



## PRODUCT DATA SHEET

C9107

**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: 20 - 1000 MHz  
Power: 1000 W CW  
Coupling:  $53 \pm 1.0$  dB Max.  
Insertion Loss: 0.4 dB Max.  
Flatness:  $\pm 1.0$  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: 4.45 x 2.4 x 1.59"

### Connector Configurations:

| Model      | Input (J1)  | Output (J2) | Fwd (J3) | Rev (J4) |
|------------|-------------|-------------|----------|----------|
| C9107-10   | N Female    | N Female    | N Female | N Female |
| C9107-12   | N Female    | N Female    | SMA      | SMA      |
| C9107-20   | 7/16 Female | 7/16 Female | N Female | N Female |
| C9107-22   | 7/16 Female | 7/16 Female | SMA      | SMA      |
| C9107-23   | 7/16 Female | 7/16 Female | BNC      | BNC      |
| C9107-41   | SC Female   | SC Female   | N Female | N Female |
| C9107-43   | SC Female   | SC Female   | SMA      | SMA      |
| C9107-712  | N Male      | N Female    | SMA      | SMA      |
| C9107-714  | N Male      | N Female    | N Female | N Female |
| C9107-7755 | 7/16 Female | SC Female   | SMA      | SMA      |

**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

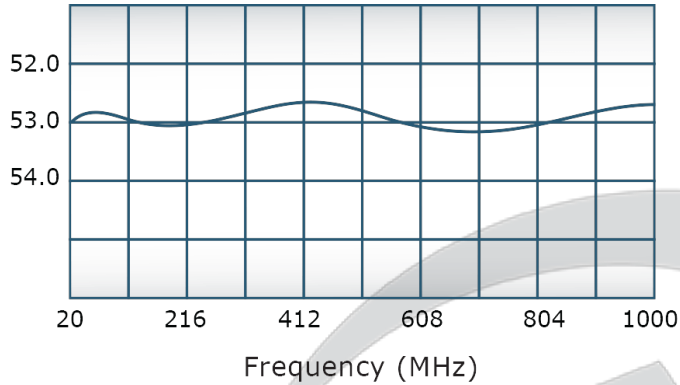


## PRODUCT DATA SHEET

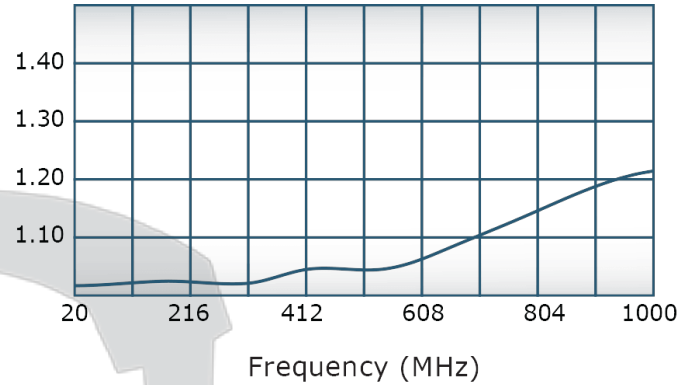
C9107

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

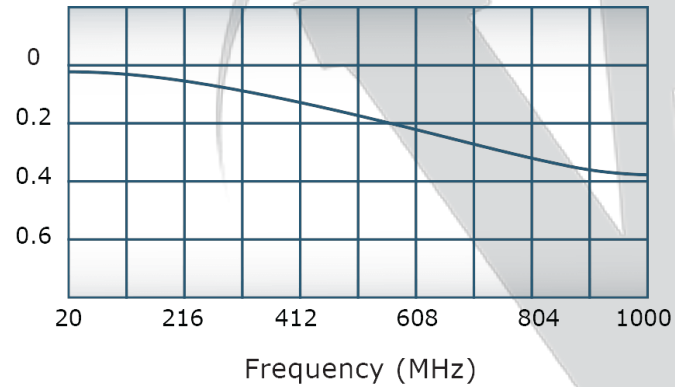
Coupling:



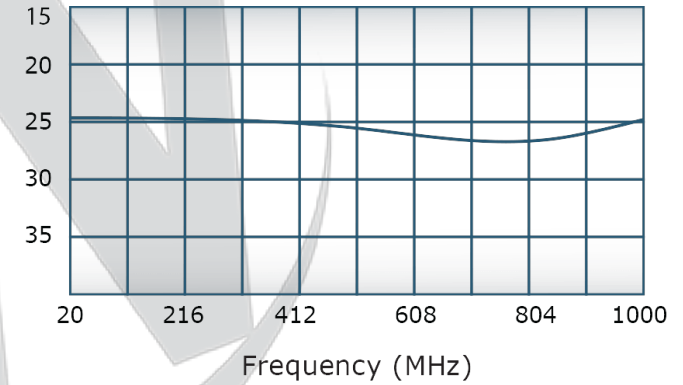
VSWR:



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.

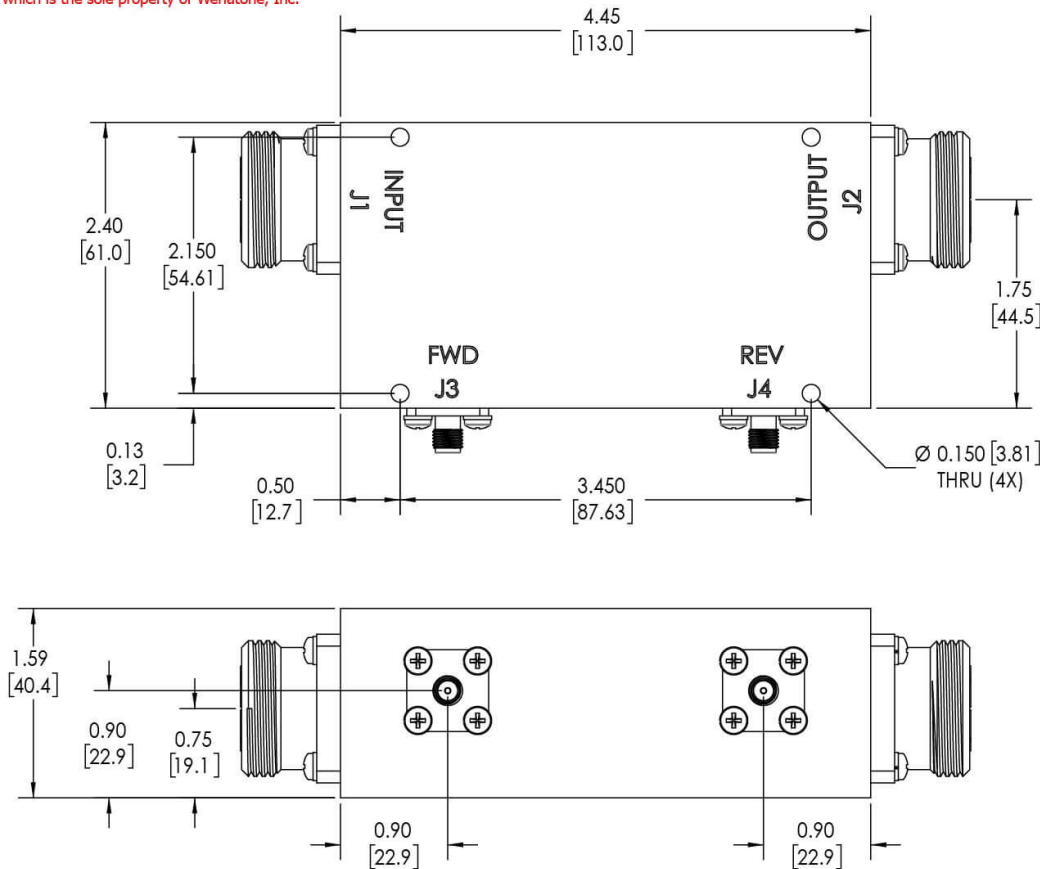
Werlatone, Inc. 17 Jon Barrett Road Patterson, NY 12563 T:(845)278-2220 F:(845)278-3440 sales@werlatone.com www.werlatone.com

**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        | 3/25/19 | 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: 7/16 FEMALE**  
**J3,J4: SMA FEMALE**



|                                                                                                                                                                            |  |                        |      |                                                                                                                   |  |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|------------------------|------|-------------------------------------------------------------------------------------------------------------------|--|
| UNLESS OTHERWISE SPECIFIED                                                                                                                                                 |  | SD                     | DATE | 17 Jon Barrett Rd<br>Patterson, NY 12563                                                                          |  |
| INTERPRET DRAWING IN ACCORDANCE WITH MIL-STD-100                                                                                                                           |  | CHK                    | DATE |  <b>WERLATONE</b> SINCE 1965 |  |
| DIMENSIONS FOR ASSEMBLY SHALL BE IN INCHES                                                                                                                                 |  | CS                     | DATE |                                                                                                                   |  |
| PARENTHESES ARE USED FOR REFERENCE ONLY                                                                                                                                    |  | ENGR                   | DATE | <b>OUTLINE</b>                                                                                                    |  |
| DIMENSIONS ARE IN INCHES                                                                                                                                                   |  | INFR                   | DATE |                                                                                                                   |  |
| DIMENSIONAL LIMITS APPLY BEFORE FINISHES                                                                                                                                   |  | QA                     | DATE | SIZE CAGE CODE DWG NO<br><b>B 20828-500</b>                                                                       |  |
| TOLERANCES:                                                                                                                                                                |  | RLSE                   | DATE |                                                                                                                   |  |
| ANGLES ± 2°<br>3 PL ± .005 [13]<br>2 PL ± .015 [38]<br>REMOVE ALL BURRS AND SHARP EDGES R.01 MAX<br>CONCENTRICITY MACHINED DIA. .002 FIM<br>MACHINE TOOL MISMATCH .003 MAX |  | THIRD ANGLE PROJECTION |      | SCALE <b>1:1</b>                                                                                                  |  |
| NEXT ASSY                                                                                                                                                                  |  | USED ON                |      | SHEET 1 OF 1                                                                                                      |  |
| APPLICATION                                                                                                                                                                |  |                        |      |                                                                                                                   |  |

**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