WERLATONE

Model C1449
Connectorized Directional Couplers



PRODUCT DATA SHEET **C1449**

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.

This unit is de-rated to 5000 W CW when supplied with 7/16 or HN connectors.

Features:

High Power | Wide Bandwidths | Small Size | Flat Coupling | Custom Designs Available

Electrical Specifications:

Frequency:	1 - 100 MHz
Power:	10,000 W CW
Coupling:	70 ± 1.0 dB Max.
Insertion Loss:	0.05 dB Max.
Flatness:	± 0.75 dB Max.
VSWR (ML):	1.10:1 Max.
Directivity:	20 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)
C1449-20	7/16 Female	7/16 Female	N Female	N Female
C1449-22	7/16 Female	7/16 Female	SMA	SMA
C1449-23	7/16 Female	7/16 Female	BNC	BNC
C1449-30	LC Female	LC Female	N Female	N Female
C1449-33	LC Female	LC Female	BNC	BNC
C1449-63	HN Female	HN Female	SMA	SMA
C1449-64	HN Female	HN Female	BNC	BNC
C1449-503	SQS Female	SQS Female	BNC	BNC
C1449-728	7/16 Male	7/16 Female	SMA	SMA
C1449-754	HN Female	HN Male	SMA	SMA
C1449-QC-2	QC Block	QC Block	SMA	SMA

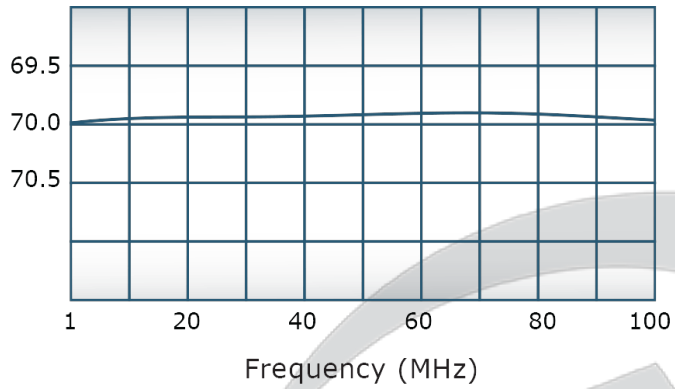
Restriction on use, duplication, or disclosure of proprietary information. This document contains proprietary information which is the sole property of Werlatone, Inc.
Werlatone, Inc. 17 Jon Barrett Road Patterson, NY 12563 T:(845)278-2220 F:(845)278-3440 sales@werlatone.com www.werlatone.com

Werlatone, Inc.All Rights Reserved

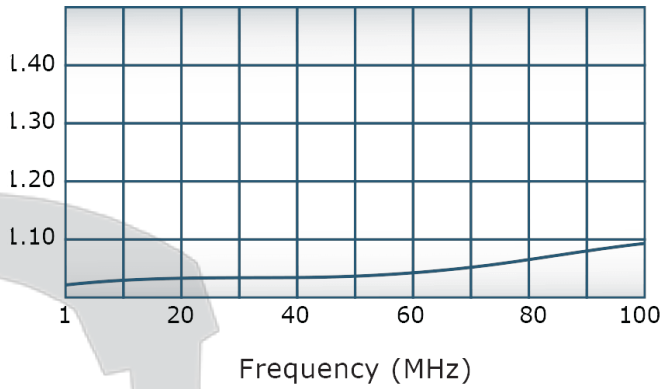


Performance Data (Specifications subject to change without notice):

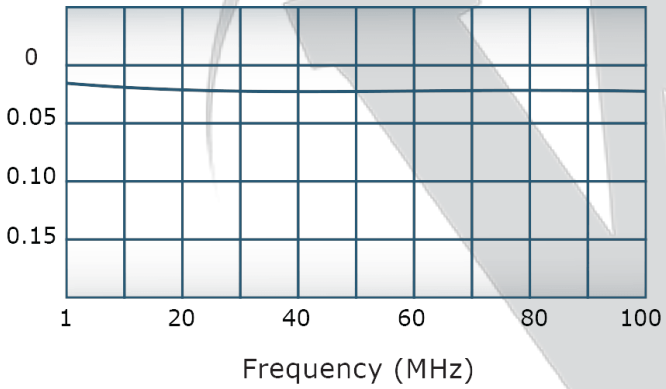
Coupling:



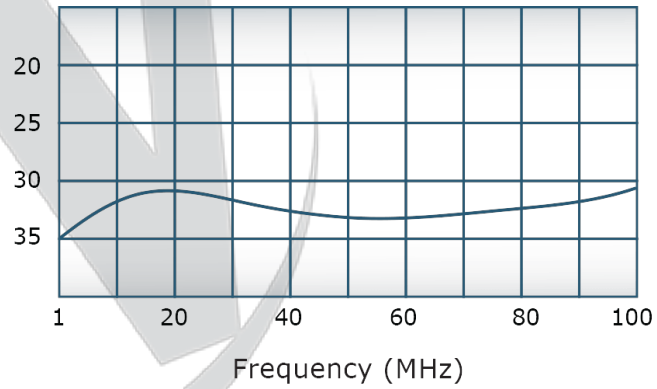
VSWR:



Insertion Loss:



Directivity:



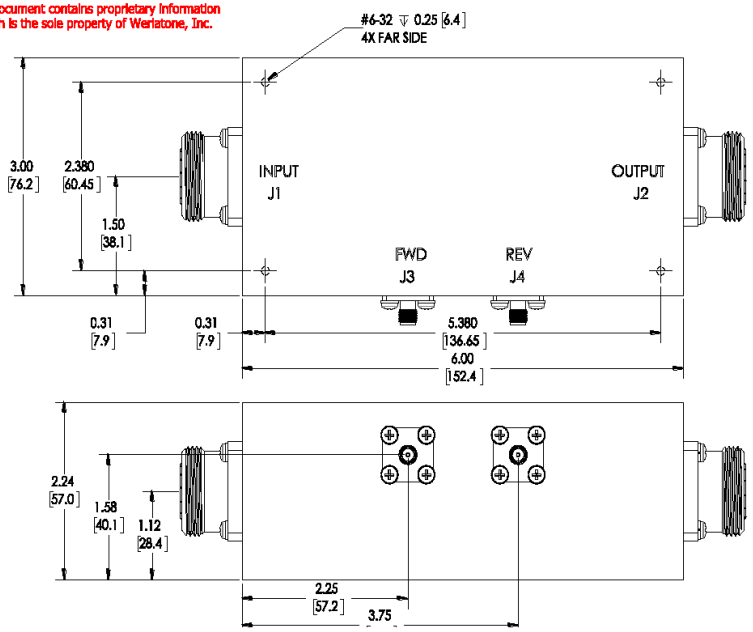
Restriction on use, duplication, or disclosure of proprietary information. This document contains proprietary information which is the sole property of Werlatone, Inc.
Werlatone, Inc. 17 Jon Barrett Road Patterson, NY 12563 T:(845)278-2220 F:(845)278-3440 sales@werlatone.com www.werlatone.com

Werlatone, Inc.All Rights Reserved

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
A	ECN 9696	11/28/18	RB



Model	Input(J1)	Output(J2)	Fwd(J3)	Rev(J4)
C1449-20	7/16 Female	7/16 Female	N Female	N Female
C1449-22	7/16 Female	7/16 Female	SMA	SMA
C1449-23	7/16 Female	7/16 Female	BNC	BNC
C1449-30	LC Female	LC Female	N Female	N Female
C1449-33	LC Female	LC Female	BNC	BNC
C1449-63	HN Female	HN Female	SMA	SMA
C1449-64	HN Female	HN Female	BNC	BNC
C1449-391	LC Male	LC Female	N Female	N Female
C1449-501	SQS Female	SQS Female	N Female	N Female
C1449-503	SQS Female	SQS Female	BNC	BNC
C1449-629	7/16 Female	7/16 Male	BNC	BNC
C1449-728	7/16 Male	7/16 Female	SMA	SMA
C1449-751	HN Female	HN Male	BNC	BNC
C1449-754	HN Female	HN Male	SMA	SMA
C1449-7503	SQS Male	SQS Female	BNC	BNC
C1449-QC-0	QC Block	QC Block	N Female	N Female
C1449-7764	QC Block & LC(F)	QC Block & LC(M)	N Female	N Female

Notes:

1.) Material: Aluminum 6061-T6
2.) Finish: Chem. Film Per MIL-DTL-5541F Type I Class 3 (Yellow Iridite)
3.) Connectors: See table below
4.) **Unit Rated for 5 kW CW with 7/16 and/or HN Main Line Connectors**
5.) Operating Temperature: -55°C to +75°C
6.) Storage Temperature: -60°C to +85°C
7.) Humidity: 95% Non-Condensing
8.) Weight: 2.5 pounds

Model C1449

70 dB Dual Directional Coupler

Electrical Specifications:

Frequency:	1 - 100 MHz
Power:	10,000 W CW
Coupling:	70 dB ± 1.0 dB Nom.
Flatness:	± 0.75 dB Max.
Insertion Loss:	0.05 dB Max.
VSWR(ML):	1.10:1 Max.
Directivity:	20 dB Min.

WERLATONE | SINCE 1965

UNLESS OTHER WISE SPECIFIED
- INTERPRET DRAWING PER 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 ± 2°
  3 PL ± .005 [.13]
  2 PL ± .015 [.38]
- REMOVE ALL BURRS AND SHARP EDGES R.01 MAX
- CONCENTRICITY MACHINED DIA: .002 FIM
- MACHINE TOOL MISMATCH .005 MAX

NEXT ASSY | USED ON
APPLICATION

THIRD ANGLE PROJECTION

		DATE
DWN	SD	2/11/2019
CHK	CS	2/11/2019
ENGR		
MFGR		
QA		
ISSUE		

WERLATONE SINCE 1965 — 17 Jon Barrett Rd Patterson, NY 12563

TITLE: OUTLINE

SIZE	CAGE CODE	DWG NO	REV
B		10396-502	A

SCALE 1:1 — SHEET 1 OF 1

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