

**PRODUCT DATA SHEET**
**C3115**

**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: 13-250 MHz  
Power: 5000 W CW  
Coupling:  $60 \pm 1.0$  dB Max.  
Insertion Loss: 0.05 dB Max.  
Flatness:  $\pm 0.5$  dB Max.  
VSWR (ML): 1.05:1 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: 3.75 x 3.00 x 1.88"

**Connector Configurations:**

Model	Input (J1)	Output (J2)	Fwd (J3)	Rev (J4)
C3115-10	N Female	N Female	N Female	N Female
C3115-12	N Female	N Female	SMA	SMA
C3115-13	N Female	N Female	BNC	BNC
C3115-61	HN Female	HN Female	N Female	N Female
C3115-64	HN Female	HN 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.

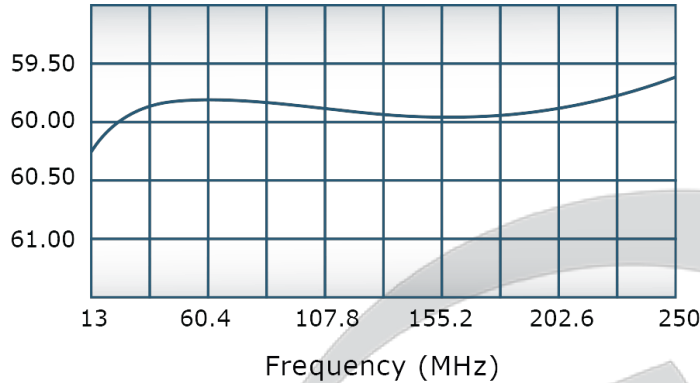


## PRODUCT DATA SHEET

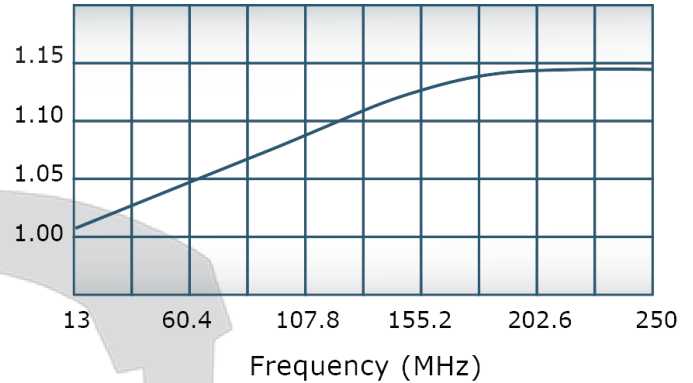
C3115

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

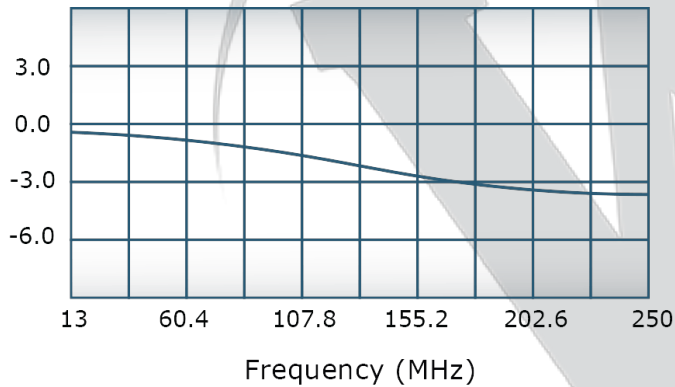
Coupling:



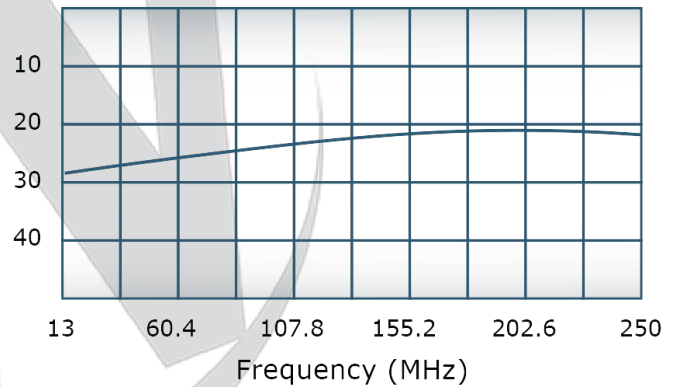
VSWR:



Insertion Loss:



Directivity:



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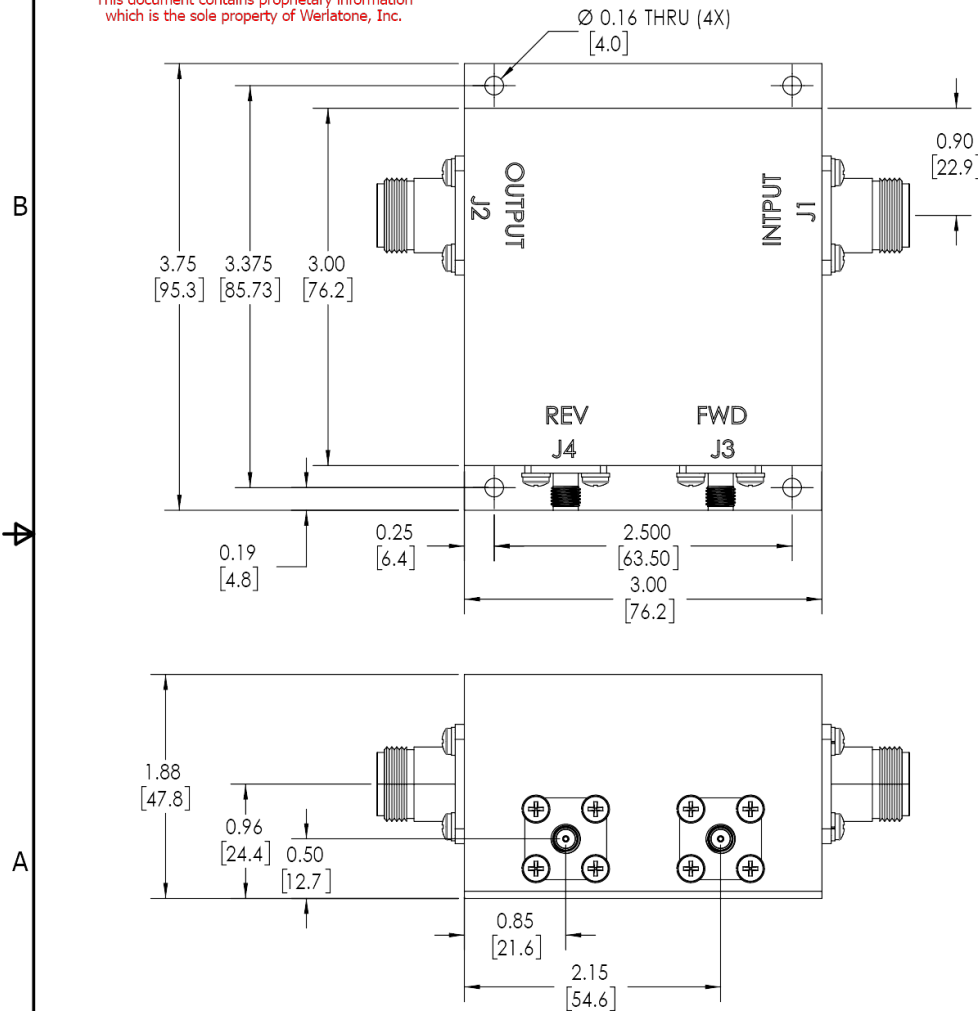
Werlatone, Inc. 17 Jon Barrett Road Patterson, NY 12563 T:(845)278-2220 F:(845)278-3440 sales@werlatone.com www.werlatone.com



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REVISION HISTORY			
REV.	REVISION RECORD	DATE	APPROVED
A	ECN 9696	11/29/18	RB

**NOTES: UNLESS OTHERWISE SPECIFIED**

- MATERIAL: ALUMINUM 6061-T6**
- FINISH: CHEM FILM PER MIL-DTL-5541F TYPE I CLASS 3 (YELLOW IRIDITE)**
- CONNECTORS:**  
 J1, J2: N FEMALE  
 J3, J4: SMA FEMALE



		UNLESS OTHERWISE SPECIFIED		OWN	DATE	 WERLATONE  SINCE 1965		17 Jon Barrett Rd Patterson, NY 12563	
		INTERPRET DRAWING 100 MIL-STD-100		SD	2/11/2019	TITLE		<h1>OUTLINE</h1>	
		DIMENSIONS PER ASME Y14.5M-2009		CHK	DATE				
		PARENTHEICAL INFO FOR REF ONLY		CS	2/11/2019	SIZE CAGE CODE DWG NO		REV	
		DIMENSIONS ARE IN INCHES		ENGR	DATE				
		DIMENSIONAL LIMITS APPLY BEFORE FINISHES		INFR	DATE	B 10031-500		A	
		TOLERANCES:		QA	DATE				
		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 FIM							
NEXT ASSY USED ON		THIRD ANGLE PROJECTION 							
APPLICATION									

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