WERLATONE

Model C3900
Connectorized Directional Couplers

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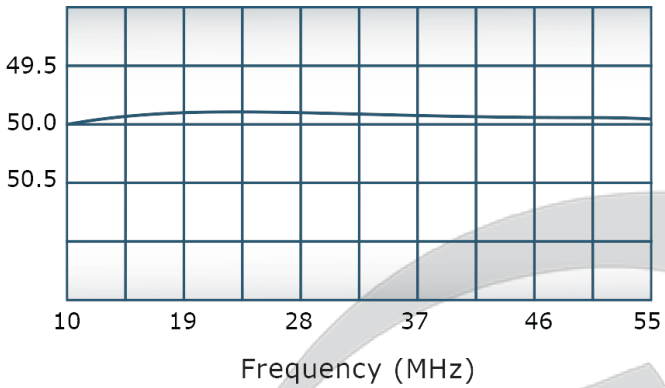
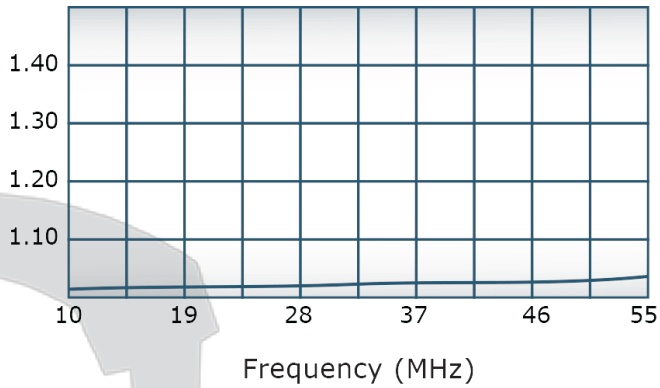
Werlatone, Inc. 17 Jon Barrett Road Patterson, NY 12563 T:(845)278-2220 F:(845)278-3440 sales@werlatone.com www.werlatone.com

Performance Data (Specifications subject to change without notice):

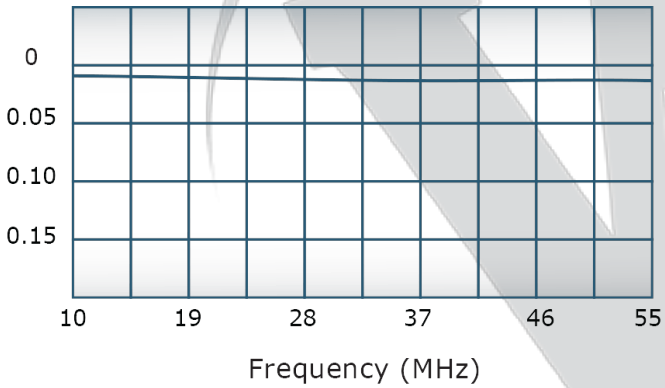
Coupling:



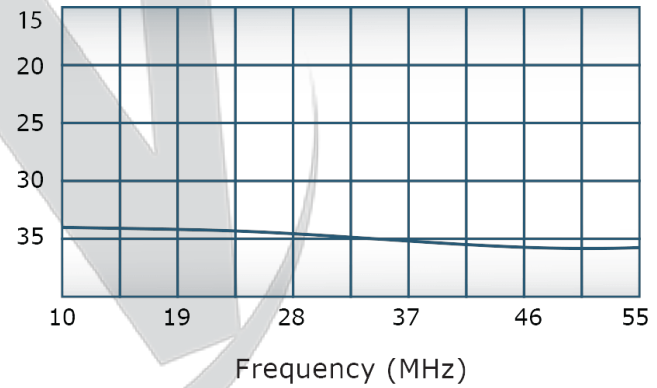
VSWR:



Insertion Loss:



Directivity:



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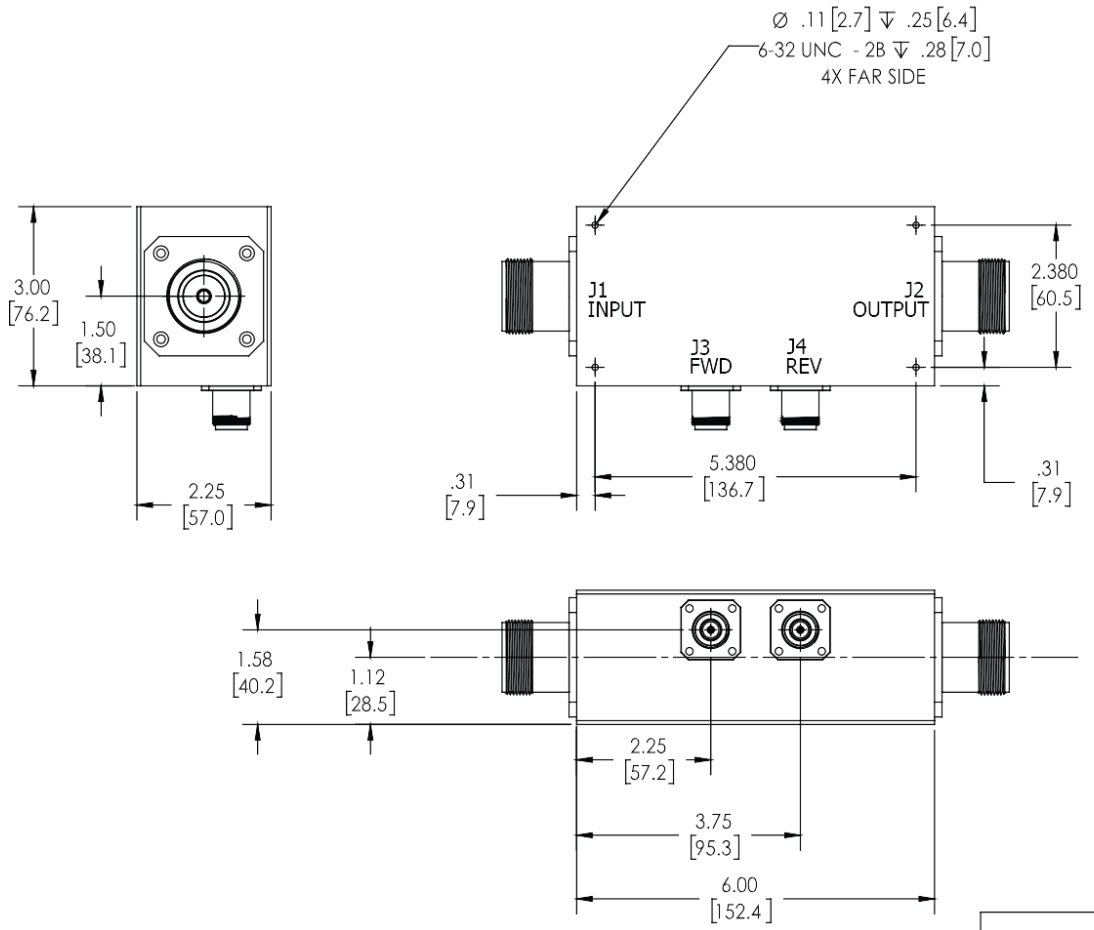
REVISION HISTORY			
REV.	REVISION RECORD	DATE	APPROVED
-	INITIAL RELEASE	10/29/2018	CS



		UNLESS OTHERWISE SPECIFIED	DWN PLP	DATE 10/25/2018	WERLATONE SINCE 1965 — 17 Jon Barrett Rd Patterson, NY 12563
		• INTERPRET DRAWING IAW MIL-STD-100 • DIMENSIONING PER ASME Y14.5M-2009 • PARENTHETICAL INFO FOR REF ONLY • DIMENSIONS ARE IN INCHES [mm] • DIMENSIONAL LIMITS APPLY BEFORE PROCESSES • TOLERANCES: ANGLES ± 2° 3 PL ± .005 [.13] 2 PL ± .015 [.4] • REMOVE ALL BURRS AND SHARP EDGES R.01 MAX • CONCENTRICITY MACHINED DIA: .002 FIM • MACHINE TOOL MISMATCH .003 MAX	CHK CS	DATE 10/29/2018	TITLE
			ENGR	DATE	
			MFGR	DATE	SIZE B | CAGE CODE 28812 | DWG NO 10396-500 | REV -
			QA	DATE	
NEXT ASSY	USED ON		RLSE	DATE	SCALE 1:2 | SHEET 1 OF 1
APPLICATION		THIRD ANGLE PROJECTION			

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