



## PRODUCT DATA SHEET

C10234

**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: 30 - 520 MHz  
Power: 3000 W CW  
Coupling: 56 ± 1.0 dB Max.  
Insertion Loss: 0.2 dB Max.  
Flatness: ± 0.3 dB Max.  
VSWR (ML): 1.15:1 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: 6.0 x 3.0 x 1.6"

### Connector Configurations:

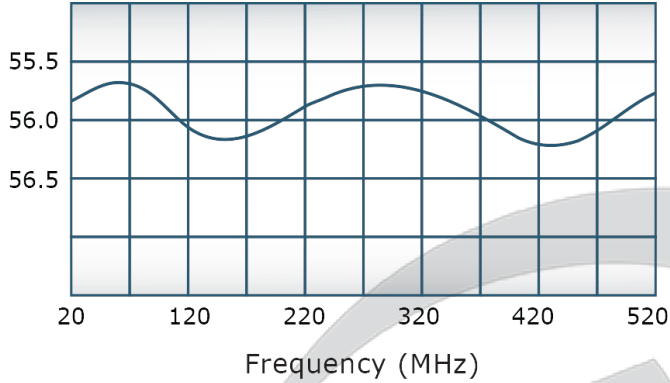
Model	Input (J1)	Output (J2)	Fwd (J3)	Rev (J4)
C10234-20	7/16 Female	7/16 Female	N Female	N Female
C10234-22	7/16 Female	7/16 Female	SMA	SMA
C10234-23	7/16 Female	7/16 Female	BNC	BNC
C10234-728	7/16 Male	7/16 Female	SMA	SMA

**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.

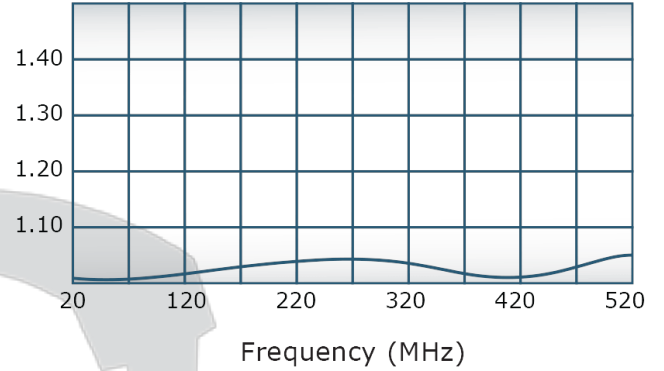


## Performance Data (Specifications subject to change without notice):

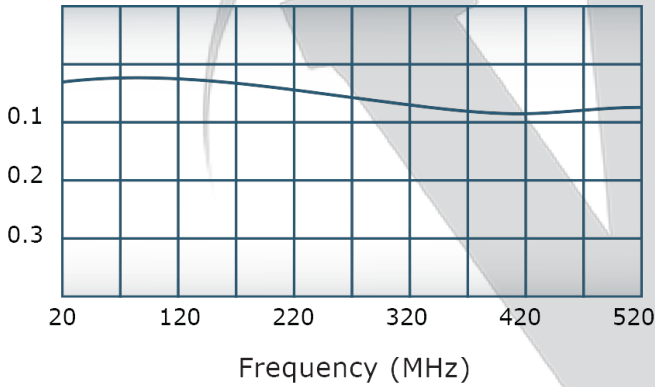
Coupling:



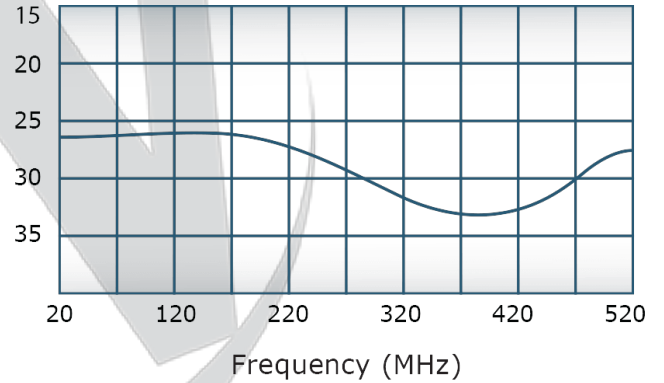
VSWR:



Insertion Loss:



Directivity:



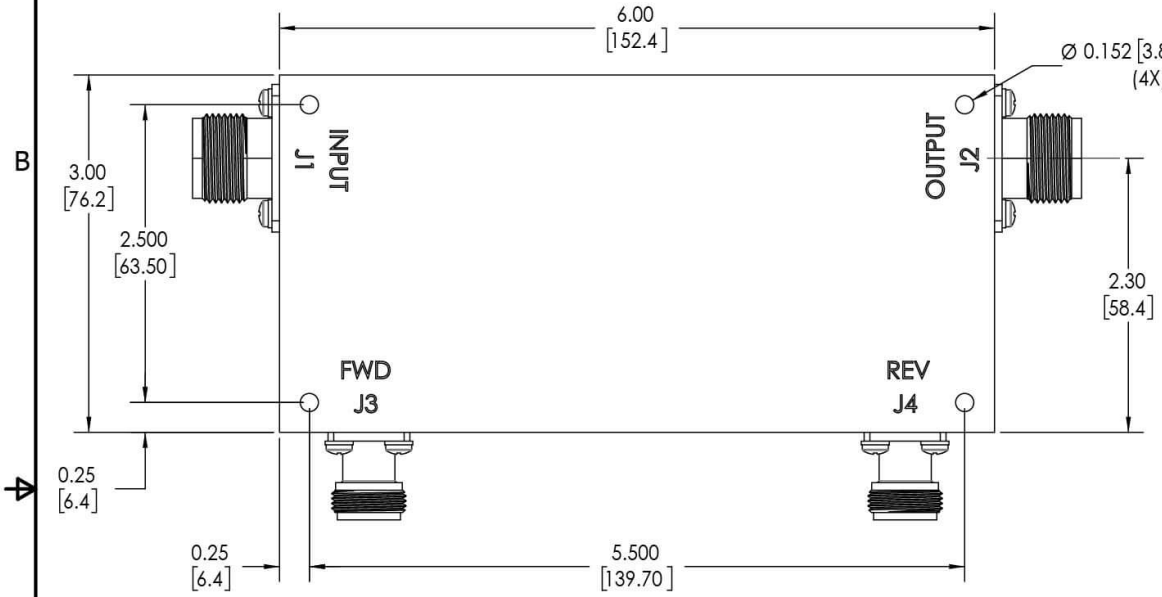
Restriction on use, duplication, or disclosure of proprietary information. This document contains proprietary information which is the sole property of

Werlatone, Inc.

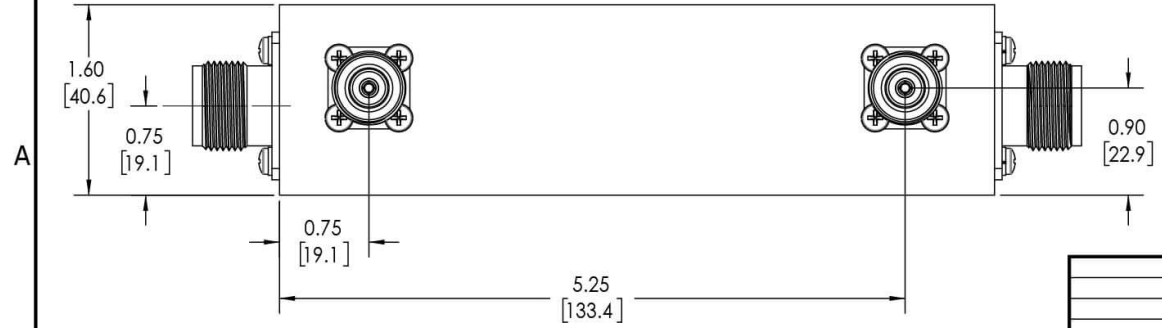
Werlatone, Inc. 17 Jon Barrett Road Patterson, NY 12563 T:(845)278-2220 F:(845)278-3440 sales@werlatone.com www.werlatone.com

**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	8/21/2019	RB



**NOTES: UNLESS OTHERWISE SPECIFIED**  
 1. MATERIAL: ALUMINUM 6061-T6  
 2. FINISH: CHEM FILM PER MIL-DTL-5541F TYPE I CLASS 3 (YELLOW IRIDIUM)  
 3. CONNECTORS:  
 J1-J2: HN FEMALE  
 J3-J4: N FEMALE



UNLESS OTHERWISE SPECIFIED		DWN	DATE	17 Jon Barrett Rd
INTERPRET DRAWING IAW MIL-STD-100		SD	8/21/2019	Patterson, NY 12563
DIMENSIONS PER ASME Y14.5M-2009		CHK	DATE	
PARENTHEetical INFO FOR REF ONLY		CS	8/21/2019	
DIMENSIONS ARE IN INCHES		ENGR	DATE	
DIMENSIONAL LIMITS APPLY BEFORE PROCESSES		INFR	DATE	
TOLERANCES:		QA	DATE	
ANGLES ± 2°		RLSE	DATE	
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	TITLE		REV
APPLICATION	THIRD ANGLE PROJECTION	OUTLINE		A
		SIZE	CAGE CODE	DWG NO
		B	20145-500	
		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