

## PRODUCT DATA SHEET

C10299

**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:

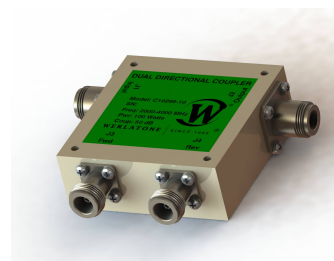
Frequency: 2000 - 4000 MHz  
Power: 100 W CW  
Coupling:  $50 \pm 1.0$  dB Max.  
Insertion Loss: 0.2 dB Max.  
Flatness:  $\pm 0.75$  dB Max.  
VSWR (ML): 1.30:1 Max.  
Directivity: 15 dB Min.

### 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: 3.0 x 3.0 x 1.09"

### Connector Configurations:

Model	Input (J1)	Output (J2)	Fwd (J3)	Rev (J4)
C10299-10	N Female	N Female	N Female	N Female
C10299-12	N Female	N Female	SMA	SMA
C10299-13	N Female	N Female	BNC	BNC
C10299-16	N Male	N Male	SMA	SMA
C10299-102	SMA	SMA	SMA	SMA
C10299-302	TNC Female	TNC Female	SMA	SMA
C10299-712	N Male	N Female	SMA	SMA
C10299-714	N Male	N Female	N Female	N Female

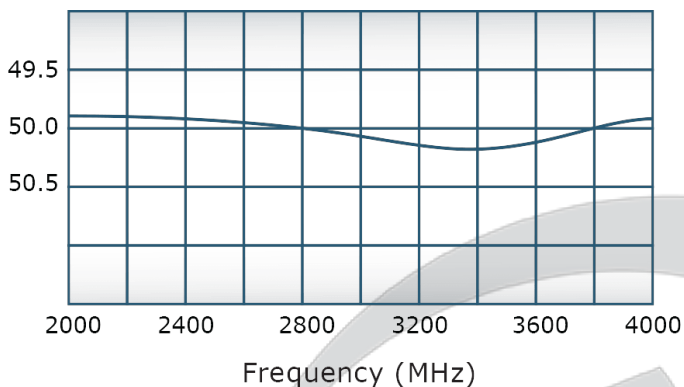


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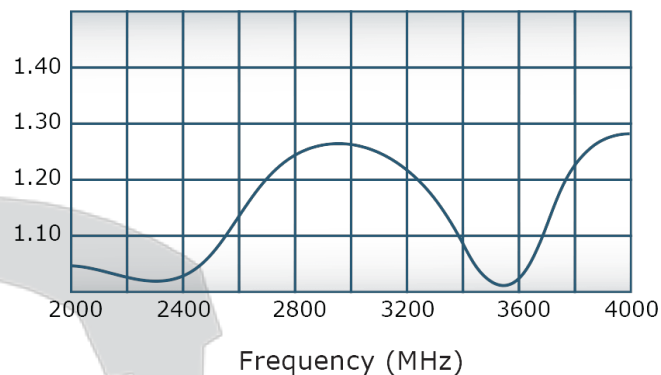
C10299

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

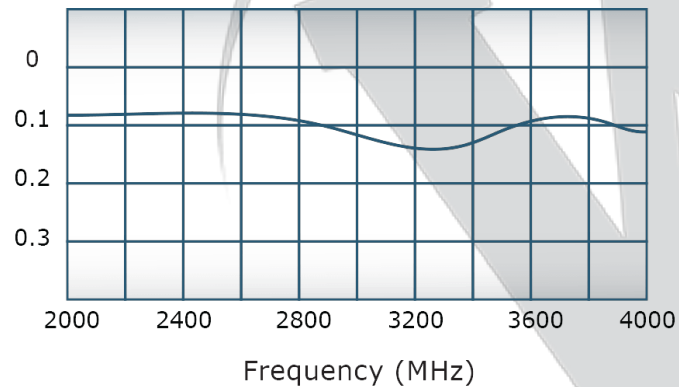
Coupling:



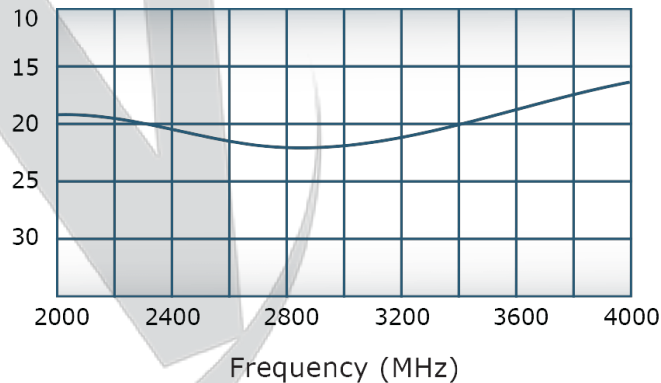
VSWR:



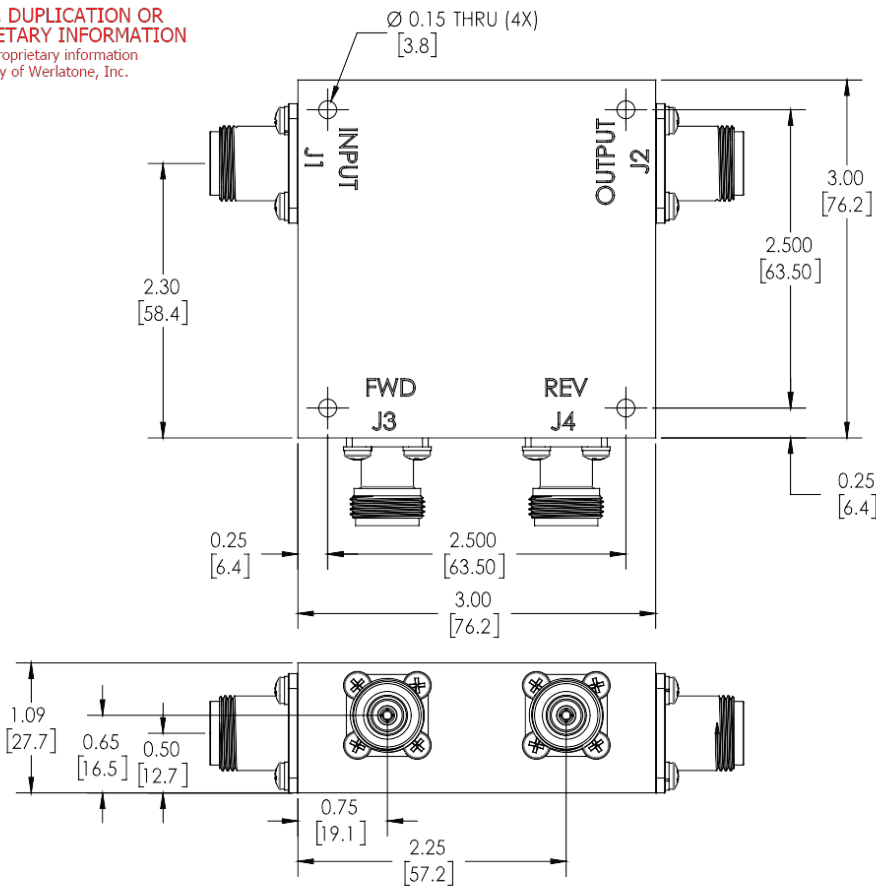
Insertion Loss:



Directivity:



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REVISION HISTORY			
REV.	REVISION RECORD	DATE	APPROVED
A	ECN 9696	11/27/18	RB

**NOTES: UNLESS OTHERWISE SPECIFIED**

- MATERIAL: ALUMINUM 6061-T6**
- FINISH: CHEM FILM PER MIL-DTL\_5541F TYPE I CLASS 3 (YELLOW IRIDITE)**

		UNLESS OTHERWISE SPECIFIED		OWN	DATE	<b>WERLATONE SINCE 1965</b> 17 Jon Barrett Rd Patterson, NY 12563
		• INTERPRET DRAWING JAW MIL-STD-100 • DIMENSIONING PER ASME Y14.5M-2009 • PARENTHETICAL INFO FOR REF ONLY • DIMENSIONS ARE IN INCHES • DIMENSIONAL LIMITS APPLY BEFORE PROCESSES • TOLERANCES: ANGLES: $\pm 2^\circ$ 2 PL. $\pm .005$ [1.3] 2 PL. $\pm .015$ [1.3] • REMOVE ALL BURS AND SHARP EDGES R.01 MAX • CONCENTRICITY MACHINED DIA: .002 FIM • MACHINE TOOL MISMATCH: .003 MAX		CHK	DATE	
				ENGR	DATE	<b>OUTLINE</b> SIZE: B CAGE CODE: 10379-505 DWG NO: 10379-505 SCALE: 1:1
				DATE	DATE	
				DATE	DATE	REV: A SHEET 1 OF 1
				DATE	DATE	
NEXT ASSY	USED ON	THIRD ANGLE PROJECTION		DATE	DATE	
APPLICATION				DATE	DATE	

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