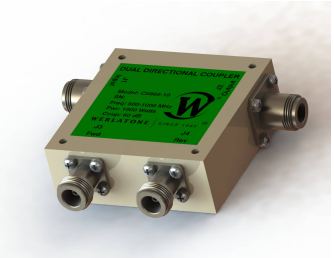
WERLATONE

Model C5865



**PRODUCT DATA SHEET** **C5865**

**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: | 500 - 1000 MHz |
| Power: | 1000 W CW |
| Coupling: | 60 ± 1.0 dB Max. |
| Insertion Loss: | 0.2 dB Max. |
| Flatness: | ± 0.25 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<br>Type I Class 3 (Yellow Iridite)<br>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'' |

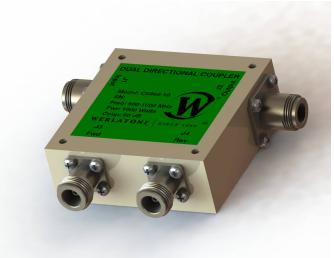
**Connector Configurations:**

| **Model** | **Input (J1)** | **Output (J2)** | **Fwd (J3)** | **Rev (J4)** |
|---|---|---|---|---|
| C5865-10 | N Female | N Female | N Female | N Female |
| C5865-12 | N Female | N Female | SMA | SMA |
| C5865-13 | N Female | N Female | BNC | BNC |
| C5865-20* | 7/16 Female | 7/16 Female | N Female | N Female |
| C5865-22* | 7/16 Female | 7/16 Female | SMA | SMA |
| C5865-23* | 7/16 Female | 7/16 Female | BNC | BNC |
| C5865-41 | SC Female | SC Female | N Female | N Female |
| C5865-727* | 7/16 Male | 7/16 Female | N Female | N Female |
| C5865-728* | 7/16 Male | 7/16 Female | SMA | SMA |

(7/16 Mainline connector option increases case height to 1.59")

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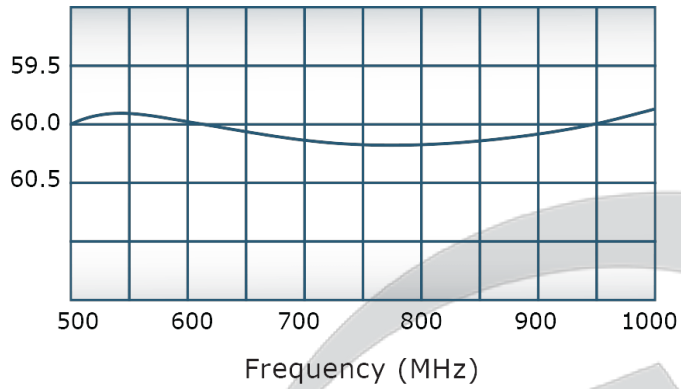
Werlatone, Inc. 17 Jon Barrett Road Patterson, NY 12563 T:(845)278-2220 F:(845)278-3440 sales@werlatone.com www.werlatone.com



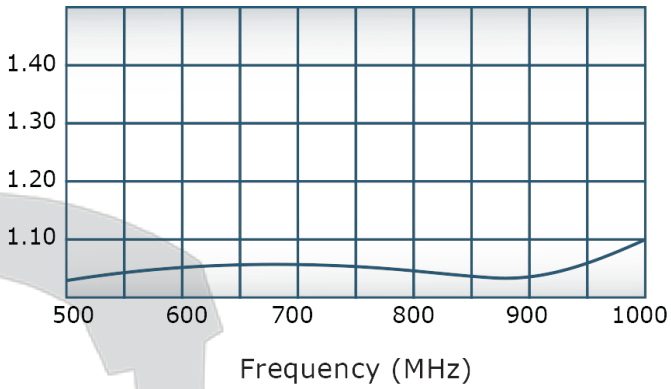


## Performance Data (Specifications subject to change without notice):

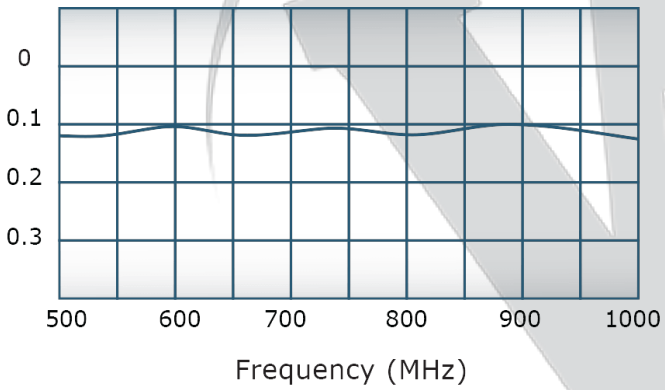
Coupling:



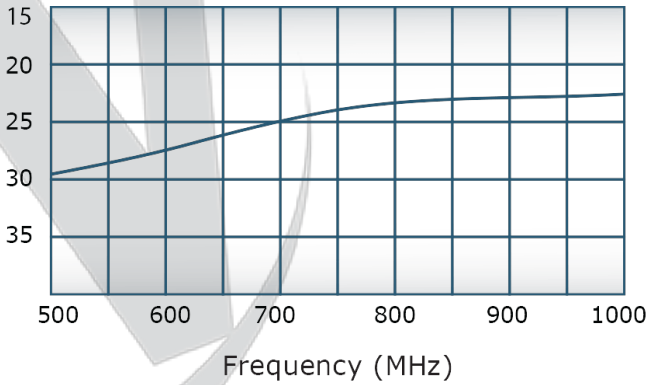

VSWR:




Insertion Loss:

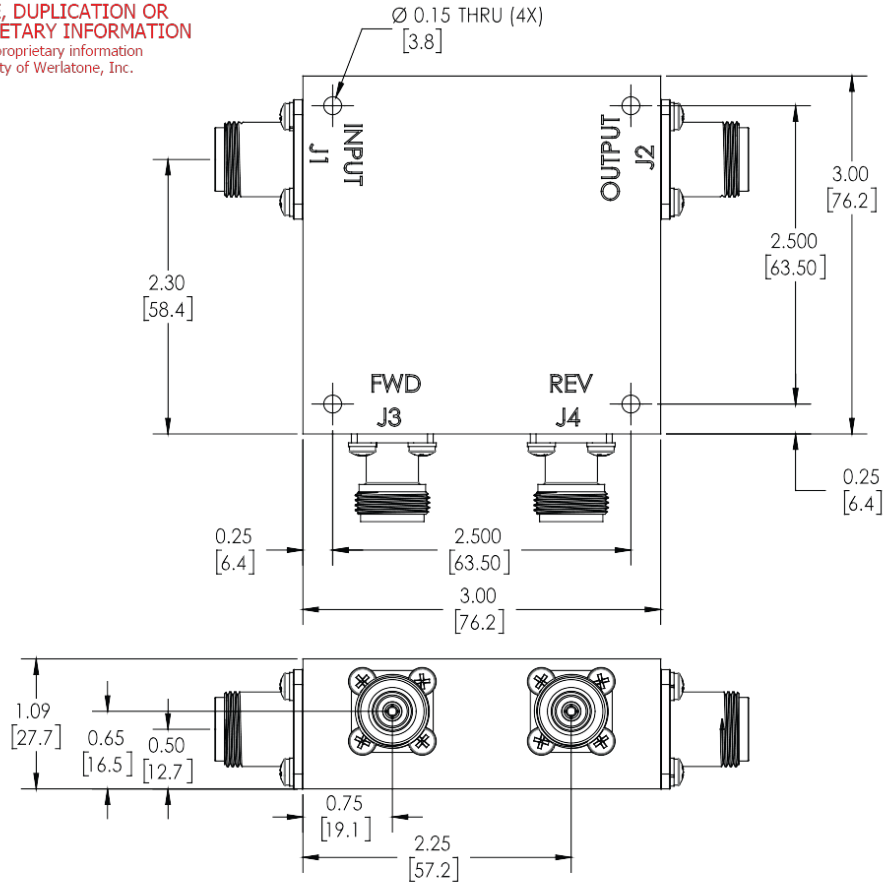



Directivity:




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| REVISION HISTORY | | | |
|---|---|---|---|
| REV. | REVISION RECORD | DATE | APPROVED |
| A | ECN 9696 | 11/27/18 | RB |

**NOTES: UNLESS OTHERWISE SPECIFIED**
1. **MATERIAL: ALUMINUM 6061-T6**
2. **FINISH: CHEM FILM PER MIL-DTL_5541F TYPE I CLASS 3 (YELLOW IRIDITE)**

| | | UNLESS OTHERWISE SPECIFIED | DWN | DATE |
|---|---|---|---|---|
| | | • INTERPRET DRAWING IAW MIL-STD-100<br>• DIMENSIONING PER ASME Y14.5M-2009<br>• PARENTHETICAL INFO FOR REF ONLY<br>• DIMENSIONS ARE IN INCHES<br>• DIMENSIONAL LIMITS APPLY BEFORE PROCESSES<br>• TOLERANCES:<br>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 EDA: .002 FIM<br>• MACHINE TOOL MISMATCH .003 MAX | RH | 7/5/2001 |
| | | | CHK | DATE |
| | | | ENGR | DATE |
| | | | MJ | 7/5/2001 |
| | | | MFGR | DATE |
| | | | QA | DATE |
| NEXT ASSY | USED ON | | RLSE | DATE |
| APPLICATION | | THIRD ANGLE PROJECTION | | |

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TITLE: OUTLINE

| SIZE | CAGE CODE | DWG NO | REV |
|---|---|---|---|
| B | | 10379-505 | A |

SCALE 1:1 — SHEET 1 OF 1

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