


PRODUCT DATA SHEET
C5086

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: 0.01 - 250 MHz
Power: 250 W CW
Coupling: 40 ± 1.0 dB Max.
Insertion Loss: 0.5 dB Max.
Flatness: ± 0.5 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
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) |
|-----------|------------|-------------|----------|----------|
| C5086-10 | N Female | N Female | N Female | N Female |
| C5086-12 | N Female | N Female | SMA | SMA |
| C5086-13 | N Female | N Female | BNC | BNC |
| C5086-102 | SMA | SMA | SMA | SMA |
| C5086-712 | N Male | N Female | SMA | SMA |
| C5086-714 | N Male | N Female | N Female | N Female |
| C5086-717 | N Male | N 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.



WERLATONE

Model C5086

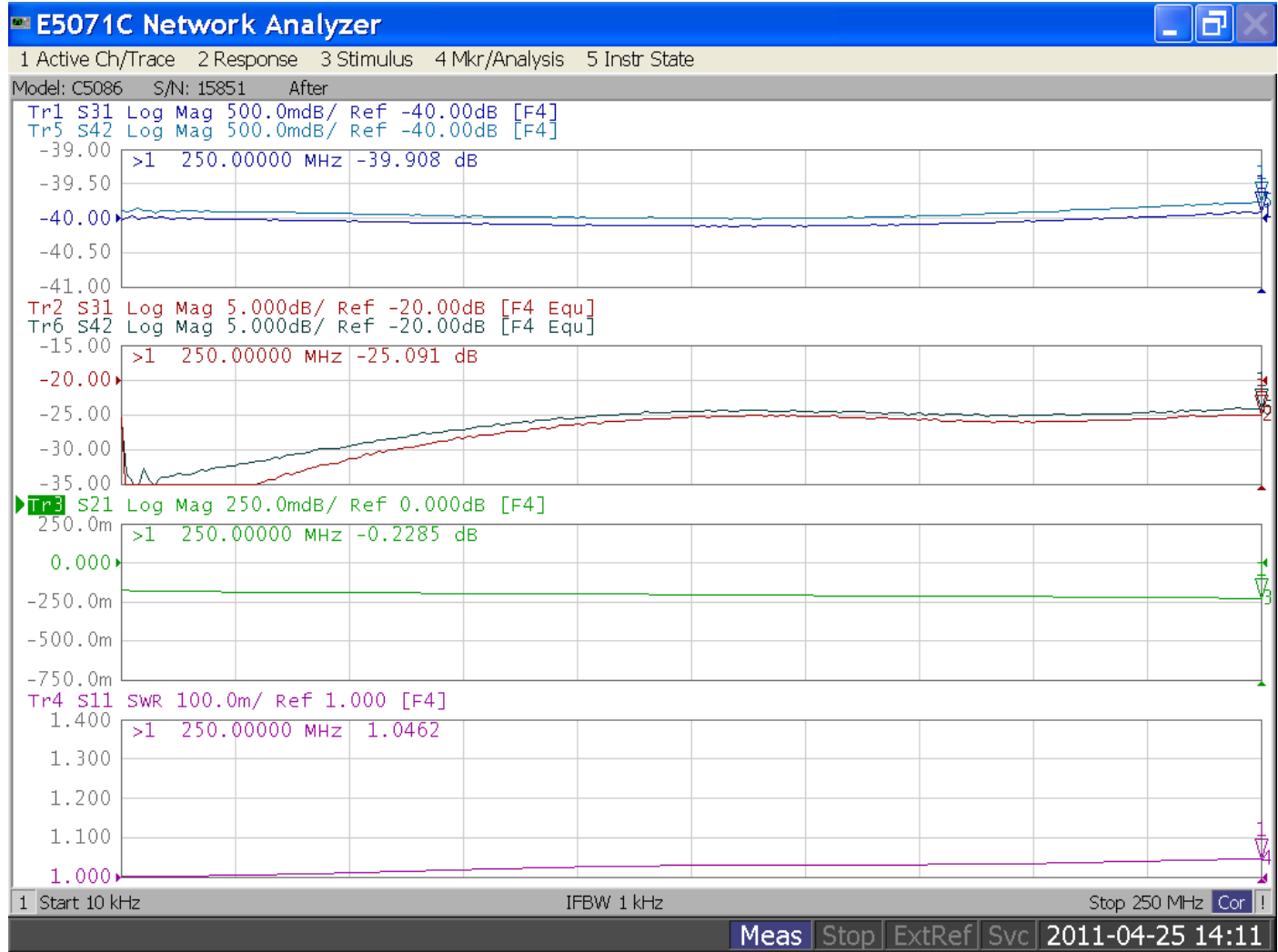


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Performance Data (Specifications subject to change without notice):

Plot 1: Coupling, Plot 2: Directivity, Plot 3: Insertion Loss, Plot 4: VSWR



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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

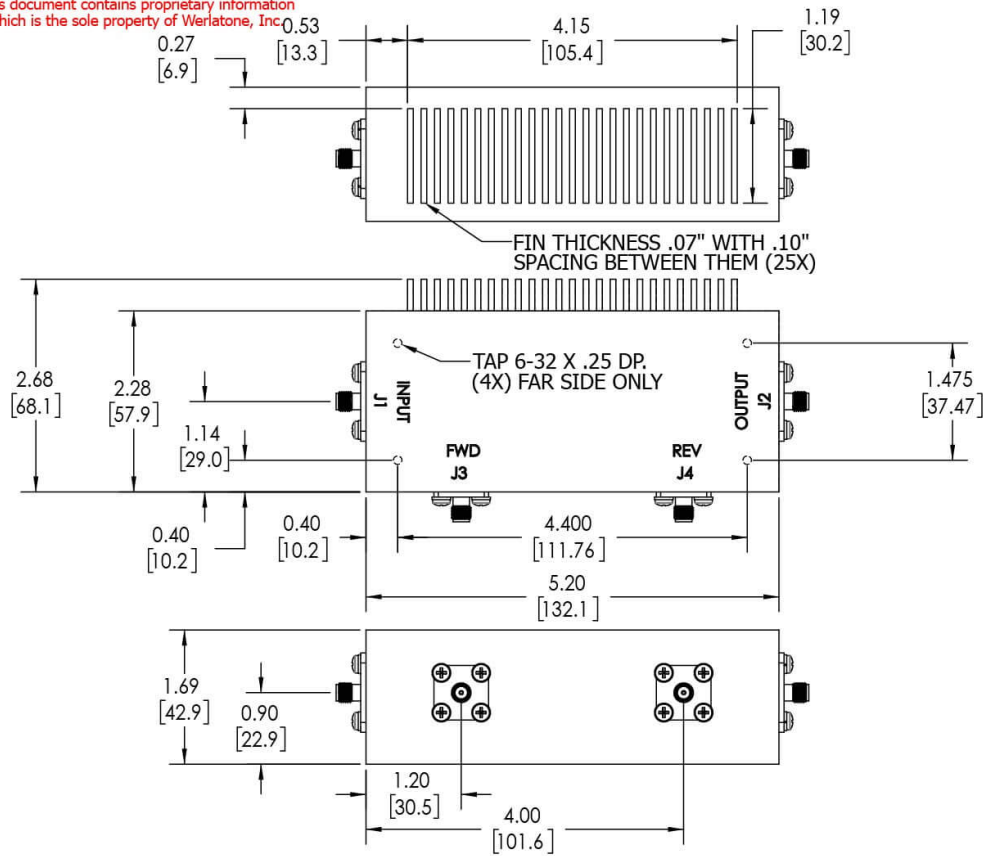
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| REVISION HISTORY | | | |
|------------------|-----------------|----------|----------|
| REV. | REVISION RECORD | DATE | APPROVED |
| A | ECN 9696 | 11/28/18 | RB |

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



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|---|--|------------------------|-----------|---|--|--|
| UNLESS OTHERWISE SPECIFIED | | OWN | DATE |  WERLATONE SINCE 1965 | 17 Jon Barrett Rd Patterson, NY 12563 | |
| INTERPRET DRAWING IN ACCORDANCE WITH MIL-STD-100 DIMENSIONS PER ASME Y14.5M-2009 PARENTHESES ARE IN INCHES DIMENSIONS ARE IN INCHES DIMENSIONAL LIMITS APPLY BEFORE PROCESSES TOLERANCES: ANGLES ± 2° 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 MAX. | | SD | 2/11/2019 | | | |
| | | CHK | DATE | | | |
| | | CS | 2/11/2019 | | TITLE | |
| | | ENGR | 9/13/1996 | | OUTLINE | |
| | | INFR | DATE | | SIZE CAGE CODE DWG NO | |
| | | QA | DATE | | B 10407-501 | |
| | | RLSE | DATE | | REV | |
| | | | | | A | |
| | | THIRD ANGLE PROJECTION | | | SCALE 1:1.5 | |
| NEXT ASSY USED ON | | | | SHEET 1 OF 1 | | |
| APPLICATION | | | | | | |

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