


PRODUCT DATA SHEET
C3900

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: 10 - 55 MHz
 Power: 10,000 W CW
 Coupling: 50 ± 1.0 dB Max.
 Insertion Loss: 0.05 dB Max.
 Flatness: ± 0.5 dB Max.
 VSWR (ML): 1.20:1 Max.
 Directivity: 30 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: 6.0 x 3.0 x 2.24"

Connector Configurations:

Model	Input (J1)	Output (J2)	Fwd (J3)	Rev (J4)
C3900-20	7/16 Female	7/16 Female	N Female	N Female
C3900-30	LC Female	LC Female	N Female	N Female
C3900-33	LC Female	LC Female	BNC	BNC
C3900-503	SQS Female	SQS Female	BNC	BNC
C3900-753	HN Male	HN Female	BNC	BNC
C3900-QC-0	QC Block	QC Block	N Female	N Female

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.

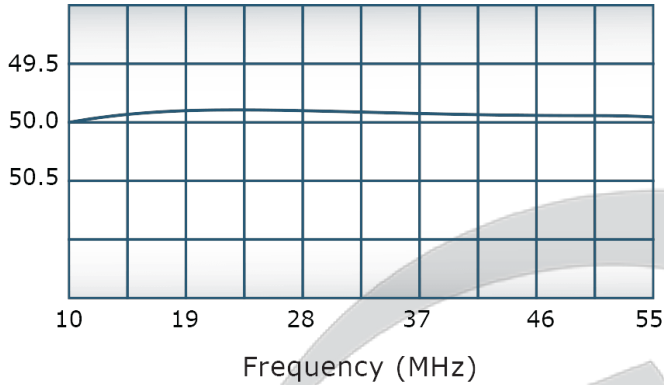


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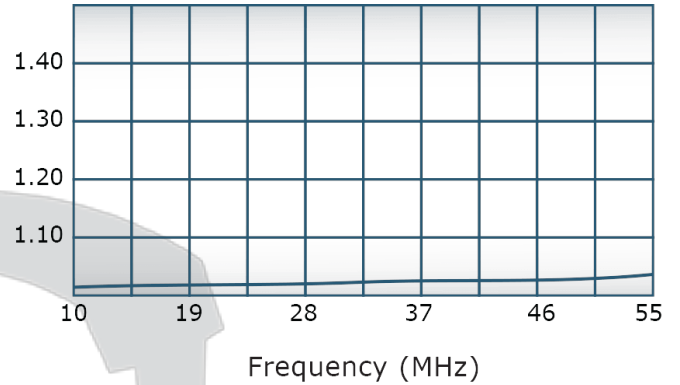
C3900

Performance Data (Specifications subject to change without notice):

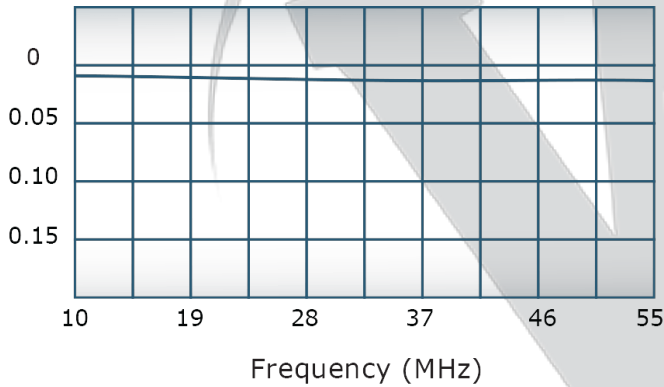
Coupling:



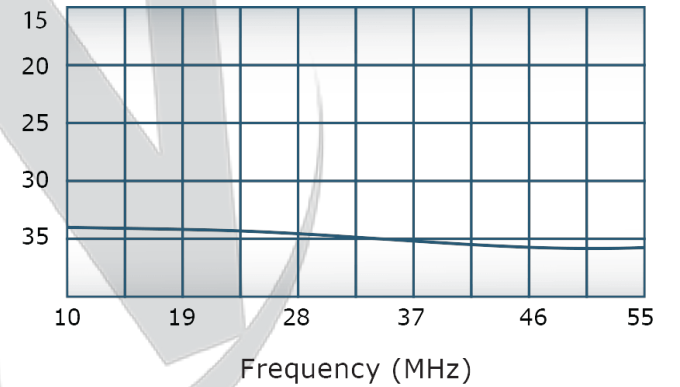
VSWR:



Insertion Loss:



Directivity:



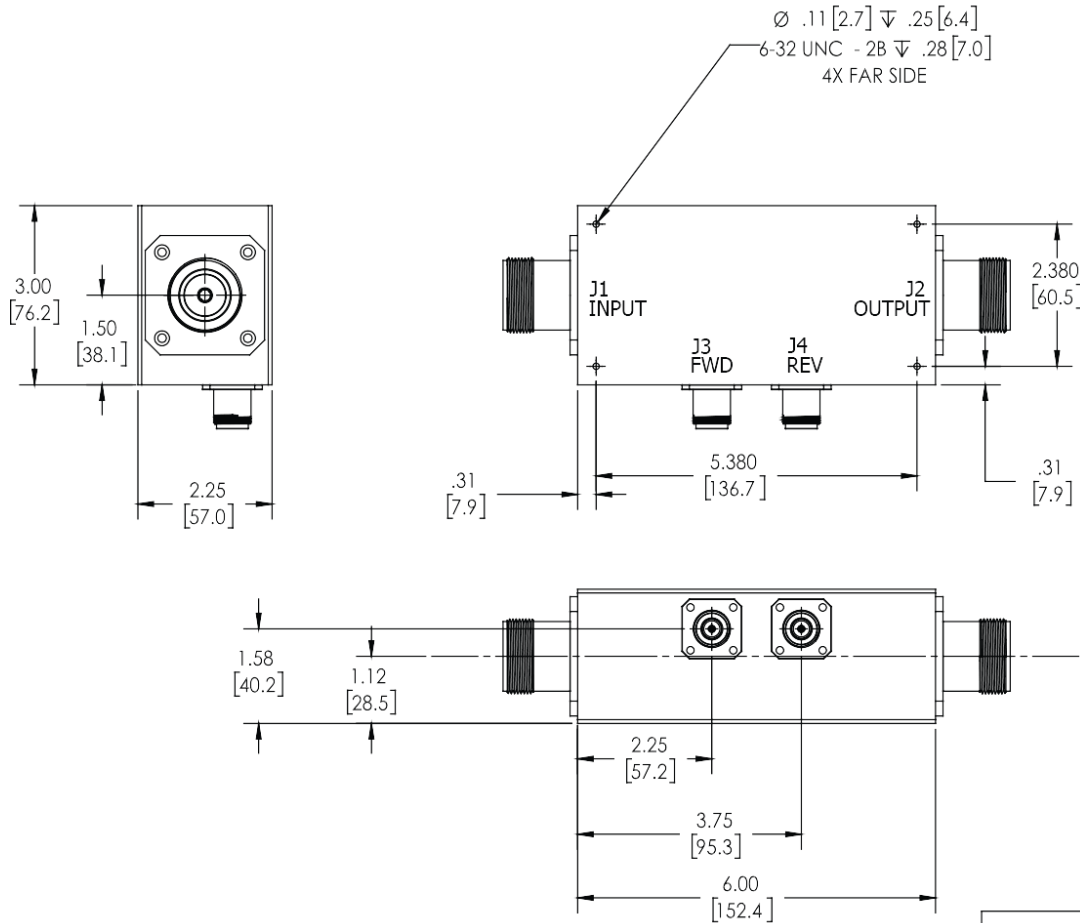
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Werlatone, Inc.

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REVISION HISTORY			
REV.	REVISION RECORD	DATE	APPROVED
-	INITIAL RELEASE	10/29/2018	CS



UNLESS OTHERWISE SPECIFIED		OWN	DATE	17 Jon Barrett Rd Patterson, NY 12563	
• INTERPRET DRAWING JAW MIL-STD-100	PLP	10/25/2018	W ^{ERL} ATON ^{IS} INCE 1965		
• DIMENSIONING PER ASME Y14.3M-2009	CHK	DATE			
• PRESENT TOTAL DIMS FOR REF ONLY	CS	10/29/2018	TITLE		
• DIMENSIONS ARE IN INCHES (mm)	ENGR	DATE			
• DIMENSIONAL LIMITS APPLY BEFORE PROCESSES	MFGR	DATE	SIZE	CASE CODE	DWG NO
• TOLERANCES:	QA	DATE	B	28812	10396-500
ANGLES: ± .2°	RLSE	DATE	SCALE	SHEET 1 OF 1	
2 PL ± .005 (1.3)	APPLICATION		1:2		
2 PL ± .015 (.4)	THIRD ANGLE PROJECTION				
• REMOVE ALL BURS AND SHARP EDGES R.02 MAX					
• CONCENTRICITY MACHINED DIA: .002 FIM					
• MACHINE TOOL REPAIR/CH .003 MAX					

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