



## PRODUCT DATA SHEET

C7020

**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: 127 - 129 MHz  
 Power: 2000 W CW  
 Coupling:  $60 \pm 1.0$  dB Max.  
 Insertion Loss: 0.15 dB Max.  
 Flatness:  $\pm 0.5$  dB Max.  
 VSWR (ML): 1.15:1 Max.  
 Directivity: 25 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)
C7020-20	7/16 Female	7/16 Female	N Female	N Female
C7020-22	7/16 Female	7/16 Female	SMA	SMA
C7020-23	7/16 Female	7/16 Female	BNC	BNC
C7020-729	7/16 Male	7/16 Female	BNC	BNC

**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 C7020

Connectorized Directional Couplers

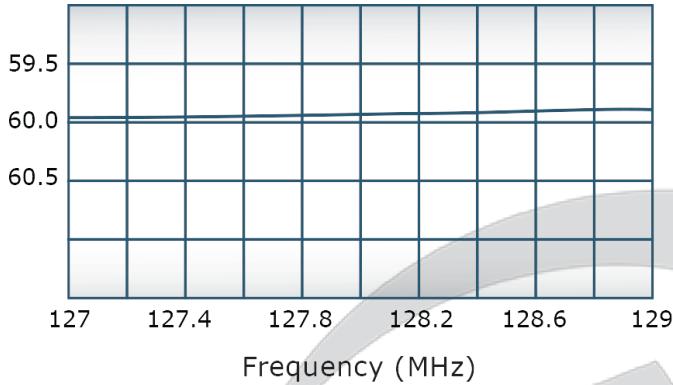


## PRODUCT DATA SHEET

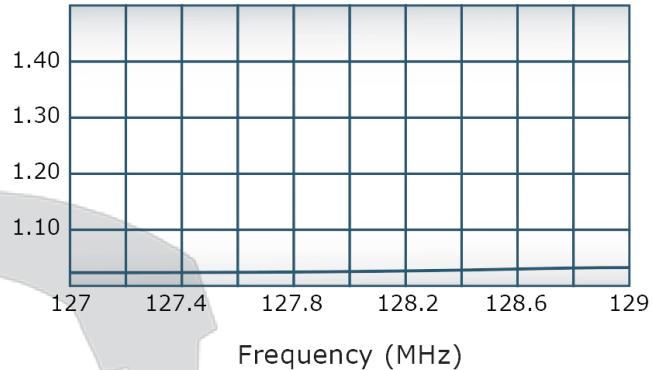
C7020

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

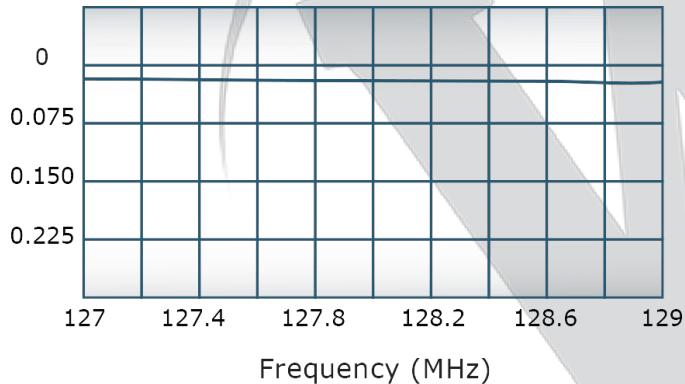
Coupling:



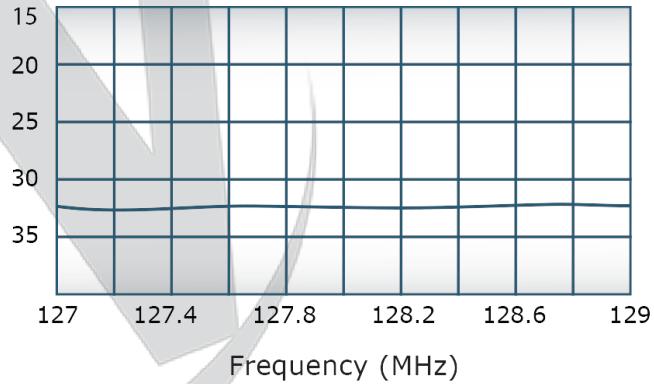
VSWR:



Insertion Loss:



Directivity:

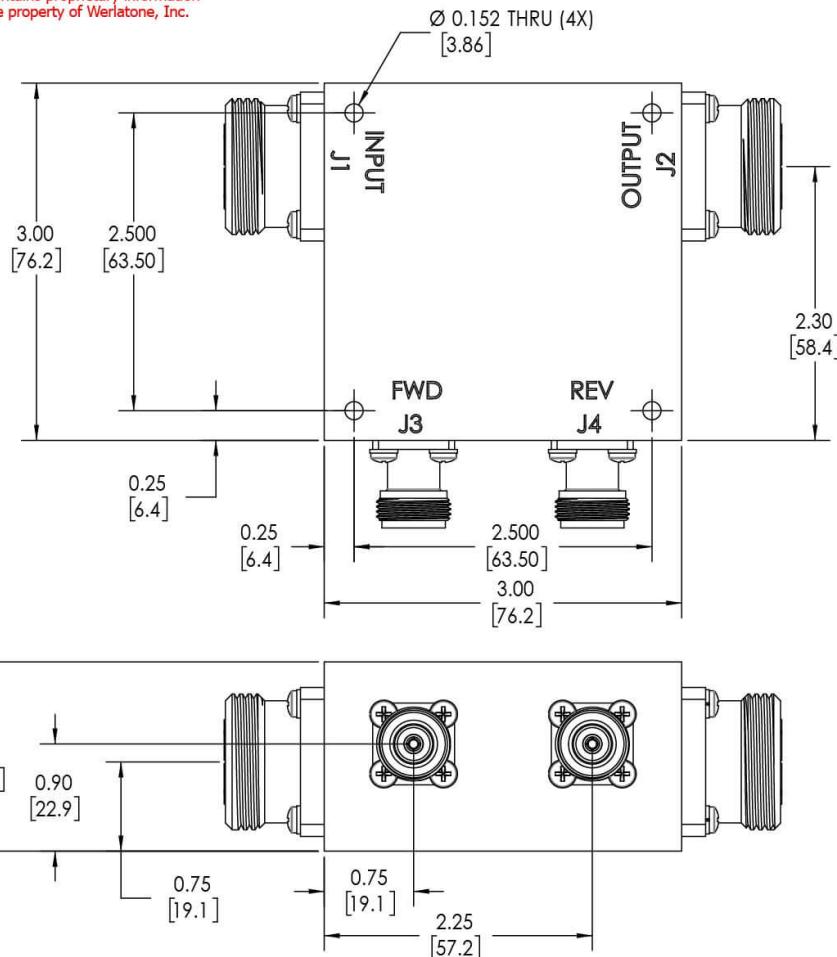


Restriction on use, duplication, or disclosure of proprietary information. This document contains proprietary information which is the sole property of Werlatone, Inc.

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

**RESTRICTION ON USE, DUPLICATION OR  
DISCLOSURE OF PROPRIETARY INFORMATION**

This document contains proprietary information  
which is the sole property of Werlatone, Inc.



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

UNLESS OTHERWISE SPECIFIED	OWN SD	DATE	17 Jon Barrett Rd
INTERPRET DRAWING JAW MIL-STD-100	CHK CS	5/13/2019	WERLATONE SINCE 1965
UNIFORM DRAWING AS PER ASME Y14.5M-2009	ENGR	DATE	17 Jon Barrett Rd
PARENTHETICAL THIS FOR REFERENCE ONLY	MFGR	DATE	Patterson, NY 12563
DIMENSIONAL LIMITS ARE IN INCHES	QA	DATE	
TOLERANCES	RELEASE	DATE	
ANGLES $\pm 2^\circ$			
3 RL $\pm .005$ [1.27]			
2 RL $\pm .012$ [3.05]			
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	
			SHEET 1 OF 1

**Restriction on use, duplication, or disclosure of proprietary information.** This document contains proprietary information which is the sole property of Werlatone, Inc.  
Werlatone, Inc. 17 Jon Barrett Road Patterson, NY 12563 T:(845)278-2220 F:(845)278-3440 sales@werlatone.com www.werlatone.com