


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

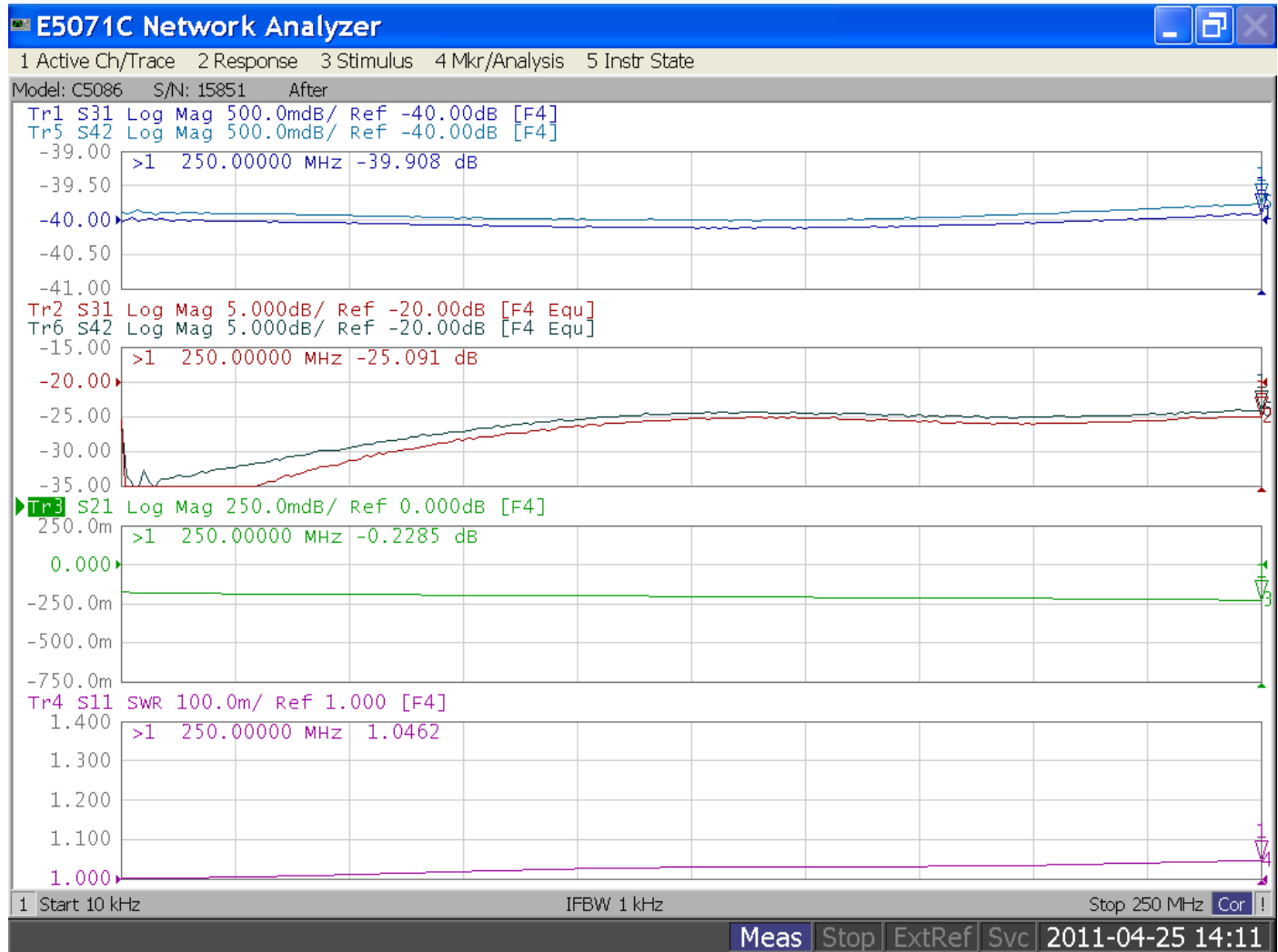


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Performance Data (Specifications subject to change without notice):

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



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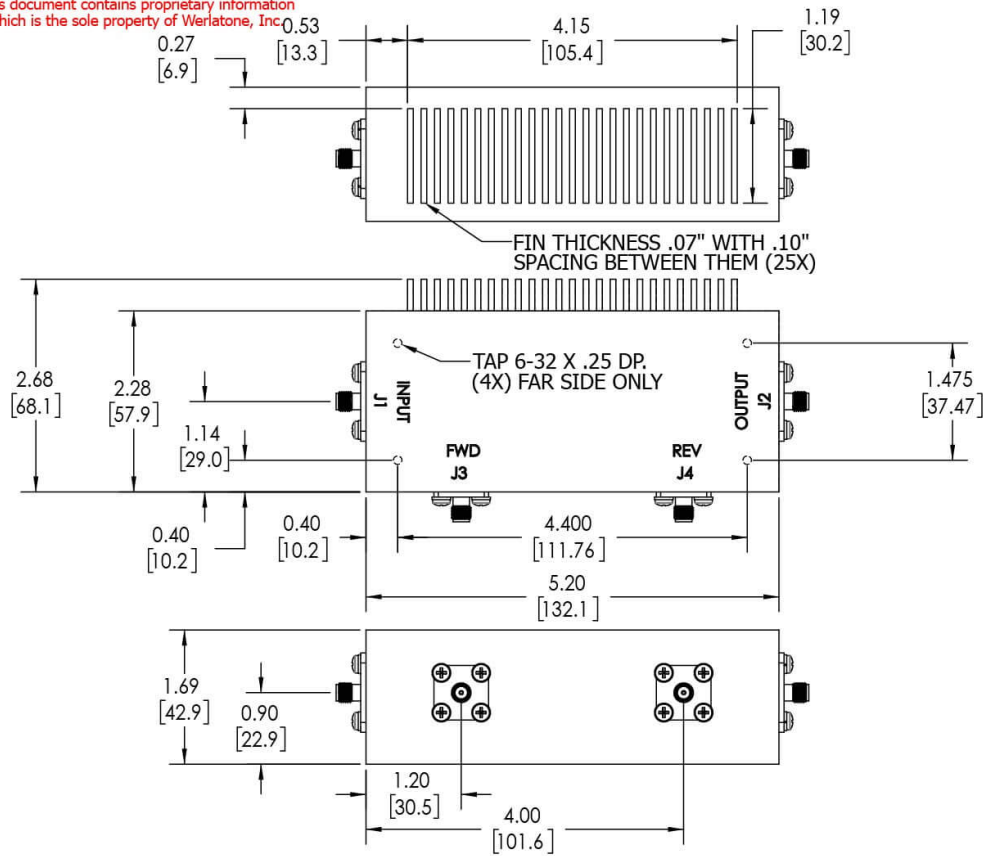
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REVISION HISTORY			
REV.	REVISION RECORD	DATE	APPROVED
A	ECN 9696	11/28/18	RB

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



		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	TITLE				
		DIMENSIONAL LIMITS APPLY BEFORE PROCESSES		ENGR	DATE					
		TOLERANCES:		BW	9/13/1996					
		ANGLES ± 2°		INFR	DATE					
		3 PL ± .005 [.13]		QA	DATE	SIZE		CAGE CODE	DWG NO	
		2 PL ± .015 [.38]		RLSE	DATE	SCALE			REV	
		REMOVE ALL BURRS AND SHARP EDGES R.01 MAX		10407-501						A
		CONCENTRICITY MACHINED DIA. .002 FIM								
		MACHINE TOOL MISMATCH .003 MAX								
NEXT ASSY		USED ON								
APPLICATION		THIRD ANGLE PROJECTION 		1:5						SHEET 1 OF 1

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