



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

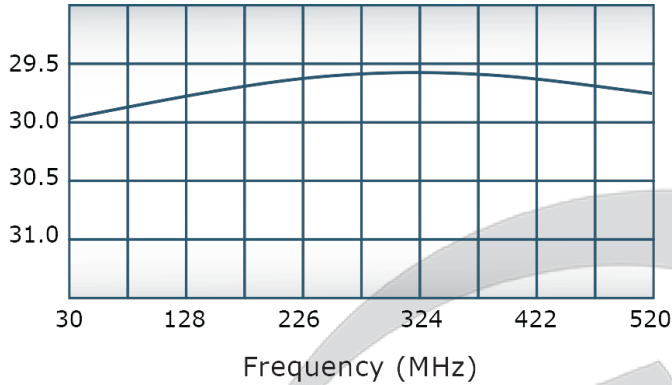
Must be mounted to a heat spreader capable of maintaining a unit base plate temperature of less than or equal to +60° C.

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.

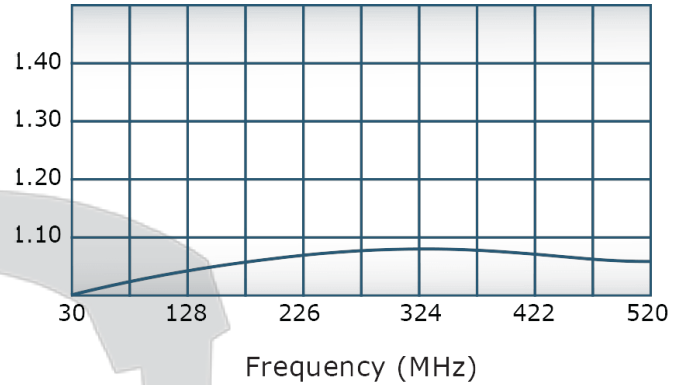


Performance Data (Specifications subject to change without notice):

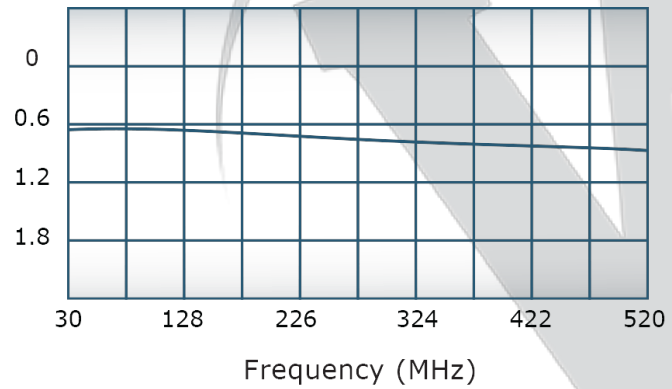
Coupling:



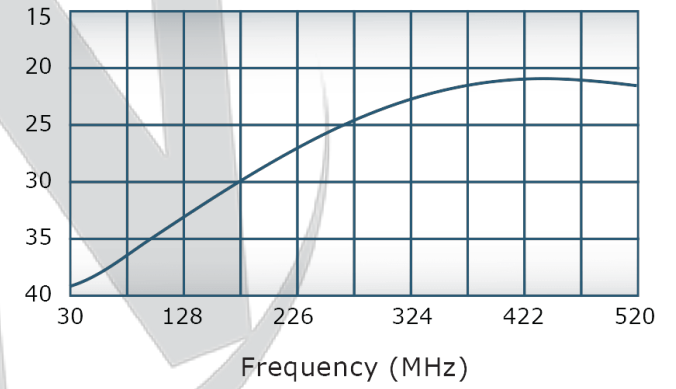
VSWR:



Insertion Loss:

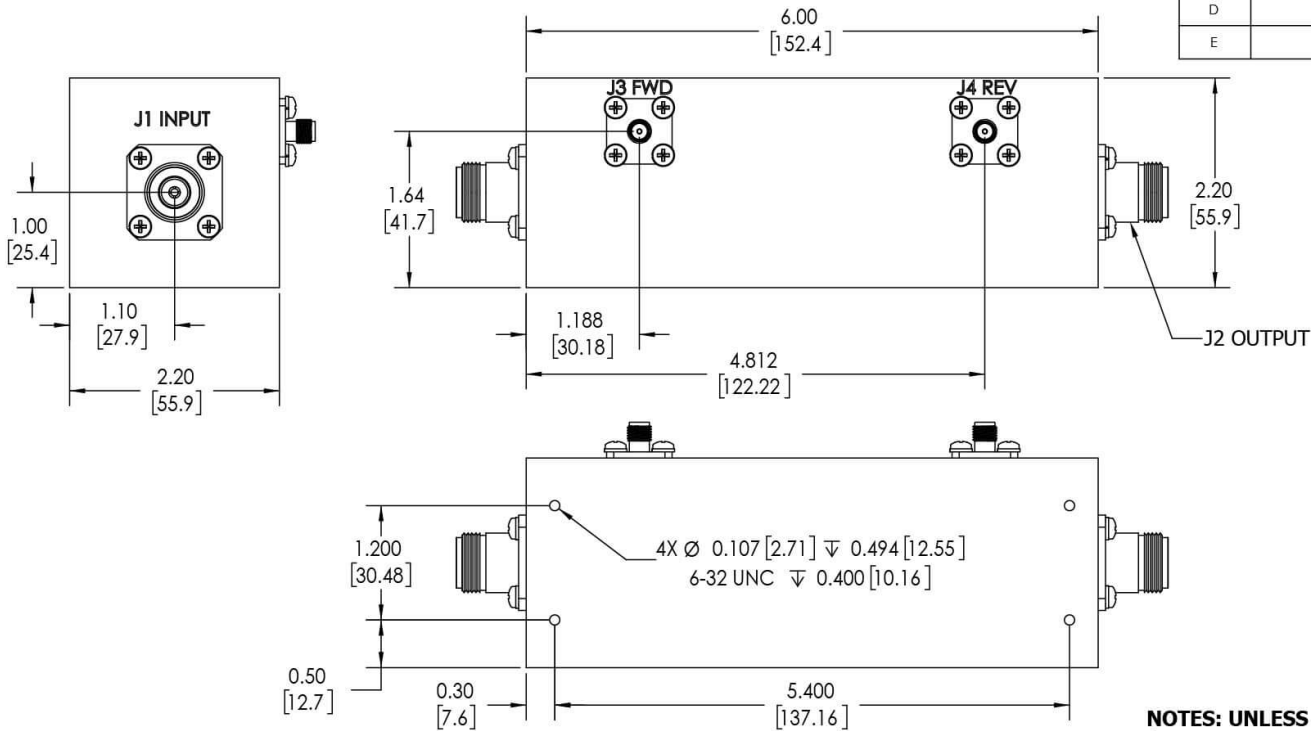


Directivity:



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

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