
**PRODUCT DATA SHEET**
**C5027**

**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:      80 - 1000 MHz  
 Power:          2000 W CW  
 Coupling:       60 ± 1.0 dB Max.  
 Insertion Loss: 0.1 dB Max.  
 Flatness:       ± 0.5 dB Max.  
 VSWR (ML):    1.30:1 Max.  
 Directivity:     20 dB Min.

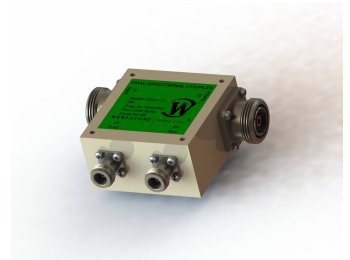
**Mechanical Specifications:**

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:              3.0 X 3.0 X 1.59"

**Connector Configurations:**

Model	Input (J1)	Output (J2)	Fwd (J3)	Rev (J4)
C5027-20	7/16 Female	7/16 Female	N Female	N Female
C5027-22	7/16 Female	7/16 Female	SMA	SMA
C5027-23	7/16 Female	7/16 Female	BNC	BNC
C5027-71	7/8" EIA	7/8" EIA	N Female	N Female
C5027-726	7/16 Male	N Female	N Female	N Female
C5027-727	7/16 Male	7/16 Female	N Female	N Female
C5027-728	7/16 Male	7/16 Female	SMA	SMA

For proper operation, unit must be mounted to a suitable heatsink capable of maintaining a unit baseplate temperature of less than or equal to +60°C.

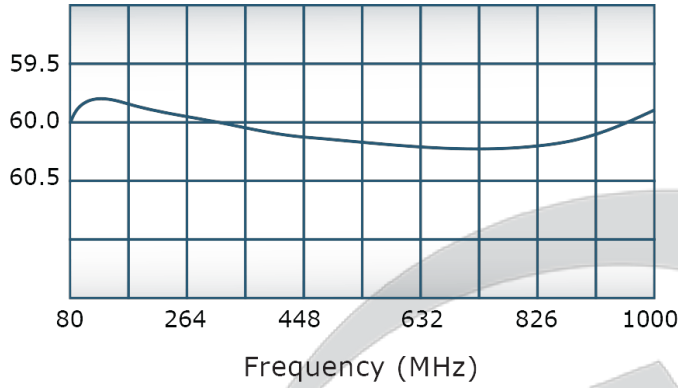


## PRODUCT DATA SHEET

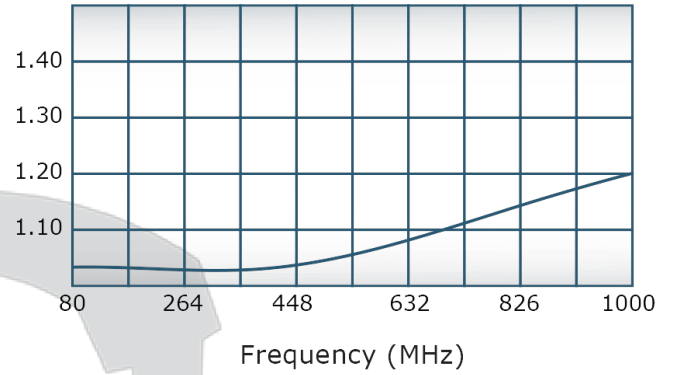
C5027

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

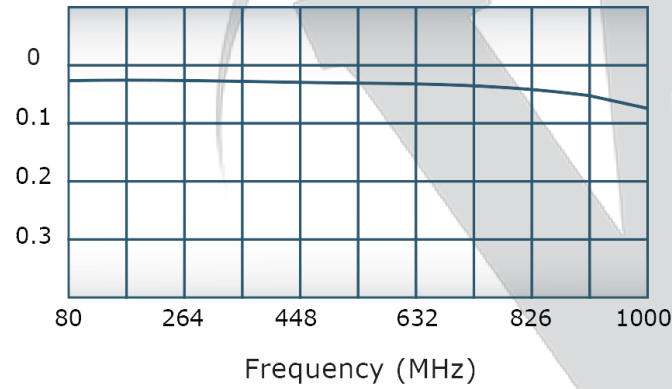
Coupling:



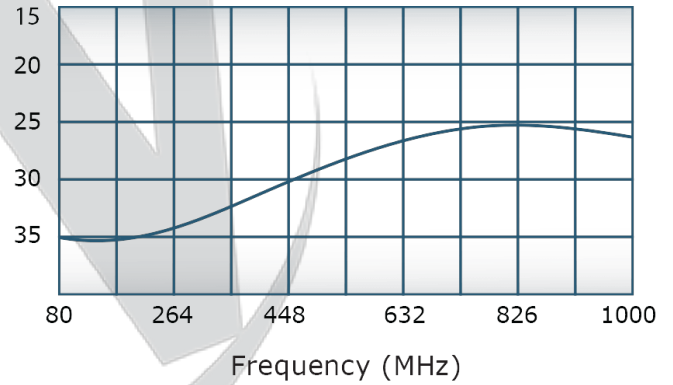
VSWR:



Insertion Loss:



Directivity:



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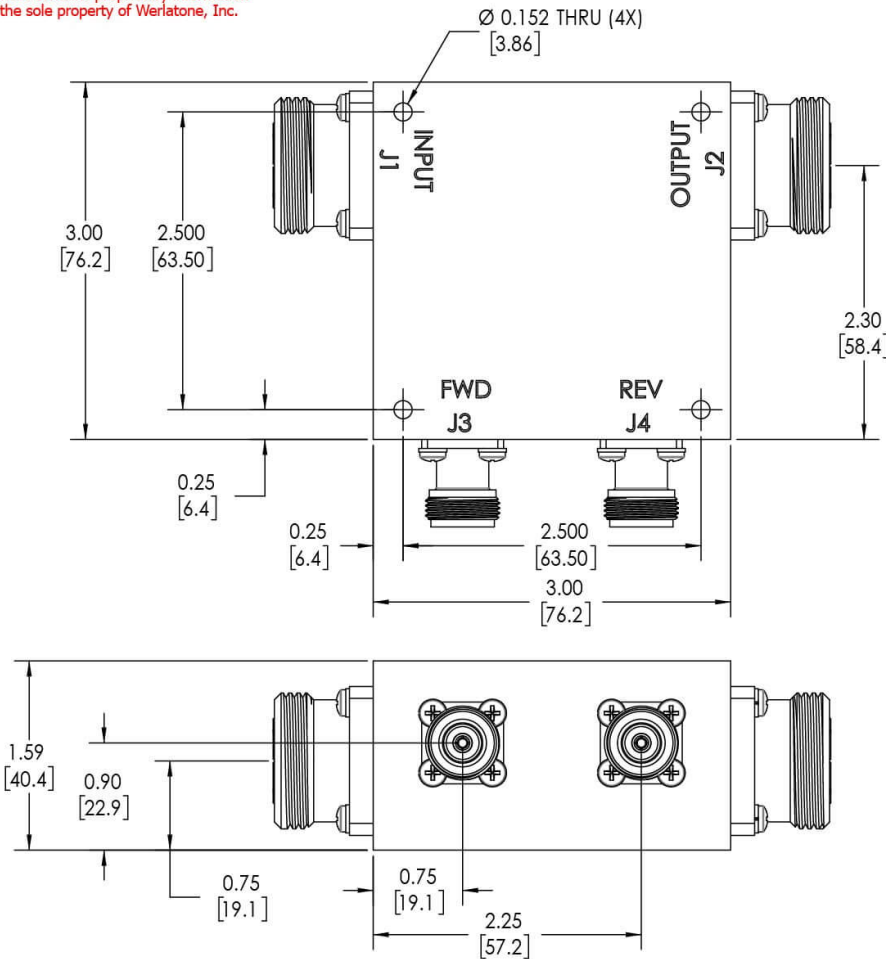
Werlatone, Inc. 17 Jon Barrett Road Patterson, NY 12563 T:(845)278-2220 F:(845)278-3440 sales@werlatone.com www.werlatone.com

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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 CLASS I TYPE 3 (YELLOW IRIDITE)**
- CONNECTORS:  
 J1, J2: 7/16 FEMALE  
 J3, J4: N FEMALE**



UNLESS OTHERWISE SPECIFIED	DWN	DATE	17 Jon Barrett Rd Patterson, NY 12563
INTERPRET DRAWING IAW MIL-STD-100	SD	5/13/2019	W 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 10443-501 A
ANGLES ± 2°	RLSE	DATE	SCALE 1:1 SHEET 1 OF 1
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.			
NEXT ASSY	USED ON	THIRD ANGLE PROJECTION	
APPLICATION			

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