



PRODUCT DATA SHEET

C5979

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 - 500 MHz
Power: 50 W CW
Coupling: 30 ± 1.0 dB Max.
Flatness: ± 0.5 dB Max.
Insertion Loss: 0.9 dB Max.
VSWR (ML): 1.20:1 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: 5.2 x 2.67 x 1.69"

Connector Configurations:

| Model | Input (J1) | Output (J2) | Fwd (J3) | Rev (J4) |
|-----------|------------|-------------|----------|----------|
| C5979-10 | N Female | N Female | N Female | N Female |
| C5979-12 | N Female | N Female | SMA | SMA |
| C5979-13 | N Female | N Female | BNC | BNC |
| C5979-102 | SMA | SMA | 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.



WERLATONE

Model C5979

Connectorized Directional Couplers

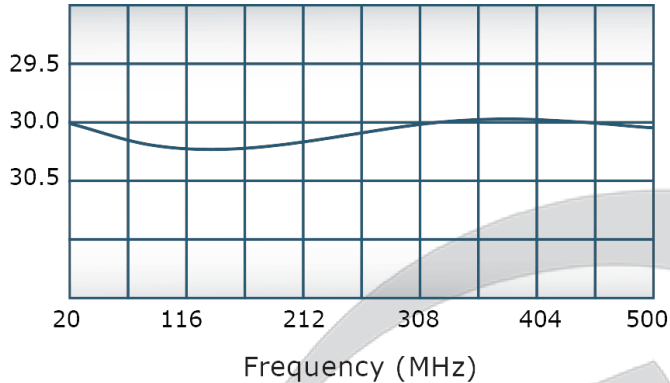


PRODUCT DATA SHEET

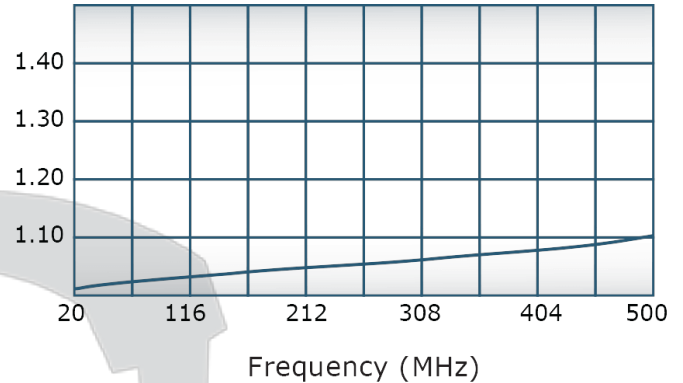
C5979

Performance Data (Specifications subject to change without notice):

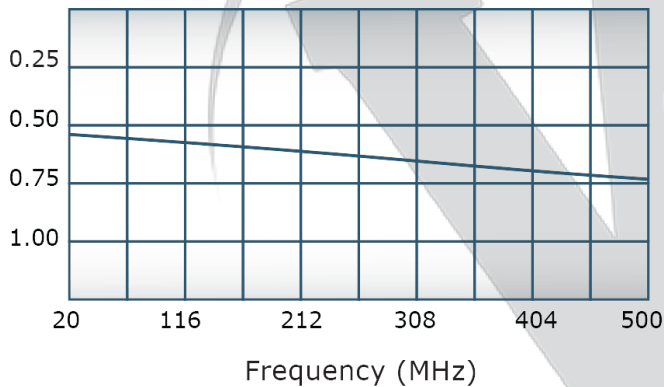
Coupling:



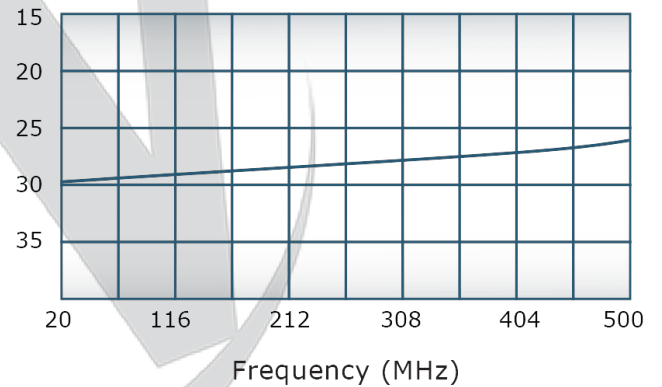
VSWR:



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

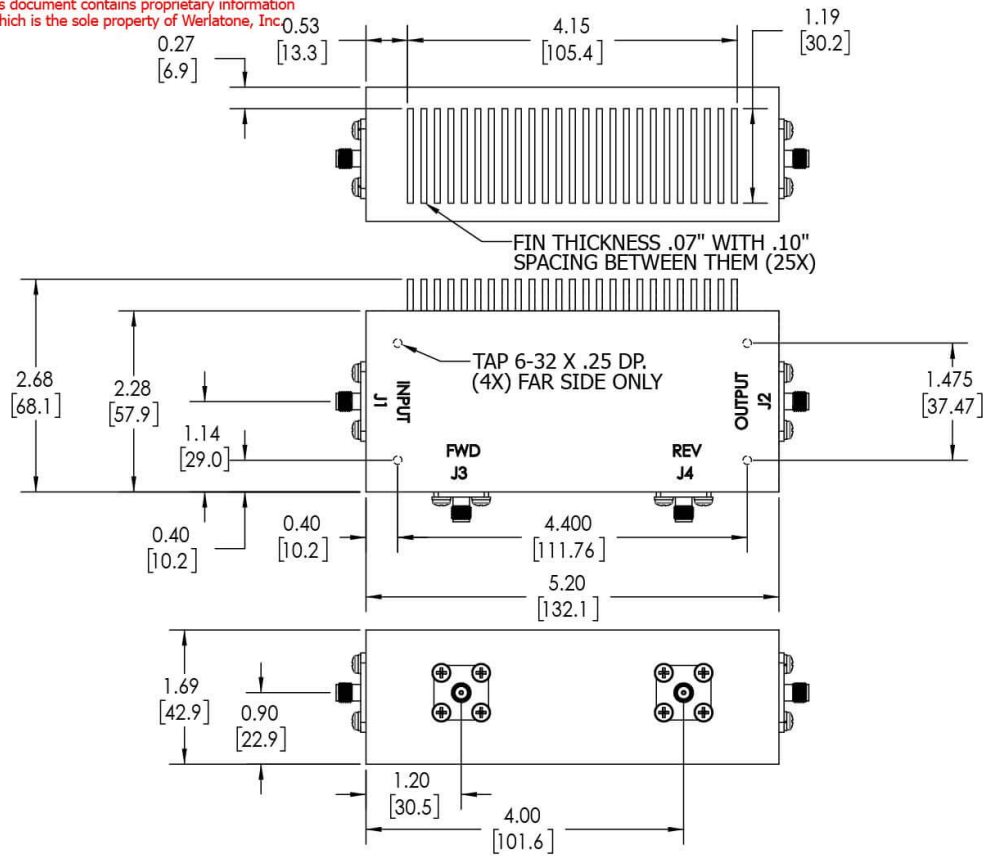
RESTRICTION ON USE, DUPLICATION OR DISCLOSURE OF PROPRIETARY INFORMATION


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

| REVISION HISTORY | | | |
|------------------|-----------------|----------|----------|
| REV. | REVISION RECORD | DATE | APPROVED |
| A | ECN 9696 | 11/28/18 | RB |

NOTES: UNLESS OTHERWISE SPECIFIED

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



| | | | | | | | |
|--|--|------------------------|-----------|---|--|--------------|-----|
| UNLESS OTHERWISE SPECIFIED | | OWN | DATE |  WERLATONE SINCE 1965 | 17 Jon Barrett Rd Patterson, NY 12563 | | |
| INTERPRET DRAWING IN ACCORDANCE WITH MIL-STD-100 | | SD | 2/11/2019 | | | | |
| DIMENSIONS PER ASME Y14.5M-2009 | | CHK | DATE | | | | |
| PARENTHESES ARE IN INCHES | | CS | 2/11/2019 | | | | |
| DIMENSIONAL LIMITS APPLY BEFORE PROCESSES | | ENGR | DATE | | | | |
| TOLERANCES: | | BW | 9/13/1996 | OUTLINE | | | |
| ANGLES ± 2° | | INFR | DATE | | | | |
| 3 PL ± .005 [13] | | QA | DATE | | | | |
| 2 PL ± .015 [38] | | RLSE | DATE | | | | |
| REMOVE ALL BURRS AND SHARP EDGES R.01 MAX | | | | | | | |
| CONCENTRICITY MACHINED DIA. .002 FIM | | | | SIZE | CAGE CODE | DWG NO | REV |
| MACHINE TOOL MISMATCH .003 MAX | | | | SCALE | 10407-501 | | A |
| NEXT ASSY | | USED ON | | 1:1.5 | | SHEET 1 OF 1 | |
| APPLICATION | | THIRD ANGLE PROJECTION | | | | | |

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