

PRODUCT DATA SHEET

C12298

4-Port Bi-Directional Coupler: Similar to the 3-Port Uni-Directional Coupler, except that both ends of the coupled line serve as coupled ports. Convenient for simultaneously monitoring both forward and reverse power. The directivity of this coupler design is, however, dependent upon well matched 50 Ohm loads on the coupled ports.

Features:

High Power Wide Bandwidths Small Size Flat Coupling Custom Designs Available

Electrical Specifications:

Frequency: 20 - 1000 MHz
 Power: 250 W CW
 Coupling: 50 ± 1.0 dB Max.
 Insertion Loss: 0.35 dB Max.
 Flatness: ± 0.65 dB Max.
 VSWR (ML): 1.25:1 Max.
 Directivity: 20 dB Min.

Mechanical Specifications:

Type: Non-Connectorized (SMT)
 Surface Finish: ENIG IAW IPC 4552
 Operating Temperature: -55°C to +85°C
 Storage Temperature: -55°C to +85°C
 Size: 1.35 x 1.0 x 0.15"

Connector Configurations:

Model	J1	J2	J3	J4
C12298	Input	Output	Forward	Reverse

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 C12298

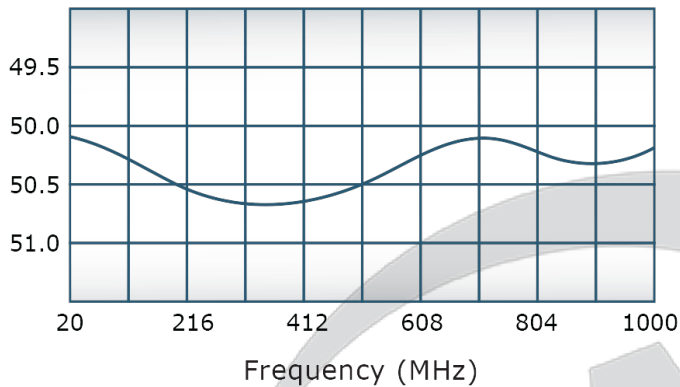


PRODUCT DATA SHEET

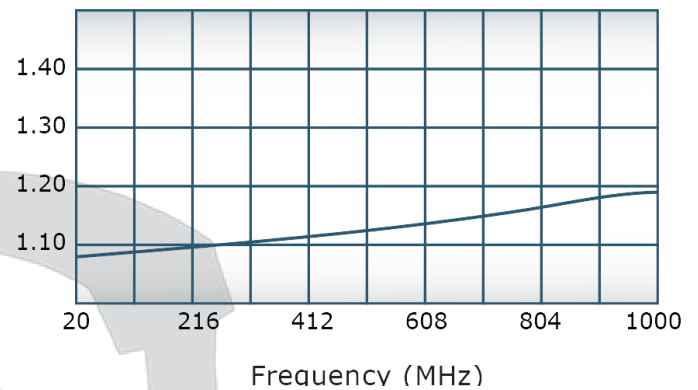
C12298

Performance Data (Specifications subject to change without notice):

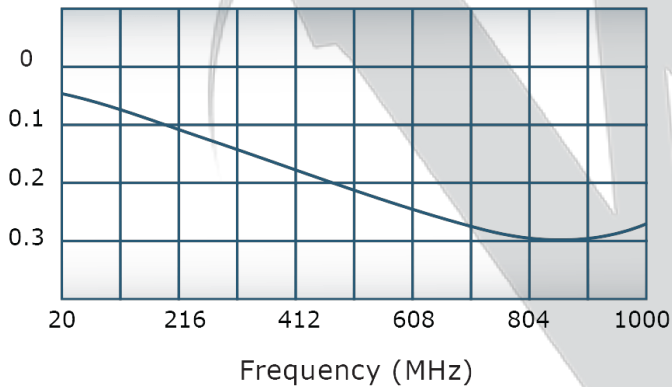
Coupling:



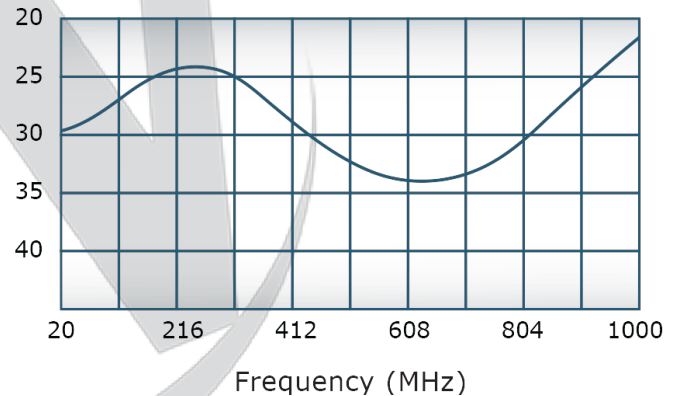
VSWR:



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.

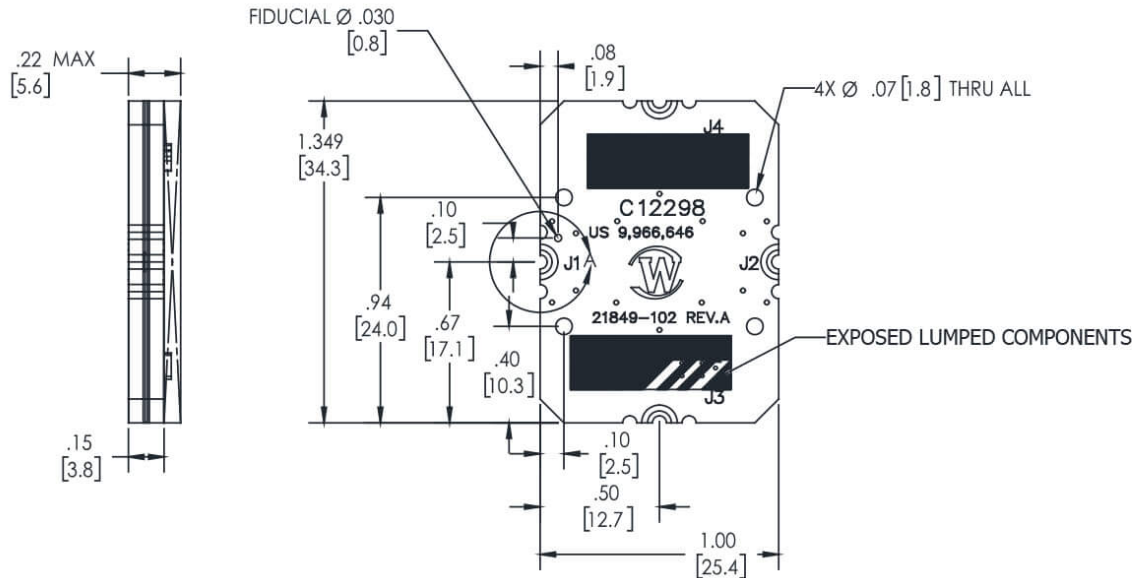
Werlatone, Inc. 17 Jon Barrett Road Patterson, NY 12563 T:(845)278-2220 F:(845)278-3440 sales@werlatone.com www.werlatone.com

RESTRICTION ON USE, DUPLICATION OR DISCLOSURE OF PROPRIETARY INFORMATION

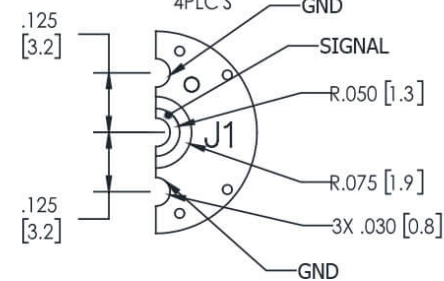
This document contains proprietary information which is the sole property of Werlatone, Inc.

REVISION HISTORY

REV.	REVISION RECORD	DATE	APPROVED
-	INITIAL RELEASE	2/11/2021	CS
A	ECN10008	3/2/2021	CS
B	ECN10476	7/27/2023	PR



DETAIL A
SCALE 4:1
4PLCS





VIEW FOR REFERENCE ONLY
SCALE 1:1



NOTES: UNLESS OTHERWISE SPECIFIED

1. SURFACE MOUNT UNIT.
2. FINISH: ENIG IAW IPC 4552.
3. PORT CONFIGURATION: J1: INPUT
J2: OUTPUT
J3: FORWARD
J4: REVERSE

		UNLESS OTHERWISE SPECIFIED		OWN	DATE	 WERLATONE SINCE 1965		17 Jon Barrett Rd Patterson, NY 12563	
		• INTERPRET DRAWING IAW MIL-STD-100		MB	1/26/2021	TITLE			
		• DIMENSIONING PER ASME Y14.5M-2009		CHK	DATE				
		• PARENTHESES FOR REF ONLY		CS	2/11/2021	OUTLINE			
		• DIMENSIONS ARE IN INCHES (mm)		ENGR	DATE				
		• DIMENSIONAL LIMITS APPLY BEFORE PROCESSES		MB	2/11/2021	SIZE CAGE CODE DWG NO		REV	
		• TOLERANCES:		INFR	DATE				
		ANGLES: ± 2°		QA	DATE	B 28812 21849-500		B	
		3 PL ± .005 [0.13]		DATE	DATE				
		2 PL ± .015 [0.4]		DATE	DATE	SCALE		SHEET 1 OF 1	
		• REMOVE ALL BURRS AND SHARP EDGES R.01 MAX		DATE	DATE				
		• CONCENTRICITY MACHINED DIA: .002 FIM		DATE	DATE	2:1			
		• MACHINE TOOL MISMATCH .003 MAX		DATE	DATE				
APPLICATION		THIRD ANGLE PROJECTION 							
21849-300 C12298									
NEXT ASSY USED ON									

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