


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

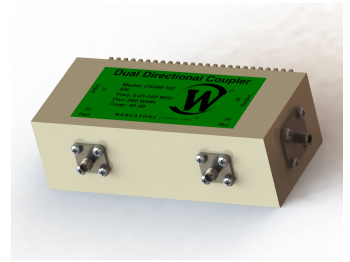
Werlatone® Broadband Dual, Uni, and Bi Directional RF Couplers are designed to tolerate the most stringent operating conditions associated with military and EMC testing environments. Many of our RF Directional Couplers, designated Mismatch Tolerant®, will operate continuously, at rated power, into a severe load mismatch condition. Our multi-octave Directional Couplers maintain exceptional coupling flatness, directivity, VSWR, and insertion loss.



WERLATONE

Model C5086

Connectorized Directional Couplers

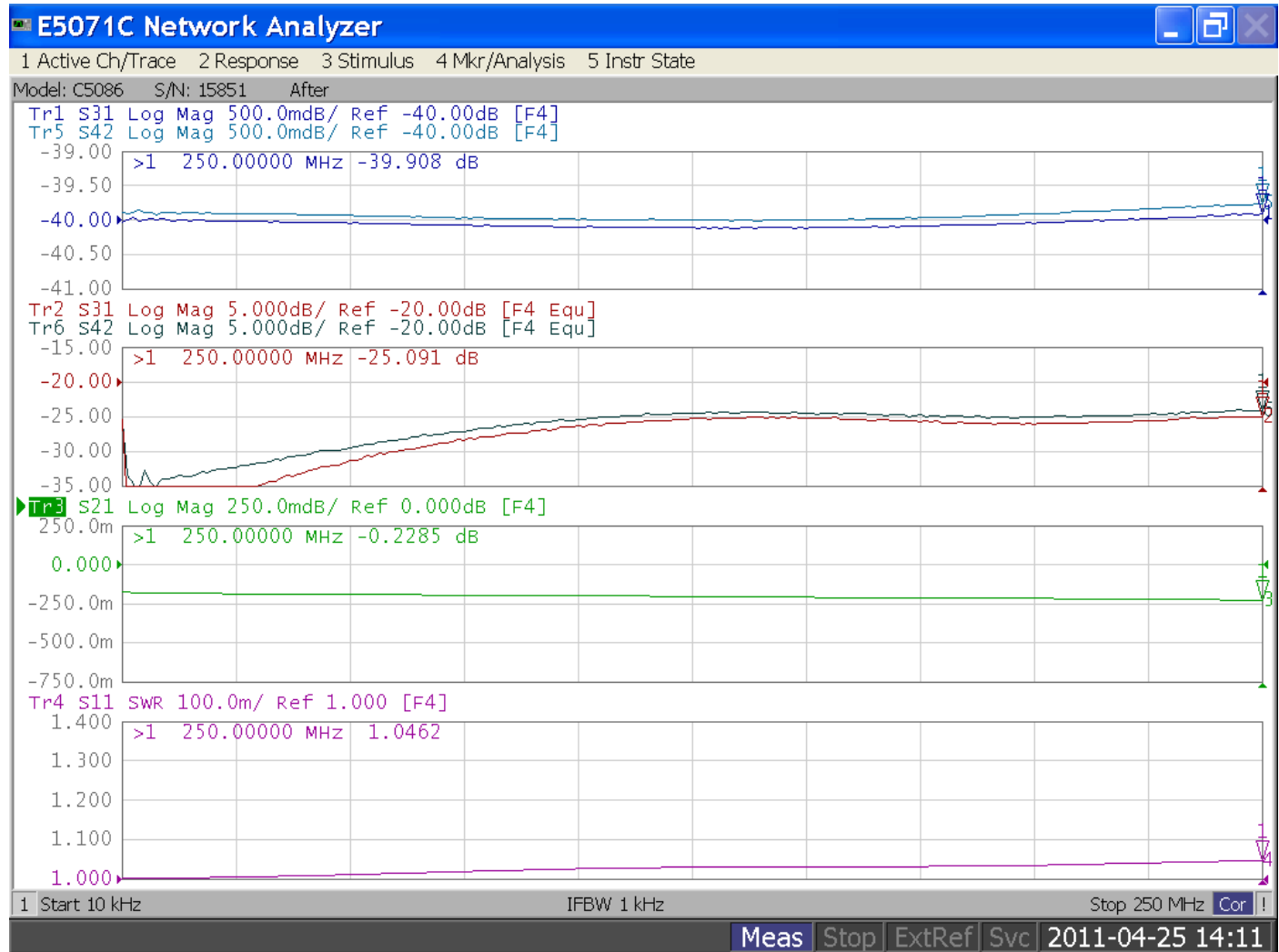


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Performance Data (Specifications subject to change without notice):

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



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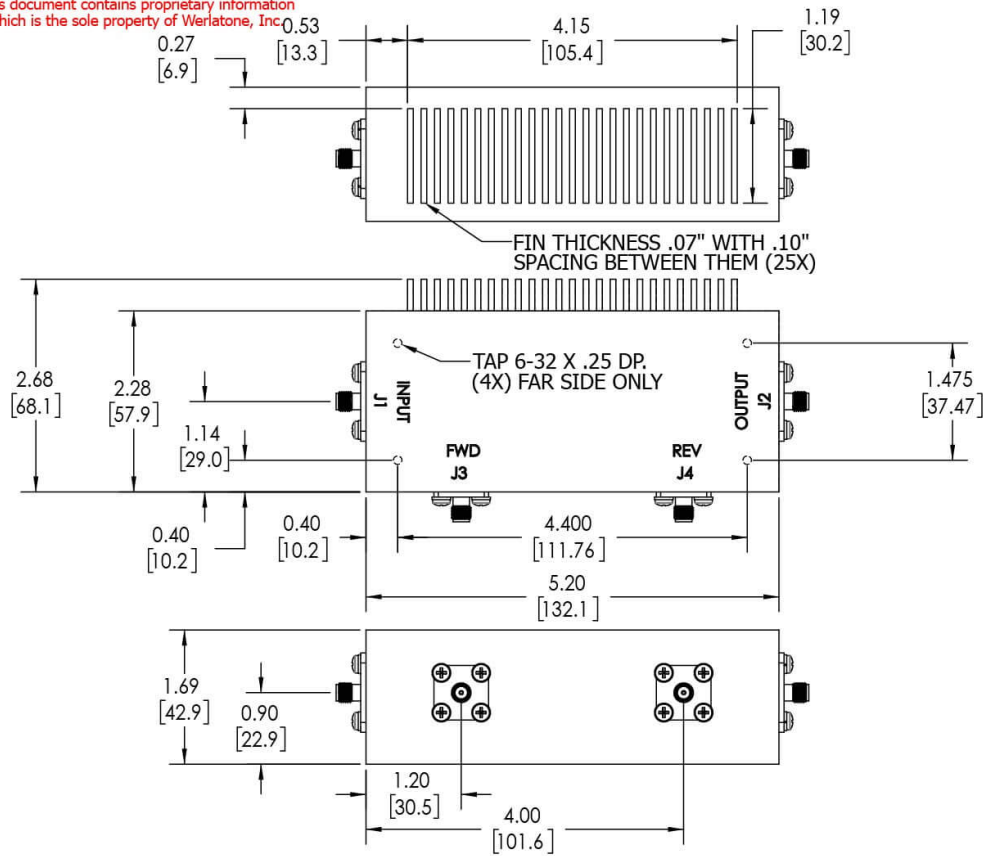
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REVISION HISTORY			
REV.	REVISION RECORD	DATE	APPROVED
A	ECN 9696	11/28/18	RB

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



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

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