
**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 ± 1.0 dB Max.  
 Insertion Loss: 0.5 dB Max.  
 Flatness:        ± 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"

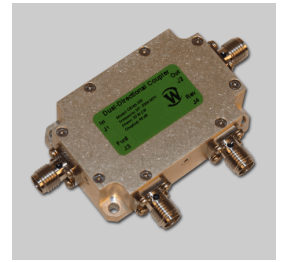
**Connector Configurations:**

<b>Model</b>	<b>Input (J1)</b>	<b>Output (J2)</b>	<b>Fwd (J3)</b>	<b>Rev (J4)</b>
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.

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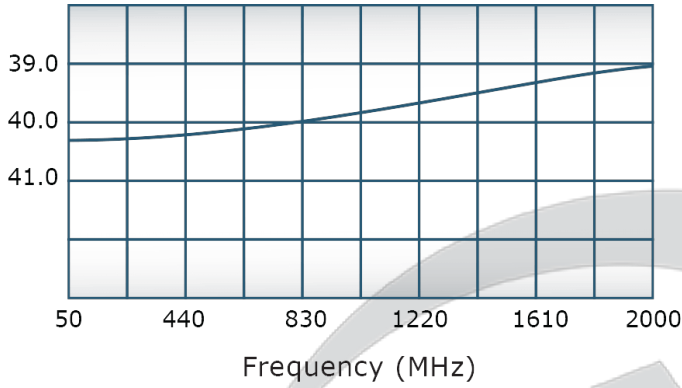


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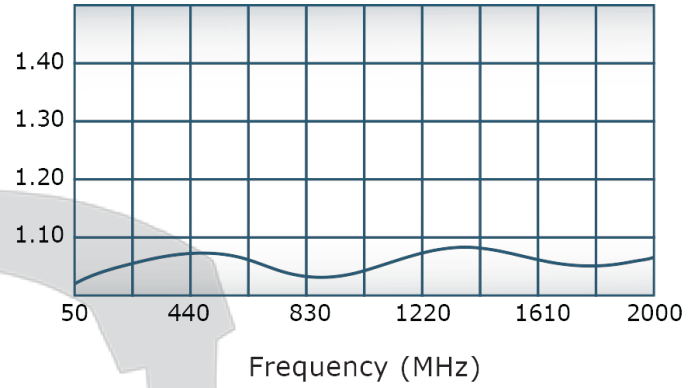
C8749

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

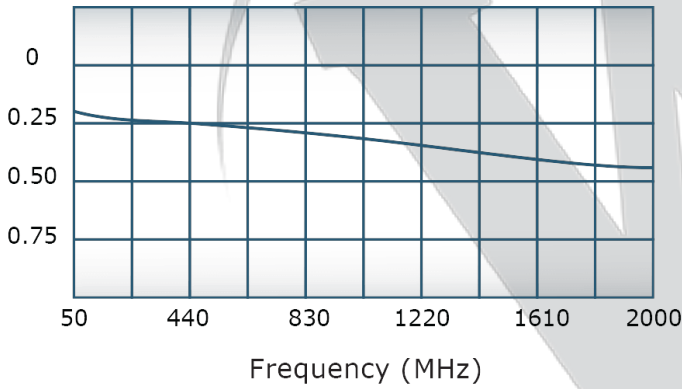
Coupling:



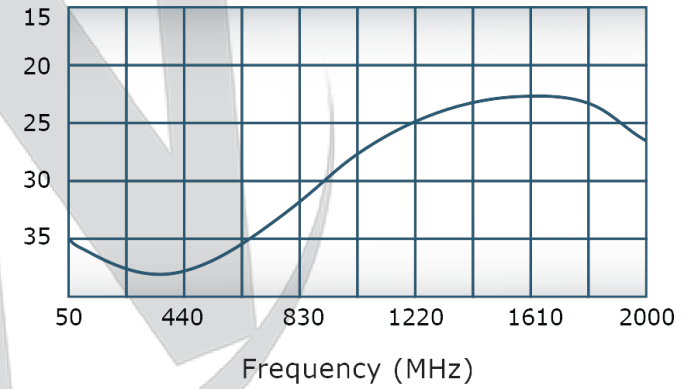
VSWR:



Insertion Loss:



Directivity:



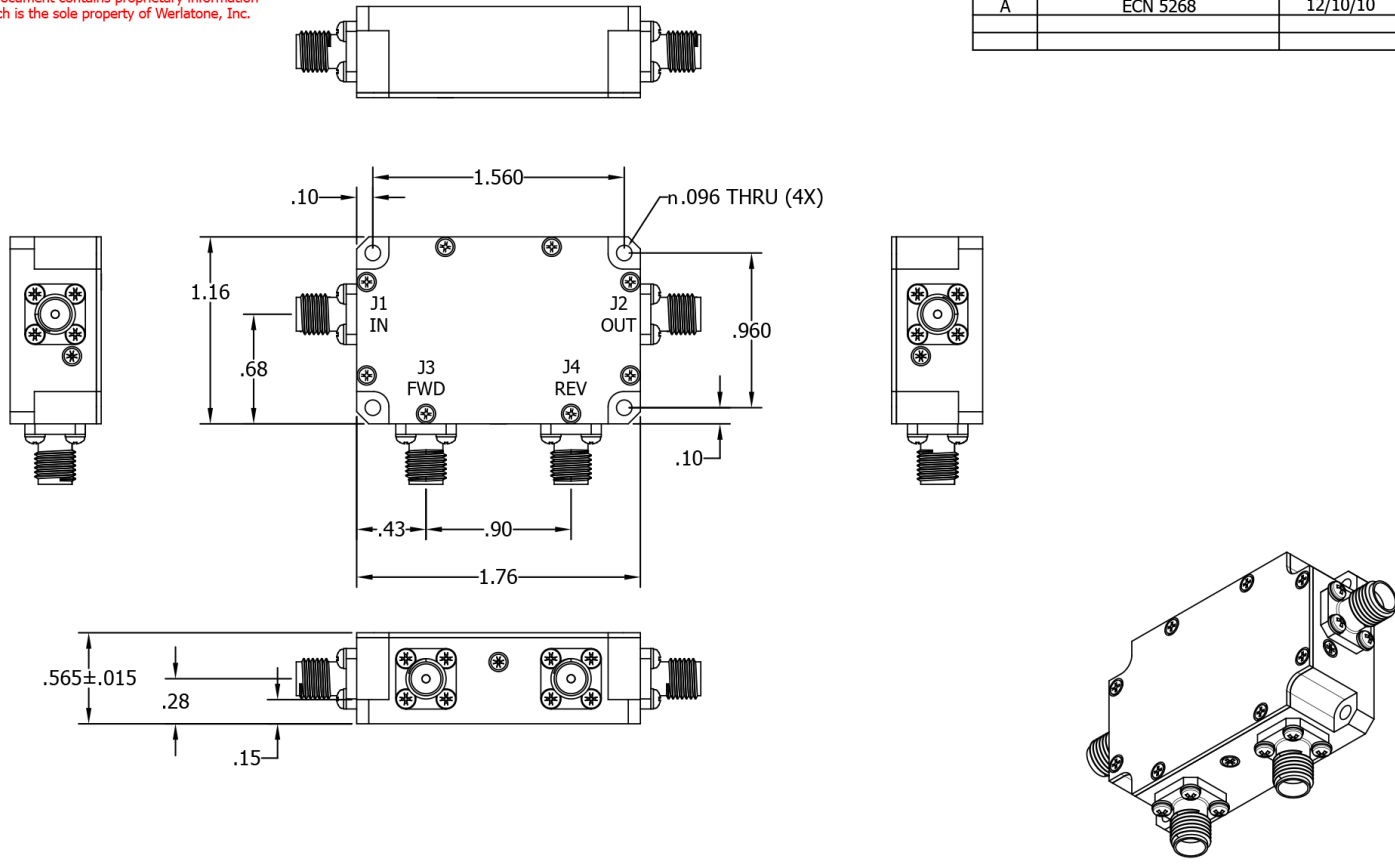
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REVISION HISTORY			
REV	REVISION RECORD	DATE	APPROVED
-	INITIAL RELEASE	7/23/10	BW
A	ECN 5268	12/10/10	BW



UNLESS OTHERWISE SPECIFIED		DWN	DATE	<b>WERLATONE   SINCE 1965</b>	17 Jon Barrett Rd Patterson, NY 12563								
<ul style="list-style-type: none"> <li>• INTERPRET DRAWING LAW MIL-STD-100</li> <li>• DIMENSIONING PER ASME Y14.5M-2009</li> <li>• PARENTHEetical INFO FOR REF ONLY</li> <li>• DIMENSIONS ARE IN INCHES</li> <li>• DIMENSIONAL LIMITS APPLY BEFORE PROCESSES</li> <li>• TOLERANCES: ANGLES ± 2°</li> <li>XXX ± .005</li> <li>XX ± .015</li> <li>• HOLE TOLERANCES ± .005</li> </ul>		GP	12/10/2010										
THIRD ANGLE PROJECTION		CHK	DATE	<table border="1"> <tr> <td>SIZE</td> <td>CAGE CODE</td> <td>DWG NO</td> <td>REV</td> </tr> <tr> <td>A</td> <td>28812</td> <td>20675-500</td> <td>A</td> </tr> </table>		SIZE	CAGE CODE	DWG NO	REV	A	28812	20675-500	A
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		NH	12/10/2010	<table border="1"> <tr> <td>SCALE</td> <td>1:1</td> <td colspan="2">SHEET 1 OF 1</td> </tr> </table>		SCALE	1:1	SHEET 1 OF 1					
SCALE	1:1	SHEET 1 OF 1											
		ENGR	DATE										
		BW	12/10/2010										
		MFGR	DATE										
		QA	DATE										
		RLSE	DATE										
		BW	12/10/2010										

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