


PRODUCT DATA SHEET
C7090

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: 1 - 100 MHz
Power: 1000 W CW
Coupling: 50 ± 1.0 dB Max.
Insertion Loss: 0.2 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: 6.0 x 2.2 x 2.2"

Connector Configurations:

Model	Input (J1)	Output (J2)	Fwd (J3)	Rev (J4)
C7090-10	N Female	N Female	N Female	N Female
C7090-12	N Female	N Female	SMA	SMA
C7090-13	N Female	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 C7090

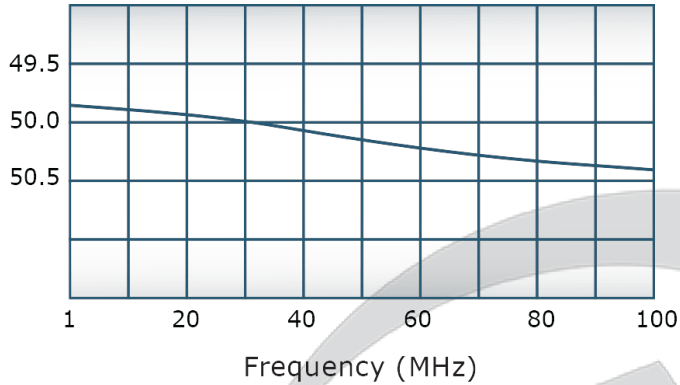


PRODUCT DATA SHEET

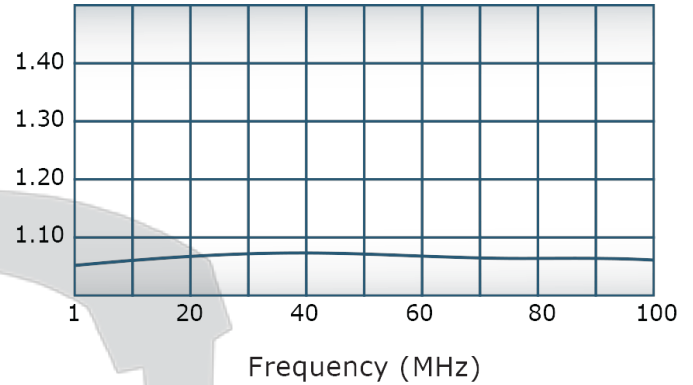
C7090

Performance Data (Specifications subject to change without notice):

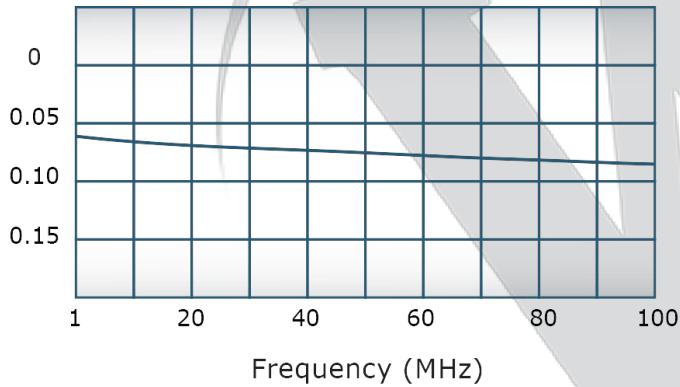
Coupling:



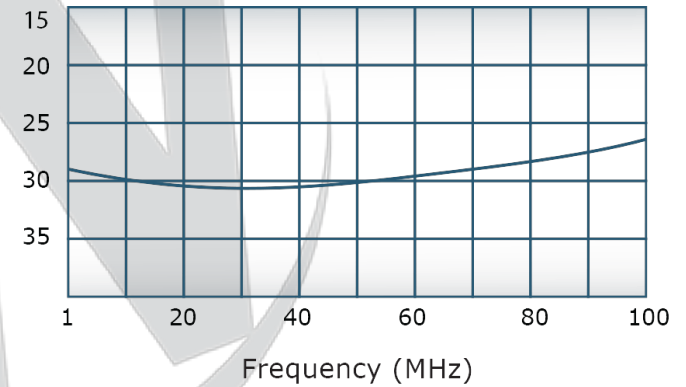
VSWR:



Insertion Loss:



Directivity:

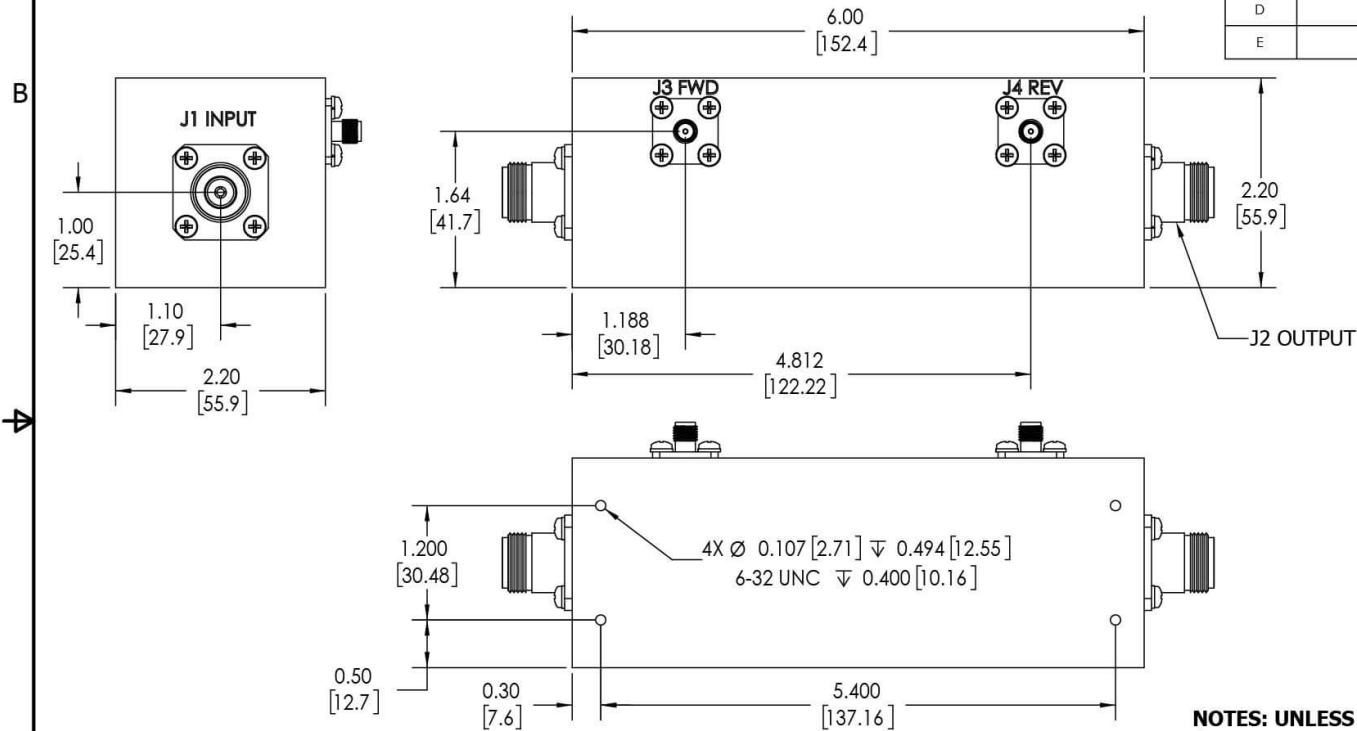


Restriction on use, duplication, or disclosure of proprietary information. This document contains proprietary information which is the sole property of Werlatone, Inc.

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 3334	6/25/03	RH
B	ECN 4036	8/18/06	MJ
C	ECN 8543	1/31/2014	SC
D	ECN 8618	4/2/2014	SC
E	ECN 9696	5/14/2019	RB



- NOTES: UNLESS OTHERWISE SPECIFIED**
- MATERIAL: ALUMINUM 6061-T6**
 - FINISH: CHEM FILM PER MIL-DTL-5541F TYPE I CLASS 3 (YELLOW IRIDITE)**
 - CONNECTORS:**
J1-J2: N FEMALE
J3-J4: SMA FEMALE

UNLESS OTHERWISE SPECIFIED		OWN	DATE	17 Jon Barrett Rd Patterson, NY 12563	
INTERPRET DRAWING IN ACCORDANCE WITH MIL-STD-100		SD	5/14/2019	WERLATONE SINCE 1965	
DIMENSIONING PER ASME Y14.5M-2009		CHK	DATE		
PARENTHESES FOR REF ONLY		CS	5/14/2019	TITLE	
DIMENSIONS ARE IN INCHES		ENGR	DATE		
DIMENSIONAL LIMITS APPLY BEFORE PROCESSES		INFR	DATE	OUTLINE	
TOLERANCES:		QA	DATE		
ANGLES ± 2°		RLSE	DATE	SIZE CAGE CODE DWG NO	
3 PL ± .005 [13]					
2 PL ± .015 [38]				REV	
REMOVE ALL BURRS AND SHARP EDGES R.01 MAX					
CONCENTRICITY MACHINED DIA. .002 FIM				B 10914-500 E	
MACHINE TOOL MISMATCH .003 MAX					
THIRD ANGLE PROJECTION				SCALE 1:1.25 SHEET 1 OF 1	
APPLICATION					

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