

## PRODUCT DATA SHEET

C6158

**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:            1000 - 2500 MHz  
Power:                 50 W CW  
Coupling:             40 ± 1.0 dB Max.  
Insertion Loss:      0.3 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 1.09"

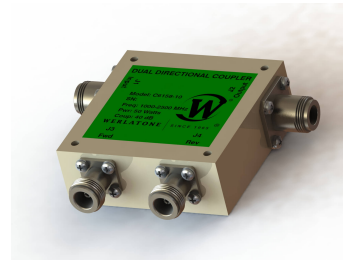
### Connector Configurations:

Model	Input (J1)	Output (J2)	Fwd (J3)	Rev (J4)
C6158-10	N Female	N Female	N Female	N Female
C6158-12	N Female	N Female	SMA	SMA
C6158-102	SMA	SMA	SMA	SMA
C6158-714	N Male	N 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.

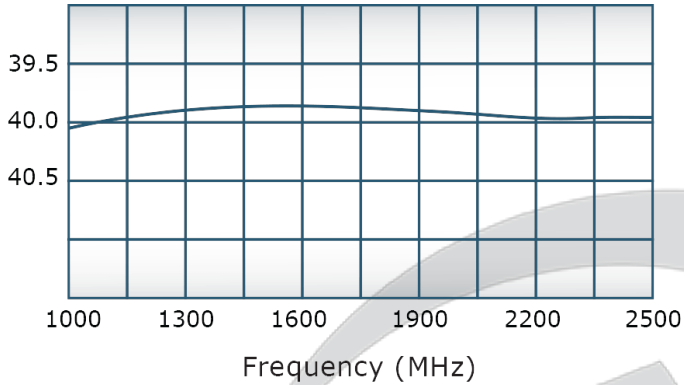
**Restriction on use, duplication, or disclosure of proprietary information.** This document contains proprietary information which is the sole property of Werlatone, Inc.

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

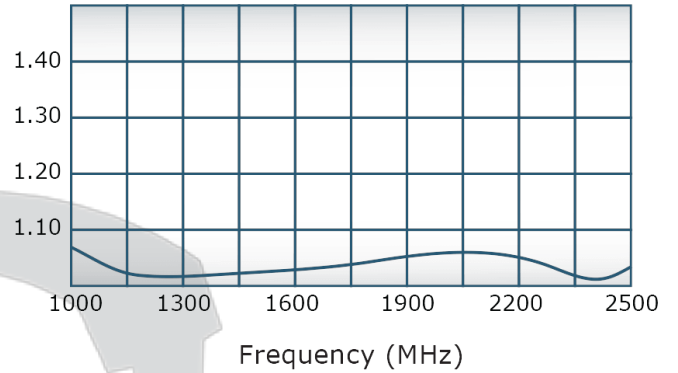


## Performance Data (Specifications subject to change without notice):

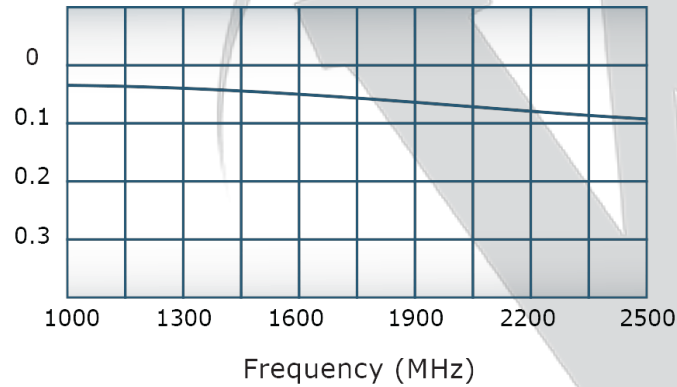
Coupling:



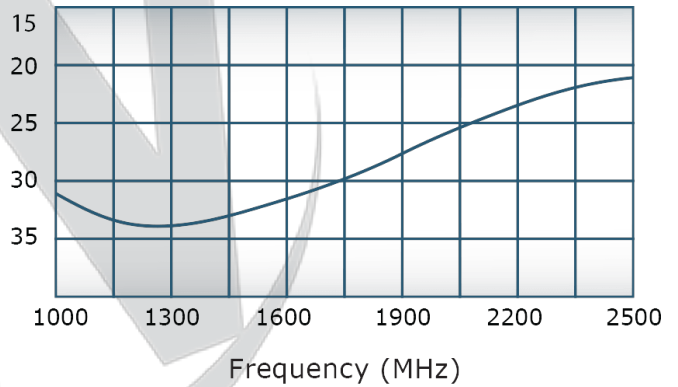
VSWR:



Insertion Loss:



Directivity:

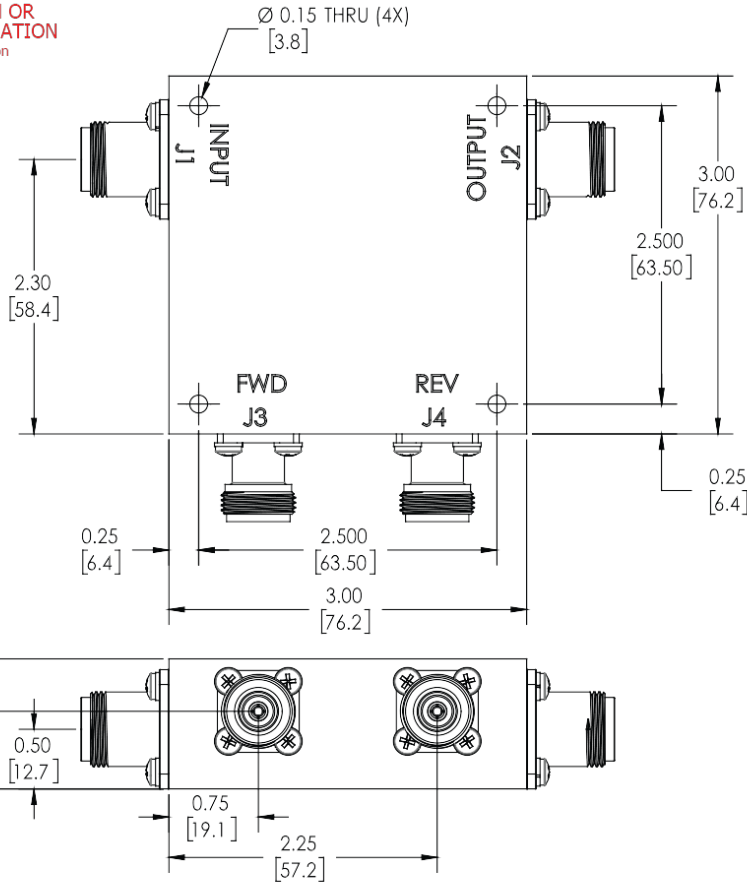


**Restriction on use, duplication, or disclosure of proprietary information.** This document contains proprietary information which is the sole property of

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	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-130 • 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 (1.3) • REMOVE ALL BURRS AND SHARP EDGES R.01 MAX • CONCENTRICITY MACHINED DIA: .002 FIM • MACHINE TOOL IMPACT: .003 MAX		CHK	DATE	
NEXT ASSY	USED ON	ENGR	DATE	TITLE
APPLICATION	THIRD ANGLE PROJECTION	MFG	DATE	<b>OUTLINE</b>
		QA	DATE	SIZE
		RELEASE	DATE	CAGE CODE
				DWG NO
				REV
				<b>B</b>
				<b>10379-505</b>
				SCALE
				<b>1:1</b>
				SHEET
				<b>1 OF 1</b>

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