INCHES • DIMENSIONAL LIMITS APPLY BEFORE PROCESSES • TOLERANCES: ANGLES ± 2° 3 PL. ± .005 [1.3] 2 PL. ± .015 [3.8] • REMOVE ALL BURRS AND SHARP EDGES R.01 MAX • CONCENTRICITY MACHINED DIA: .002 FIM • MACHINE TOOL IMPACT: .003 MAX		CHK	DATE	
NEXT ASSY		ENGR	DATE	TITLE
USED ON		MFG	DATE	<b>OUTLINE</b>
APPLICATION		QA	DATE	SIZE
THIRD ANGLE PROJECTION		RELEASE	DATE	CAGE CODE
				DWG NO
				REV
				<b>B</b>
				10379-505
				SCALE
				<b>1:1</b>
				SHEET 1 OF 1

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