

**Our patented 3 dB 90° Hybrid Couplers provide:**

- Superior component performance starting at 3:1 Bandwidth.
- Thicker center boards for high power and increased repeatability.
- Bonded structures which eliminate any air gaps between substrates.
- More sections per bandwidth for better coupling flatness.
- Electrically shorter and physically smaller RF components.

**Features:**

High Power      Wide Bandwidths      Small Size      Connectorized      Drop-In & Surface Mount

**Electrical Specifications:**

Frequency:            500 - 2500 MHz  
 Power:                200 W CW  
 Insertion Loss:      0.7 dB Max.  
 VSWR:                1.35:1 Max.  
 Phase Balance:      90° ± 5° Max.  
 Amplitude Balance: ± 0.5 dB Max.  
 Isolation:            18 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  
 Weight:                0.25 lb.  
 Size:                    2.1 x 1.49 x 0.75"

**Connector Configurations:**

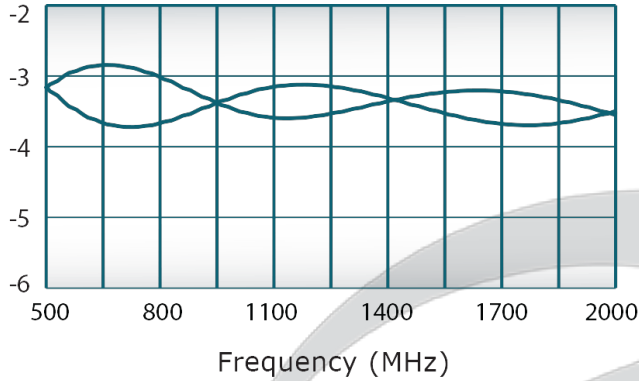
<b>Model</b>	<b>Sum Port (J1)</b>	<b>0°,90° (J2,J3)</b>	<b>Iso. Port (J4)</b>
QH7902-102	SMA	SMA	SMA

**Werlatone's** breakthrough technology allows us to build our existing line of Broadband 3 dB High Power 90° Hybrid Couplers. Connectorized 3 dB 90° Hybrid Coupler models are available with a choice of connectors. Several of our existing High Power 3 dB 90° RF Couplers are three port designs, wherein the difference port is internally terminated with a high power termination. This eliminates the need for a customer supplied external load for each Hybrid Coupler.

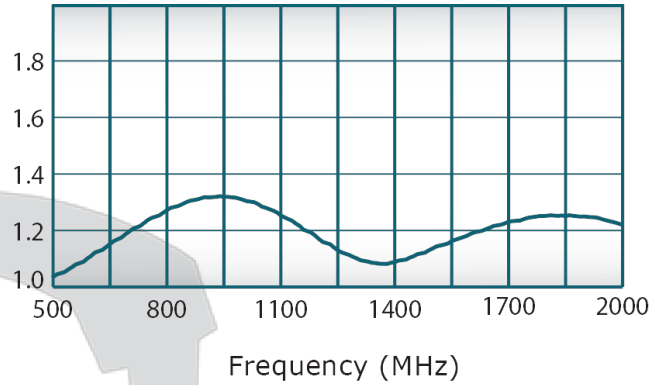


## Performance Data (Specifications subject to change without notice):

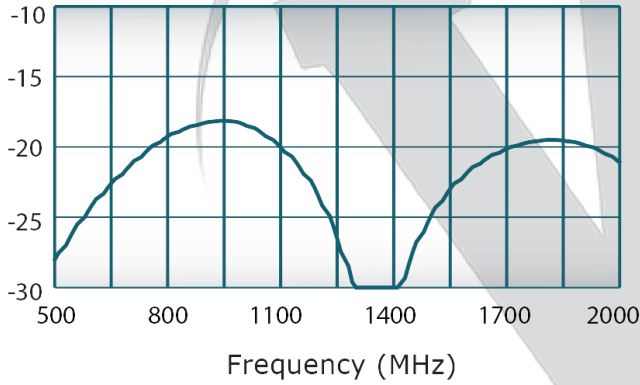
Coupling:



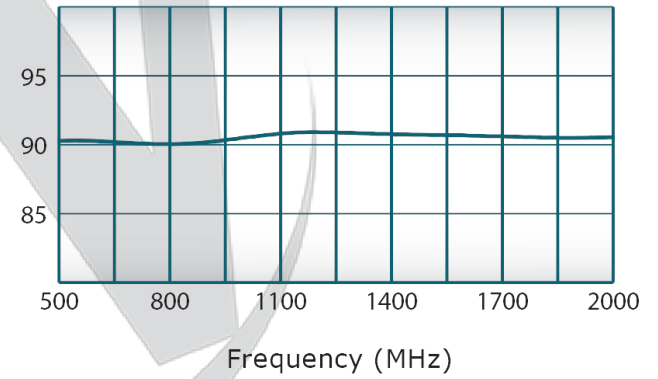
VSWR:



Isolation:



Phase Balance:



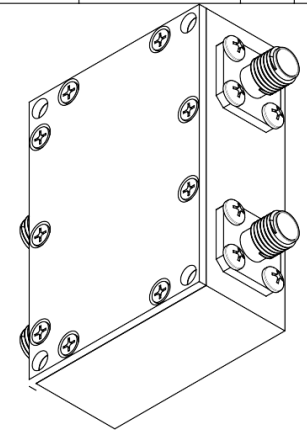
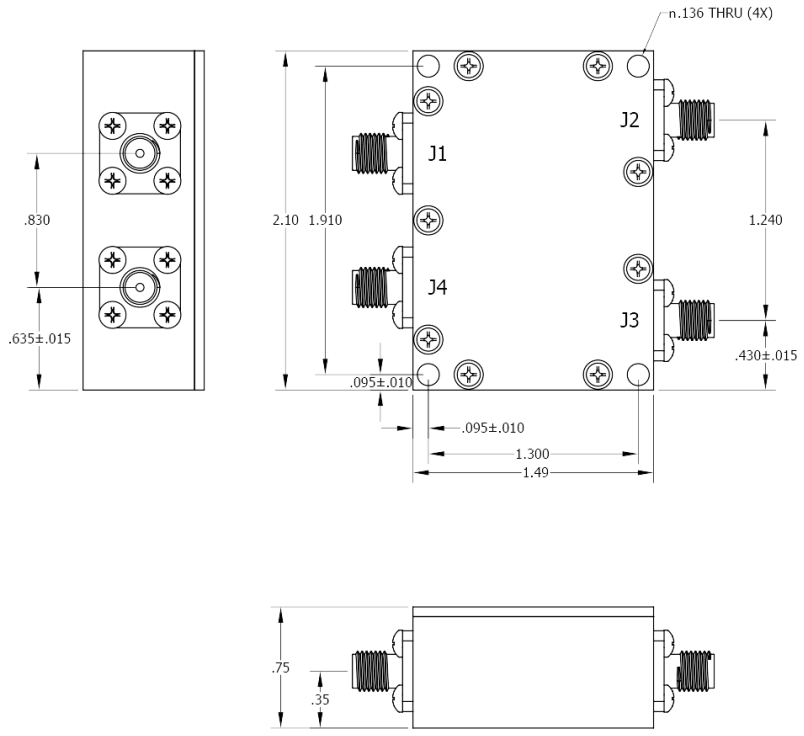
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Werlatone, Inc.

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REVISION HISTORY					
DATE	REV	REVISION RECORD	AUTH	CHK	APPV
5/20/2010	-	INITIAL RELEASE	GP	NH	BW
8/16/2011	A	ECN 5442	GP	NH	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 IAW MIL-STD-100</li> <li>• DIMENSIONS PER ASME Y14.5M-2009</li> <li>• PARENTHETICAL TIPS FOR REF ONLY</li> <li>• DIMENSIONS ARE IN INCHES</li> <li>• DIMENSIONAL LIMITS APPLY BEFORE PROCESSING</li> <li>• TOLERANCES: ANGLE ± 2°</li> <li>          2 PL ± .005</li> <li>          3 PL ± .015</li> </ul>		GP	8/16/2010	
THIRD ANGLE PROJECTION		CHK	DATE	TITLE
		ENGR	DATE	
		APVD	DATE	
		QA	DATE	
		RLSE	DATE	
SIZE	CAGE CODE	DWG NO	REV	
A	28812	20650-500	A	
SCALE	1:1		SHEET 1 OF 1	

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