



## PRODUCT DATA SHEET

C9790

**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:      30 - 520 MHz  
 Power:          600 W CW  
 Coupling:        30 ± 1.0 dB Max.  
 Flatness:        ± 0.8 dB Max.  
 Insertion Loss: 0.8 dB Max.  
 VSWR (ML):     1.20:1 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 +60°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)
C9790-10	N Female	N Female	N Female	N Female
C9790-12	N Female	N Female	SMA	SMA
C9790-20	7/16 Female	7/16 Female	N Female	N Female
C9790-22	7/16 Female	7/16 Female	SMA	SMA

**Must be mounted to a heat spreader capable of maintaining a unit base plate temperature of less than or equal to +60° C.**

**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.

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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

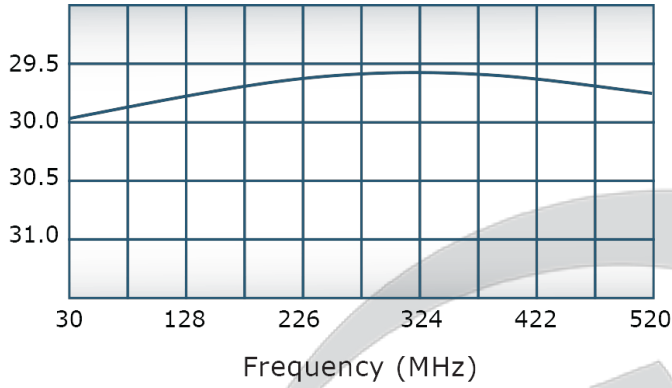


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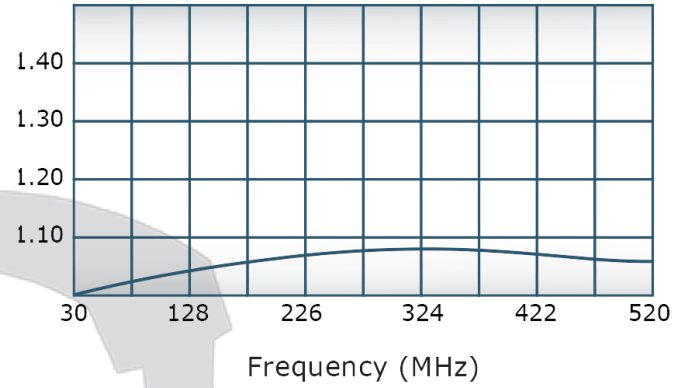
C9790

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

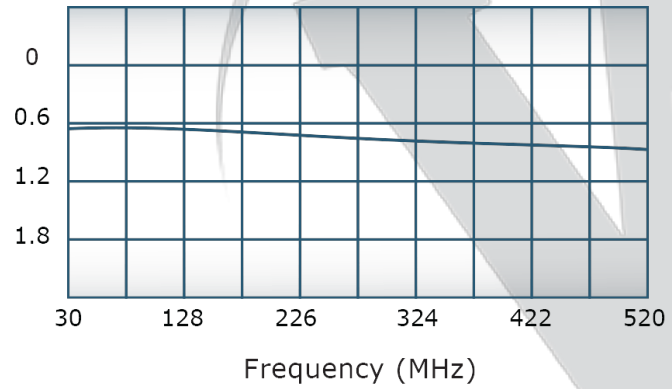
Coupling:



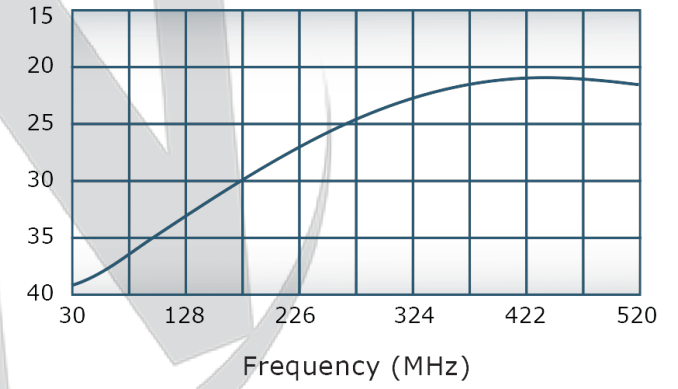
VSWR:



Insertion Loss:



Directivity:



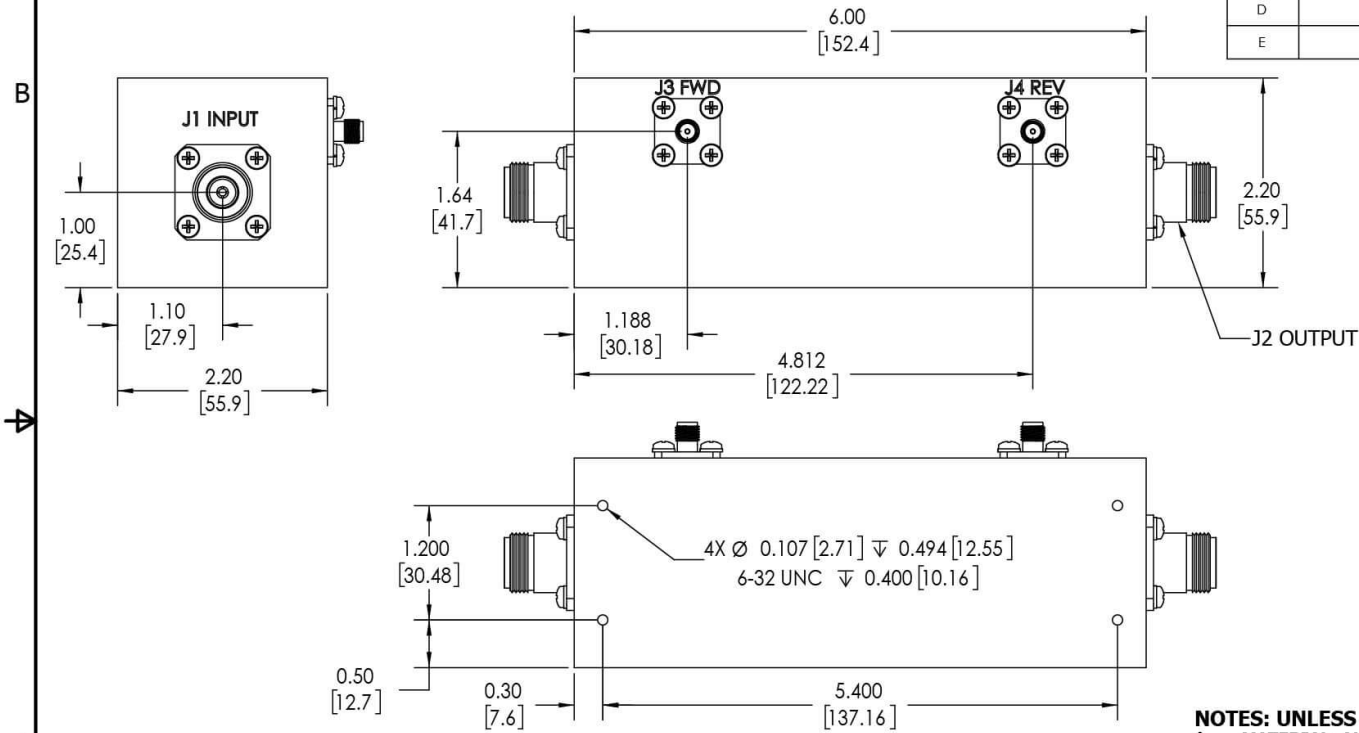
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REVISION HISTORY			
REV.	REVISION RECORD	DATE	APPROVED
A	ECN 3334	6/25/03	RH
B	ECN 4036	8/18/06	MJ
C	ECN 8543	1/31/2014	SC
D	ECN 8618	4/2/2014	SC
E	ECN 9696	5/14/2019	RB



- 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		DWN	DATE	17 Jon Barrett Rd Patterson, NY 12563
INTERPRET DRAWING IAW MIL-STD-100		SD	5/14/2019	WERLATONE SINCE 1965
DIMENSIONS PER ASME Y14.5M-2009		CHK	DATE	
PARENTHEetical INFO FOR REF ONLY		CS	5/14/2019	TITLE
DIMENSIONS ARE IN INCHES		ENGR	DATE	OUTLINE
DIMENSIONAL LIMITS APPLY BEFORE PROCESSES		INFR	DATE	SIZE CAGE CODE DWG NO
TOLERANCES:		QA	DATE	B 10914-500
ANGLES = 2°		RLSE	DATE	SCALE 1:1.25
3 PL ± .005 [1.3]				REV E
2 PL ± .015 [3.8]				SHEET 1 OF 1
REMOVE ALL BURRS AND SHARP EDGES R.01 MAX				
CONCENTRICITY MACHINED DIA: .002 FIM				
MACHINE TOOL MISMATCH .003 MAX.				
NEXT ASSY	USED ON	THIRD ANGLE PROJECTION		
APPLICATION				

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