

## PRODUCT DATA SHEET

**C8749**

**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: 50 - 2000 MHz  
Power: 30 W CW  
Coupling:  $40 \pm 1.0$  dB Max.  
Insertion Loss: 0.5 dB Max.  
Flatness:  $\pm 1.25$  dB Max.  
VSWR (ML): 1.30:1 Max.  
Directivity: 20 dB Min.

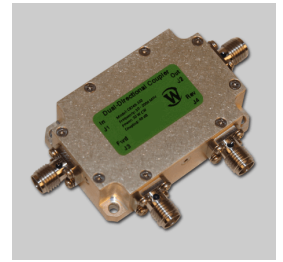
### Mechanical Specifications:

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: 1.76 x 1.16 x 0.565"

### Connector Configurations:

Model	Input (J1)	Output (J2)	Fwd (J3)	Rev (J4)
C8749-102	SMA	SMA	SMA	SMA

**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.

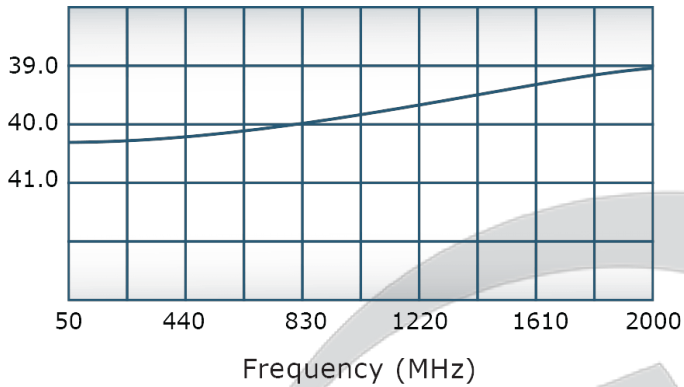


## PRODUCT DATA SHEET

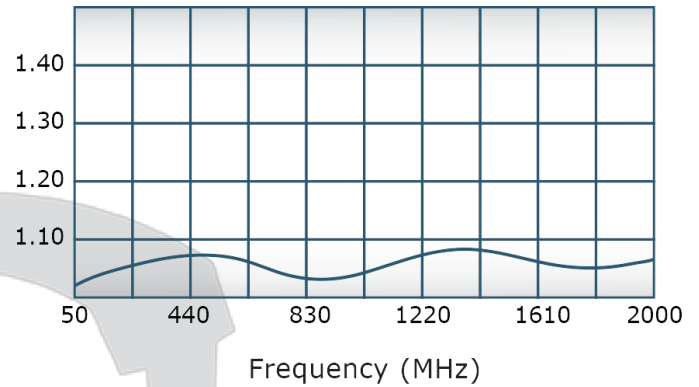
C8749

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

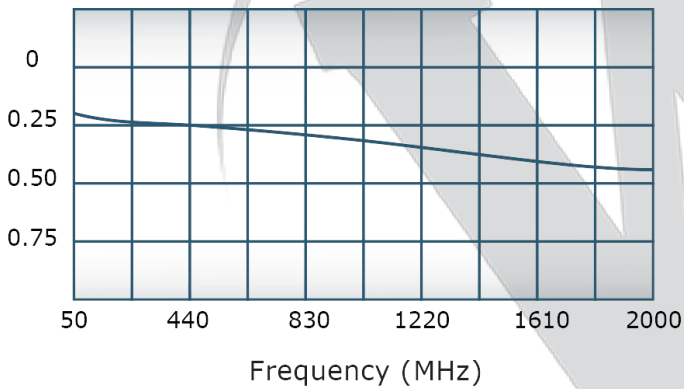
Coupling:



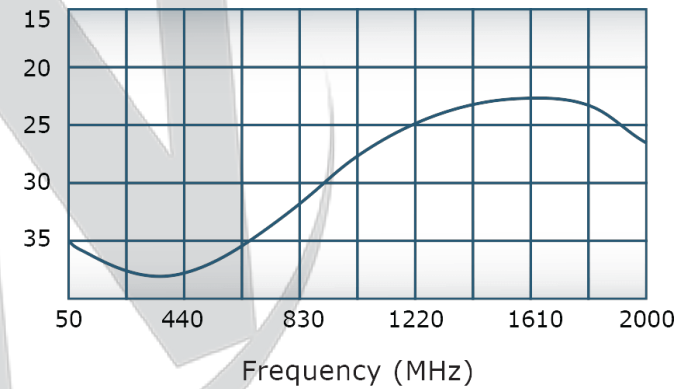
VSWR:



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.

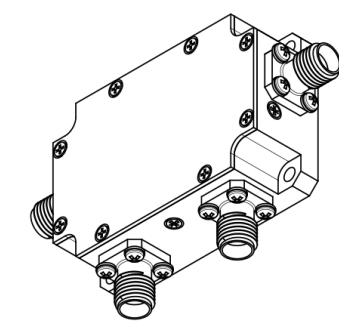
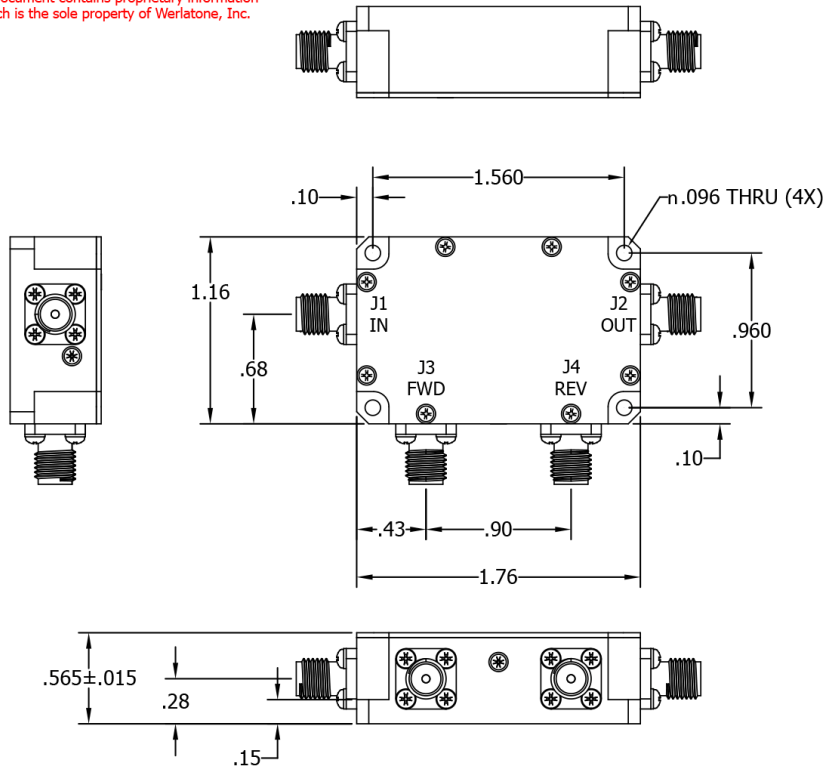
Werlatone, Inc. 17 Jon Barrett Road Patterson, NY 12563 T:(845)278-2220 F:(845)278-3440 sales@werlatone.com www.werlatone.com

**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
-	INITIAL RELEASE	7/23/10	BW
A	ECN 5268	12/10/10	BW

B

A



B

A

<small>UNLESS OTHERWISE SPECIFIED</small> • INTERPRET DRAWING IAW MIL-STD-100 • DIMENSIONING PER ASME Y14.5M-2009 • PARENTHEetical INFO FOR REF ONLY • DIMENSIONS ARE IN INCHES • DIMENSIONAL LIMITS APPLY BEFORE PROCESSES • TOLERANCES: ANGLES ± 2° XXX ± .005 XXX ± .015 • HOLE TOLERANCES ±.005				<b>WERLATONE   SINCE 1965</b>		17 Jon Barrett Rd Patterson, NY 12563	
DWN	GP	DATE	12/10/2010	SIZE	CAGE CODE	DWG NO	REV
CHK	NH	DATE	12/10/2010	A	28812	20675-500	A
ENGR	BW	DATE	12/10/2010	SCALE	1:1	SHEET 1 OF 1	
MFGR		DATE					
QA		DATE					
RLSE	BW	DATE	12/10/2010				

**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