WERLATONE

Model C12298
Directional Couplers Non-Connectorized



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.

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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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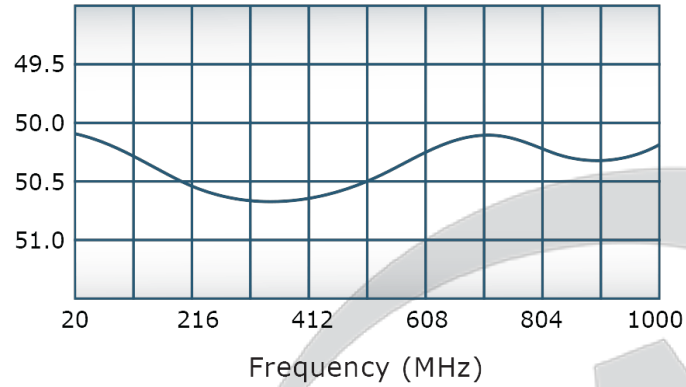
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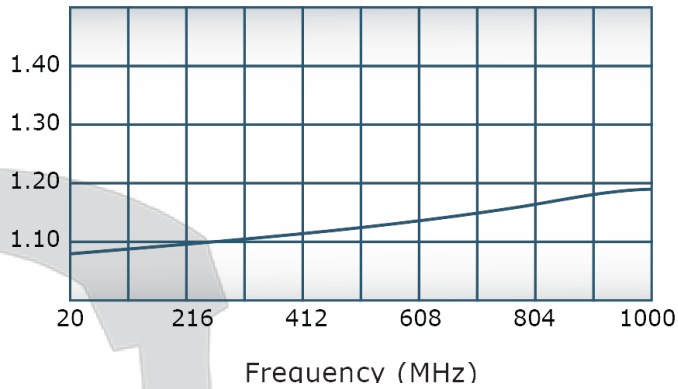
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Performance Data (Specifications subject to change without notice):

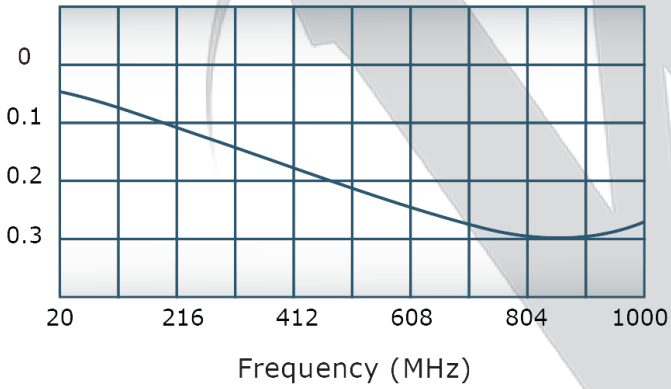
Coupling:



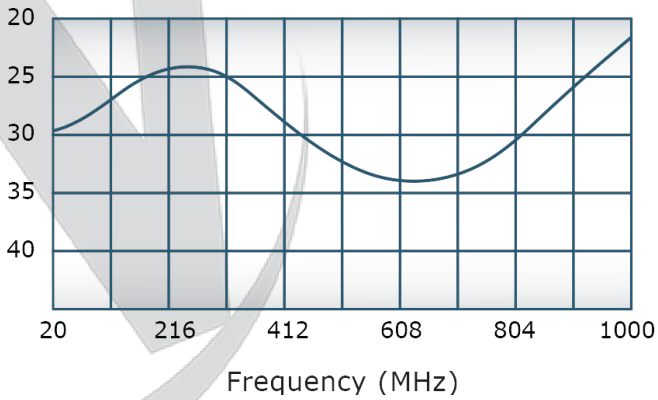
VSWR:



Insertion Loss:



Directivity:



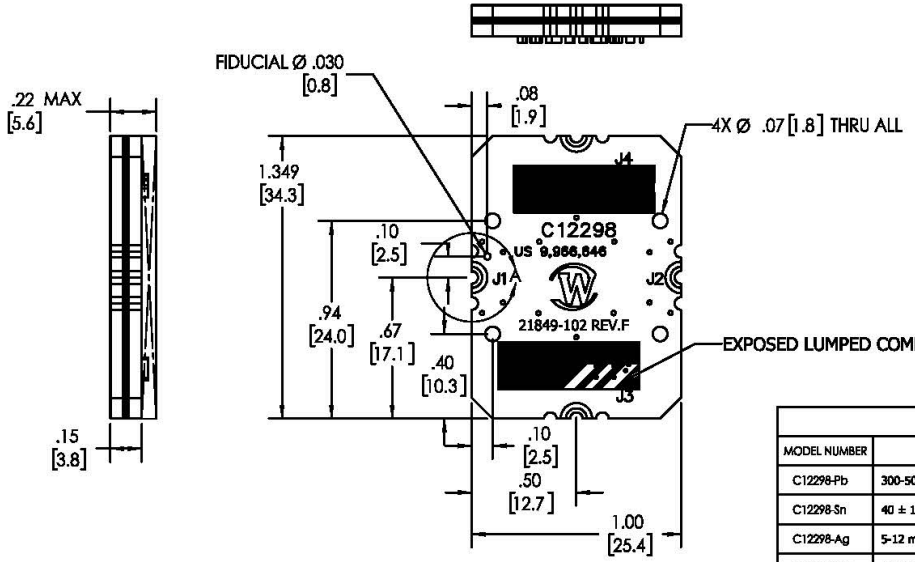
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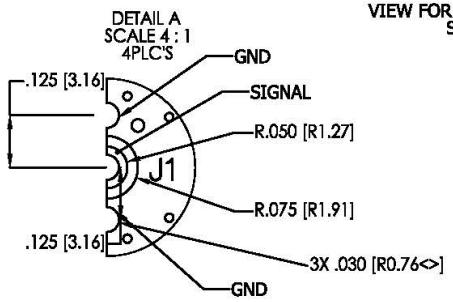
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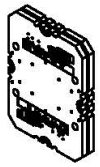
NOTES: UNLESS OTHERWISE SPECIFIED
1. SURFACE MOUNT UNIT.
2. FINISH: ENIG IAW IPC 4552.
3. PORT CONFIGURATION: J1: INPUT
J2: OUTPUT
J3: FORWARD
J4: REVERSE

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
C	ECN10726	4/01/2025	..





VIEW FOR REFERENCE ONLY
SCALE 1:1



SURFACE FINISH		
MODEL NUMBER	DESCRIPTION	COMPLIANCE
C12298-Pb	300-500 micro-inches Electrodeposited Sn60/Pb40 (not fused) per IPC 6012E	Non- RoHs
C12298-Sn	40 ± 15 micro-inches Immersion Tin IAW IPC 4554.	Non- RoHs
C12298-Ag	5-12 micro-inches Immersion Silver IAW IPC 4553A. (Component subassembly is Non-RoHs)	Non- RoHs
C12298R-Ag	5-12 micro-inches Immersion Silver IAW IPC 4553A.	RoHS
C12298-Au	ENIG IAW IPC 4552. Ni Thickness: 120-240 micro-inches. Au Thickness : 3-5 micro-inches (Component subassembly is Non-RoHs)	Non- RoHs
C12298R-Au	ENIG IAW IPC 4552. Ni Thickness: 120-240 micro-inches. Au Thickness : 3-5 micro-inches	RoHS

21849-300	C12298
NEXT ASSY	USED ON
APPLICATION	

UNLESS OTHERWISE SPECIFIED
THIRD ANGLE PROJECTION

DWN	MB	1/26/2021
CHK	CS	2/11/2021
ENGR	MB	2/11/2021
MFGR		
QA		
RLSE		

WERLATONE SINCE 1965
17 Jon Barrett Rd
Patterson, NY 12563

TITLE: OUTLINE

SIZE	CAGE CODE	DWG NO	REV
B	28812	21849-500	C

SCALE 2:1 SHEET 1 OF 1

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